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Wednesday
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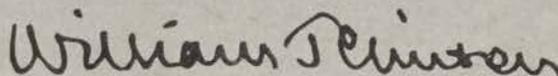
The President

Transfer of \$1 Million in FY 1994 Foreign Military Financing Funds to the International Military Education and Training Account To Increase Programs for Countries of Central and Eastern Europe and the Former Soviet Union**Memorandum for the Secretary of State**

Pursuant to the authority vested in me by section 610(a) of the Foreign Assistance Act of 1961, as amended (the "Act"), I hereby determine that it is necessary for the purposes of the Act that \$1 million of funds made available for the purposes of section 23 of the Arms Export Control Act, be transferred to, and consolidated with, funds made available for Chapter 5 of Part II of the Act.

I hereby authorize the use of the aforesaid \$1 million in funds made available under Chapter 5 of Part II of the Act to increase programs for countries of Central and Eastern Europe and the former Soviet Union.

You are hereby authorized and directed to report this determination immediately to the Congress and to publish it in the **Federal Register**.



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Wm. D. ...

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Presidential Documents

Presidential Determination No. 94-41 of August 8, 1994

Determination To Authorize the Furnishing of Emergency Military Assistance to Jamaica Under Section 506(a)(1) of the Foreign Assistance Act

Memorandum for the Secretary of Defense [and] the Secretary of State

Pursuant to the authority vested in me by section 506(a)(1) the Foreign Assistance Act of 1961, as amended, 22 U.S.C. 2318(a)(1) (the "Act"), I hereby determine that:

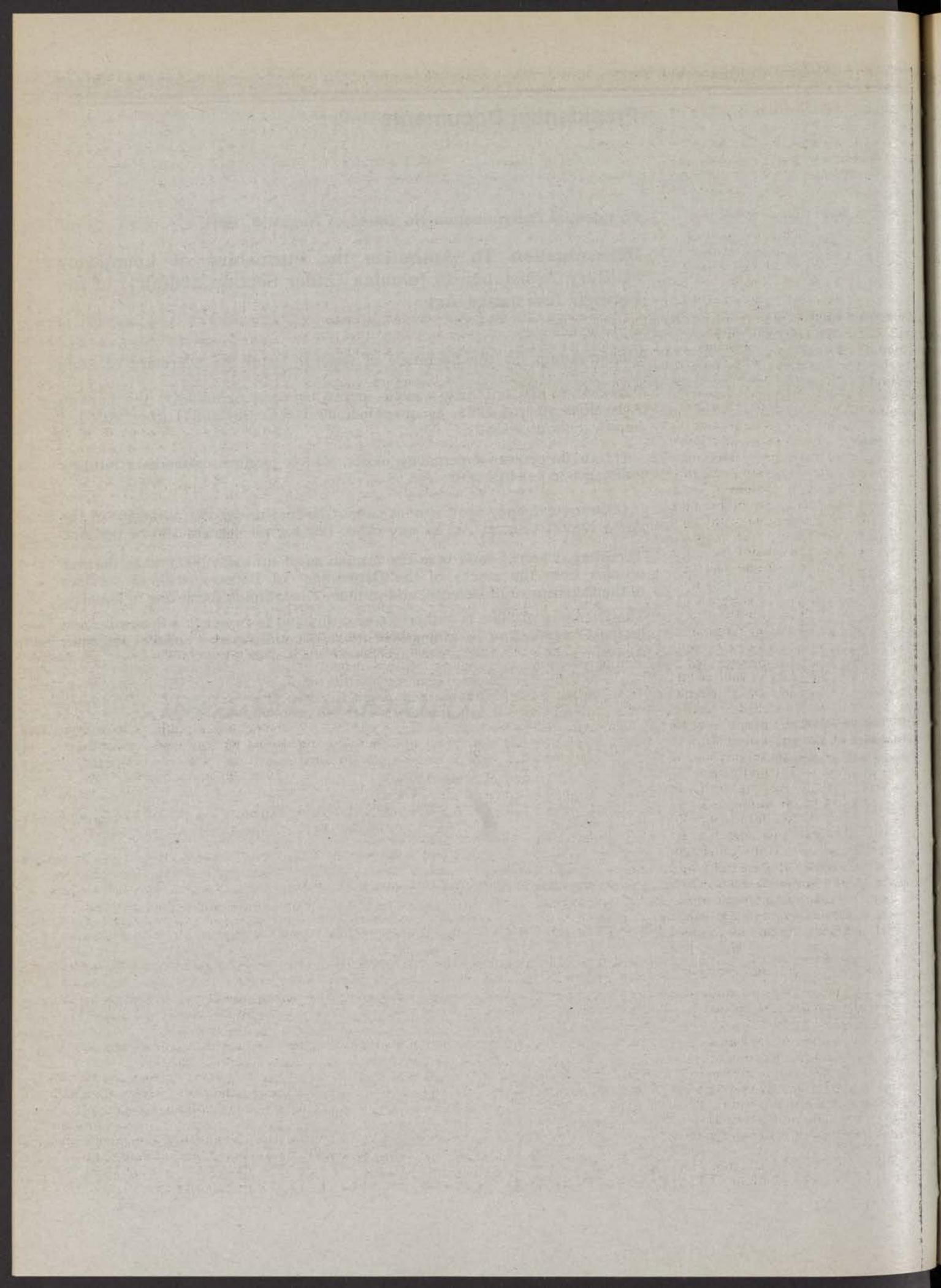
(1) an unforeseen emergency exists, which requires immediate military assistance to Jamaica; and

(2) the emergency requirement cannot be met under the authority of the Arms Export Control Act or any other law except section 506 of the Act.

Therefore, I hereby authorize the furnishing of up to \$1,500,000 in defense articles from the stocks of the Department of Defense, defense services of the Department of Defense, and military education and training to Jamaica.

The Secretary of State is authorized and directed to report this determination to the Congress and to arrange for its publication in the **Federal Register**.

William J. Clinton



Presidential Documents

Presidential Determination No. 94-42 of August 8, 1994

Drawdown of Commodities and Services from the Inventory and Resources of the Department of the Treasury To Support Sanctions Enforcement Efforts Against Serbia and Montenegro

Memorandum for the Secretary of State [and] the Secretary of the Treasury

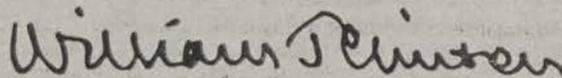
Pursuant to the authority vested in me by section 552(c)(2) of the Foreign Assistance Act of 1961, as amended, 22 U.S.C. 2348a(c)(2) (the "Act"), I hereby determine that:

(1) as a result of an unforeseen emergency, the provisions of assistance under Chapter 6 of Part II of the Act in amounts in excess of funds otherwise available for such assistance is important to the national interests of the United States; and

(2) such unforeseen emergency requires the immediate provision of assistance under Chapter 6 of Part II of the Act.

I therefore direct the drawdown of commodities and services from the inventory and resources of the Department of the Treasury of an aggregate value not to exceed \$1.1 million to support international sanctions enforcement efforts against Serbia and Montenegro, in addition to that which I directed in Presidential Determination 94-16 of March 16, 1994.

The Secretary of State is authorized and directed to report this determination to the Congress and to arrange for its publication in the **Federal Register**.



FR Doc. 94-20353
Filed 8-15-94; 3:34 pm
Billing code 4710-10-M

Editorial note: For the President's letter to the Senate on the arms embargo on Bosnia-Herzegovina, see issue 32 of the *Weekly Compilation of Presidential Documents*.

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Rules and Regulations

Federal Register

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

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DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

7 CFR Parts 300 and 319

[Docket No. 94-035-2]

Importation of Fuji Variety Apples From Japan and the Republic of Korea

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the Fruits and Vegetables regulations to allow the importation of Fuji variety apples from Japan and the Republic of Korea. As a condition of entry, the Fuji variety apples have to be cold treated and fumigated for certain injurious insects in Japan or the Republic of Korea under the supervision of the Animal and Plant Health Inspection Service. The Fuji variety apples also have to be inspected by the Animal and Plant Health Inspection Service and the national plant protection agency in Japan or the Republic of Korea prior to export. This action relieves restrictions on the importation into the United States of Fuji variety apples from Japan and the Republic of Korea without presenting a significant risk of introducing injurious insects into the United States.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: Mr. Peter M. Grosser or Mr. Frank E. Cooper, Senior Operations Officers, Port Operations, Plant Protection and Quarantine, APHIS, USDA, room 632, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782, (301) 436-6799.

SUPPLEMENTARY INFORMATION:

Background

The regulations in 7 CFR 319.56 through 319.56-8 (referred to below as the regulations) prohibit or restrict the

importation into the United States of fruits and vegetables from certain parts of the world to prevent the introduction and dissemination of injurious insects that are new to or not widely distributed within and throughout the United States.

On June 8, 1994, we published in the Federal Register (59 FR 29557-29559, Docket No. 94-035-1) a document in which we proposed to amend the regulations to allow Fuji variety apples from Japan and the Republic of Korea to be imported into the United States under certain conditions. The importation of Fuji variety apples from Japan and the Republic of Korea has been prohibited because of the risk that they could introduce injurious insects into the United States. We proposed to allow importation at the request of those countries' ministries of agriculture and after determining that the apples could be imported under certain conditions without significant pest risk.

We solicited comments on the proposed rule for a 30-day period ending on July 8, 1994. We received two comments by that date. In one, a foreign ministry of agriculture supported the proposal.

In the other, a State department of agriculture expressed concerns regarding the possible spread into the United States of three fungal diseases (*Diplocarpon mali*, *Monilinia mali*, and *Alternaria mali*) known to affect apples in Japan and the Pacific rim. Two of the diseases are exotic to the United States and the other is known to occur only in the Southeastern United States. The commenter recommends that we conduct pest risk assessments for the three diseases in order to determine if mitigation measures are necessary.

Prior to proposing to allow Fuji variety apples to be imported from Japan and the Republic of Korea, we assessed the risk of exotic pests being introduced into the United States on the apples. Based on this assessment, we believe that the risk of the three fungal diseases spreading into the United States will be mitigated by numerous factors. For instance, these three fungal diseases are primarily leaf pathogens and seldom infect fruit, unless inoculum pressures are high. Furthermore, the routine cultural practices for Fuji variety apple production in Japan and the Republic of Korea, such as orchard sanitation and

the bagging of fruit, effectively suppress outbreaks of these diseases. Finally, we believe that the required inspections of the fruit following treatment in Japan or the Republic of Korea will allow us to easily identify fruit infected with any of the three fungal diseases and prevent its entry into the United States.

Therefore, based on the rationale set forth in the proposed rule and in this document, we are adopting the provisions of the proposal as a final rule without change.

Effective Date

This is a substantive rule that relieves restrictions and, pursuant to the provisions of 5 U.S.C. 553, may be made effective less than 30 days after publication in the Federal Register. Immediate implementation of this rule is necessary to provide relief to those persons who are adversely affected by restrictions we no longer find warranted. Making this rule effective immediately will allow interested producers and others in the marketing chain to benefit from this additional source of fruit. Therefore, the Administrator of the Animal and Plant Health Inspection Service has determined that this rule should be effective upon publication in the Federal Register.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be not significant for purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

We are amending the Fruits and Vegetables regulations by allowing the importation of Fuji variety apples from Japan and the Republic of Korea.

According to an estimate by the International Apple Institute, U.S. growers produced approximately 160 million pounds of Fuji apples in 1993, about 1.5 percent of the total U.S. apple production for that year. It is likely that this estimate understates the amount of Fuji apples produced domestically, as Fuji acreage in California, Washington, and other States is expanding rapidly.

About 75 percent of the Fuji variety apples grown in the United States are grown in California and Washington. In 1993, growers in California and Washington produced about 60 million pounds per State, while growers in

other States produced a total of about 40 million pounds. Statistics on the number of domestic growers of Fuji apples and their sizes are not available.

Most of the domestic production of Fuji apples is exported because demand, and consequently the price, for Fuji apples is quite low in the United States as compared to other countries, particularly in the Pacific Rim. Prices of \$30 to \$50 per 40-pound box (depending upon quality) are common in Hong Kong, Taiwan, and other Pacific Rim markets. Domestic buyers, however, have been paying less than half that price.

Growers in the Republic of Korea produce annually about 923 million pounds of Fuji variety apples. APHIS estimates that about 220,000 to 440,000 pounds of Fuji variety apples might be exported per year from the Republic of Korea to the United States. This estimate assumes the Republic of Korea's exports to the United States will approach levels currently exported to European countries.

Japanese growers produce annually about 1.18 billion pounds of Fuji variety apples, just over half of Japan's total annual apple production. APHIS estimates that exports to the United States of all varieties of Japanese apples would probably never exceed 2.2 million pounds.

It is unlikely that imports of Fuji variety apples from Japan and the Republic of Korea will reach the estimated levels above, due to the low demand and low price for Fuji variety apples in the United States. However, even if imports were to reach 2.6 million pounds (2.2 million pounds from Japan and 440,000 pounds from the Republic of Korea), this would constitute less than 1.4 percent of domestic production of Fuji variety apples. Consequently, allowing Fuji variety apples to be imported from Japan and the Republic of Korea will not have a significant economic impact on domestic Fuji variety apple producers or other small entities.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12778

This rule allows Fuji variety apples to be imported into the United States from Japan and the Republic of Korea under certain conditions. State and local laws and regulations regarding Fuji variety apples imported under this rule will be preempted while the fruit is in foreign commerce. Fresh apples are generally

imported for immediate distribution and sale to the consuming public, and will remain in foreign commerce until sold to the ultimate consumer. The question of when foreign commerce ceases in other cases must be addressed on a case-by-case basis. No retroactive effect will be given to this rule; and this rule will not require administrative proceedings before parties may file suit in court challenging this rule.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this final rule will be submitted for approval to the Office of Management and Budget.

List of Subjects

7 CFR Part 300

Incorporation by reference, Plant diseases and pests, Quarantine.

7 CFR Part 319

Bees, Coffee, Cotton, Fruits, Honey, Imports, Incorporation by reference, Nursery Stock, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Rice, Vegetables.

Accordingly, title 7, chapter III, of the Code of Federal Regulations is amended as follows:

PART 300—INCORPORATION BY REFERENCE

1. The authority citation for part 300 is revised to read as follows:

Authority: 7 U.S.C. 150ee, 154, 161, 162, 167; 7 CFR 2.17, 2.51, and 371.2(c).

2. In § 300.1, paragraph (a) is revised to read as follows:

§ 300.1 Materials incorporated by reference.

(a) The Plant Protection and Quarantine Treatment Manual, which was revised and reprinted November 30, 1992, and includes all revisions through August 1994, has been approved for incorporation by reference in 7 CFR chapter III by the Director of the Office of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

* * * * *

PART 319—FOREIGN QUARANTINE NOTICES

3. The authority citation for part 319 continues to read as follows:

Authority: 7 U.S.C. 150dd, 150ee, 150ff, 151–167, 450; 21 U.S.C. 136 and 136a; 7 CFR 2.17, 2.51, and 371.2(c).

4. In Subpart—Fruits and Vegetables, a new § 319.56–2cc is added to read as follows:

§ 319.56–2cc Administrative instructions governing the entry of Fuji variety apples from Japan and the Republic of Korea.

Fuji variety apples may be imported into the United States from Japan and the Republic of Korea only under the following conditions:

(a) *Treatment and fumigation.* The apples must be cold treated and then fumigated, under the supervision of an Animal and Plant Health Inspection Service (APHIS) inspector, either in Japan or the Republic of Korea, for the peach fruit moth (*Carposina niponensis*), the yellow peach moth (*Conogethes punctiferalis*), the fruit tree spider mite (*Tetranychus viennensis*), and the kanzawa mite (*T. kanzawai*), in accordance with the Plant Protection and Quarantine Treatment Manual, which is incorporated by reference at § 300.1 of this chapter.

(b) *APHIS inspection.* The apples must be inspected upon completion of the treatments required by paragraph (a) of this section, prior to export from Japan or the Republic of Korea, by an APHIS inspector and an inspector from the national plant protection agency of Japan or the Republic of Korea. The apples shall be subject to further disinfection in the exporting country if plant pests are found prior to export. Imported Fuji variety apples inspected in Japan or the Republic of Korea are also subject to inspection and disinfection at the port of first arrival, as provided in § 319.56–6.

(c) *Trust fund agreements.* The national plant protection agency of the exporting country must enter into a trust fund agreement with APHIS before APHIS will provide the services necessary for Fuji variety apples to be imported into the United States from Japan or the Republic of Korea. The agreement requires the national plant protection agency to pay in advance of each shipping season all costs that APHIS estimates it will incur in providing services in Japan or the Republic of Korea during that shipping season. These costs include administrative expenses and all salaries (including overtime and the Federal share of employee benefits), travel expenses (including per diem expenses), and other incidental expenses incurred by APHIS in performing these services. The agreement requires the national plant protection agency to deposit a certified or cashier's check with APHIS for the amount of these costs, as estimated by APHIS. If the deposit is not sufficient to meet all costs incurred by

APHIS, the agreement further requires the national plant protection agency to deposit with APHIS a certified or cashiers check for the amount of the remaining costs, as determined by APHIS, before APHIS will provide any more services necessary for Fuji variety apples to be imported into the United States from that country. After a final audit at the conclusion of each shipping season, any overpayment of funds will be returned to the national plant protection agency, or held on account until needed, at that agency's option.

(d) *Department not responsible for damage.* The treatments prescribed in paragraph (a) of this section are judged from experimental tests to be safe for use with Fuji variety apples from Japan and the Republic of Korea. However, the Department assumes no responsibility for any damage sustained through or in the course of such treatment or by compliance with requirements under paragraph (a) or (b) of this section.

Done in Washington, DC, the 11th day of August 1994.

William S. Wallace,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 94-20181 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-34-P

Food Safety and Inspection Service

9 CFR Part 381

[Docket No. 91-037F]

[RIN 0583-AB54]

Badges for Persons Authorized to Conduct Federal Poultry Inspection

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: The Food Safety and Inspection Service (FSIS) is amending the poultry products inspection regulations to require the use of numbered official badges to identify persons authorized to conduct Federal inspection under the Poultry Products Inspection Act. Such persons may be our employees or employees of other Federal agencies or State agencies working under agreements with us. The amendment confirms our current practice of issuing badges to such persons and removes an inconsistency between the meat and the poultry products inspection regulations.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: Dr. Lester Nordyke, Director, Federal-State Relations, Inspection Operations, Food Safety and Inspection Service, U.S.

Department of Agriculture, Washington, D.C. 20250; telephone, Area Code (202) 720-6313.

SUPPLEMENTARY INFORMATION:

Background

Under the Federal Meat Inspection Act (FMIA—21 U.S.C. 601 *et seq.*) and the Poultry Products Inspection Act (PPIA—21 U.S.C. 451 *et seq.*), the Secretary of Agriculture is responsible for carrying out inspection programs for assuring that meat, meat food, and poultry products prepared for distribution in commerce are safe, not adulterated, and properly marked, labeled, and packaged. The Secretary is required to staff the programs with persons appointed for the purpose of conducting ante-mortem and post-mortem inspection of livestock and poultry; inspection of facilities, equipment, and sanitation at official establishments; and inspection of further processing of meat and poultry. Under regulations implementing the FMIA and PPIA, persons authorized to conduct inspection in meat and poultry slaughtering and further processing establishments are provided with appropriate identification.

The Federal meat inspection regulations have long required the use of a numbered official badge to identify each Federal meat inspector who is entitled to enter the premises of official establishments to conduct inspection. Since the merger of the meat and poultry inspection programs in the early 1970's, the badge has also been used to identify poultry inspectors carrying out mandatory inspection under the PPIA.

The poultry products inspection regulations currently require that inspectors have with them at all times the "means of identification" furnished to them by the Department. The regulations have also required that "licenses" be issued to persons carrying out Federal poultry inspection under agreements with State or other agencies. These requirements originated in the era when the inspection of poultry for condition and wholesomeness was one of the Department's voluntary inspection and certification programs.

USDA administered voluntary poultry inspection in cooperation with State and other agencies, with poultry processing establishments paying fees for the service. For much of this work, the Department entered into cooperative agreements with State agencies whose USDA-licensed personnel operated under USDA supervision.

After the PPIA was enacted and Federal inspection of poultry products prepared for distribution in commerce

became mandatory, the need for cooperative agreements was reduced. Even so, the mandatory poultry products inspection regulations that were promulgated in February 1958 (23 FR 731) to implement the PPIA carried over from the earlier regulations provisions allowing the Secretary to authorize "licensed" Federal or State employees to conduct Federal poultry inspection. Such authorized State personnel have performed Federal inspection according to Federal-State agreements concluded under the Talmadge-Aiken Act of 1962 (7 U.S.C. 450).

Before the meat and poultry inspection programs were merged, poultry inspectors who were USDA employees used Department identification cards as their means of identification. Employees of cooperating Federal or State agencies who were authorized to conduct Federal poultry inspection were issued license cards. The license cards for the State employees thus served the same purpose as USDA identification cards of Federal poultry inspectors and the badges of Federal meat inspectors.

In May 1972, FSIS amended the poultry products inspection regulations to implement the Wholesome Poultry Products Act of 1968. The amendments reflected the organizational merger of poultry and meat inspection. Since that time, poultry inspection has been administered in the same way as meat inspection. The same method of credentialing—the badge—is used for both meat and poultry inspectors; State employees performing Federal inspection under "Talmadge-Aiken" agreements also are issued Federal inspection badges.

The Final Rule

Therefore, the Agency is removing and reserving section 381.30 of the poultry products inspection regulations to delete the requirement for issuance of a license to non-USDA employees who are authorized to conduct Federal poultry inspection. Section 381.31, which governs conditions for expiration, suspension, and revocation of licenses, is also being deleted. The suspension and revocation provisions of this section have not been invoked since the merger of the meat and poultry inspection programs. The qualifications and conditions of service of non-USDA employees who are authorized to conduct Federal poultry inspection are contained in the agreements between FSIS and cooperating agencies. Finally the Agency is revising section 381.33, concerning identification of inspectors; to require the use of the numbered

official inspection badge for such identification.

Executive Order 12866

This rule has been determined to be not significant for the purposes of Executive Order 12866 and therefore has not been reviewed by the Office of Management and Budget.

Executive Order 12778

This final rule has been reviewed pursuant to Executive Order 12778, Civil Justice Reform. This rule: (1) preempts all State and local laws and regulations that are inconsistent with this rule; (2) has no retroactive effect; and (3) does not require administrative proceedings before parties may file suit in court challenging this rule.

Effect on Small Entities

The Acting Administrator, FSIS, has determined that this action will not have a significant impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*).

Administrative Procedure Act

Because this amendment is an amendment of Agency procedure, with nugatory public impact, this rulemaking is exempted under the Administrative Procedure Act (APA—5 U.S.C. 553(b)(3)(A)) from the requirement for notice and opportunity for public comment. Similarly, because this amendment concerns only Agency procedure and is without measurable public impact, this rulemaking is exempt for good cause from the APA requirement that a substantive rule be published 30 days prior to its effective date (5 U.S.C. 553(d)).

List of Subjects in 9 CFR Part 381

Government employees, Poultry and poultry products.

For the reasons set out in the preamble, 9 CFR part 381 is amended as follows:

PART 381—MANDATORY POULTRY PRODUCTS INSPECTION

1. The authority citation for part 381 continues to read as follows:

Authority: 7 U.S.C. 138F; 7 U.S.C. 450; 21 U.S.C. 451–470; 7 CFR 2.17, 2.55.

2. Sections 381.30 and 381.31 are removed and reserved and section 381.33 is revised to read as follows:

§ 381.33 Identification.

Each inspector will be furnished with a numbered official inspection badge, which shall remain in his or her possession at all times, and which shall

be worn in such manner and at such times as the Administrator may prescribe. This badge shall be sufficient identification to entitle the inspector to admittance at all regular entrances and to all parts of the establishment and premises to which the inspector is assigned.

Done at Washington, DC, on August 11, 1994.

Patricia Jensen,

Acting Assistant Secretary, Marketing and Inspection Services.

[FR Doc. 94–20184 Filed 8–16–94; 8:45 am]

BILLING CODE 3410-DM-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–NM–216–AD; Amendment 39–8973; AD 94–15–02]

Airworthiness Directives; McDonnell Douglas Model MD–11 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: This document corrects a typographical error that appeared in a reference to a service bulletin called out in the above-captioned airworthiness directive (AD) that was published in the *Federal Register* on July 20, 1994 (59 FR 36932). A typographical error in the service bulletin reference resulted in a reference to a service document that does not exist. This action is necessary to ensure that certain necessary repairs are performed in accordance with appropriate service instructions.

DATES: Effective August 19, 1994.

The incorporation by reference of certain publications listed in the regulations was previously approved by the Director of the Federal Register as of August 19, 1994 (59 FR 36932, July 20, 1994).

The incorporation by reference of McDonnell Douglas Alert Service Bulletin A54–31, dated September 17, 1992, as listed in the regulations, was previously approved by the Director of the Federal Register of November 2, 1992 (57 FR 47991, October 21, 1992).

FOR FURTHER INFORMATION CONTACT: Wahib Mina, Aerospace Engineer, Airframe Branch, ANM–121L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806–2425; telephone (310) 988–5324; fax (310) 988–5210.

SUPPLEMENTARY INFORMATION:

Airworthiness directive (AD) 94–15–02, amendment 39–8973, applicable to certain McDonnell Douglas Model MD–11 series airplanes, was published in the *Federal Register* on July 20, 1994 (59 FR 36932). Among other things, that AD requires inspections to verify the installation and tightness of the shear pins, shear pin retainers, and shear pin retainer attaching parts in the aft end of the center pylon thrust link, and repair, if necessary.

As published, paragraph (a)(3) of that AD contained a reference to McDonnell Douglas MD–11 Alert Service Bulletin A54–31, Revision 1, as a source of service information related to accomplishing a repair of the shear pin retainer and attaching parts. Due to a typographical error, the issue date of that service bulletin was listed as "June 3, 1994," rather than the correct date of "June 3, 1993." (This date was cited correctly, however, in other portions of the rule that contained references to this same service bulletin.) As a result, the service bulletin referenced in paragraph (a)(3) of the published AD does not exist.

Since it is essential that operators perform repairs in accordance with appropriate and available service instructions, this document changes the issue date of the service bulletin cited in paragraph (a)(3) of AD 94–15–02, amendment 39–8973, to read as: "June 3, 1993."

The effective date of the rule remains August 19, 1994.

Since no other portion of the regulatory information has been changed, the final rule is not being republished.

Issued in Renton, Washington, on August 11, 1994.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94–20160 Filed 8–16–94; 8:45 am]

BILLING CODE 4910–13–U

COMMODITY FUTURES TRADING COMMISSION

17 CFR Part 30

Limited Marketing Activities From a United States Location by Certain Firms and Their Employees or Other Representatives Exempted Under Commodity Futures Trading Commission Rule 30.10

AGENCY: Commodity Futures Trading Commission.

ACTION: Order.

SUMMARY: The Commodity Futures Trading Commission ("Commission" or "CFTC"), subject to the conditions specified below, is expanding the category of persons to whom firms operating pursuant to the Limited Marketing Order issued on October 28, 1992 may direct limited marketing conduct with respect to foreign futures or option contracts within the United States through their employees or other representatives. The relief as originally issued was limited to conduct directed towards institutions and governmental entities identified in condition 5 of the Limited Marketing Order whose description in terms of status and assets has been derived generally from the definition of "qualified eligible participant" ("QEP") as that term is defined in Commission rule 4.7(a)(1)(ii), 17 CFR 4.7(a)(1)(ii). This Order will expand the relief to conduct directed towards all "accredited investors" as that term is defined in the Securities and Exchange Commission's ("SEC") Regulation D issued pursuant to the Securities Act of 1933.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: Jane C. Kang, Esq., or Francey L. Youngberg, Esq., Division of Trading and Markets, Commodity Futures Trading Commission, 2033 K Street, N.W., Washington, D.C. 20581. Telephone: (202) 254-8955.

SUPPLEMENTARY INFORMATION: On October 28, 1992, the Commission issued an Order under rule 30.10, 17 CFR 30.10, to permit firms that have received rule 30.10 relief, to engage in limited marketing conduct with respect to foreign futures or option contracts within the United States through their employees or other representatives. 57 FR 49644 (November 3, 1992).

Among other conditions,¹ the Order provided that such solicitation or marketing activities occurring within the United States be limited to such activities directed towards certain institutions and governmental entities

whose description in terms of status and assets has been derived generally from the definition of QEP as that term is defined in Commission rule 4.7(a)(1)(ii), 17 CFR 4.7(a)(1)(ii). The Commission noted that the Order was a first step and that absent any problems that would warrant a reconsideration of the appropriateness of permitting rule 30.10 firms to operate in accordance with the Order, the Commission may in due course expand the scope of the relief. Upon consideration of the matter, in particular, that no issues have arisen in connection with the operation of the Limited Marketing Order in the two years since its issuance, the CFTC is amending condition (5) of the Order issued on October 28, 1992 expanding the relief to be generally consistent with the term "accredited investors" as defined in section 230.501(a) of Securities Exchange Commission Regulation D promulgated pursuant to the Securities Act of 1933, 17 CFR 230.501(a), who are not already included within the scope of current condition (5) of the Limited Marketing Order.

Accordingly, condition (5) of the Order is amended as follows (new language is italic):

"(5) Such soliciting or marketing activities occurring within the United States will be limited to such activities directed to the following persons, acting either for their own account or the account of another entity which is described below:

(a) A futures commission merchant, introducing broker, commodity pool operator or commodity trading advisor registered as such with the Commission;

(b) A broker or dealer registered pursuant to section 15 of the Securities Exchange Act of 1934;

(c) An investment company registered under the Investment Company Act of 1940 or a business development company defined in section 2(a)(48) of that Act;

(d) A bank as defined in section 3(a)(2) of the Securities Act of 1933 ("Securities Act"), or any savings and loan association or other institution as defined in section 3(a)(5)(A) of the Securities Act;

(e) An insurance company as defined in section 2(13) of the Securities Act;

(f) A plan established by and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, if such plan has total assets in excess of \$5,000,000;

(g) An employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974,

Provided, That the investment decision is made by a plan fiduciary, as defined in section 3(21) of such Act, which is a bank, savings and loan association, insurance company or registered investment adviser, or that the employee benefit plan has total assets in excess of \$5,000,000; or, if a self-directed plan, with investment decisions made solely by persons that are accredited investors as defined in 17 CFR 230.501(a);

(h) A private business development company as defined in section 202(a)(22) of the Investment Advisers Act of 1940;

(i) An organization described in section 501(c)(3) of the Internal Revenue Code, with total assets in excess of \$5,000,000;

(j) A corporation, Massachusetts or similar business trust, or partnership, other than a pool, which has total assets in excess of \$5,000,000;

(k) A pool, trust, insurance company separate account or bank collective trust, with total assets in excess of \$5,000,000;

(l) A governmental entity (including the United States, a state, or a foreign government) or political subdivision thereof, or a multinational or supranational entity or an instrumentality, agency or department of any of the foregoing;

(m) A Small Business Investment Company licensed by the U.S. Small Business Administration under section 301 (c) or (d) of the Small Business Investment Act of 1958;

(n) Any natural person whose individual net worth, or joint net worth with that person's spouse, at the time of his purchase exceeds \$1,000,000;

(o) Any natural person who had an individual income in excess of \$200,000 in each of the two most recent years or joint income with that person's spouse in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year; and

(p) Any entity in which all of the equity owners are accredited investors as defined in 17 CFR 230.501(a)."

In all other respects, the terms and conditions of the Commission's Part 30 Order issued on October 28, 1992, including the requirement that the foreign regulatory or self-regulatory organization to which the Commission's rule 30.10 Order was issued obtain a written confirmation from the Commission that the Order applies to firms in its jurisdiction with confirmed rule 30.10 relief, remain unchanged.

¹The Limited Marketing Order also required that the regulatory or self-regulatory organization to which the Commission issued 30.10 relief or its equivalent obtain written confirmation from the Commission that the Order applies to such rule 30.10 order. To date, the following regulatory or self-regulatory organizations have requested and received confirmation from the Commission that the Order will apply to their members: 1) Commission des Operations de Bourse (December 4, 1992); 2) The Securities and Investment Board (December 30, 1992); 3) Investment Management Regulatory Organisation (December 30, 1992); 4) Securities and Futures Authority (December 30, 1992); 5) The Montreal Exchange (February 10, 1993); and 6) Sydney Futures Exchange (June 30, 1993). In this connection, the Commission would need to confirm the application of this expanded relief to each of the organizations referred to above.

List of Subjects in 17 CFR Part 30

Commodity futures, Consumer protection, Fraud.

Issued in Washington, DC, on August 4, 1994.

Jean A. Webb,

Secretary of the Commission.

Accordingly, Chapter I of Title 17 of the CFR is amended as set forth below:

PART 30—FOREIGN FUTURES AND FOREIGN OPTIONS TRANSACTIONS

1. The authority citation for part 30 continues to read as follows:

Authority: 7 U.S.C. 1a, 2, 4, 6, 6c and 12a, unless otherwise noted.

2. Appendix A to part 30 is amended by adding a new center heading and listing at the end of the appendix to read as follows:

Appendix A to Part 30—Interpretative Statement With Respect to the Commission's Exemptive Authority Under § 30.10 of its Rules

* * * * *

Marketing Activities by Firms Granted Rule 30.10 Relief

FR date and citation: November 3, 1992, 57 FR 49644; August 17, 1994, 59 FR [insert FR page number].

[FR Doc. 94-19437 Filed 8-16-94; 8:45 am]

BILLING CODE 6351-01-P

DEPARTMENT OF STATE**Bureau of Political-Military Affairs****22 CFR Part 126**

[Public Notice 2050]

Amendment to the International Traffic in Arms Regulations

AGENCY: Department of State.

ACTION: Final rule.

SUMMARY: The Department of State is amending the International Traffic in Arms Regulations (22 CFR parts 120-130) (ITAR) to reflect that it is no longer the policy of the United States to deny licenses, other approvals, exports and imports of defense articles and defense services, destined for or originating in South Africa. The regulations are also amended to add Rwanda to the list of states for which such a policy of denial is in effect. A new provision is added to indicate that whenever the United Nations Security Council imposes an arms embargo, all transactions which involve defense articles and services and which are prohibited by the embargo are prohibited under the ITAR.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: Dean A. Rogers, Office of Export Control Policy, Bureau of Political-Military Affairs, Department of State (202-647-4231).

SUPPLEMENTARY INFORMATION: The Department of State is amending § 126.1(a) and striking § 126.1(c) of the ITAR to reflect that it is no longer the policy of the United States to deny licenses, other approvals, exports and imports of defense articles and services, destined for or originating in South Africa. With respect to South Africa, all requests for licenses or other approvals involving items covered by the U.S. Munitions List (22 CFR part 121) will now be reviewed on a case-by-case basis. This policy change was announced in a notice published at 59 FR 31667 on June 20, 1994.

The arms export embargo on South Africa was imposed by the U.N. Security Council in Resolution 418 of November 4, 1977. An arms import embargo was called for by Security Council Resolution 558 of December 13, 1984. The Security Council terminated both embargoes in U.N. Security Council Resolution 919 of May 25, 1994. The Council's actions follow the first all-race multiparty election and the establishment of a democratic South African Government inaugurated on May 10, 1994.

Section 126.1(a) is also amended to add Rwanda to the list of countries with respect to which the United States maintains an arms embargo. It is the policy of the United States to deny licenses, other approvals, exports and imports of defense articles and services, destined for or originating in Rwanda. This policy was announced in a notice published at 59 FR 28583 on June 2, 1994. This policy and amendment implement U.N. Security Council Resolution 918 of May 17, 1994, which requires all states to prevent the sale or supply to Rwanda of arms and related material, and Executive Order 12918 of May 26, 1994.

Licenses and approvals subject to the South Africa and Rwanda policies include manufacturing licenses, technical assistance agreements, technical data, and commercial military exports and reexports of any kind involving these countries under the authority of the Arms Export Control Act.

A new section 126.1(c) is added to indicate that whenever the United Nations Security Council mandates an arms embargo, all transactions which are prohibited by the embargo and which involve U.S. persons anywhere,

or any person in the United States, and defense articles and services of a type enumerated on the United States Munitions List (22 CFR part 121), irrespective of origin, are prohibited under the ITAR for the duration of the embargo, unless the Department of State publishes a notice in the **Federal Register** specifying different measures. This would include, but is not limited to, transactions involving trade by U.S. persons who are located inside or outside of the United States in defense articles and services of U.S. or foreign origin which are located on U.S. territory or elsewhere.

This amendment involves a foreign affairs function of the United States. It is exempt from review under Executive Order 12866 but has been reviewed internally by the Department to ensure consistency with the purposes thereof. It is also excluded from the procedures of 5 U.S.C. 553 and 554.

Accordingly, for the reasons set forth in the preamble, and under the authority of section 38 of the Arms Export Control Act (22 U.S.C. 2778) and Executive Order 11958, as amended 22 CFR Subchapter M is amended as follows:

PART 126—GENERAL POLICIES AND PROVISIONS

1. The authority citation for part 126 is amended to read as follows:

Authority: Secs. 2, 38, 40, 42, and 71, Arms Export Control Act, Pub. L. 90-629, 90 Stat. 744 (22 U.S.C. 2752, 2778, 2780, 2791, and 2797); E.O. 11958, 41 FR 4311; E.O. 11322, 32 FR 119; 22 U.S.C. 2658; 22 U.S.C. 287c; E.O. 12918, 59 FR 28205.

2. Section 126.1 is amended by revising paragraphs (a) and (c), as follows:

§ 126.1 Prohibited exports and sales to certain countries.

(a) General. It is the policy of the United States to deny licenses, other approvals, exports and imports of defense articles and defense services, destined for or originating in certain countries. This policy applies to Armenia, Azerbaijan, Belarus, Cuba, Georgia, Iran, Iraq, Kazakhstan, Kyrgyzstan, Libya, Moldova, Mongolia, North Korea, Russia, Syria, Tajikistan, Turkmenistan, Ukraine, Uzbekistan and Vietnam.

This policy also applies to countries with respect to which the United States maintains an arms embargo (e.g., Burma, China, Haiti, Liberia, Rwanda, Somalia, Sudan, the former Yugoslavia, and Zaire) or whenever an export would not otherwise be in furtherance of world peace and the security and foreign

policy of the United States. Comprehensive arms embargoes are normally the subject of a State Department notice published in the **Federal Register**. The exemptions provided in the regulations in this subchapter, except §§ 123.17 and 125.4(b)(13) of this subchapter, do not apply with respect to articles originating in or for export to any proscribed countries or areas.

* * * * *

(c) Exports and sales prohibited by United Nations Security Council embargoes. Whenever the United Nations Security Council mandates an arms embargo, all transactions which are prohibited by the embargo and which involve U.S. persons anywhere, or any person in the United States, and defense articles and services of a type enumerated on the United States Munitions List (22 CFR part 121), irrespective of origin, are prohibited under the ITAR for the duration of the embargo, unless the Department of State publishes a notice in the **Federal Register** specifying different measures. This would include, but is not limited to, transactions involving trade by U.S. persons who are located inside or outside of the United States in defense articles and services of U.S. or foreign origin which are located inside or outside of the United States.

Dated: August 9, 1994.

Lynn E. Davis,

Under Secretary for Arms Control and International Security Affairs.

[FR Doc. 94-20218 Filed 8-16-94; 8:45 am]

BILLING CODE 4710-25-M

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Secretary

24 CFR Parts 880, 881, 882, 883, 884, 886, and 889

[Docket No. R-94-1671; FR-3122-C-04]

Preferences for Admission to Assisted Housing; Correction

AGENCY: Office of the Secretary, HUD.

ACTION: Final rule; correction.

SUMMARY: This document makes corrections to a final rule that was published in the **Federal Register** on July 18, 1994 (59 FR 36616), that revised the tenant selection preference provisions of regulations of several project-based assisted housing programs.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT:

Barbara D. Hunter, Acting Director, Planning and Procedures Division, Office of Multifamily Housing, Department of Housing and Urban Development, 451 Seventh Street, SW, Washington, DC 20410, (202) 708-3944 (voice); (202) 708-4594 (TDD). (These are not toll-free numbers.)

Accordingly, FR Doc. 94-16886, a final rule published in the **Federal Register** on July 18, 1994 (59 FR 36616), is corrected to read as follows:

§ 880.613 [Corrected]

1. On page 36624, in the second column, § 880.613, the last sentence of paragraph (c)(1)(i), the phrase "a mixed population project, the owner will" is corrected to read "an elderly project, the owner may"; and the phrase "(see subpart D of this part)" is corrected to read "(see § 880.612a)".

§ 881.613 [Corrected]

2. On page 36628, in the second column, § 881.613, the last sentence of paragraph (c)(1)(i), the phrase "a mixed population project, the owner will" is corrected to read "an elderly project, the owner may"; and the phrase "(see subpart D of this part)" is corrected to read "(see § 881.612a)".

§ 882.517 [Corrected]

3. On page 36632, in the second column, § 882.517, paragraph (c)(1)(i) is corrected by removing the last sentence.

§ 883.714 [Corrected]

4. On page 36635, in the third column, § 883.714, the last sentence of paragraph (c)(1)(i), the phrase "a mixed population project, the owner will" is corrected to read "an elderly project, the owner may"; and the phrase "(see § 883.704a)" is inserted before the period at the end of the paragraph.

§ 884.226 [Corrected]

5. On page 36639, in the second column, § 884.226, the last sentence of paragraph (c)(1)(i), the phrase "a mixed population project, the owner will" is corrected to read "an elderly project, the owner may"; and the phrase "(see § 884.223a)" is inserted before the period at the end of the paragraph.

§ 886.132 [Corrected]

6. On page 36643, in the third column, § 886.132, the last sentence of paragraph (c)(1)(i), the phrase "a mixed population project, the owner will" is corrected to read "an elderly project, the owner may"; and the phrase "(see § 886.329a)" is inserted before the period at the end of the paragraph.

§ 889.611 [Corrected]

7. On page 36647, in the third column, § 889.611, paragraph (c)(1)(i) is corrected by removing the last sentence.

Dated: August 11, 1994.

Brenda W. Gladden,

Acting Assistant General Counsel for Regulations.

[FR Doc. 94-20095 Filed 8-16-94; 8:45 am]

BILLING CODE 4210-32-M

DEPARTMENT OF THE TREASURY

Bureau of Alcohol, Tobacco and Firearms

27 CFR Parts 4, 5, and 7

[T.D. ATF-359]

RIN 1512-AB31

Signature Authority for Approval of Certificates of Label Approval (COLAS) (94F-002P)

AGENCY: Bureau of Alcohol, Tobacco and Firearms (ATF), Treasury.

ACTION: Final rule, Treasury decision.

SUMMARY: This Treasury decision will authorize the removal of imported alcoholic beverage products from Customs custody in conformity with certificates of label approval signed by ATF specialists. Currently, ATF specialists issue label approvals by affixing the Director's name to each application. This Treasury decision will eliminate from 27 CFR §§ 4.40(b) (wine), 5.51(b) (distilled spirits), and 7.31(b) (malt beverages) the requirement that certificates of label approval bear the signature of the Director. This change will streamline internal procedures and improve resource management.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT:

Robert White, Coordinator, Wine and Beer Branch, Bureau of Alcohol, Tobacco and Firearms, 650 Massachusetts Avenue, NW, Washington, DC 20226 (202-927-8230).

SUPPLEMENTARY INFORMATION:

Background

Section 205(e) of the Federal Alcohol Administration Act (FAA Act), 27 U.S.C. 205(e), requires that all distilled spirits, wine, and malt beverage products have either a certificate of label approval or a certificate of exemption from label approval prior to bottling, or in the case of imported products, prior to removal from Customs custody. Section 205(e) grants authority to the Secretary of the Treasury to issue certificates of label

approval in such manner and in such form as prescribed by regulation. The Secretary has delegated authority to administer the FAA Act to the Director, ATF, including the issuance of certificates of label approval. See 37 FR 11696 (June 6, 1972).

Under an existing delegation order, ATF specialists issue label approvals and exemptions from label approvals for both domestic and imported products in the name of the Director. ATF is currently revising this delegation order to authorize specialists within the Product Compliance Branch to approve labels and grant exemptions in their own names. However, the regulations at 27 CFR 4.40(b), 5.51(b), and 7.31(b) specifically require that certificates of label approval (ATF Form 5100.31) bear the signature of the Director before imported alcoholic beverage products may be released from Customs custody. This Treasury decision will amend these regulations so that the Director may delegate to Product Compliance Branch specialists the authority to approve labels for imported products in their own names.

Paperwork Reduction Act

The provisions of the Paperwork Reduction Act of 1980, Public Law 96-511, 44 U.S.C. Chapter 35, and its implementing regulations, 5 CFR Part 1320, do not apply to this final rule because no requirement to collect information is imposed.

Regulatory Flexibility Act

Because no notice of proposed rulemaking is required by 5 U.S.C. 553 or any other law, the provisions of the Regulatory Flexibility Act (5 U.S.C. 601 et. seq.) do not apply.

Executive Order 12866

Because this is a rule of agency management, the provisions of Executive Order 12866 do not apply.

Administrative Procedure Act

Because this final rule is a rule of agency management that merely redesignates signature authority for certificates of label approval, it is unnecessary to issue this Treasury decision with notice and public procedure under 5 U.S.C. 553(b) or subject to the effective date limitation in 5 U.S.C. 553(d).

Drafting Information

The principal author of this document is Robert White, Wine and Beer Branch, Bureau of Alcohol, Tobacco and Firearms.

List of Subjects

27 CFR Part 4

Advertising, Consumer protection, Customs duties and inspection, Imports, Labeling, Packaging and containers, Wine.

27 CFR Part 5

Advertising, Consumer protection, Customs duties and inspection, Imports, Labeling, Liquors, Packaging and containers, Reporting and recordkeeping requirements, Trade practices.

27 CFR Part 7

Advertising, Beer, Consumer protection, Customs duties and inspection, Imports, Labeling.

Authority and Issuance

Chapter I of Title 27, Code of Federal Regulations, is amended as follows:

PART 4—LABELING AND ADVERTISING OF WINE

Paragraph 1. The authority citation for Part 4 continues to read as follows:

Authority: 27 U.S.C. 205, unless otherwise noted.

Par. 2. Section 4.40(b) is revised to read as follows:

§ 4.40 Label approval and release.

(b) If the original or photostatic copy of ATF Form 5100.31 has been approved, the brand or lot of imported wine bearing labels identical with those shown thereon may be released from U.S. Customs custody.

PART 5—LABELING AND ADVERTISING OF DISTILLED SPIRITS

Par. 3. The authority citation for Part 5 continues to read as follows:

Authority: 26 U.S.C. 5301, 7805, 27 U.S.C. 205.

Par. 4. Section 5.51(b) is revised to read as follows:

§ 5.51 Label approval and release.

(b) *Release.* If the original or photostatic copy of ATF Form 5100.31 has been approved, the brand or lot of distilled spirits bearing labels identical with those shown thereon may be released from U.S. Customs custody.

PART 7—LABELING AND ADVERTISING OF MALT BEVERAGES

Par. 5. The authority citation for Part 7 continues to read as follows:

Authority: 27 U.S.C. 205.

Par. 6. Section 7.31(b) is revised to read as follows:

§ 7.31 Label approval and release.

(b) *Release.* If the original or photostatic copy of ATF Form 5100.31 has been approved, the brand or lot of imported malt beverages bearing labels identical with those shown thereon may be released from U.S. Customs custody.

Signed: July 12, 1994.

Daniel R. Black,
Acting Director.

Approved: August 1, 1994.

John P. Simpson,
Deputy Assistant Secretary (Regulatory, Tariff and Trade Enforcement).

[FR Doc. 94-20185 Filed 8-16-94; 8:45 am]

BILLING CODE 4810-31-P

DEPARTMENT OF JUSTICE

28 CFR Part 0

[Directive No. 81A]

Redelegation of Authority of Assistant Attorney General, Criminal Division, To Act as Central Authority or Competent Authority Under Treaties and Executive Agreements on Mutual Assistance in Criminal Matters

AGENCY: Office of the Assistant Attorney General, Criminal Division, Justice.

ACTION: Final rule.

SUMMARY: Section 0.64-1 of Title 28, Code of Federal Regulations, authorizes the Assistant Attorney General in charge of the Criminal Division to act as the Central or Competent Authority under treaties and executive agreements between the United States and other countries on mutual assistance in criminal matters. Section 0.64-1, as amended, also authorizes the Assistant Attorney General in charge of the Criminal Division to redelegate this authority to her Deputy Assistant Attorneys General and to the Director and Deputy Directors of the Office of International Affairs. This final rule amends the Appendix to Subpart K of Part 0. The purpose is to effectuate 28 CFR 0.64-1, as amended, by formally redelegating the authority of the Assistant Attorney General under both treaties and executive agreements on mutual assistance in criminal matters to designated individuals within the Criminal Division.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: George W. Proctor, Director, Office of International Affairs, Criminal Division,

Department of Justice, Washington, DC 20530; 202-514-0000.

SUPPLEMENTARY INFORMATION: In Directive No. 81 in the Appendix to Subpart K of Part 0, as currently written, the Assistant Attorney General in charge of the Criminal Division has redelegated her authority to act as the Central or Competent Authority under treaties on mutual assistance in criminal matters to her Deputy Assistant Attorneys General and to the Director of the Office of International Affairs. This final rule extends the redelegation of such authority to each of the Deputy Directors of the Office of International Affairs, Criminal Division. This final rule also expands the scope of that redelegation to match the scope of 28 CFR 0.64-1, which encompasses executive agreements, as well as treaties, on mutual assistance in criminal matters.

This rule is a matter of internal Department management. It has been drafted and reviewed in accordance with section 1(b) of Executive Order 12866. The Assistant Attorney General for the Criminal Division has determined that this rule is not a "significant regulatory action" under section 3(f) of Executive Order 12866 and accordingly this rule has not been reviewed by the Office of Management and Budget.

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Assistant Attorney General for the Criminal Division has reviewed this rule, and by approving it certifies that this rule will not have a significant economic impact on a substantial number of small entities.

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

List of Subjects in 28 CFR Part 0

Authority delegations (Government agencies), Government employees, International agreements, Organization and functions (Government agencies), Treaties, Whistleblowing.

For the reasons stated in the preamble, Title 28, Chapter I, Part 0, of the Code of Federal Regulations is amended as set forth below.

PART 0—ORGANIZATION OF THE DEPARTMENT OF JUSTICE

1. The authority citation for Part 0 continues to read as follows:

Authority: 5 U.S.C. 301; 28 U.S.C. 509, 510, 515-519.

2. Appendix to Subpart K is amended by removing Directive No. 81 and adding Directive No. 81A, which reads as follows:

Appendix to Subpart K—Criminal Division

* * * * *

[Directive No. 81A]

Redelegation of Authority to Deputy Assistant Attorneys General and Director and Deputy Directors of the Office of International Affairs Regarding Authority To Act as Central Authority or Competent Authority Under Treaties and Executive Agreements on Mutual Assistance in Criminal Matters

By virtue of the authority vested in me by § 0.64-1 of title 28 of the Code of Federal Regulations, the Authority delegated to me by that section to exercise all of the power and authority vested in the Attorney General under treaties and executive agreements on mutual assistance in criminal matters is hereby redelegated to each of the Deputy Assistant Attorneys General, to the Director of the Office of International Affairs and to each of the Deputy Directors of the Office of International Affairs, Criminal Division.

Dated: August 5, 1994.

Jo Ann Harris,

Assistant Attorney General.

[FR Doc. 94-19820 Filed 8-16-94; 8:45 am]

BILLING CODE 4410-01-M

DEPARTMENT OF THE TREASURY

Fiscal Service

31 CFR Part 337

RIN 1505-AA52

Supplemental Regulations Governing Federal Housing Administration Debentures

AGENCY: Department of the Treasury, Fiscal Service, Bureau of the Public Debt.

ACTION: Final rule.

SUMMARY: This rule implements provisions of the Housing and Community Development Act of 1992 that authorize the issuance of Federal Housing Administration debentures in book-entry form.

EFFECTIVE DATE: September 16, 1994.

FOR FURTHER INFORMATION CONTACT: Fred Pyatt, Director, Division of Special Investments, (304) 480-7752, or Cindy Reese, Deputy Chief Counsel, Office of the Chief Counsel, (202) 219-3320.

SUPPLEMENTARY INFORMATION: Federal Housing Administration (FHA) debentures have been issued since 1938 in registered certificated form in payment of certain insured mortgages in default. FHA debentures are fully guaranteed as to principal and interest by the United States. The Treasury acts as the fiscal agent of the Department of Housing and Urban Development (HUD) in administering its debenture issues. The general regulations of the Department of the Treasury governing U.S. securities (31 CFR Part 306) have been adopted by HUD to govern transactions in its debentures. The Treasury regulations at 31 CFR part 337 supplement the general regulations, setting out provisions that apply specifically to the debentures.

In 1986, the Department of the Treasury began issuing its marketable securities exclusively in book-entry form. This action was taken as book-entry technology was determined to be quicker, more efficient, and less costly than issuing certificated securities. To take advantage of this technology, HUD successfully secured legislation, i.e., the Housing and Community Development Act of 1992, Public Law 102-550, § 516, 106 Stat. 3790 (1992), authorizing the issuance of FHA debentures in book-entry form.

This rule revises and expands 31 CFR Part 337 to include provisions relating to book-entry debentures. Book-entry debentures will be governed by the rules for the TREASURY DIRECT Book-Entry Securities System (31 CFR part 357) with several exceptions which reflect the unique nature of the debentures. First, book-entry debentures, unlike Treasury's book-entry marketable securities, may not be transferred to, or held in, Treasury's commercial book-entry system; they may be transferred only between accounts in the FHA book-entry debenture system. Second, while debenture payments will be made by the direct deposit (electronic funds transfer) method, prenotification messages or test payment messages will not be used to verify payment instructions since accurate payment information will have entities seeking settlement of defaulted insured mortgages. Third, since debentures are issued in settlement of defaulted mortgages rather than through an auction process, no issue price

information will be maintained for the debentures.

Book-entry debentures will be maintained in the FHA book-entry debenture system operated for Treasury by the Federal Reserve Bank of Philadelphia acting as fiscal agent of the United States. Debentures in certificated form may be exchanged for similar debentures in book-entry form, but, once exchanged, may not be reissued in certificated form. Debentures issued in book-entry form may not be exchanged for debentures in certificated form.

This rule also revises 31 CFR Part 337 to reflect the centralization of processing of debentures in both certificated and book-entry form at the Federal Reserve Bank of Philadelphia, and to eliminate the obsolete requirement that the registered owner or assignee must assign certificated debentures presented for redemption when payment is to be made to the registered owner or assignee.

Special Analysis

It has been determined that the rule does not constitute a "significant regulatory action" for purposes of Executive Order No. 12866. It has also been determined that prior notice of proposed rulemaking is unnecessary and impracticable because the rule sets out procedures that merely implement legislation authorizing the issuance of debentures in book-entry form. Because no notice of proposed rulemaking is required, the provisions of the Regulatory Flexibility Act (5 U.S.C. 601, *et seq.*) do not apply to this rule.

List of Subjects in 31 CFR Part 337

Banks, Banking, Electronic funds transfers, Government Securities, Federal Reserve System, Housing.

For the reasons set out in the preamble, 31 CFR Part 337 is revised to read as follows:

PART 337—SUPPLEMENTAL REGULATIONS GOVERNING FEDERAL HOUSING ADMINISTRATION DEBENTURES

Sec.

337.0 Scope of regulations.

Subpart A—Certificated Debentures

- 337.1 Applicability of Treasury regulations.
- 337.2 Transportation charges and risks.
- 337.3 Termination of transfers and denominational exchange transactions.
- 337.4 Presentation and surrender.
- 337.5 Assignments.
- 337.6 Conversions to book-entry.
- 337.7 Servicing transactions.
- 337.8 Payment of mortgage insurance premiums.
- 337.9 Payment of final interest.
- 337.10 Payments.

Subpart B—Book-Entry Debentures

- 337.11 Original issue and conversions.
- 337.12 Applicability of TREASURY DIRECT regulations.
- 337.13 Payment of mortgage insurance premiums.

Subpart C—Additional Information

- 337.14 Address for further information.
- 337.15 General provisions.

Authority: 5 U.S.C. 301; 31 U.S.C. 321; Sec. 516, Pub. L. 102-550, 106 Stat. 3790.

§ 337.0 Scope of regulations.

The United States Department of the Treasury is the agent of the Federal Housing Administration for transactions in any debentures which have been or may be issued pursuant to the authority conferred by the National Housing Act (48 Stat. 1246), as amended; (12 U.S.C. 1701 *et seq.*), as amended from time to time, including Mutual Mortgage Insurance Fund Debentures, Housing Insurance Fund Debentures, War Housing Insurance Fund Debentures, Military Housing Insurance Fund Debentures, and National Defense Housing Insurance Fund Debentures. In accordance with the regulations adopted by the Federal Housing Commissioner and approved by the Secretary of the Treasury, such transactions are governed by regulations of the Department of the Treasury, so far as applicable.

Subpart A—Certificated Debentures

§ 337.1 Applicability of Treasury regulations.

The general regulations governing United States securities, part 306 of this chapter, apply, as the regulations for similar transactions and operations in certificated debentures. To the extent that the provisions in this part differ from the provisions in part 306, the provisions in this part shall prevail.

§ 337.2 Transportation charges and risks.

Debentures presented for redemption at call or maturity, or for authorized prior purchase, or for conversion to book-entry form, must be delivered at the expense and risk of the holder. Debentures bearing restricted assignments may be forwarded by registered mail, but for the owner's protection debentures bearing unrestricted assignments should be forwarded by insured registered mail. Debentures should be delivered to the Federal Reserve Bank of Philadelphia, Securities Division, Ten Independence Mall, P.O. Box 90, Philadelphia, Pennsylvania 19105-0090. Debentures delivered to any other Federal Reserve Bank or Branch, to the Department of

Housing and Urban Development (HUD), or to the Bureau of the Public Debt will be forwarded to the Federal Reserve Bank of Philadelphia for processing.

§ 337.3 Termination of transfers and denominational exchange transactions.

Debentures, which by their terms are subject to call, may be called for redemption, in whole or in part, at par and accrued interest, on any interest date on three months' notice. No transfers or denominational exchanges in certificated debentures covered by a given call will be made on the books of the Department of the Treasury on or after the announcement of such call. However, this does not affect the right of a holder of such debenture to sell and assign it on or after the announcement of the call date.

§ 337.4 Presentation and surrender.

(a) *For redemption.* To facilitate the redemption of called or maturing debentures, they may be presented and surrendered in the manner prescribed in this section in advance of the call or maturity date, as the case may be. Early presentation by holders will insure prompt payment of principal and interest when due. The debentures must first be assigned by the registered payee or his assignee, or by his duly constituted representative, if required, in the form and manner indicated in § 337.5, and should then be submitted to the Federal Reserve Bank of Philadelphia, accompanied by appropriate written advice. A transmittal advice for this purpose will accompany the notice of call.

(b) *For purchase.* Debentures, the purchase of which has been authorized prior to call or maturity, may be assigned as instructed in paragraph (a) of this section and immediately submitted in accordance with procedures prescribed by HUD for this purpose.

§ 337.5 Assignments.

(a) If the registered payee, or an assignee holding a certificated debenture under proper assignment from the registered payee, desires that payment be made to such payee or assignee, the debenture need not be assigned. If the owner desires for any reason that payment be made to another, without intermediate assignment, the debentures should be assigned to "The Federal Housing Commissioner for redemption (or, purchase) for the account of _____," inserting the name and address of the person to whom payment is to be made. Proof of the authority of the individual assigning

on behalf of an owner will be required in accordance with part 306 of this chapter.

(b) An assignment in blank or other assignment having similar effect will be recognized, but in that event the debenture would be, in effect, payable to bearer, and payment will be made in accordance with the instructions received from the person surrendering the debenture for redemption or purchase. For the owner's protection, such assignments should be avoided unless the owner is willing to lose the protection afforded by registration.

(c) Debentures submitted for conversion to book-entry form should be assigned to "The Federal Housing Commissioner for conversion to book-entry debentures for the account of _____." The registration on the book-entry account and/or the account number in which the debentures should be deposited should be indicated.

(d) All assignments must be made on the debentures themselves unless otherwise authorized by the Department of Treasury.

§ 337.6 Conversions to book-entry.

Upon implementation of the book-entry debenture system, to be announced in advance by separate public notice, all new debentures will be issued only in book-entry form, and may not thereafter be converted to certificated form.

Certificated debentures may, upon the owner's request in accordance with § 337.5(c), be converted to book-entry. If such action is taken, the owner shall be deemed to have irrevocably waived the right to hold such debenture in certificated form.

§ 337.7 Servicing transactions.

Upon implementation of the book-entry debenture system, to be announced in advance by separate public notice, any transfer or denominational exchange of certificated debentures generally will be made in book-entry form. If certificated debentures are desired, the owner should so request in writing, before the book-entry debentures are issued.

§ 337.8 Payment of mortgage insurance premiums.

When certificated debentures are tendered for purchase prior to maturity in order that the proceeds thereof be applied to pay for mortgage insurance premiums, any difference between the amount of the debentures purchased and the amount of the mortgage insurance premium will generally be issued to the owner in the form of a book-entry debenture in the exact

amount of such difference, provided it is one dollar (\$1.00) or more. However, if the owner so requests, such difference will be settled with certificated debenture(s), together with a cash adjustment, if any. Such request should be made in writing, before the book-entry debenture in the amount of the difference is issued.

§ 337.9 Payment of final interest.

Final interest on any debenture, whether purchased prior to or redeemed on or after the call or the maturity date, will be paid with the principal. In all cases the payment of principal and final interest will be mailed or directed to the payment address given in the form of advice accompanying the debenture surrendered.

§ 337.10 Payments.

Payments on certificated debentures will be made by fiscal agency check in accordance with part 355 of this chapter, or, upon request, by direct deposit (electronic funds transfer) in accordance with part 370 of this chapter. Information as to the deposit account at the financial institution designated to receive a direct deposit payment shall be provided on the appropriate form(s) designated by the Department.

Subpart B—Book-Entry Debentures

§ 337.11 Original issue and conversions.

Upon implementation of the book-entry debenture system, to be announced in advance by separate public notice, all new debentures will be issued only in book-entry form in the exact amount payable to the owner. Once issued in book-entry form, a debenture may not be converted to certificated form.

§ 337.12 Applicability of TREASURY DIRECT regulations.

The regulations governing the TREASURY DIRECT Book-Entry Securities System (TREASURY DIRECT) (part 357 of this chapter) apply to govern transactions in FHA book-entry debentures, with the following exceptions:

(a) *Securities account.* (See § 357.20 of this chapter.) An account in the book-entry debenture system may be established by the Department of the Treasury upon receipt of the request that a new debenture be issued or that a certificated debenture be converted to book-entry form. The statement of account shall contain information regarding the account as of the date of such statement. It will include a unique account number, but will not include price information.

(b) *Transfers.* (See § 357.22 of this chapter.) A book-entry debenture may be transferred only between accounts established in the FHA book-entry debenture system.

(c) *Debentures announced for call.* Debentures, which by their terms are subject to call, may be called for redemption, in whole or in part, at par and accrued interest, on any interest date on three months' notice. For purposes of a transaction request affecting ownership and/or payment instructions with respect to a debenture announced for call, a proper request must be received not less than twenty (20) calendar days preceding the next payment date. If the twentieth day preceding a payment date falls on a Saturday, Sunday, or a Federal holiday, the last day set for the receipt of a transaction request will be the last business day preceding that date. If a transaction request is received less than twenty (20) calendar days preceding a payment date, the Department may, in its discretion, act on such request if sufficient time remains for processing. If a transaction request is received too late for completion of the requested transaction, principal and final interest on the called debentures will be paid to the owner of record and sent to the payment address of record.

(d) *Payments.* (See § 357.26 of this chapter.) Direct deposit (electronic funds transfer) payments with respect to debentures, e.g., principal, interest and cash adjustments, will be made without prenotification messages.

§ 337.13 Payment of mortgage insurance premiums.

When book-entry debentures are being purchased prior to maturity to pay for mortgage insurance premiums, the difference between the amount of the debentures purchased and the mortgage insurance premiums shall be issued to the owner in the form of a book-entry debenture in the exact amount of such difference, provided it is one dollar (\$1.00) or more.

Subpart C—Additional Information

§ 337.14 Address for further information.

Further information regarding the issuance of, transactions in, and redemption of, FHA debentures may be obtained from the Federal Reserve Bank of Philadelphia, Securities Division, Ten Independence Mall, P.O. Box 90, Philadelphia, Pennsylvania 19105-0090, or from the Bureau of the Public Debt, Division of Special Investments, 200 Third Street, P.O. Box 396, Parkersburg, West Virginia 26102-0396.

§ 337.15 General Provisions.

As fiscal agents of the United States, Federal Reserve Banks are authorized and requested to perform any necessary acts under this Part. The Federal Reserve Bank of Philadelphia is specifically authorized to operate the FHA debenture computer system and to perform day-to-day operations and transactions relating to the debentures. The Secretary of the Treasury may at any time or from time to time prescribe supplemental and amendatory regulations governing the matters covered by this part, notice of which shall be communicated promptly to the registered owners of the debentures.

Dated: August 9, 1994.

Gerald Murphy,

Fiscal Assistant Secretary.

[FR Doc. 94-20128 Filed 8-16-94; 8:45 am]

BILLING CODE 4810-39-P

ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 52

[CA 32-2-6530; FRL-5007-7]

Approval and Promulgation of Implementation Plans; California State Implementation Plan Revision; South Coast Air Quality Management Division; Ventura County Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is finalizing the approval of revisions to the California State Implementation Plan (SIP) proposed in the Federal Register on March 15, 1994. The revisions concern rules from the South Coast Air Quality Management District (SCAQMD) and the Ventura County Air Pollution Control District (VCAPCD). This approval action will incorporate these rules into the federally approved SIP. The intended effect of approving these rules is to regulate emissions of volatile organic compounds (VOCs) in accordance with the requirements of the Clean Air Act, as amended in 1990 (CAA or the Act). The revised rules control emissions of VOCs from the transfer of gasoline into storage or fuel tanks, and from crude oil and natural gas production and processing facilities. Thus, EPA is finalizing the approval of these revisions into the California SIP under provisions of the CAA regarding EPA action on SIP submittals, SIPs for national primary and secondary ambient

air quality standards and plan requirements for nonattainment areas.

EFFECTIVE DATE: This action is effective on September 16, 1994.

ADDRESSES: Copies of the rule revisions and EPA's evaluation report for each rule are available for public inspection at EPA's Region IX office during normal business hours. Copies of the submitted rule revisions are available for inspection at the following locations:

Rulemaking Section (A-5-3), Air and Toxics Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Environmental Protection Agency, Jerry Kurtzweg ANR 443, 401 "M" Street, S.W., Washington, D.C. 20460.

California Air Resources Board, Stationary Source Division, Rule Evaluation Section, 2020 "L" Street, Sacramento, CA 95814.

South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182.

Ventura County Air Pollution Control District, 702 County Square Drive, Ventura, California 93003.

FOR FURTHER INFORMATION CONTACT: Mae Wang, Rulemaking Section (A-5-3), Air and Toxics Division, U.S.

Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, Telephone: (415) 744-1200.

SUPPLEMENTARY INFORMATION:
Background

On March 15, 1994 in 59 FR 11958, EPA proposed to approve the following rules into the California SIP: SCAQMD Rule 461, Gasoline Transfer and Dispensing, and VCAPCD Rule 74.10, Components at Crude Oil and Natural Gas Production and Processing Facilities. Rule 461 was adopted by the SCAQMD on July 7, 1989, and submitted by the California Air Resources Board (CARB) to EPA on December 31, 1990. Rule 74.10 was adopted by the VCAPCD on June 16, 1992 and submitted by the CARB on September 14, 1992. These rules were submitted in response to EPA's 1988 SIP-Call and the CAA section 182(a)(2)(A) requirement that nonattainment areas fix their reasonably available control technology (RACT) rules for ozone in accordance with EPA guidance that interpreted the requirements of the pre-amendment Act. A detailed discussion of the background for each of the above rules and nonattainment areas is provided in the notice of proposed rulemaking (NPRM) cited above.

EPA has evaluated all of the above rules for consistency with the requirements of the CAA and EPA regulations and EPA interpretation of

these requirements as expressed in the various EPA policy guidance documents referenced in the NPRM cited above. EPA has found that the rules meet the applicable EPA requirements. A detailed discussion of the rule provisions and evaluations has been provided in 59 FR 11958 and in technical support documents (TSDs) available at EPA's Region IX office.

Response to Public Comments

A 30-day public comment period was provided in 59 FR 11958. EPA did not receive any comments regarding these rules.

EPA Action

EPA is finalizing this action to approve the above rules for inclusion into the California SIP. EPA is approving the submittal under section 110(k)(3) as meeting the requirements of section 110(a) and Part D of the CAA. This approval action will incorporate these rules into the federally approved SIP. The intended effect of approving these rules is to regulate emissions of VOCs in accordance with the requirements of the CAA.

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any state implementation plan. Each request for revision to the state implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

Regulatory Process

This action has been classified as a Table 3 action by the Regional Administrator under the procedures published in the Federal Register on January 19, 1989 (54 FR 2214-2225), as revised by an October 4, 1993, memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation. The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866 review.

List of Subjects in 40 CFR Part 52

Environmental Protection Agency, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements.

Note: Incorporation by reference of the State Implementation Plan for the State of California was approved by the Director of the Federal Register on July 1, 1982.

Dated: June 23, 1994.

John Wise,

Acting Regional Administrator.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

Subpart F—California

2. Section 52.220 is amended by adding paragraphs (c)(182)(i)(A)(4) and (c)(189)(i)(B)(2) to read as follows:

§ 52.220 Identification of plan.

- * * * * *
- (c) * * *
- (182) * * *
- (i) * * *
- (A) * * *
- (4) Rule 461, adopted on July 7, 1989.
- * * * * *
- (189) * * *
- (i) * * *
- (B) * * *
- (2) Rule 74.10, adopted on June 16, 1992.
- * * * * *

[FR Doc. 94-19907 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-P

40 CFR Part 52

[DC16-1-6286a, A-1-FRL-5052-6]

Approval and Promulgation of Air Quality Implementation Plans; District of Columbia—Small Business Stationary Source Technical and Environmental Compliance Assistance Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is approving a State Implementation Plan (SIP) revision submitted by the District of Columbia for the purpose of establishing a Small Business Stationary Source Technical and Environmental Compliance Assistance Program (PROGRAM). This SIP revision was submitted by the District to satisfy the Federal mandate of the Clean Air Act (CAA) to ensure that small businesses have access to the technical assistance and regulatory information necessary to comply with the CAA. The rationale for approval is set forth in this document; additional information is available at the address indicated in the ADDRESSES section. This action is being taken in accordance with section 110 of the CAA.

DATES: This final rule is effective on October 17, 1994 unless adverse or critical comments are received by September 16, 1994. If the effective date is delayed, timely notice will be published in the Federal Register.

ADDRESSES: Comments may be mailed to Thomas J. Maslany, Director, Air, Radiation, and Toxics Division, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, PA 19107. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air, Radiation, and Toxics Division, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, PA 19107; District of Columbia Environmental Regulation Administration, 2100 Martin Luther King, Jr., Avenue, SE., room 203, Washington, DC 20020.

FOR FURTHER INFORMATION CONTACT: Jennifer M. Abramson, (215) 597-2923.

SUPPLEMENTARY INFORMATION:

I. Background

Implementation of the provisions the CAA will require regulation of many small businesses so that areas may attain and maintain the National ambient air quality standards (NAAQS) and reduce the emission of air toxics. Small businesses frequently lack the technical expertise and financial resources necessary to evaluate such regulations and to determine the appropriate mechanisms for compliance. In anticipation of the impact of these requirements on small businesses, the CAA requires that states adopt a Small Business Stationary Source Technical and Environmental Compliance Assistance Program, and submit this PROGRAM as a revision to the federally approved SIP. In addition, the CAA directs EPA to oversee these small business assistance programs and report to Congress on their implementation. The requirements for establishing a PROGRAM are set out in section 507 of title V of the CAA. In February 1992, EPA issued *Guidelines for the Implementation of Section 507 of the 1990 Clean Air Act Amendments* in order to delineate the Federal and state roles in meeting the new statutory provisions and as a tool to provide further guidance to the states on submitting acceptable SIP revisions.

On October 22, 1993, the District of Columbia submitted a formal revision to its SIP. The SIP revision consists of a plan for establishing a PROGRAM. In order to gain full approval, the District's submittal must provide for each of the following program elements: (1) The

establishment of a Small Business Assistance Program (SBAP) to provide technical and compliance assistance to small businesses; (2) the establishment of a District Small Business Ombudsman to represent the interests of small businesses in the regulatory process; and (3) the creation of a Compliance Advisory Panel (CAP) to determine and report on the overall effectiveness of the SBAP. The plan must include the duties, funding, and schedule of implementation for the three program components. The plan must also determine the eligibility of small business stationary sources for assistance in the program.

The District's plan for the establishment of a Small Business Assistance Program (SBAP) and Ombudsman was adopted and will be implemented pursuant to the authority vested in the Mayor by section 422(6) of the District of Columbia Self Government and Governmental Reorganization Act of 1973, as amended (1992), D.C. Code sections 1-242 (6), (11) and (12), 6-901, 6-902 and 6-903. The creation and administration of the Compliance Advisory Panel will be accomplished by Mayoral order.

Milestones for implementing the essential elements of the District's PROGRAM are included as part of the SIP revision submittal. The District has committed to establishing a SBAP, administered by the Air Resources Management Division of the Environmental Regulation Administration, by September 1, 1993. In January, 1994 the District appointed a small business representative to coordinate SBAP activities. Eligibility for assistance under the SBAP will be determined by the criteria outlined in the PROGRAM submittal. Full SBAP implementation will begin no later than November 15, 1994. The District has committed to establishing an Ombudsman's office, to be located in the Office of the Administrator of the Environmental Regulation Administration, by September 1, 1993. The Ombudsman will complete the first annual review of the SBAP by November 15, 1994. A Mayoral Order establishing the creation and administration of the Compliance Advisory Panel was issued on November 3, 1992. The District has committed to convening its CAP by June 1, 1993. The CAP will submit its first annual report to EPA by November 15, 1994.

II. Analysis of SIP Revision

Section 507(a) of the CAA sets forth seven requirements that the District must meet to have an approvable SBAP.

Six of the requirements will be discussed in this section of this document, while the seventh requirement, establishment of a state Small Business Ombudsman, will be discussed in the next section.

1. Small Business Assistance Program

The first requirement is to establish adequate mechanisms for developing, collecting and coordinating information concerning compliance methods and technologies for small business stationary sources, and programs to encourage lawful cooperation among such sources and other persons to further compliance with the CAA. The second requirement is to establish adequate mechanisms for assisting small business stationary sources with pollution prevention and accidental release detection and prevention, including providing information concerning alternative technologies, process changes, products and methods of operation that help reduce air pollution. The District has met these requirements by establishing a SBAP, administered by the District of Columbia Air Resources Management Division (ARMD). The ARMD SBAP has the responsibility of collecting and coordinating information concerning compliance methods and acceptable control technologies for small business stationary sources. The ARMD will also work closely with the Office of Emergency Preparedness and other District organizations in coordinating information exchange regarding alternative technologies, process changes, products and other methods of pollution prevention and accidental release prevention and detection. The dissemination of SBAP information shall take two forms. Technical and compliance information will be disseminated to small businesses in a proactive manner via press releases, brochures and other media as necessary. Additionally, "outreach" programs such as conferences or meetings with Advisory Neighborhood Commissioners, small businesses, and/or trade associations, etc. may be utilized. The SBAP will also disseminate information in a reactive manner via an established telephone hotline and information clearinghouse which will be capable of handling inquiries from the small business community.

The third requirement is to develop a compliance and technical assistance program for small business stationary sources which assists small businesses in determining applicable requirements and in receiving permits under the CAA in a timely and efficient manner. The SBAP will work closely with the staff of

the ARMD Engineering and Planning Branch and Compliance and Enforcement Branch to help sources identify applicable requirements and obtain permits. Specifically, the SBAP will be responsible for providing advice and assistance to small businesses in the interpretation of regulatory requirements, explaining permitting procedures and providing information regarding fees, when and where to apply, the length of time necessary to receive a permit, etc. Additional responsibilities include helping small businesses determine if they qualify for reduced fees under the waiver provisions of the title V Operating Permit Program.

The fourth requirement is to develop adequate mechanisms to assure that small business stationary sources receive notice of their rights under the CAA in such manner and form as to assure reasonably adequate time for such sources to evaluate compliance methods and any relevant or applicable proposed or final regulation or standards issued under the CAA. The fifth requirement is to develop adequate mechanisms for informing small business stationary sources of their obligations under the CAA, including mechanisms for referring such sources to qualified auditors or, at the option of the state, for providing audits of the operations of such sources to determine compliance with the CAA. The SBAP is responsible for notifying eligible sources of their statutory and regulatory rights and obligations under the Clean Air Act in a timely fashion. Such communication will include explaining fine and permit policies, the consequences of operating in violation of regulations, and appeal procedures. In addition, the District's SBAP will administer an audit program which provides technical assistance on pollution prevention or control options. Environmental professionals from the Compliance and Enforcement Branch and the Engineering and Planning Branch of the ARMD are to serve as auditors for the program.

The sixth requirement is to develop procedures for consideration of requests from a small business stationary source for modification of: (A) Any work practice or technological method of compliance; or (B) the schedule of milestones for implementing such work practices or compliance methods preceding any applicable compliance date. The SBAP will meet this requirement by developing procedures, in accordance with section 507(a)(7) of the CAA, for handling requests from small businesses for modifications of work practices or alternative air

pollution control methods. The District has committed to establishing such procedures by November 15, 1994.

An ARMD program analyst, authorized to report directly to the Program Manager of the Air Resources Management Division, is responsible for the development and initiation of SBAP programs. As SBAP programs are developed, additional staff will be hired as required. The SBAP will be funded by District of Columbia and/or Federal air pollution control grant funds until the effective date of implementation of the District's title V Operating Permits Program. After the effective date, the District's SBAP will be funded by District of Columbia funds appropriated from the revenues generated by fees required by the title V Operating Permits Program.

2. Ombudsman Office

The seventh requirement of section 507(a)(3) is the designation of a state office to serve as the Ombudsman for small business stationary sources in connection with the implementation of the CAA. The District's Ombudsman will work in the Office of the Administrator of the Environmental Regulation Administration as a member of the Administrator's staff. Consequently, the Ombudsman will be in an effective position to represent the views and interests of the small business community on issues concerning the implementation of the CAA. The Ombudsman will have direct access to the Program Manager of the ARMD and his/her superior, the Administrator. In this position, the Ombudsman can easily evaluate the District's SBAP, investigate and resolve disputes between businesses and air pollution control authorities, develop and propose legislation, and actively promote the small business point-of-view. The Ombudsman will also have access to the Director of the Department of Consumer and Regulatory Affairs, the Office of the Corporation Counsel, and the Office of the Mayor.

A listing of the Ombudsman's duties indicate that it will be readily accessible to small businesses and, on their behalf, be authorized to provide reports to and to communicate with appropriate personnel. The Ombudsman will also distribute the District's CAP reports and advisory opinions and provide administrative support to the CAP. The District has committed to hiring a program analyst to serve as the Small Business Ombudsman. Additional staff for the Office of the Ombudsman will be recruited as necessary. The Ombudsman will be funded with District of Columbia appropriated funds. After the effective

date of the District's title V Operating Permits Program, the Ombudsman and his or her staff may be funded by appropriations from revenues of the District's title V Operating Permits Program.

3. Compliance Advisory Panel

Section 507(e) of the CAA requires each state to establish a Compliance Advisory Panel that includes two members selected by the Governor (or equivalent) who are not owners or representatives of owners of small business stationary sources; four members selected by the state legislature (or equivalent) who are owners, or represent owners, of small businesses; and one member selected by the head of the agency in charge of the air pollution permit program. The District has committed to creating a compliance advisory panel. The composition of the District's CAP is in accordance with the method of selection required by section 507(e)(2) of the CAA for a unicameral legislature. All CAP members, with the exception of the representative of the Air Resources Management Division, a District of Columbia employee, will be unpaid appointees.

In addition to establishing the minimum membership of the CAP the CAA delineates certain responsibilities of the panel. A description of the duties and authorities delegated to the District's Compliance Advisory Panel indicates that it will be responsible for all activities required by section 507(e). These activities include rendering advisory opinions on the effectiveness of the small business ombudsman and SBAP and preparing periodic reports to EPA concerning the effectiveness of the PROGRAM following the intent of the Federal Paperwork Reduction Act, the Regulatory Flexibility Act, and the Equal Access to Justice Act. The CAP will also be responsible for reviewing information disseminated to small business stationary sources to assure such information is understandable to laypersons.

4. Source Eligibility

Section 507(c)(1) of the CAA defines the term "small business stationary source" as a stationary source that:

- (A) Is owned or operated by a person who employs 100 or fewer individuals;
- (B) Is a small business concern as defined in the Small Business Act;
- (C) Is not a major stationary source;
- (D) Does not emit 50 tons per year (tpy) or more of any regulated pollutant; and
- (E) Emits less than 75 tpy of all regulated pollutants.

The District's program definition of the term "small business stationary source" is identical to the statutory definition found in section 507(c). All small business stationary sources located in the District shall be eligible to receive assistance from the SBAP. Any source which does not meet the criteria in (C), (D), and (E) above but does not emit more than 100 tons per year of all regulated pollutants may petition the District of Columbia to be included in the SBAP. The District may, after public notice and opportunity for public comment, permit such a source to participate in the SBAP even though the source does not meet the criteria given above.

III. Summary of SIP Revision

The District has submitted a SIP revision which fully implements each of the program elements required by CAA section 507. As previously stated, the District has committed to fully implementing its SBAP, administered by the Air Resources Management Division of the Environmental Regulation Administration, by November 15, 1994. The District's Ombudsman, located in the Office of the Administrator of the Environmental Regulation Administration, shall complete its first annual review of the SBAP, by November 15, 1994. The District's CAP, authorized by Mayoral Order, shall complete its first annual review of the SBAP and Ombudsman and submit it to EPA by November 15, 1994. In this action, EPA is approving the SIP revision submitted by the District of Columbia. Accordingly, § 52.510 is added to 40 CFR part 52, subpart J—District of Columbia to reflect EPA's approval action and the fact that it is considered part of the District of Columbia SIP.

EPA is approving this SIP revision without prior proposal because the Agency views this as a noncontroversial amendment and anticipates no adverse comments. However, in a separate document in this *Federal Register* publication, EPA is proposing to approve the SIP revision should adverse or critical comments be filed. This action will become effective October 17, 1994 unless, within 30 days of publication, adverse or critical comments are received.

If EPA receives such comments, this action will be withdrawn before the effective date by publishing a subsequent document that will withdraw the final action. All public comments received will then be addressed in a subsequent final rule based on this action serving as a proposed rule. EPA will not institute a

second comment period on this action. Any parties interested in commenting on this action should do so at this time. If no such comments are received, the public is advised that this action will be effective on October 17, 1994.

Final Action

EPA is approving the District of Columbia's plan for the establishment of a Small Business Stationary Source Technical and Environmental Compliance Assistance Program. Accordingly, § 52.510 is added to 40 CFR part 52, subpart J—District of Columbia to reflect EPA's approval action. EPA has reviewed this request for revision of the federally-approved state implementation plan for conformance with the CAA including section 507 and section 110(a)(2)(E).

Nothing in this action should be construed as permitting or allowing or establishing a precedent for any future request for revision to any SIP. Each request for revision to the SIP shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

Under the Regulatory Flexibility Act, 5 U.S.C. 600 *et seq.*, EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. 5 U.S.C. 603 and 604. Alternatively, EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

By this action, EPA is approving a state program created for the purpose of assisting small businesses in complying with existing statutory and regulatory requirements. The program being approved does not impose any new regulatory burden on small businesses; it is a program under which small businesses may elect to take advantage of assistance provided by the state. Therefore, because EPA's approval of this program does not impose any new regulatory requirements on small businesses, the Administrator certifies that it does not have a significant economic impact on any small entities affected.

This action has been classified as a Table 2 action for signature by the Regional Administrator under the procedures published in the *Federal Register* on January 19, 1989 (54 FR 2214-2225), as revised by an October 4, 1993 memorandum from Michael H. Shapiro, Acting Assistant Administrator for Air and Radiation. The OMB has

exempted this regulatory action from E.O. 12866 review.

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by October 17, 1994. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Small business assistance program.

Dated: June 9, 1994.

Peter H. Kostmayer,

Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

Subpart J—District of Columbia

2. Section 52.510 is added to read as follows:

§ 52.510 Small business assistance program.

On October 22, 1993, the Administrator of the District of Columbia Environmental Regulation Administration submitted a plan for the establishment and implementation of a Small Business Technical and Environmental Compliance Assistance Program as a state implementation plan revision (SIP), as required by title V of the Clean Air Act. EPA approved the Small Business Technical and Environmental Compliance Assistance Program on August 17, 1994 and made it part of the District of Columbia SIP. As with all components of the SIP, the District of Columbia must implement the program as submitted and approved by EPA.

[FR Doc. 94-20148 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

40 CFR Part 81

[WI44-01-6426a; FRL-5053-5]

Designation of Areas for Air Quality Planning Purposes; Wisconsin; Redesignation of Oshkosh, WI, to Attainment for Carbon Monoxide

AGENCY: United States Environmental Protection Agency (USEPA).

ACTION: Final rule.

SUMMARY: The USEPA redesignates Oshkosh, Wisconsin from unclassifiable to attainment status for carbon monoxide. The State of Wisconsin requested this redesignation and provided the necessary monitoring data for USEPA to approve the change. The redesignation has no substantive effect because unclassifiable areas are subject to the same requirements as attainment areas. Elsewhere in this **Federal Register**, USEPA is proposing approval of and soliciting public comment on this redesignation. If adverse comments are received in the time period specified below, USEPA will withdraw this final rule and address the comments in a subsequent final rule.

DATES: This final rule will be effective October 17, 1994 unless notice is received within 30 days of this publication that someone wishes to submit adverse comments. If the effective date is delayed, timely notice will be published in the **Federal Register**.

ADDRESSES: Written comments should be sent to: Carlton T. Nash, Chief, Regulation Development Section, Air Toxics and Radiation Branch (AT-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

Copies of the redesignation request and USEPA's analysis are available for inspection at the U.S. Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. (It is recommended that you telephone Megan Beardsley at (312) 886-0669 before visiting the Region 5 Office.)

A copy of this SIP revision is also available at the Office of Air and Radiation, Docket and Information Center (Air Docket 6102), room M1500, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-7548.

FOR FURTHER INFORMATION CONTACT: Megan Beardsley, Environmental Scientist, Regulation Development Section, Air Toxics and Radiation Branch (AT-18J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 886-0669.

SUPPLEMENTARY INFORMATION:

I. Background

In November 1991, USEPA designated Oshkosh, Wisconsin as an unclassifiable area for carbon monoxide (56 FR 56850) because the available air quality data was not representative of air quality at the date of enactment of the 1990 Clean Air Act Amendments. Exceedances of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide had been recorded in Oshkosh, Wisconsin in late 1988 and early 1989, but the emissions causing the exceedances were brought under control later in 1989. These controls were approved by USEPA and incorporated into the State Implementation Plan on October 8, 1992 (57 FR 46309).

Wisconsin's current request, submitted on April 7, 1994, is to change the designation of Oshkosh from unclassifiable to attainment based on recent ambient air quality measurements.

II. Evaluation of State Submission

A. Procedural Background

Redesignation requests are processed under section 107(d)(3) of the Clean Air Act (the Act). While section 107(d)(3)(E) specifies a number of requirements for areas requesting redesignation from nonattainment to attainment, the redesignation of unclassifiable areas is not explicitly addressed. However, the general criteria governing designations, set forth in section 107(d)(1)(A), do apply. Therefore, to qualify an unclassified area for redesignation to attainment, the State must show that the area has attained the relevant standard.

For a carbon monoxide area to be designated as attainment for a pollutant, it must meet the NAAQS for that pollutant (40 CFR part 50), based on the most recent two years of data. In its redesignation request, Wisconsin submitted carbon monoxide data for Oshkosh from January 24, 1992 to January 31, 1994 (when the monitor was shut down). Wisconsin collected the air quality data as required in the 1992 SIP revision and under procedures in accordance with the USEPA's monitoring requirements set forth in 40 CFR part 58. This data has been entered into USEPA's Aerometric Information Retrieval System (AIRS) and is summarized in USEPA's Technical Support Document for this action (M. Beardsley to Files, July 20, 1994). The data show that Oshkosh is well under the NAAQS for carbon monoxide concentrations and, thus, meets the requirements for attainment status.

C. Action

The USEPA redesignates the City of Oshkosh, Wisconsin from unclassifiable to attainment for carbon monoxide.

Because USEPA considers this action noncontroversial, we are approving it without prior proposal. This action will become effective on October 17, 1994. However, if we receive adverse or critical comments by September 16, 1994, USEPA will publish a document that withdraws today's action and will address all public comments in a subsequent final rule based on the proposal published in the proposed rule section. The public comment period will not be extended or reopened.

IV. Miscellaneous

A. Executive Order 12866

The Office of Management and Budget has exempted this regulatory action from Executive Order 12866 review.

B. Regulatory Flexibility

Under the Regulatory Flexibility Act, 5 U.S.C. 600 *et seq.*, USEPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or

final rule on small entities (5 U.S.C. 603 and 604). Alternatively, USEPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

This redesignation does not create any new requirements. Therefore, I certify that this action does not have a significant impact on any small entities affected.

D. Petitions for Judicial Review

Under section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by October 17, 1994. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review, nor does it extend the time within which a petition for judicial review may be filed and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to

enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Dated: August 1, 1994.

Valdas V. Adamkus,
Acting Regional Administrator.

For the reasons stated in the preamble, part 81, title 40 of the Code of Federal Regulations is amended as follows:

PART 81—[AMENDED]

1. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

2. In § 81.350 the attainment status of designation table for carbon monoxide is amended by revising the entries for "Adams County", "Waushara County", "Winnebago County", and "Wood County" to read as follows:

§ 81.350 Wisconsin.

* * * * *

WISCONSIN—CARBON MONOXIDE

Designated area	Designation		Classification	
	Date ¹	Type	Date ¹	Type
Adams County		Unclassifiable/Attainment.		
Waushara County		Unclassifiable/Attainment.		
Winnebago County	September 16, 1994.	Unclassifiable/Attainment	September 16, 1994.	
Wood County		Unclassifiable/Attainment.		

¹ This date is November 15, 1990, unless otherwise noted.

[FR Doc. 94-20172 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-P

40 CFR Part 82

[FRL-5040-7]

Protection of Stratospheric Ozone

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of partial stay and reconsideration.

SUMMARY: This action announces a three-month stay of certain federal rules requiring the repair and/or retrofit of appliances containing ozone-depleting substances contained in the regulations implementing the National Recycling Program. The effectiveness of 40 CFR

82.156(i), as they apply to industrial process refrigeration equipment only, including the applicable compliance dates, is stayed for three months pending reconsideration. EPA is issuing this stay pursuant to Clean Air Act section 307(d)(7)(B), 42 U.S.C. 7607(d)(7)(B), which provides the Administrator authority to stay the effectiveness of a rule during reconsideration.

In the proposed rules section of today's **Federal Register**, EPA proposes, under Clean Air Act sections 301(a)(1), 42 U.S.C. 7601(a)(1), to temporarily stay the effectiveness of these rules and applicable compliance dates beyond the three months expressly provided in section 307(d)(7)(B), but only to the extent necessary to complete reconsideration (including any

appropriate regulatory action) of the rules in question.

EFFECTIVE DATE: September 16, 1994.

ADDRESSES: Comments and materials supporting this rulemaking are The PRESIDING OFFICER, contained in Public Docket No. A-92-01, Waterside Mall (Ground Floor) Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 in room M-1500. Dockets may be inspected from 8 a.m. until 4 p.m., Monday through Friday. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Cynthia Newberg, Program Implementation Branch, Stratospheric Protection Division, Office of Atmospheric Programs, Office of Air and Radiation (6205-J), 401 M Street,

SW., Washington, DC 20460, (202)233-9729. The Stratospheric Ozone Information Hotline at 1-800-296-1996 can also be contacted for further information.

SUPPLEMENTARY INFORMATION: The contents of this preamble are listed in the following outline:

- I. Background
- II. Rules to Be Stayed and Reconsidered
- III. Issuance of Stay
- IV. Authority of Stay and Reconsideration
- V. Proposed Additional Temporary Stay
- V. Effective Date

I. Background

On July 13, 1993, the Chemical Manufacturers Association (CMA) sent to the United States Environmental Protection Agency (EPA) a petition for reconsideration of the Refrigerant Recycling Rule, promulgated May 14, 1993, (58 FR 28660), particularly the leak repair provisions under 40 CFR 82.156(i) as they concern industrial process refrigeration equipment¹. On that same date, CMA filed a petition in the United States Court of Appeals for the District of Columbia Circuit seeking review of this Refrigerant Recycling Rule (*Chemical Manufacturers Association v. Browner, et. al.*, D.C. Cir. Docket 93-1444.) As part of a settlement agreement signed by EPA and the CMA on May 20, 1994, EPA agreed to propose changes to the appropriate sections of the rules. A 113(g) notice of the settlement agreement was published on June 14, 1994 (59 FR 30584).

The settlement agreement set a tight deadline for the completion of rulemaking, requiring EPA to propose changes by September 1, 1994, and to promulgate amended regulations by June 1, 1995. By this action, EPA is convening a proceeding for reconsideration.

II. Rules To Be Stayed and Reconsidered

Final regulations published on May 14, 1993 (58 FR 28660), establish a recycling program for ozone-depleting refrigerants recovered during the servicing and disposal of air-conditioning and refrigeration equipment. Together with the prohibition on venting during the service, repair, and disposal of class I and class II substances (see the listing notice January 22, 1991; 56 FR 2420)

¹ Industrial process refrigeration is defined in § 82.152(g) of the final regulations (58 FR 28713). The definition states that "industrial process refrigeration means, for the purposes of § 82.156(i), complex customized appliances used in the chemical, pharmaceutical, petrochemical and manufacturing industries. This sector also includes industrial ice machines and ice rinks."

that took effect on July 1, 1992, these regulations should substantially reduce the emissions of ozone-depleting refrigerants.

The petition filed by the CMA asks for reconsideration of leak repair provisions under § 82.156(i) as they relate to industry process refrigeration equipment. In particular, the petitioners raised concerns regarding the ability to repair or retrofit some industrial process refrigeration equipment within the timeframes established by the final rule. CMA's concerns involve the need to shut down equipment and/or obtain custom built parts within the appropriate timeframes. CMA also raised the possibility of delays caused by other regulatory requirements related to changes at plants.

EPA has evaluated CMA's information and is now reconsidering the leak repair provisions in light of this information. Moreover, EPA believes that this information warrants review and response pursuant to section 307(d)(7)(B) of the Clean Air Act. In order to review and evaluate the ability of the owners and operators of industrial process refrigeration equipment to comply with the leak repair provisions when extenuating circumstances exist, EPA will reconsider the regulatory requirements applicable to repairing leaks in accordance with section 307(d) of the Clean Air Act.

III. Issuance of Stay

EPA hereby issues a three-month administrative stay of the effectiveness of provisions of § 82.156(i) as they apply to industrial process refrigeration equipment, including all applicable compliance dates, promulgated as final federal rules requiring the reduction of emissions of ozone-depleting substances during the servicing and disposal of air-conditioning and refrigeration equipment (58 FR 28660). EPA will reconsider these rules, as discussed above and, following the notice and comment procedures of section 307(d) of the Clean Air Act, will take appropriate action. If, after reconsideration of these provisions, EPA determines that it is appropriate to impose leak repair requirements that are stricter than the existing rules, EPA will propose an adequate compliance period from the date of final action on reconsideration. EPA will seek to ensure that the affected parties are not unduly prejudiced by the Agency's reconsideration. Any EPA proposal regarding changes to the leak repair requirements and the appropriate compliance period would be subject to

the notice and comment procedures of Clean Air Act section 307(d).

Because the settlement agreement between EPA and CMA set a tight deadline for the completion of the rulemaking, EPA will reconsider the rules in question as expeditiously as practicable.

IV. Authority for Stay and Reconsideration

The administrative stay and reconsideration of the rules and associated compliance periods announced by this notice are being undertaken pursuant to section 307(d)(7)(B) of the Clean Air Act, 42 U.S.C. 7607(d)(7)(B). That provision authorizes the Administrator to stay the effectiveness of a rule for three months if it was impracticable to raise an objection or if the grounds for an objection arose after the period for public comment and if the objection is of central relevance to the outcome of the rule. Because some of the issues in the petition for reconsideration may have been impracticable to raise during the comment period, EPA is authorized to stay the effectiveness of the relevant provisions.

V. Proposed Additional Temporary Stay

EPA may not be able to complete the reconsideration (including any appropriate regulatory action) of the rules stayed by this notice within the three-month period expressly provided in section 307(d)(7)(B). If EPA does not complete the reconsideration in this timeframe, then it might be appropriate to extend temporarily the stay of the effectiveness of the leak repair requirements for industrial process refrigeration and applicable compliance dates until EPA completes final rulemaking action upon reconsideration. EPA is going through notice and comment rulemaking to decide whether to extend the stay beyond this initial three-month period. In the Proposed Rules Section of today's **Federal Register**, EPA proposes a temporary extension of the stay beyond the three months, only to the extent necessary to complete reconsideration of the rules in question.

VI. Effective Date

This action will become final on September 16, 1994.

List of Subjects in 40 CFR Part 82

Administrative practice and procedure, Air pollution control, Chemicals, Chlorofluorocarbons, Exports, Hydrochlorofluorocarbons, Imports, Interstate commerce,

Nonessential products, Reporting and recordkeeping requirements, Stratospheric ozone layer.

Dated: August 4, 1994.

Carol M. Browner,
Administrator.

Part 82, chapter I, title 40, of the code of Federal Regulations, is amended to read as follows:

PART 82—PROTECTION OF STRATOSPHERIC OZONE

1. The authority citation for part 82 continues to read as follows:

Authority: 42 U.S.C. 7414, 7601, 7671-7671q.

2. Section 82.156 is amended by adding paragraph (i)(5) to read as follows:

§82.156 Required practices.

* * * * *

(i) * * * * *
(5) Rules stayed for reconsideration. Notwithstanding any other provisions of this subpart, the effectiveness of the following rules, only to the extent described below, is stayed from September 16, 1994 to December 16, 1994. 40 CFR 82.156(i)(1), (i)(3), and (i)(4), only as these provisions apply to industrial process refrigeration equipment.

[FR Doc. 94-19767 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AB83

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Lilium occidentale* (Western Lily)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) determines the endangered status pursuant to the Endangered Species Act of 1973, as amended (Act) for the plant *Lilium occidentale* (western lily). This lily is known to occur in 31 small, widely separated populations in sphagnum bogs, coastal scrub and prairie, and other poorly drained soils along the coast of southern Oregon and northern California. Threats to the species include development (e.g., roads, cranberry farms, buildings, and

associated infrastructure), competition from encroaching shrubs and trees into lily habitat, bulb collecting, and grazing by domestic livestock and deer. Human activities have interrupted natural processes of bog and wetland creation and maintenance, so that there are fewer bogs in early successional stages suitable for this lily. This rule implements the Federal protection and recovery provisions provided by the Act for this species.

EFFECTIVE DATE: September 16, 1994.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Boise Field Office, U.S. Fish and Wildlife Service, 4696 Overland Rd., Room 576, Boise, Idaho 83705.

FOR FURTHER INFORMATION CONTACT: Dr. Robert L. Parenti, Botanist, at the above address (208/334-1931, FAX 208/334-9493).

SUPPLEMENTARY INFORMATION:

Background

Carl Purdy first collected and described *Lilium occidentale* (western lily) from unspecified locations in the headlands around Humboldt Bay, California (Purdy 1897). There are no other taxonomic treatments of this lily. Some researchers have speculated that separate Oregon and California varieties of the lily may exist (Ballantyne 1980). The variation between lilies in these two regions is now believed to be due to environmental differences; i.e. wetter (bog) sites and drier (coastal prairie) sites, and not geographic variation (Mark Skinner, California Native Plant Society, pers. comm., 1991). In some instances, *L. occidentale* is known to hybridize with *L. columbianum* (tiger lily) that grows in generally drier sites. Hybrids are known only from disturbed sites such as road edges.

Lilium occidentale, a perennial in the lily family (Liliaceae), grows from a short unbranched, rhizomatous bulb, reaching a height of up to 1.8 meters (5 feet (ft)). Leaves grow along the unbranched stem singly or in whorls and are long and pointed, roughly 1 centimeter (cm) wide and 10 cm long (0.5 inch (in) by 4 in). The nodding flowers are red, sometimes deep orange, with yellow to green centers in the shape of a star and spotted with purple. The six petals (tepals) are 3 to 4 cm (1 to 1.5 in) long and curve strongly backwards. This species can be distinguished from similar native lilies by the combination of pendent red flowers with yellow to green centers in the shape of a star, highly reflexed petals, non-spreading stamens closely

surrounding the pistil, and an unbranched rhizomatous bulb. *Lilium columbianum* is yellow to orange and grows from a typical ovoid bulb; *L. vollmeri*, *L. pardilinum*, and *L. maritimum* can have red tepals, but none have the distinctive characters of stamens that stay close to the pistil and a green central star (which may change to yellow with age).

Lilium occidentale has an extremely restricted distribution within 2 miles (3.2 kilometers (km)) of the coast from Hauser, Coos County, Oregon to Loleta, Humboldt County, California. This range encompasses approximately the southern one-third of the Oregon coast and the northern 100 miles (161 km) of the California coast. Its extreme westerly distribution is the origin of its specific name. The plant is currently known from 7 widely separated regions along the coast, and occurs in 31 small (2 square meters (2.4 square yards) to 4 hectares (10 acres) in area), isolated, densely clumped populations. Of the 25 populations known in 1987 and 1988, 9 contained only 2 to 6 plants, 5 contained 10 to 50 plants, 6 contained 51 to 200 plants, 4 contained 201 to 600 plants, and 1 contained almost 1,000 plants (Schultz 1989). At some sites, particularly the sites with more than 200 plants, the majority of plants were non-flowering, which is probably an indication of stress (Schultz 1989). Schultz calculated a known population of 661 flowering and at least 2,750 non-flowering plants in 1988. Since then, an estimated total of 1,000 to 2,000 flowering plants have been discovered at 4 sites near Crescent City, California, where none were previously known (Dave Imper, Humboldt State University Foundation, pers. comm., 1991). In addition, a population of about 125 flowering plants was discovered near Brookings, Oregon, in 1991 (Margie Willis, Oregon Department of Parks and Recreation, pers. comm. 1991), and a population of 13 flowering plants was discovered near Bandon, Oregon, in 1992. The known populations occur on State of Oregon (15), county (1), private (15) including 1 site on land owned by The Nature Conservancy, and State of California (2) lands. Two sites span two ownerships.

In Oregon, Schultz (1989) identified a 20-mile stretch of coast from Bandon to Cape Blanco as an area likely to contain undiscovered populations of *Lilium occidentale*. Previously, Ballantyne (1980) searched this area and did not find new populations, but his visit was after flowering when the plants would have been inconspicuous. It is possible this area may support the lily. In California, little suitable habitat remains

that has not already been surveyed (Dave Imper, pers. comm., 1992). The extremely dense vegetation in the coastal scrub habitat and around bogs makes surveying for the lily difficult.

Lilium occidentale grows at the edges of sphagnum bogs and in forest or thicket openings along the margins of ephemeral ponds and small channels. It also grows in coastal prairie and scrub near the ocean where fog is common. Herb and grass associates include *Calamagrostis nutkaensis* (Pacific reedgrass), *Carex* sp. (sedge), *Sphagnum* sp. (sphagnum moss), *Gentiana sceptrum*, and *Darlingtonia californica* (California pitcher-plant). Common shrub associates are *Myrica californica* (wax-myrtle), *Ledum glandulosum* (Labrador tea), *Spiraea douglasii* (Douglas' spiraea), *Gaultheria shallon* (salal), *Rhododendron macrophyllum* (western rhododendron), *Vaccinium ovatum* (evergreen huckleberry), and *Rubus* sp. (blackberry). Tree associates include *Pinus contorta* (coast pine), *Picea sitchensis* (sitka spruce), *Chamaecyparis lawsonia* (Port Orford cedar), and *Salix* sp. (willow) (Schultz 1989).

Lilium occidentale has not been widespread in recent times. Historical records indicate that it was once more common than it is today. After the ice age, rising sea levels flooded marine benches where bogs and coastal scrub would have been more extensive than today. That may account for the patchiness of its current habitat distribution. It is known or assumed to be extirpated in at least nine historical sites, due to forest succession, cranberry farm development, livestock grazing, highway construction, and other development. Its status is uncertain in at least seven other historical sites (Schultz 1989). These factors continue to threaten the lily, with development taking a primary role. Two known populations near Brookings, Oregon were partially or totally destroyed by unpermitted development-related wetland fill activity in 1991. The largest known population and three smaller populations near Crescent City, California are currently threatened by housing and recreation development (Dave Imper, pers. comm. 1991).

Previous Federal Action

Federal action on this plant began as a result of section 12 of the Endangered Species Act (16 U.S.C. 1531 *et seq.*), which directed the Secretary of the Smithsonian Institution to prepare a report on plants considered to be endangered, threatened, or extinct in the United States. This report, designated as House Document No. 94-51, was

presented to Congress on January 9, 1975. In that document, *Lilium occidentale* was considered to be endangered.

On July 1, 1975, the Service published a notice in the *Federal Register* (40 FR 27823) accepting the report as a petition to list the species within the context of section 4(c)(2) (now section 4(b)(3)(A)) of the Act, and giving notice of its intention to review the status of the plant taxa named therein. In this and subsequent notices, *Lilium occidentale* was treated as under petition for listing as endangered. As a result of that review, on June 16, 1976, the Service published a proposed rule in the *Federal Register* (41 FR 24523) to determine endangered status pursuant to section 4 of the Act for approximately 1,700 vascular plant species, including *L. occidentale*. The list of 1,700 plant species was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975, *Federal Register* publication.

In 1978, amendments to the Act required that all proposals over 2 years old be withdrawn. A 1-year grace period was given to proposals already over 2-years old. On December 10, 1979, the Service published a notice in the *Federal Register* (44 FR 70796) withdrawing the portion of the June 16, 1976, proposal that had not been made final, including *Lilium occidentale*, along with four other proposals that had expired.

The Service published an updated Notice of Review for plants on December 15, 1980 (50 FR 82480) including *Lilium occidentale* as a category 1 species, meaning that the Service had sufficient information to support a proposal for listing. A review of the information available on this species in 1985 indicated that category 2 status was more appropriate, and the plant was included as such in the September 27, 1985 (50 FR 39526) Notice of Review for plants. Category 2 species are taxa for which the Service has some information indicating that listing may be warranted, but additional information on biological vulnerability and threats is needed to support a proposal for listing as threatened or endangered. In 1989, a status review of the species was completed (Schultz 1989). This report provided the additional information necessary to elevate the species to a category 1 candidate; it was included as such in the February 21, 1990, Plant Notice of Review (55 FR 6184).

Section 4(b)(3)(B) of the Act requires the Secretary to make findings on

pending petitions within 12 months of their receipt. Section 2(b)(1) of the 1982 amendments further requires all petitions pending on October 13, 1982, be treated as having been newly submitted on that date. On October 13, 1983, the Service found that the petitioned listing of this species was warranted, but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act; notice of this finding was published on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled yearly pursuant to section 4(b)(3)(C)(i) of the Act. The finding was reviewed each year from 1984 through 1991. A proposal to list *Lilium occidentale* as endangered was published in the *Federal Register* on October 26, 1992 (57 FR 48495). The Service now determines *L. occidentale* to be endangered with the publication of this rule.

Summary of Comments and Recommendations

In the October 26, 1992, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final listing decision. Appropriate State agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in *The Oregonian* paper, Portland, Oregon, on November 27, 1992, and *The World* paper, Coos Bay, Oregon, on November 25, 1992, which invited general public comment. Three letters were received. Two letters, both from private citizens, were in support of the listing. One letter, from a local government, questioned whether there has been enough study on the need to list the species, its habitat requirements, or whether habitat changes such as cranberry farming may actually benefit the plant.

Service Response: The Service believes that the status review of the plant was very thorough. All known populations from historical herbarium collections were checked, and many were found to be extirpated. The restricted habitat requirements of the species are accurately known, and most suitable habitat has been searched. Additionally, the Service contacted all individuals knowledgeable about the species prior to proposing it for listing to assess the most current information about the status of the species. In response to the concern with the ability of the lily to grow in cranberry farms, a small population of lilies was found in 1992 in an apparently abandoned

cranberry bog (Bruce Rittenhouse, Coos Bay District, Bureau of Land Management, pers. comm.). No populations have been found in active cranberry farms.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Lilium occidentale* should be classified as an endangered species. Procedures found at section 4 of the Act (16 U.S.C. 1533) and regulations promulgated to implement the listing provisions (50 CFR part 424) were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *L. occidentale* Purdy (western lily) are as follows:

A. *The present or threatened destruction, modification, or curtailment of habitat or range.* *Lilium occidentale* existed historically at several sites above Humboldt Bay in northern California. These populations have been extirpated by development or, in some cases, encroachment by forest. From the 1940's to the present, conversion of bog habitat to cranberry farms, roads, and residential dwellings has eliminated suitable *L. occidentale* habitat as well as some populations of the plant in the area from Bandon south to Cape Blanco, Oregon (Schultz 1989). This area contained perhaps the greatest concentration of the species in Oregon 40 to 50 years ago, according to native plant collectors and old-time residents of the area (Ballantyne 1980). In 1988, this area contained 6 small populations with a total of fewer than 125 flowering plants (Schultz 1989). Clearing and draining along the Elk and Sixes Rivers in Oregon for livestock grazing have eliminated many of the once numerous populations there (Ballantyne 1980). In the mid-1960's, the construction of a picnic area and restroom facility in an Oregon State Park destroyed another population. In the summer of 1987, trail maintenance by a crew from this same State Park destroyed the flowering shoots of six *L. occidentale* (Schultz 1989).

In 1984, the city of Brookings, Oregon, under an easement permit from the Oregon Department of Transportation (ODOT), buried a sewer line along a powerline right-of-way through a lily bog that had contained up to 100 plants (Veva Stansell, U.S. Forest Service, pers. comm.). The fill eliminated all the *Lilium occidentale* in a 20-ft (6.1 meter) wide strip, destroying almost half of the

available lily habitat. The species that later colonized the fill, rushes and alder, were not the same as those found in the adjoining bog (e.g., sphagnum and *Drosera* sundews) (Schultz 1989). In 1991, the City of Brookings again obtained permission from ODOT to bury a larger sewer line in the site, widening the destroyed area to approximately 25 ft (7.6 meters). The project was completed without obtaining proper wetland fill permits (John Craig, Army Corps of Engineers, pers. comm., 1991). It is unlikely that the filled area will support *L. occidentale* in the future (Stewart Schultz, University of British Columbia, pers. comm., 1991). The effects on the hydrology of the remaining bog are as yet unknown. At a second site, a private developer drained a lily bog that historically contained about 100 plants, without obtaining a State or Federal permit for the wetland activity. Two lilies were found remaining between two drainage ditches (Richard Mize, California Native Plant Society, pers. comm., 1991).

Future development activities threaten the remaining sites where *Lilium occidentale* occurs. The largest known population occurs partly on private land in Crescent City, California. This land has been surveyed and is platted as a subdivision in city records (Richard Mize, pers. comm., 1991). Other nearby populations are privately owned and the owner has expressed the desire to develop the land (Dave Imper, pers. comm., 1991). The ODOT is currently planning to widen Highway 101 at another lily site. After the proposed rule was published, ODOT modified their plans and will avoid the lily population. Such pressure to develop wetland sites occupied by this lily will likely increase in the future. The lily is limited to habitat very near the coast that is currently undergoing intense development pressure. The species' bog and coastal prairie/scrub habitat occurs on level marine terraces that are desirable for coastal development because of the gentle topography and proximity to the ocean.

B. *Overutilization for commercial, recreational, scientific, or educational purposes.* *Lilium occidentale* is a showy, rare lily and the species has been collected by lily growers and for the commercial trade since before the 1930's. After the location of a California population of *L. occidentale* was published in lily society yearbooks in 1934, 1955, and 1972, bulb collecting by lily growers and breeders decimated the population (Ballantyne, 1980). Overcollection continues sporadically at sites in Oregon and California (Schultz 1989). For example, in June 1987, seven

bulbs were dug from an Oregon site. Lily breeders collect *L. occidentale* seed regularly from several sites. Plants near trails and roads are occasionally picked: at least seven plants were picked in 1985, four to six in 1986, five in 1987, and two in 1988 at a site in Oregon (Schultz 1989). *Lilium occidentale* was reportedly advertised for sale in western United States and British seed and bulb catalogues (Siddall and Chambers 1978). Overcollection currently threatens this plant and would likely increase, if specific locations of this plant were publicized.

C. *Disease or predation.* Although a limited amount of grazing may be of benefit to *Lilium occidentale*, if it prevents forest succession (see Factor E); overgrazing by cattle is considered a threat to this plant. Until recently, livestock overgrazing on the lily and surrounding vegetation was severe at three California ranch sites (Schultz 1989). The lily population at one ranch was reduced from over 100 flowering individuals in 1984 to fewer than 10 between 1985 and 1988. At another ranch, half of the fruits were grazed by deer and cattle in 1985. By July 1987, cattle had crushed 32 percent and grazed another 25 percent of 49 flowering shoots. Only 17 intact fruits remained in August (Imper et al. 1987). Deer and elk herbivory is severe at 3 Oregon sites; 50 to 60 percent of fruit in one population of about 60 flowering plants were browsed in 1987 and 1988 (Schultz 1989). Unknown vandals destroyed all flowering shoots at one site in 1980 (Ballantyne 1980).

Deer browsing continues to be a threat at the Oregon sites. The fences, however, are not deer-proof and deer are common at these ranches. Though occurring sporadically, browsing by deer can cause major damage.

Grazing of leaves, buds, and flowers by Coleopteran and Lepidopteran larvae is an ongoing threat at one California site (Imper et al. 1987). The highly clumped distribution and small number of populations of *Lilium occidentale* make any fungal, viral, or bacterial disease a potential threat. Fungal pathogens are common in cultivated lilies; growers often avoid planting in ground known to be contaminated.

D. *The inadequacy of existing regulatory mechanisms.* *Lilium occidentale* is listed as an endangered species in both California (Chapter 1.5, § 2050 et seq.) and Oregon (ORS 564.100—564.135; OAR 603-73-005 et seq.), and is included in the Oregon Wildflower Protection Act (ORS 564.020). In California, the "take" of State-listed plants is prohibited, but the law exempts the taking of such plants

via habitat modification or land use change by the landowner. After the California Department of Fish and Game notifies a landowner that a State-listed plant grows on his or her property, State law requires only that the landowner notify the agency "at least 10 days in advance of changing the land use to allow salvage of such plant" (Chapter 1.5, § 1913). In Oregon, the "take" of State-listed plants is prohibited only on State-owned or -leased lands. Enforcement of State endangered species laws is inadequate, as is evident from the list of recent depredations in Factor C above, and from the "take" of lilies by activities of the city of Brookings on Oregon Department of Transportation land, as described in Factor A above. The seriousness of the problem of enforcement is underscored by the fact that this lily population on State land was twice subjected to destruction, although all involved parties were informed of the presence of the rare lily after the first incident.

Lilium occidentale grows in wetland habitat. Under section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) regulates the discharge of fill into the waters of the United States, including wetlands. The Clean Water Act requires project proponents to notify the Corps and obtain a permit prior to undertaking many activities (e.g., grading, discharge of soil or other fill material, etc.) that would result in the fill of wetlands under the Corps' jurisdiction.

The Corps promulgated Nationwide Permit No. 26 (33 CFR 330, Appendix A) to address fill of isolated or headwater wetlands totalling less than 10 acres. Where fill would adversely modify less than 10 acres of wetland, the Corps circulates a pre-discharge notification to the Service and other interested parties for comment to determine whether or not an individual permit should be required for a proposed fill activity and associated impacts. The Corps must respond within 30 days or the proposed activity will be authorized under the nationwide permit.

Individual permits are required for the discharge of fill material that would fill or adversely modify greater than 10 acres of wetlands or any size wetland if proposed or listed species are present and could be adversely affected by the proposed activity. The review process for the issuance of individual permits is more rigorous than for nationwide permits. Unlike nationwide permits, an analysis of cumulative wetland impacts is required for individual permit applications. Resulting permits may include special conditions that require

avoidance or mitigation of environmental impacts. On nationwide permits, the Corps has discretionary authority to require an applicant to seek an individual permit if the Corps believes that the resources are sufficiently important, regardless of the wetland's size. In practice, the Corps rarely requires an individual permit when a project would qualify for a nationwide permit, except when a threatened or endangered species or other significant resource would be adversely affected by the proposed activity.

Most of the populations of *Lilium occidentale* occur in wetlands that are less than 10 acres in size. Many are only a few square yards, and many are in wetlands with no surface drainage to streams (i.e., "isolated"). Therefore, filling them could fall under Nationwide Permit No. 26. If *L. occidentale* is listed as endangered, formal consultation with the Service would be required before the Corps could issue an individual section 404 permit that may adversely affect the lily.

E. Other natural or manmade factors affecting its continued existence. The primary long-term natural threat to *Lilium occidentale* is competitive exclusion by shrubs and trees as a result of succession in bogs and coastal prairie/scrub. Human activities such as draining of wetlands, clearing of land, elimination of beaver, and stabilization of moving sand areas have interrupted the natural processes of bog and wetland creation. As late-stage bogs and coastal scrub go through succession to forest, lily habitat is eliminated with little new habitat being created. There is some indication that *L. occidentale* populations have been maintained in the past by periodic fires, perhaps set by native Americans (Schultz 1989). Charcoal is abundant in the soil at several of the major populations, indicating past fires. Fires are now rare events in these areas.

Young plants of this species are almost always recruited under shrub cover, but the lily is shaded out if the canopy cover is greater than 50 percent or shrubs are over 2 meters (6 ft) high. Several populations and portions of populations have already been extirpated by forest succession. Eleven populations (ranging from 2 to about 1,000 plants) currently are seriously stressed from competition, as indicated by low reproductive rates (Schultz 1989). Individual plants do not flower every year, apparently as an energy-saving mechanism when stressed. Health of a population can be evaluated by the number of flowering versus non-flowering plants, and the number of

blooms per plant. It has been suggested that the 11 stressed populations would probably survive less than a decade without habitat manipulation (Schultz 1989). Invasion by the exotic shrub gorse (*Ulex europaeus*) into the bog habitat of *Lilium occidentale* has eliminated suitable habitat in Oregon near Blacklock Point (Ballantyne 1980).

At four California ranch populations, livestock exclosure fences have solved the immediate problem of overgrazing (Dave Imper, pers. comm., 1992). A limited amount of grazing may actually benefit the species by preventing succession. Over time, without habitat management, forest succession within the exclosures would limit the lilies to the well-lighted edges of the exclosures and reproduction would deteriorate.

Some populations are so small (2 to 100 flowering plants) that loss of genetic variability is a threat. Plants with genetic abnormalities such as 4-merous flowers, tepals replacing stamens, stamens replacing tepals, and double flowers have been observed over two or more seasons at sites in both California and Oregon. The effects of inbreeding may already be adversely affecting the viability of these small populations and remains a future threat to the plant (Schultz 1989).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by *Lilium occidentale* in determining to make this rule final. Based on this evaluation, the preferred action is to list *L. occidentale* as endangered. This species occupies an extremely restricted geographic range and is comprised of a total of 2,000 to 3,000 flowering individuals. Residential development, conversion of habitat to cranberry farms, shrub and tree succession, overcollection, vandalism, overgrazing, and loss of genetic diversity threaten this plant with extinction. Because the plant is in danger of extinction throughout its range, it fits the definition of endangered under the Act.

Critical habitat is not being designated for this species for reasons discussed in the "Critical Habitat" section of this rule.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is listed. The Service finds that designation of critical habitat is not presently prudent for this species. As discussed under Factor B in the "Summary of Factors Affecting the Species," *Lilium occidentale* is

threatened by taking. The publication of precise maps and descriptions of critical habitat in the **Federal Register**, as required for the designation of critical habitat, would increase the degree of threat to this species from take or vandalism and, therefore, could contribute to its decline and increase enforcement problems. The listing of this species under the Act publicizes the rarity of the species and, thus, could make this plant attractive to researchers, curiosity seekers, or collectors of wildflowers or rare plants. All involved parties and landowners have been notified of the importance of protecting this species' habitat. Protection of the species' habitat will be addressed through the recovery process and the section 7 consultation process. Therefore, the Service finds that designation of critical habitat for this species is not prudent at this time because such designation would increase the degree of threat from collecting or other human activities.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) of the Act requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species. If a Federal action may affect a listed species, the

responsible Federal agency must enter into consultation with the Service.

The U.S. Army Corps of Engineers will become involved with this plant species after listing through its permitting authority as described under section 404 of the Clean Water Act. By regulation, permits may not be issued where a federally listed endangered or threatened species would be affected by the proposed project without first completing consultation pursuant to section 7 of the Act. The presence of a listed species would highlight the national importance of these resources. In addition, insurance of housing loans by the Department of Housing and Urban Development in areas that presently support *Lilium occidentale* will be subject to review by the Service under section 7 of the Act.

The Act and its implementing regulations found at 50 CFR 17.61 and 17.62, set forth a series of prohibitions and exceptions that apply to listed plant species. All prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale this species in interstate or foreign commerce, or to remove and reduce to possession the species from areas under Federal jurisdiction. In addition, for plants listed as endangered, the Act prohibits the malicious damage or destruction of any such species on lands under Federal jurisdiction; or removal, cutting, digging up, damaging, or destroying of such plants in knowing violation of any State law or regulation, or in the course of any violation of a State criminal trespass law. Certain exceptions apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered plants under certain circumstances. Such permits are available for scientific purposes and to enhance propagation or survival of the species. It is anticipated that trade permits might be sought because the species is in cultivation and is very rare in the wild. Requests for copies of the regulations regarding listed species and inquiries about prohibitions and permits

may be addressed to the U.S. Fish and Wildlife Service, Ecological Services, Endangered Species Permits, 911 N.E. 11th Avenue, Portland, Oregon 97232-4181 (503/231-6241; FAX 503/231-6243).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment or Environmental Impact Statement, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the Boise Field Office (see ADDRESSES-section).

Author

The primary author of this final rule is Helen Ulmschneider, U.S. Fish and Wildlife Service, Boise Field Office (see ADDRESSES section), 208/334-1931.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Public Law 99-625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.12(h) is amended by adding the following, in alphabetical order under the family Liliaceae, to the List of Endangered and Threatened Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rule
Scientific name	Common name					
LILIACEAE (LILY FAMILY)						
<i>Lilium occidentale</i>	Western lily	USA (CA, OR)	E	545	NA	NA

Dated: July 26, 1994.

Mollie H. Beattie,

Director, Fish and Wildlife Service.

[FR Doc. 94-20162 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 285

[I.D. 081194E]

Atlantic Tuna Fisheries; Bluefin Tuna

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Closure of the General category fishery.

SUMMARY: NMFS has determined that the 1994 General category quota, minus a 65 metric tons (mt) set aside for a late season fishery beginning September 15th, will be taken by August 14, 1994. Therefore, the General category fishery will be closed effective at 0001 hours on Monday, August 15, 1994. This action is being taken to prevent overharvest of the quota established for this fishery while providing an opportunity for areas that have not yet had an ample opportunity to harvest a fair share of the quota beginning September 15, 1994.

EFFECTIVE DATE: 0001 hours on August 15, 1994, through September 14, 1994.

FOR FURTHER INFORMATION CONTACT: John Kelly, 301-713-2347, or Raymond E. Baglin, 508-281-9140.

SUPPLEMENTARY INFORMATION: Regulations implemented under the authority of the Atlantic Tunas Convention Act (16 U.S.C. 971 *et seq.*) governing the harvest of Atlantic bluefin tuna by persons and vessels subject to U.S. jurisdiction are found at 50 CFR part 285. Section 285.22 subdivides the International Commission for the Conservation of Atlantic Tunas recommended U.S. quota among the various domestic fishing categories.

Implementing regulations for the Atlantic Tuna Fisheries at 50 CFR 285.22(a) provide for an annual quota of 531 mt of large medium and giant Atlantic bluefin tuna to be harvested from the Regulatory Area by vessels permitted in the General category. Of this amount, 65 mt are set aside for a late season fishery beginning September 15. The Assistant Administrator for Fisheries, NOAA, is required under § 285.20(b)(1) to monitor the catch and landing statistics and, on the basis of these statistics, to project a date when the catch of Atlantic bluefin tuna will equal the annual quota minus 65 mt, and to publish a **Federal Register** document stating that fishing for, retaining, possessing, or landing Atlantic bluefin tuna under the early-season quota must cease on that date at a specified hour, and not recommence until September 15th, whereupon a quota equal to the difference between the annual quota and the estimated catch prior to September 15th will become available.

The General category has taken approximately 364 mt of its 531 mt quota as of August 10, 1994. While NMFS had calculated an average catch in August of 12 mt per day, industry contacts have informed NMFS that catch per day has increased to 17 mt per day or more. Atlantic bluefin tuna are still abundant off of Maine and Massachusetts, the primary commercial fishing grounds, and have not migrated offshore and further south. Effort by General category vessels remains high.

Based on the landing reports, it is projected that the quota of Atlantic bluefin tuna allocated for the General category, minus a 65 mt set aside amount for the late season fishery will be reached by August 14, 1994. Fishing for, retention of, possessing, or landing large medium or giant Atlantic bluefin tuna by vessels in the General category must cease by 0001 hours August 15, 1994. The intent of this action is to prevent overharvest of the quota established for this fishery while helping continue traditional late summer and early fall fisheries and

providing a fishing opportunity in areas that have not yet had an ample opportunity to harvest a fair share of the quota.

Beginning September 15, 1994, in areas to be described and under conditions to be specified in a future document to be filed with the Office of the Federal Register, vessels permitted in the General category may resume fishing for Atlantic bluefin tuna at a catch rate of one large medium or giant bluefin tuna per day per vessel, until the set aside allocation has been taken.

Classification

This action is taken under 50 CFR 285.20(b) and is exempt from OMB review under E.O. 12866.

Authority: 16 U.S.C. 971 *et seq.*

Dated: August 11, 1994.

David S. Crestin,

Acting Director, Office of Fisheries Conservation and Management, National Marine Fisheries Service.

[FR Doc. 94-20088 Filed 8-11-94; 4:47 am]

BILLING CODE 3510-22-F

50 CFR Part 651

[Docket No. 931076-4220; I.D. 071194C]

Northeast Multispecies Fishery

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Final rule; technical amendment.

SUMMARY: NMFS issues this final rule to make corrections and clarifications to the regulations implementing Amendment 5 to the Northeast Multispecies Fishery Management Plan (FMP).

EFFECTIVE DATES: This final rule is effective August 12, 1994 except for § 651.9(a)(14) which is effective September 12, 1994.

FOR FURTHER INFORMATION CONTACT: Christopher B. McCarron, NMFS, Fishery Management Specialist, 508-281-9139.

SUPPLEMENTARY INFORMATION: The New England Fishery Management Council (Council) submitted Amendment 5 to the FMP on September 27, 1993. Two measures of the amendment were disapproved on September 30, 1993—one measure pertaining to a haddock possession limit, and the other pertaining to winter flounder fishing in state waters. The remainder of Amendment 5 was approved on January 3, 1994. The final rule for Amendment 5 was published on March 1, 1994 (59 FR 9872). This action makes several corrections and clarifications to that rule.

Amendment 5 requires vessels in the Fleet days-at-sea (DAS) program, for multispecies trips longer than 24 hours, to tie-up (layover) at the dock at the end of each trip for half the amount of DAS accrued on the trip. Since many vessels, when in harbor, tie-up at a mooring instead of a dock and/or move between locations in the harbor to attend to operational needs such as refueling, a definition for "tied-up to the dock" has been added to § 651.2 to clarify that a vessel may be tied to either a mooring or a dock and may move between locations in the same harbor during its layover period. This definition complies with the objectives of the FMP.

From March 1 through July 31, vessels in the Stellwagen Bank/Jeffreys Ledge (SB/JL) juvenile protection area are required by § 651.20(a)(5) to have 6-inch (15.24-cm) square mesh in the last 140 bars of the codend and extension piece of all mobile net gear. The final regulation inadvertently did not define square mesh. To clarify the square-mesh requirement, a definition of "square mesh" has been added to § 651.2.

The final rule for Amendment 5 set forth how diamond mesh would be measured for enforcement purposes but inadvertently omitted the measurement technique for square mesh. Language is added to § 651.20(g) to set forth the measurement technique for square mesh.

The regulations implementing Amendment 5 allow vessels fishing for non-regulated species, in the regulated mesh areas, to obtain an exemption permit to fish with midwater trawl or purse seine gear. Although the FMP only requires such a permit in those areas that do not allow the stowage of small-mesh nets, the regulations are not clear and seem to require that such a permit be obtained for all areas. Sections 651.20(e) and 651.20(f) are revised to remove that ambiguity.

According to the regulations as now written, a vessel, while its DAS are being appealed, may fish under the Fleet DAS program until a

determination is made on the appeal. The regulations are not explicit, however, on whether a vessel that has received an initial allocation of individual DAS may fish pursuant to that initial allocation during an appeal of the amount of DAS allocated. In such a case, the vessel has received, independent of the appeal, authorization to fish under the individual DAS program. The fact that the vessel may be appealing the amount of DAS allocated does not preclude the vessel from fishing the individual DAS that are not in dispute. The regulations as originally written were intended only to define the rights of vessels that otherwise would not have any significant allocation of DAS while an appeal was pending. To clarify the intent, § 651.22(b)(7) is revised to specify that vessels may elect to fish under the individual DAS program, while under appeal, if they have been initially allocated individual DAS, provided they do not exceed their initial allocation of DAS and remain in the individual DAS program for the remainder of the 1994-95 fishing season.

In the October 27, 1993, proposed rule for Amendment 5 (58 FR 57774), dealer, operator and vessel permits were to expire upon the date specified in the permit. This was done to eliminate unnecessary renewal burdens to permit holders and to give the Regional Director the flexibility to deal efficiently with the administrative burden associated with permit renewals. The final regulatory language inadvertently specified that permits must be renewed annually. This was not the intent. Accordingly, changes are made to § 651.4(i), § 651.5(g), and § 651.6(f) to remove the annual renewal requirement.

A prohibition concerning the reporting requirements in § 651.7(b)(1) was inadvertently omitted and is added at § 651.9(a)(14). This prohibition requires federally permitted multispecies vessel operators to sell, barter, or trade multispecies finfish only to federally permitted multispecies dealers. This prohibition mirrors a prohibition at § 651.9(e)(7) that prohibits federally permitted dealers from purchasing, possessing, or receiving multispecies from a vessel that does not hold a Federal multispecies permit, with the exception of vessels that fish exclusively in state waters.

The regulation implementing Framework Adjustment 4 to the FMP (59 FR 26972) implemented a series of time and area closures for the sink gillnet fishery. Since these regulations prohibit sink gillnet operators from possessing gillnet gear aboard their

vessel while in the areas and for the times specified in § 651.32(a), vessels would be prevented from transiting a closed area while in possession of gillnet gear. Based on a review of the record, it is clear that the Council did not intend that gillnet vessels be precluded from accessing open areas. This action clarifies the Council's intent by adding language that will allow for net stowage pursuant to § 651.20(c)(4) so that a gillnet vessel may transit a closed area. The Regional Director, pursuant to § 651.20(c)(4)(iv) may specify by letter to permit holders additional methods for lawfully storing gillnet gear while transiting a closed area.

Currently, § 651.30 prohibits the transfer at sea of multispecies finfish. A review of the record revealed that this prohibition should have been limited to the transfer of regulated species. Section 651.30(a) and § 651.30(b) have been revised to correct this error, as have the corresponding prohibitions in § 651.9(a)(7) and § 651.9(e)(5).

Finally, this action accomplishes three other corrections: The metric conversion for winter flounder in § 651.23(a) is corrected; in § 651.22(c)(1)(i)(B), "multispecies" is replaced by "regulated species;" and clearer, more detailed versions of figures 1 and 3 are provided.

Classification

Because this rule only corrects omissions and other errors or makes clarifications of intent to an existing set of regulations for which full prior notice and opportunity for comment have been given, no useful purpose would be served by providing prior notice and opportunity for comment for this rule. Accordingly, under 5 U.S.C. 553(b)(B) it is unnecessary to provide such notice and opportunity for comment.

All but one provision of this rule impose no new requirements on anyone subject to these regulations and many provisions remove or relieve restrictions. Accordingly, under 5 U.S.C. 553(d), they may be made immediately effective. Section 651.9(a)(14) adds a new prohibition which is effective 30 days from the date of filing with the Office of the Federal Register.

This rule is exempt from OMB review under E.O. 12866.

List of Subjects in 50 CFR Part 651

Fisheries, Fishing, Reporting and recordkeeping requirements.

Dated: August 12, 1994.

Gary Matlock,

Program Management Officer, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 651 is amended as follows:

PART 651—NORTHEAST MULTISPECIES FISHERY

1. The authority citation for part 651 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.*

2. In § 651.2, the definitions for "square mesh" and "tied-up to the dock" are added, in alphabetical order, to read as follows:

§ 651.2 Definitions.

Square mesh means mesh in which the horizontal bars of the mesh run perpendicular to the long axis of the net so when the net is placed under a strain the mesh remains open to a square-like shape. Square mesh can be formed by hanging diamond mesh "on the square", if the resulting mesh conforms with the above description of square mesh.

Tied-up to the dock means to tie-up at a dock, on a mooring, or within the harbor.

3. Section 651.4(i) is revised to read as follows:

§ 651.4 Vessel permits.

(i) *Expiration*. A permit will expire upon the renewal date specified in the permit.

4. Section 651.5(g) is revised to read as follows:

§ 651.5 Operator permits.

(g) *Expiration*. A permit will expire upon the renewal date specified in the permit.

5. Section 651.6(f) is revised to read as follows:

§ 651.6 Dealer permits.

(f) *Expiration*. A permit will expire upon the renewal date specified in the permit.

6. In § 651.9, paragraphs (a)(7), (a)(13), (e)(5), and (e)(31) are revised and paragraph (a)(14) is added to read as follows:

§ 651.9 Prohibitions.

(a) * * *

(7) Land, offload, remove, or otherwise transfer, or attempt to land, offload, remove, or otherwise transfer fish from one vessel to another vessel or other floating conveyance unless authorized in writing by the Regional Director pursuant to § 651.30(a).

(13) Fish with, set, haul back, possess on board a vessel, unless stowed in accordance with § 651.20(c)(4), or fail to remove a sink gillnet from the area and for the times specified in § 651.32(a), unless authorized in writing by the Regional Director.

(14) Sell, barter, trade, or transfer, or attempt to sell, barter, trade, or otherwise transfer, for a commercial purpose, other than transport, any multispecies, unless the transferee has a dealer permit issued under § 651.6.

(e) * * *
(5) Land, offload, remove, or otherwise transfer, or attempt to land, offload, remove or otherwise transfer multispecies finfish from one vessel to another vessel, unless both vessels qualify under the exception specified in paragraph (e)(1)(ii) of this section, or unless authorized in writing by the Regional Director pursuant to § 651.30(a).

(31) Fish with, set, haul back, possess on board a vessel, unless stowed in accordance with § 651.20(c)(4), or fail to remove a sink gillnet from the EEZ portion of the areas, and for the times specified in § 651.32(a), unless authorized in writing by the Regional Director.

7. In § 651.20, the first sentence of paragraph (c)(4) introductory text, paragraph (a)(5), (e) heading, (e)(1) introductory text, (e)(2), (f) introductory text, and (g) are revised to read as follows:

§ 651.20 Regulated mesh areas and restrictions on gear and methods of fishing.

(a) * * *
(5) *Stellwagen Bank/Jeffreys Ledge (SB/JL) juvenile protection area*. During the period March 1 through July 31 of each year, the minimum mesh size for nets in the following area shall be 6 inches (15.24 cm) in all sink gillnets and 6 inches (15.24 cm) square mesh in the last 140 bars of the codend and extension piece of all mobile net gear except as provided for in (e) and (f) of this section.

(c) * * *

(4) *Net stowage requirements*. Except as provided in paragraphs (c)(3)(i) and (d)(3)(i) of this section, a vessel holding a valid Federal multispecies permit under this part and fishing in the Southern New England or Mid-Atlantic regulated mesh areas, may not have available for immediate use any net, or any piece of a net, not meeting the requirements specified in paragraphs (c)(2) and (d)(2) of this section; and a vessel, holding a valid multispecies permit while in the areas and for the times specified under § 651.32(a), and any vessel while in the EEZ portion of the areas and for the times specified under § 651.32(a), may not have available for immediate use any sink gillnet gear. * * *

(e) *Midwater trawl gear exemption*. (1) For the GOM/GB, JL/SB, and Nantucket Lightship regulated mesh areas south of 42°20' N. lat., fishing for Atlantic herring or blueback herring, mackerel, and squid may take place throughout the fishing year with midwater trawl gear of mesh size less than the regulated size, provided that:

(2) For the GOM/GB and JL/SB regulated mesh areas north of 42°20' N. lat., fishing for Atlantic herring or blueback herring, and for mackerel may take place throughout the fishing year with midwater trawl gear of mesh size less than the regulated size, provided that the requirement of paragraphs (e)(1) (i) through (iv) of this section are met.

(f) *Purse seine gear exception*. For the GOM/GB, JL/SB, and Nantucket Lightship regulated mesh areas, fishing for Atlantic herring or blueback herring, mackerel, and menhaden may take place throughout the fishing year with purse seine gear of mesh size less than the regulated size, provided that:

(g) *Mesh measurements*—(1) *Net gauge*. Mesh sizes are measured by a wedged-shaped gauge having a taper of 2 cm in 8 cm and a thickness of 2.3 mm, inserted into the meshes under a pressure or pull of 5 kg.

(2) *Square-mesh measurement*. Square mesh in the regulated portion of the net shall be measured by placing the net gauge along the diagonal line that connects the largest opening between opposite corners of the square. The square mesh size will be the average of the measurements of 20 consecutive adjacent meshes from the terminus forward along the long axis of the net. The square mesh shall be measured at least five meshes away from the lacings of the net.

(3) *Diamond-mesh measurement.* Diamond mesh in the regulated portion of the net will be measured running parallel to the long axis of the net. The mesh size will be average of the measurements of any series of 20 consecutive meshes. The mesh shall be measured at least five meshes away from the lacings of the net.

* * * * *

8. In § 651.22, paragraphs (b)(7) and (c)(1)(i)(B) are revised to read as follows:

§ 651.22 Effort-control program for limited-access vessels.

* * * * *

(b) * * *

(7) *Status of vessels pending appeal of DAS allocations.* All vessel owners, while their Individual DAS allocation is under appeal, may fish under the Fleet DAS program, or the Individual DAS program if they have been initially allocated DAS under the Individual DAS program, at their election, and are subject to all the requirements applicable to the DAS program they choose, unless otherwise exempted, until the Regional Director has made a final determination on the appeal.

(i) *Vessels fishing under the Fleet DAS program during appeal.* Any DAS spent fishing for regulated species by a vessel that has elected the Fleet DAS program while that vessel's initial DAS allocation is under appeal, shall be counted against the Individual DAS allocation that the vessel may ultimately receive. If, before this appeal is decided, a vessel exceeds the number of days it is finally allocated after appeal, the excess days will be subtracted from the

vessel's allocations of days in fishing year 1995.

(ii) *Vessels fishing under the Individual DAS program during appeal.* A vessel fishing under the Individual DAS program while its initial DAS allocation is under appeal may only fish up to its initial allocation of DAS, pending the outcome of its appeal, and is required to remain in the Individual DAS program for the remainder of the 1994 multispecies fishing year.

* * * * *

(c) * * *

(1) * * *

(i) * * *

(B) During each period of time declared, the applicable vessel may not possess more than the possession limit (226.8 kg) of regulated species.

* * * * *

§ 651.23 [Amended]

9. In § 651.23, the table in paragraph (a) is amended by removing the entry, "Winter flounder (blackback)... 12 (27.9 cm)" and adding in its place "Winter flounder (blackback)... 12 (30.48 cm)".

10. Section 651.30 is revised to read as follows:

§ 651.30 Transfer-at-sea.

(a) Vessels permitted under § 651.4 are prohibited from transferring or attempting to transfer fish from one vessel to another vessel, unless authorized in writing by the Regional Director, except that no vessel permitted under § 651.4 may be authorized to transfer regulated species.

(b) All vessels, unless authorized in writing from the Regional Director under paragraph (a) of this section, are prohibited from transferring or

attempting to transfer multispecies finfish from one vessel to another vessel while in the EEZ.

11. In § 651.32, paragraphs (a) introductory text and (a)(1) introductory text are revised to read as follows:

§ 651.32 Sink gillnet requirements to reduce harbor porpoise takes.

(a) *General.* In addition to the measures specified in §§ 651.20 and 651.21, persons owning or operating vessels using, possessing on board a vessel, unless stowed in accordance with § 651.20(c)(4), or fishing with, sink gillnet gear are subject to the following restrictions unless otherwise authorized in writing by the Regional Director:

(1) *Areas closed to sink gillnets.* All persons owning or operating vessels must remove all of their sink gillnet gear from, and may not use, set, haul back, fish with, or possess on board a vessel, unless stowed in accordance with § 651.20(c)(4), a sink gillnet in, the EEZ portion of the areas and for the times specified in paragraphs (a)(1)(i) through (iii) of this section; and, all persons owning or operating vessels issued a Federal Multispecies Limited Access Permit must remove all of their sink gillnet gear from, and may not use, set, haul back, fish with or possess on board a vessel, unless stowed in accordance with § 651.20(c)(4), a sink gillnet in, the entire areas and the times specified in paragraphs (a)(1)(i) through (iii) of this section.

* * * * *

12. Figures 1 and 3 to part 651 are revised to read as follows:

BILLING CODE 3510-22-W

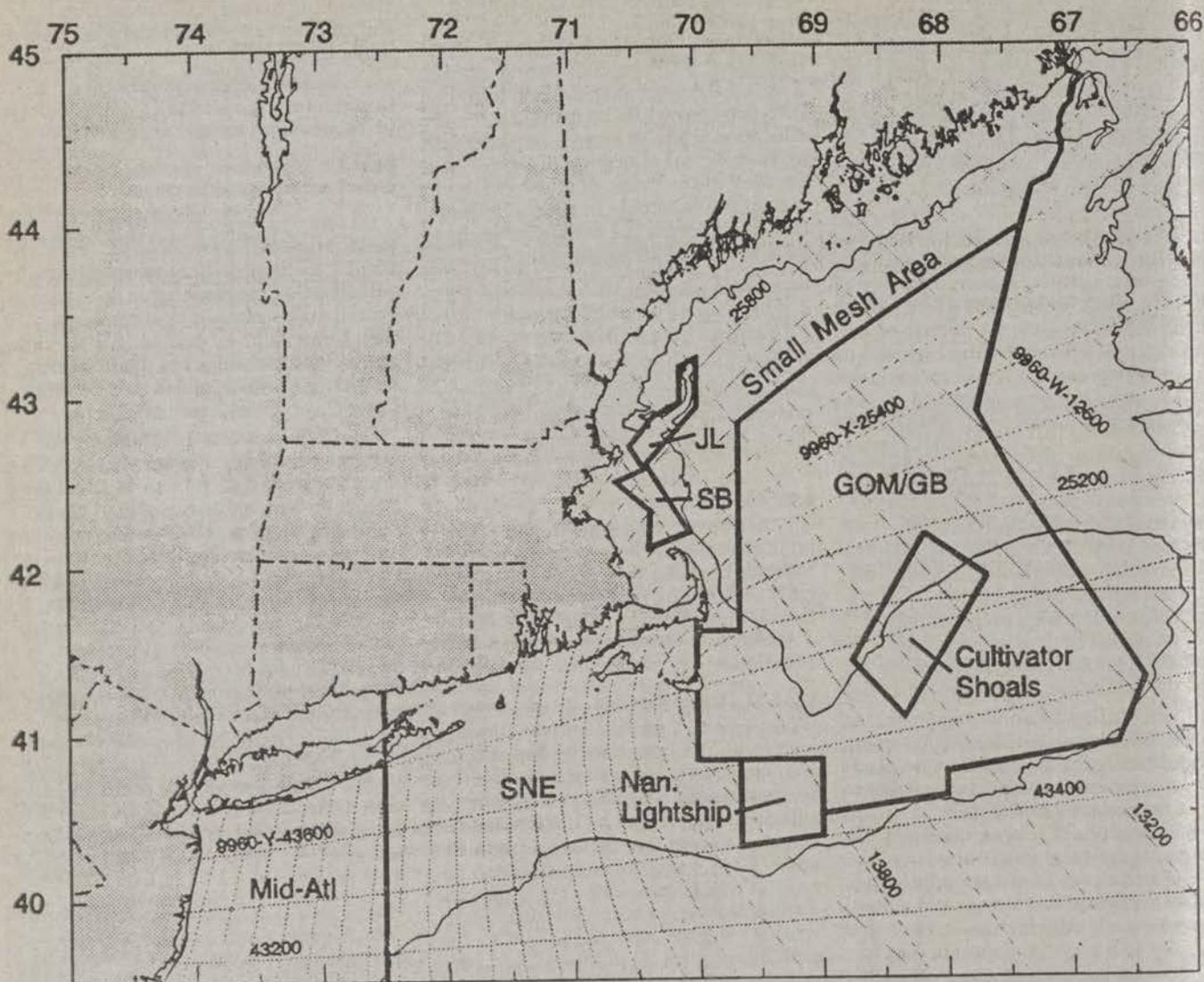


Figure 1 to part 651--Regulated Mesh Areas

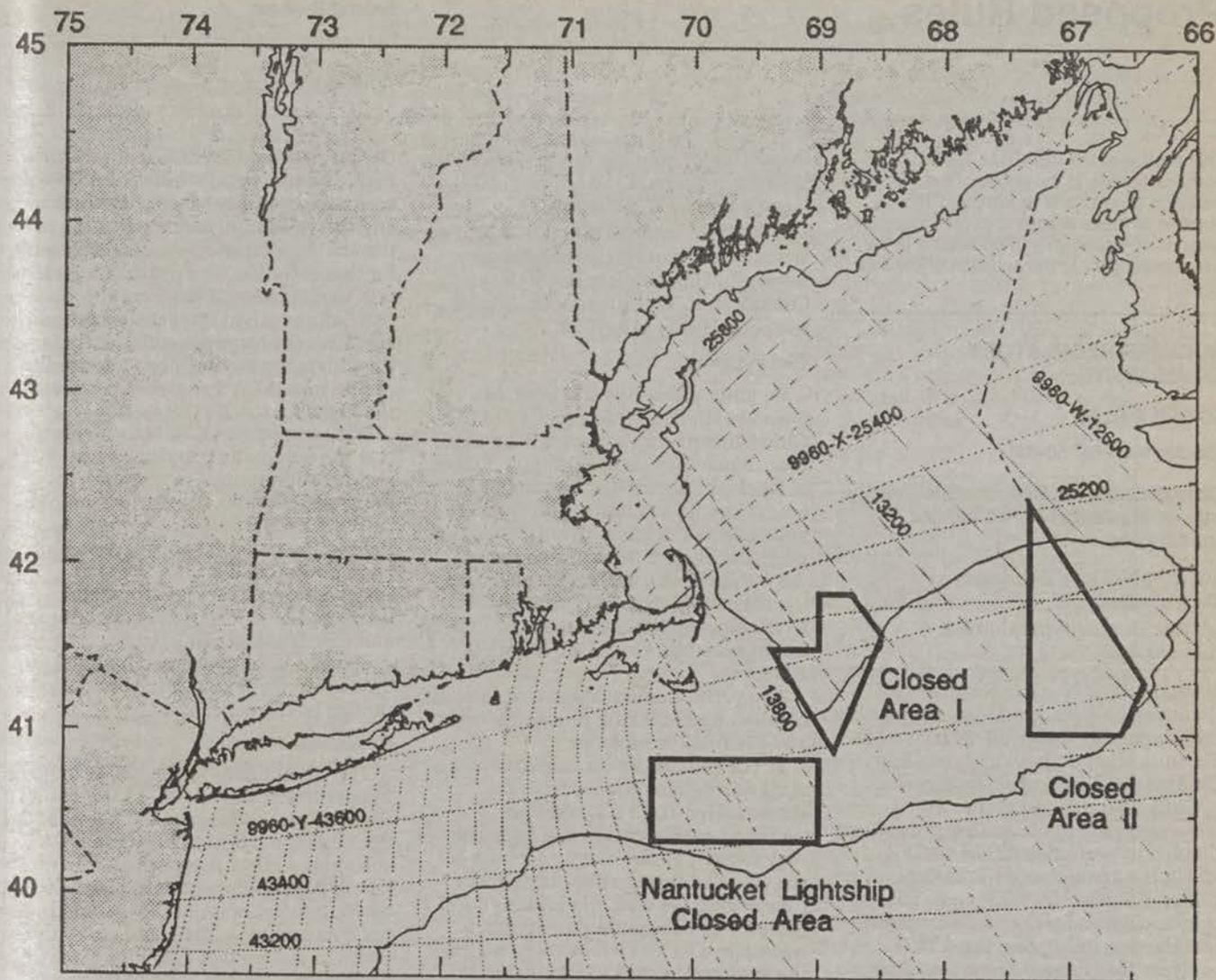


Figure 3 to part 651--Closed Areas

[FR Doc. 94-20197 Filed 8-12-94; 4:26 pm]

BILLING CODE 3510-22-W

Proposed Rules

Federal Register

Vol. 59, No. 158

Wednesday, August 17, 1994

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

[Docket No. PRM 50-53]

Ohio Citizens for Responsible Energy, Inc., et al.; Denial of Petition for Rulemaking

AGENCY: Nuclear Regulatory Commission.

ACTION: Denial of petition for rulemaking.

SUMMARY: The Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking (PRM-50-53) from Ms. Susan L. Hiatt on behalf of the Ohio Citizens for Responsible Energy, Inc. (OCRE). The petition requested reopening of the rulemaking procedure that led to promulgation of 10 CFR 50.62, the "Anticipated Transient Without Scram" (ATWS) rule. The principal basis for the OCRE request was the possibility that the ATWS analyses that formed the underlying bases of the ATWS rule were invalid because they did not appropriately account for the effects of large power oscillations, such as those that occurred during the March 9, 1988, instability event at the LaSalle County Nuclear Station (Unit 2). The petition is being denied because the Commission has concluded, based on core stability analyses during hypothetical ATWS events, and based on recommended procedure changes at nuclear power plants, that large-amplitude power oscillations will not impact the core and containment response sufficiently to invalidate the assumptions and results of previous ATWS analyses that were the bases for the ATWS rule. The NRC has carefully considered the issues raised in the petition and has taken them into account in reaching its decision to deny the petition.

ADDRESSES: Copies of the petition for rulemaking and the NRC's letter to the petitioner, including attachments (SECY-94-123), are available for public

inspection or copying in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Roy Woods, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-6622.

The Petition

By letter dated July 22, 1988, Ms. Susan L. Hiatt, a representative of the Ohio Citizens for Responsible Energy, Inc., requested that the Director, Office of Nuclear Reactor Regulation (NRR), take immediate action with respect to boiling water reactors (BWRs) to relieve what she alleged to be undue risks to the public health and safety posed by the thermal-hydraulic instability of BWRs as revealed by an event at LaSalle County Station, Unit 2, on March 9, 1988.

The petitioner requested that the NRC conduct a rulemaking procedure under 10 CFR 2.802 to address:

1. The possibility that the analyses used during the proceedings that promulgated 10 CFR 50.62 (the "ATWS" rule) were invalid because they did not appropriately account for the effect of large power oscillations (those analyses were the underlying basis for the design requirements established in 10 CFR 50.62 to reduce the risk from ATWS events); and
2. The appropriateness of the 10 CFR 50.62 requirement for automatic tripping of the recirculation pumps in response to designated ATWS signals. In light of the potential consequences of large power oscillations, since tripping the recirculation pumps moves reactor operation into a state with high power-to-flow ratio where oscillations are likely, the petitioner requested that the pump-tripping requirement be reconsidered.

Staff Action on the Petition

The staff has been reviewing generic concerns regarding the large power oscillations that were observed during the March 9, 1988, instability event at the LaSalle County Nuclear Station, Unit 2, since the event's occurrence. That part of the effort that has focused on developing a response to the OCRE petition has concentrated on developing an improved understanding of BWR stability phenomena. These staff [and associated Boiling Water Reactor

Owner's Group (BWROG)] efforts have included analytical studies of ATWS scenarios, stability sensitivity studies, and the validation and verification of the analytical models and codes used for these studies. The primary objective was to determine if large-amplitude oscillations might impact the core and containment response sufficiently to invalidate the assumptions and results of previous ATWS analyses that were the bases for the ATWS rule.

With respect to OCRE's contention that the automatic tripping of the recirculation pumps in response to designated ATWS signals, as required by the ATWS rule, is inappropriate in light of the potential consequences of large power oscillations, the staff reviewed the advantages (related to decreased heat load on the containment) and disadvantages (related to exacerbation of power oscillations) of the requirement that the recirculation pumps be tripped.

Reasons for Denial

The attachments to the NRC's letter to the petitioner (SECY-94-123) includes a detailed presentation of the bases for the denial of the petition. In summary, a substantial effort was necessary to develop computer codes to simulate the oscillation behavior of the modeled reactors and to validate and verify these codes to ensure that they give accurate predictions. On the basis of its review of TRACG code's qualifications for performing power oscillation analyses, the staff concluded that TRACG can serve as an adequate tool to estimate qualitatively the global behavior of operating reactors during transients that may result in large power oscillations.

Although large power oscillations may increase the overheating and severity of fuel damage resulting from an ATWS event, the analyses indicate that core coolability and containment integrity can be acceptably maintained. Therefore, the staff concluded that the ATWS analyses that formed the bases of the ATWS rule remain valid.

The staff's review of the advantages and disadvantages of the requirement that the recirculation pumps be tripped indicated that recirculation pump trip was appropriate and necessary to reduce heat load to the containment following an ATWS, and that the potentially adverse impact due to large power oscillations could be mitigated by revisions to the Emergency Procedure

Guidelines (EPGs) that were recommended by the BWROG. Revisions to the EPGs are: prompt cessation of feedwater flow until water level is reduced to about one meter below the feedwater sparger, thus reducing core inlet subcooling which dampens power oscillations; and earlier injection of boron in the presence of power oscillations, thus reducing power level, which reduces the adverse consequences of any remaining power oscillations. The staff concluded that these revisions are sufficient for mitigating the consequences of a bounding ATWS event with large oscillations.

On the bases of the above analyses and recommended procedure changes, the staff concludes that, although large power oscillations may increase the overheating and severity of fuel damage resulting from an ATWS event, core coolability and containment integrity can be acceptably maintained in a manner consistent with the assumptions and results of previous ATWS analyses that were the bases for the ATWS rule, and that, therefore, the requirements of the ATWS rule remain appropriate.

Because each of the issues raised in the petition has been substantively resolved, the NRC has denied this petition.

Dated at Rockville, Maryland, this 11th day of August 1994.

For the Nuclear Regulatory Commission.

John C. Hoyle,
Acting Secretary.

[FR Doc. 94-20135 Filed 8-16-94; 8:45 am]

BILLING CODE 7590-01-P

FEDERAL ELECTION COMMISSION

[Notice 1994-11]

11 CFR Parts 100 and 113

Expenditures; Personal Use of Campaign Funds

AGENCY: Federal Election Commission.

ACTION: Proposed rule; request for additional comments.

SUMMARY: The Federal Election Commission is seeking additional comments on new rules governing the conversion of campaign funds to personal use. The Federal Election Campaign Act, as amended, prohibits any person from converting campaign funds to his or her personal use. The Commission is considering inserting a definition of personal use into its regulations. Further information is provided in the supplementary information which follows.

DATES: Comments must be received on or before October 3, 1994.

ADDRESSES: Comments must be in writing and addressed to: Ms. Susan E. Propper, Assistant General Counsel, 999 E Street, N.W., Washington, DC 20463.

FOR FURTHER INFORMATION CONTACT: Ms. Susan E. Propper, Assistant General Counsel, 999 E Street, N.W., Washington, DC 20463, (202) 219-3690 or (800) 424-9530.

SUPPLEMENTARY INFORMATION: In August of 1993, the Commission published a Notice of Proposed Rulemaking ["the 1993 NPRM"] seeking comment on proposed rules governing the conversion of campaign funds to personal use ["the proposed rules"]. 58 FR 45463 (August 30, 1993). The proposed rules were drafted to implement section 439a of the Federal Election Campaign Act, 2 U.S.C. 431 *et seq* ["FECA"]. Section 439a says that no amounts received by a candidate as contributions that are in excess of any amount necessary to defray his or her expenditures may be converted by any person to any personal use, other than to defray any ordinary and necessary expenses incurred in connection with his or her duties as a holder of Federal office. Those who wished to comment on the proposed rules were invited to do so by September 29, 1993.

The Commission subsequently granted a request for a 45 day extension of the comment period, giving the regulated community until November 13, 1993 to submit their views on the proposed rules. 58 FR 52040 (Oct. 6, 1993). The Commission received 32 comments from 31 commenters in response to the 1993 NPRM. The Commission also held a public hearing on January 12, 1994, at which it heard testimony from five witnesses on the proposed rules.

On May 19, 1994, the Commission held an open meeting at which it considered draft final rules on the conversion of campaign funds to personal use. The Commission also discussed several letters it had received at the time of the meeting requesting an additional opportunity to comment on the rules before they are finally promulgated. These requests correctly noted that, in an effort to address the concerns of the commenters, the draft final rules adopted a different approach to defining personal use than the proposed rules.

The Commission notes that the 1993 NPRM sought comments on all of the areas addressed by the draft final rules. Thus, under the Administrative Procedure Act, 5 U.S.C. 551 *et seq.*, it would be appropriate for the

Commission to proceed to adopt final rules.

Nevertheless, the Commission has decided to provide an additional opportunity to comment on the rules before they are finally promulgated. The Commission has revised the rules and is publishing the revised version [referred to as "the revised rules"] in this NPRM in order to invite comments from the regulated community. Although this additional comment period will delay completion of the personal use rules, the Commission still intends to finalize rules this year. The Commission will maintain a schedule that will allow the rules to go into effect early in the next election cycle.

The Revised Rules

The revised rules would include a general definition of personal use and several enumerated examples. Section 113.1(g)(1) would indicate that, generally, personal use would be any use of funds that confers a benefit on a candidate or a member of the candidate's family that is not related to the campaign or the ordinary and necessary duties of a holder of Federal office. Section 113.1(g)(1)(i) contains examples of uses that would be personal use if they confer the kind of benefit described in the general definition. The list of examples includes mortgage, rent and utility payments, certain vehicle expenses, household food items, clothing, tuition, and funeral expenses. The list also includes salary payments to family members in excess of fair market value, legal expenses, certain travel and meal expenses, country club dues and entertainment. In addition, the revised rules would specifically indicate that the use of funds to pay the candidate a salary would be personal use.

Section 113.1(g)(1)(iii) of the revised rules would indicate that the Commission will use the general definition to determine, on a case by case basis, whether other uses of campaign funds are personal use. The revised rules would also indicate that the Commission may determine that a use of funds that confers a benefit on someone other than the candidate or the candidate's family members is personal use if the benefit is not campaign or officeholder related.

Revised § 113.1(g)(2) would indicate that charitable donations are not personal use unless the candidate making the donation receives compensation from the recipient organization before the organization has used the funds donated for other purposes. Under revised § 113.1(g)(3), transfers of campaign committee assets

to the candidate would not be personal use so long as the committee receives adequate consideration. Revised § 113.1(g)(3) also contains provisions that would ensure that the cost of the asset being transferred is properly allocated between the committee and the candidate.

Under § 113.1(g)(4) of the revised rules, the use of funds for an expense that would be considered a political expense under House rules or an officially connected expense under Senate rules would not be personal use to the extent that the expense qualifies as an expenditure under 11 CFR 100.8 or is an ordinary and necessary expense incurred in connection with the duties of a Federal officeholder. The Commission anticipates that, in most circumstances, political and officially connected expenses will be ordinary and necessary expenses of a Federal officeholder for purposes of the FECA, rather than conversions to personal use. However, section 439a of the FECA uses different standards than House and Senate rules for determining whether a particular use of campaign funds is permissible. Specifically, the Commission would not consider any use of funds that would be personal use under § 113.1(g)(1) to be an ordinary and necessary expense incurred in connection with the duties of a Federal officeholder under the FECA. Thus, the Commission will have to determine whether political or officially connected expenses are personal use on a case-by-case basis.

Proposed section 113.1(g)(5) of the revised rules would indicate that payments for expenses that would be personal use under paragraph (g)(1) of this section will generally be considered contributions to the candidate if made by a third party. Consequently, the amount donated or expended will count towards the third party's contribution limits. However, no contribution would result if the payment is a donation to a legal expense trust fund, if the funds used were the candidate's personal funds, if the payment was made by a member of the candidate's family from an account jointly held with the candidate, or if the payment would have been made irrespective of the candidacy and such payments were made before the candidate became a candidate. Section 113.1(g)(6) would list the members of the candidate's family for the purposes of § 113.1(g).

The Commission is also proposing an amendment to the list of permissible uses of excess campaign funds contained in 11 CFR 113.2. The amendment would specifically indicate that certain travel costs and certain

office operating expenditures would be considered ordinary and necessary expenses incurred in connection with the duties of a Federal officeholder under the FECA. It would also specifically indicate that any use of funds that would be personal use under 11 CFR 113.1(g)(1) is not an ordinary and necessary expense incurred in connection with the duties of a Federal officer.

The notice also contains a proposed conforming amendment to the definition of expenditure contained in section 100.8(b)(22). Consistent with revised § 113.1(g)(5), this amendment would clarify that payment of the candidate's personal living expenses by a member of the candidate's family will not be considered expenditures if they are made from an account jointly held with the candidate or were paid by the family member before the candidate became a candidate.

In addition to the comments on the proposed rules set out below, the Commission is interested in receiving comments on whether additional recordkeeping and reporting requirements would be useful in administering section 439a. Several of the commenters that responded to the 1993 NPRM expressed the view that additional reporting requirements would be helpful in this area. However, it is difficult to craft a rule that would be both useful in enforcing the personal use ban and not overly burdensome on the reporting committees. The Commission invites commenters to suggest ways in which the reporting requirements could be amended to achieve this goal. Comments are also welcome on the alternative of requiring committees to keep additional records to serve this purpose, without requiring additional reporting. Commenters are encouraged to focus on how these amendments could be crafted to be both useful and not overly burdensome.

The Commission notes that Internal Revenue Service regulations under 26 U.S.C. 527 contain a definition of personal use by political organizations. 26 CFR 1.527-5(a)(1). However, the IRS definition is not controlling in this situation, and is not necessarily coextensive with the proposed rule. The Commission welcomes comments on the revised rules, and on any other issues raised by this rulemaking.

Certification of No Effect Pursuant to 5 U.S.C. 605(b) (Regulatory Flexibility Act)

I certify that the attached proposed rule will not have a significant economic impact on a substantial number of small entities. The basis of

this certification is that the proposed rule is directed at individuals rather than small entities within the meaning of the Regulatory Flexibility Act. Therefore, no small entities will be significantly impacted.

List of Subjects

11 CFR Part 100

Elections.

11 CFR Part 113

Campaign funds, Political candidates, Elections.

For the reasons set out in the preamble, it is proposed to amend Subchapter A, chapter I of Title 11 of the Code of Federal Regulations as follows:

PART 100—SCOPE AND DEFINITIONS (2 U.S.C. 431)

1. The authority citation for Part 100 would continue to read as follows:

Authority: 2 U.S.C. 431, 438(a)(8).

2. Section 100.8 would be amended by revising paragraph (b)(22) to read as follows:

§ 100.8 Expenditure (2 U.S.C. 431(9)).

* * * * *

(b) * * *

(22) Payments by a candidate from his or her personal funds, as defined at 11 CFR 110.10(b), for the candidate's routine living expenses which would have been incurred without candidacy, including the cost of food and residence, are not expenditures. Payments for such expenses by a member of the candidate's family as defined in 11 CFR 113.1(g)(6), are not expenditures if the payments are made from an account jointly held with the candidate, or if the expenses were paid by the family member before the candidate became a candidate.

* * * * *

PART 113—EXCESS CAMPAIGN FUNDS AND FUNDS DONATED TO SUPPORT FEDERAL OFFICEHOLDER ACTIVITIES (2 U.S.C. 439a)

5. The authority citation for Part 113 would continue to read as follows:

Authority: 2 U.S.C. 432(h), 438(a)(8), 439a, 441a.

6. Section 113.1 would be amended by adding paragraph (g), to read as follows:

§ 113.1 Definitions (2 U.S.C. 439a).

* * * * *

(g) *Personal use.*

(1) *Personal use* is any use of funds that confers a benefit on a present or

former candidate or a member of such a candidate's family that is not primarily related to the candidate's campaign or the ordinary and necessary duties of a holder of Federal office.

(i) Examples of *personal use* include the use of funds for any of the expenses listed in paragraph (g)(1)(i)(A) through (L) of this section if the use confers the type of benefit described in paragraph (g)(1).

(A) Mortgage, rent or utility payments—

(1) For real property that is used concurrently by the candidate or a member of the candidate's family as a personal residence; or

(2) For real or personal property that is owned by the candidate or a member of the candidate's family, to the extent the payments exceed the fair market value of the property usage;

(B) Expenses incurred in using a vehicle at campaign expense, to the extent that such expenses exceed a *de minimus* amount. Persons who use a vehicle for personal purposes at campaign expense shall reimburse the campaign within thirty days for that portion of the actual cost of the personal use that exceeds a *de minimus* amount;

(C) Household food items or supplies;

(D) Clothing;

(E) Tuition;

(F) Funeral, cremation or burial expenses;

(G) Salary payments for a member of the candidate's family, to the extent that such payments exceed the fair market value of the services provided;

(H) Legal expenses;

(I) Transportation and subsistence expenses incurred during travel.

Persons who combine personal activities with travel that is campaign or officeholder related shall reimburse the campaign within thirty days for any incremental expenses resulting from the personal activities, such as additional airfare, hotel and meal expenses;

(J) Meal expenses;

(K) Dues, fees or gratuities paid to a country club, health club, recreational facility or social organization; and

(L) Admission to a sporting event, concert, theater or other form of entertainment.

(ii) The use of funds to pay the candidate a salary is personal use.

(iii) The Commission will determine, on a case by case basis, whether other uses of campaign funds confer a benefit on a candidate or a member of a candidate's family that is not primarily related to the candidate's campaign or the ordinary and necessary duties of a holder of Federal office, and therefore are personal use.

(iv) The Commission may also determine that a use of campaign funds

that confers a benefit on someone other than the candidate or a member of the candidate's family is personal use, if the benefit is not primarily related to a candidate's campaign or the ordinary and necessary duties of a holder of Federal office.

(2) *Charitable donations.* Donations of campaign funds or assets to an organization described in section 170(c) of Title 26 of the United States Code are not conversions to personal use, unless the candidate receives compensation from the organization before the organization has expended the entire amount donated for purposes unrelated to his or her personal benefit.

(3) *Transfers of campaign assets.* Transfers of campaign committee assets to the candidate or a member of the candidate's family for adequate consideration are not conversions to personal use. In order to be adequate, the consideration must be for fair market value, and any depreciation that takes place before the transfer must be allocated between the committee and the purchaser based on the useful life of the asset.

(4) *Political or officially connected expenses.* The use of campaign funds for an expense that would be a political expense under the rules of the United States House of Representatives or an officially connected expense under the rules of the United States Senate is not personal use to the extent that the expense is an expenditure under 11 CFR 100.8 or an ordinary and necessary expense incurred in connection with the duties of a holder of Federal office. Any use of funds that would be personal use under 11 CFR 113.1(g)(1) will not be considered an expenditure under 11 CFR 100.8 or an ordinary and necessary expense incurred in connection with the duties of a holder of Federal office.

(5) *Third party payments.*

Notwithstanding that the use of funds for a particular expense would be a personal use under paragraph (g)(1) of this section, payment of that expense by any person other than the candidate or the campaign committee shall be a contribution to the candidate unless—

(i) The payment is a donation to a legal expense trust fund established in accordance with the rules of the United States Senate or the United States House of Representatives;

(ii) The payment is made from funds that are the candidate's personal funds as defined in 11 CFR 110.10(b), including an account jointly held by the candidate and a member of the candidate's family;

(iii) The payment would have been made irrespective of the candidacy and payments for that expense were made

by the person making the payment before the candidate became a candidate. Payments that are compensation shall be considered contributions unless—

(A) The compensation results from bona fide employment that is genuinely independent of the candidacy;

(B) The compensation is exclusively in consideration of services provided by the employee as part of this bona fide independent employment; and

(C) The compensation does not exceed the amount of compensation which would be paid to any other similarly qualified person for the same work over the same period of time.

(6) *Members of the candidate's family.* For the purposes of § 113.1(g), the candidate's family includes:

(i) The spouse of the candidate;

(ii) Any child, parent, grandparent, sibling, half-sibling or step-sibling of the candidate or the candidate's spouse;

(iii) The spouse of any child, parent, grandparent, sibling, half-sibling or step-sibling of the candidate; and

(iv) A person who has a committed relationship with the candidate, such as sharing a household and having mutual responsibility for each other's personal welfare or living expenses.

7. In Section 113.2, the introductory text is republished and paragraph (a) is revised to read as follows:

§ 113.2 Use of funds (2 U.S.C. 439a).

Excess campaign funds and funds donated:

(a) May be used to defray any ordinary and necessary expenses incurred in connection with the recipient's duties as a holder of Federal office, if applicable.

(1) Examples of uses that defray ordinary and necessary expenses incurred in connection with the duties of a holder of Federal office include:

(i) The use of funds for the expenses of a Federal officeholder and an accompanying spouse for travel that is part of the ordinary and necessary duties of a holder of Federal office, such as a fact-finding meeting or an event at which the officeholder's services are provided through a speech or appearance in an official capacity; and

(ii) The use of funds for the costs of winding down the office of a former Federal officeholder for a period not to exceed 6 months after he or she leaves office.

(2) Any use of funds that would be personal use under 11 CFR 113.1(g)(1) is not an ordinary and necessary expense incurred in connection with the duties of a holder of Federal office; or

* * * * *

Dated: August 11, 1994.

Trevor Potter,
Chairman.

[FR Doc. 94-20193 Filed 8-16-94; 8:45 am]

BILLING CODE 6715-01-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 94-NM-96-AD]

Airworthiness Directives; Short Brothers Model SD3-60 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Short Brothers Model SD3-60 series airplanes. This proposal would require installation of a certain time delay relay and associated wiring into a circuit of the rudder gust lock. This proposal is prompted by reports of inadvertent engagements of the rudder gust lock on in-service Model SD3-60 series airplanes. The actions specified by the proposed AD are intended to prevent premature locking of the rudder gust lock, which could result in reduced controllability of the airplane in flight and during landing roll.

DATES: Comments must be received by September 26, 1994.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 94-NM-96-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Short Brothers, PLC, 2011 Crystal Drive, Suite 713, Arlington, Virginia 22202-3719. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

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

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

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

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 94-NM-96-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 94-NM-96-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The Civil Aviation Authority (CAA), which is the airworthiness authority for United Kingdom, recently notified the FAA that an unsafe condition may exist on certain Short Brothers Model SD3-60 series airplanes. The CAA advises that it has received reports of inadvertent engagements of the rudder gust lock on in-service Model SD3-60 series airplanes. Investigation revealed that these inadvertent engagements were caused by premature locking of the rudder gust lock system. Premature locking of the rudder gust lock, if not corrected, could result in reduced controllability of the airplane in flight and during landing roll.

Short Brothers has issued Short Service Bulletin SD360-27-23, Revision 1, dated April 15, 1994, which describes procedures for installation of a 10-

second time delay relay, having part number TDD-AYOF-1002, and associated wiring into a circuit of the rudder gust lock. Such an installation safeguards against inadvertent locking of the rudder gust lock until the airplane can reach a ground speed at which the nose wheel steering can be used. The CAA classified this service bulletin as mandatory and issued CAA Airworthiness Directive 013-02-94, dated March 24, 1994, in order to assure the continued airworthiness of these airplanes in the United Kingdom.

This airplane model is manufactured in the United Kingdom and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the CAA has kept the FAA informed of the situation described above. The FAA has examined the findings of the CAA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require installation of a certain 10-second time delay relay and associated wiring into a circuit of the rudder gust lock. The actions would be required to be accomplished in accordance with the service bulletin described previously.

The FAA estimates that 88 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 29 work hours per airplane to accomplish the proposed actions, and that the average labor rate is \$55 per work hour. Required parts would be supplied by the manufacturer at no cost to the operators. Based on these figures, the total cost impact of the proposed AD on U.S. operators is estimated to be \$140,360, or \$1,595 per airplane.

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

The regulations proposed herein would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore,

in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

The Proposed Amendment

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

PART 39—AIRWORTHINESS DIRECTIVES

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

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

§ 39.13 [Amended]

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

Short Brothers, PLC: Docket 94-NM-96-AD

Applicability: Model SD3-60 series airplanes on which Modification 8112 (reference Shorts Service Bulletin SD360-27-16) has been installed, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent reduced controllability of the airplane in flight and during landing roll, accomplish the following:

(a) Within 90 days after the effective date of this AD, install a 10-second time delay relay, having part number TDD-AYOF-1002, and associated wiring into a circuit of the rudder gust lock, in accordance with Shorts Service Bulletin SD360-27-23, Revision 1, dated April 15, 1994.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager,

Standardization Branch, ANM-113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

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

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

Issued in Renton, Washington, on August 11, 1994.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 94-20159 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-13-P

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 210, 239, 274

[Release No. 33-7081; IC-20472; S7-22-94]

RIN 3235-AF94

Payment for Investment Company Services With Brokerage Commissions

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule and form amendments.

SUMMARY: The Commission is proposing for comment rule and form amendments relating to the reporting of expenses by investment companies. The proposed amendments would require an investment company to reflect as expenses in its statement of operations certain liabilities of the company paid by broker-dealers in connection with the allocation of the company's brokerage transactions to the broker-dealers. The amendments would also require an investment company to include expenses paid in this manner in the fee table and financial highlights table appearing in the company's prospectus, and in calculating the company's yield. The amendments are designed to enhance the information provided to investors so that they may be better able to assess and compare investment company expenses and performance.

DATES: Comments should be received on or before October 17, 1994.

ADDRESSES: Comments should be submitted in triplicate to Jonathan G. Katz, Secretary, Securities and Exchange

Commission, 450 Fifth Street, N.W., Washington, D.C. 20549. All comment letters should refer to File No. S7-22-94. All comments received will be available for public inspection and copying in the Commission's Public Reference Room, 450 Fifth Street, N.W., Washington, D.C. 20549.

FOR FURTHER INFORMATION CONTACT: Eric C. Freed, Senior Counsel, Office of Disclosure and Investment Adviser Regulation, (202) 942-0726, or Anthony Evangelista, Assistant Chief Accountant, (202) 942-0636, Division of Investment Management, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549.

SUPPLEMENTARY INFORMATION: The Securities and Exchange Commission today is proposing for comment:

(1) Amendments to rule 6-07 of Regulation S-X [17 CFR 210.6-07].

(2) Amendments to Form N-1A [17 CFR 239.15A, 274.11A], Form N-2 [17 CFR 239.14, 274.11a-1], Form N-3 [17 CFR 239.17a, 274.11b], and Form N-4 [17 CFR 239.17b, 274.11c] under the Securities Act of 1933 [15 U.S.C. 77a *et seq.*] ("1933 Act") and the Investment Company Act of 1940 [15 U.S.C. 80a-1 *et seq.*] ("1940 Act").

Executive Summary

The Commission is proposing to amend rule 6-07 of Regulation S-X, the regulation setting forth form and content requirements for financial statements included in registration statements, proxy statements, annual reports, and shareholder reports under the various securities laws. The amendments would require a registered investment company ("fund") to adjust the amount of expenses reflected in the statement of operations in its financial statements to include amounts the fund would have paid to its service providers had a broker-dealer or any affiliate of the broker-dealer not paid or agreed to pay those service providers on behalf of the fund in connection with the allocation of fund transactions to the broker-dealer. The Commission is also proposing amendments to various fund registration forms to require that the adjusted expenses be reflected in the fee table and financial highlights table included in fund prospectuses, in the yield quotation required in fund Statements of Additional Information, and, as a result, in yield quotations in fund advertisements and sales literature. Finally, the Commission is proposing to require that the financial highlights table disclose the average commission rate paid by the fund.

I. Background

Some investment companies recently have entered into arrangements under which a broker-dealer agrees to pay the cost of certain products or services provided to the investment company in exchange for fund brokerage ("brokerage/service arrangements"). Under a typical brokerage/service arrangement, a broker agrees to pay a fund's custodian fees or transfer agency fees and, in exchange, the fund agrees to direct a minimum amount of brokerage to the broker. The fund usually negotiates the terms of the contract with the service provider, who is paid directly by the broker.¹

By entering into a brokerage/service arrangement, a fund can reduce expenses reported to shareholders in its statement of operations, fee table, and its expense ratio and can increase its reported yield.² This is because the costs paid on behalf of the fund by the broker are embedded in the brokerage commissions the fund pays.³ Under

¹ Brokerage/service arrangements are structurally similar to the more common research soft-dollar arrangements by which an investment adviser uses client commission dollars to obtain research services. In a research soft-dollar arrangement, however, the receipt of a benefit by an adviser through the use of its clients' commission dollars raises conflict of interest concerns addressed by the safe harbor provisions of section 28(e) of the Securities Exchange Act of 1934 ("1934 Act"). These concerns generally are not raised by brokerage/service arrangements, which typically involve the use of a fund's commission dollars to obtain services that directly and exclusively benefit the fund. Nevertheless, a fund's investment adviser can benefit from these brokerage/service arrangements, particularly if a reduction in fund expenses affects the amount of any expense waiver or reimbursement by the adviser. The receipt by a fund's adviser of any direct or indirect economic benefit as the result of these arrangements would almost certainly violate section 17(e)(1) of the 1940 Act [15 U.S.C. 80a-17(e)(1)], unless the benefit received fell within the safe harbor provided by Section 28(e).

² A fund is currently required to disclose in footnotes to its fee table, financial highlights table, and financial statements its participation in brokerage/service arrangements and the effect the arrangements may have on the level of brokerage commissions paid by the fund. To the extent practicable, a fund must also quantify in these footnotes the effect of brokerage/service arrangements on fund expenses. This footnote disclosure would no longer be necessary if the amendments are adopted.

³ The safe harbor provided by section 28(e) of the 1934 Act does not encompass soft dollar arrangements under which research services are acquired as a result of principal transactions, i.e., when a broker buys or sells securities for or from its own account. U.S. Department of Labor (pub. avail. July 25, 1990). Because, as discussed at note 1 *supra* and accompanying text, brokerage/service arrangements do not fall under the Section 28(e) safe harbor, a fund may use principal as well as

current accounting treatment, brokerage commissions are reflected in the cost basis of the purchased securities or as a reduction of the proceeds from the sale of securities.⁴ In substance, however, a brokerage/service arrangement involves a rebate on brokerage commissions which, if paid in cash to the fund, would not reduce fund expenses.⁵

As a result of the current accounting treatment of brokerage/service arrangements, investors may not be able to evaluate fully the expenses of a fund that pays for services with commission dollars and accurately compare expenses and yields among funds. This lack of comparability is particularly significant considering the wide use of fund expense data by investors.

Brokerage/service arrangements may benefit funds (and their shareholders) by reducing overall fund costs and increasing total return,⁶ particularly if lower commissions are not available to funds that do not enter into the arrangements.⁷ The receipt of a net benefit by a fund does not, however, alter the substance of the services provided under these arrangements. The services provided are generally wholly distinct from the execution of securities transactions, and their reflection as capital costs can distort fund financial information.⁸

The Commission, therefore, is proposing to amend its accounting rules to require that amounts the fund would have paid for services in the absence of

agency transactions to accumulate credits with brokers for the payment of fund expenses. Therefore, references in this release to "commissions" or "commission dollars" rather than "spreads" or "mark-ups" are not intended to indicate otherwise.

⁴ See R. Key & D. Searfoss, *Handbook of Accounting and Auditing* 12-13 (2d ed. 1989).

⁵ Cash rebates would reduce the cost basis of securities purchased or increase the proceeds from securities sold.

⁶ The characterization of costs as expenses or capital items will not affect a fund's total return calculated in accordance with Commission standards. The formula for total return is based upon "ending redeemable value"; expenses and capital costs are both inherent in this formula. See, e.g., Item 22(b)(i) of Form N-1A.

⁷ Entering into a brokerage/service arrangement when lower commissions are available raises questions whether the fund is receiving best execution for its transactions. See Securities Exchange Act Kel. No. 23170 (Apr. 23, 1986) [51 FR 16004 (Apr. 30, 1986)] ("Release 23170") at § V (discussing best execution obligations of money managers in the context of section 28(e)).

⁸ The Commission believes that a fund's board of directors or trustees, in connection with its review of brokerage allocation policies, should be informed of the fund's brokerage/service arrangements and the effects of the arrangements on fund expenses and commission rates.

brokerage/service arrangements be reflected as "expenses" in fund financial information and in fund performance data.

II. Discussion

A. Accounting for Expenses Paid From Brokerage Commissions

1. The Proposed Accounting Method

The Commission is proposing to amend rule 6-07 of Regulation S-X⁹ to require that the amounts of the various expenses (such as custody fees, transfer agency fees, printing and legal fees, and other miscellaneous fees) listed in a fund's statement of operations be adjusted, or "grossed-up," to include amounts paid with commission dollars.¹⁰ The required adjustments to the statement of operations would be made at the time financial statements are prepared, and no daily expense accruals for services paid for with commission dollars would be required. No amounts in the financial statements other than expenses and the expense ratio would be required to be adjusted.

Under the proposed amendments, the total of the itemized expenses in the statement of operations, including the expenses paid with commission dollars, would be shown as the fund's "total expenses." As discussed below, the total expense figure also would be used in determining the fund's expense ratio, its "Other Expenses" listed in the fee table, and its yield. The total expenses would be reduced by the total amount paid with commission dollars and the remainder shown on the statement of operations as "net expenses."¹¹ The following example illustrates the adjustments to the statement of operations that would be required by the proposed amendments if custodian fees were paid with commission dollars:

⁹ Article 6 of Regulation S-X specifies the contents of financial statements included in registration statements, proxy statements and shareholder reports of registered investment companies. Rule 6-07 of Regulation S-X sets forth the requirements for investment company statements of operations.

¹⁰ Rule 6-04(15) of Regulation S-X [17 CFR 210.6-04(15)] requires fund financial statements to disclose material contractual commitments. Contractual commitments covered by this rule include material commitments to allocate commission dollars for payment of fund expenses.

¹¹ Because only expenses, and not realized gains/losses or unrealized appreciation/depreciation, would be adjusted in the statement of operations, the presentation of "net expenses" would be necessary so that net investment income remains the same.

Expenses:	
Management Fee	50
[Other direct fund expenses]	48
Custodian Fee [would include 8 paid by brokers]	10
Total Expenses	108
Fees Paid with Commission Dollars	(8) ¹²
Net Expenses	100

The additional "cost" reflected on the statement of operations would be the amount that the fund would have paid for the services if commission dollars had not been used. If a fund negotiates the service provider's fees directly with the service provider, the cost of the services for purposes of making the required adjustments would be the amount negotiated, presumably the same amount the fund would have paid for the service in the absence of the arrangement. When the broker arranges for the services or provides them itself or through an affiliate, however, the actual cost of the services may not be readily determinable by the fund. In this case, the proposed amendments would require that the fund reflect in its financial statements an amount determined by making a good-faith estimate of the amount the fund would have paid had it contracted for the services directly in an arms-length transaction.¹³ Comment is requested whether there are alternative methods for valuing services provided or arranged by brokers.

The amendments would specifically except research services, as that term is used in section 28(e) of the 1934 Act, from the services the cost of which must be reflected as expenses.¹⁴ The cost of research "purchased" by an adviser with fund commission dollars could also be considered an expense of the fund which is not reflected as an expense in the statement of operations and other financial information. The

¹² A footnote would be required to identify the specific services paid for with commission dollars. Any expense that, as a result of the proposed amendments, was increased by five percent or more over the amount paid directly by the fund, as well as the amount of the increase, would be required to be separately identified in the footnote. Amounts that were individually less than five percent of the unadjusted expense could be aggregated. The total of these amounts, which should equal the amount of the "Fees Paid with Commission Dollars" line item, also would be required to be stated in the footnote.

¹³ The good-faith estimate could be based upon price quotes for the services obtained by the fund or the amount funds of similar size and having similar investment objectives pay for the services.

¹⁴ Because research services are typically provided to the adviser, not the fund, the specific exception may be unnecessary. However, in light of the widespread use of research soft-dollar arrangements, the Commission is proposing a specific exception.

Commission is concerned that the adoption of these disclosure rules might lead some funds to discontinue brokerage/service arrangements and purchase more research through traditional soft dollar arrangements, which, under these proposals, would not be required to be treated as an expense. Comment is requested whether these proposals would have this effect.

The Commission is studying whether the cost of research services provided by brokers should be reflected as fund expenses and requests comment on this issue.¹⁵ Commenters favoring inclusion of research services in the amendments should address how such services should be valued and how the value of the services should be allocated among clients of the adviser that may benefit from them. If research services cannot be valued, should the Commission require that assumptions be made about their value by extrapolation from the brokerage commissions paid? For example, should the difference between a brokerage commission paid on a transaction and the lowest commission paid by the fund be considered a fund expense for research? Alternatively, should the Commission require only that the values of research services that have readily ascertainable values be quantified, such as subscriptions to newspapers, price quotation or valuation services, or research that is received in return for the direction of a determinable amount of brokerage?

2. An Alternative Accounting Method

As an alternative to the accounting changes being proposed, funds could be required to allocate each commission paid between execution cost and payment for fund services and to present their financial statements based upon those allocations. This method would require separating commissions into brokerage and expense components, and reflecting the expense component as an expense in the financial statements.

The allocation method would assess the actual economic character of a fund's brokerage commissions and adjust all fund financial information to reflect this assessment. Under the allocation method, the portion of a commission properly allocated to expenses would have to be estimated and may need to be adjusted as the total amount of commission dollars paid to the broker increases.¹⁶ This adjustment,

¹⁵ Funds are required to describe their soft-dollar practices in the Statement of Additional Information that must be provided to investors upon request. See, e.g., Item 17 of Form N-1A.

¹⁶ If the benefits received by a fund from a given brokerage/service arrangement remain constant

in turn, would require that the cost bases and sales prices of particular securities be adjusted periodically based upon the transactions directed to a particular broker. Therefore, using the allocation method to account for expenses paid with commission dollars could prove to be costly and lead to undesirable uncertainties in accounting.

The Commission requests comment (i) on the ability of funds to account for amounts paid with commission dollars by the allocation method, (ii) whether the proposed gross-up method adequately reflects the economic nature of these arrangements, and (iii) on the costs of each of these accounting methods compared to their benefits to investors.

B. The Fee Table and Financial Highlights Table

The Commission is proposing to amend instructions to the item of the fund registration forms that require funds to include in their prospectuses a table presenting the expenses paid by fund shareholders, either directly or out of the assets of the fund (the "fee table").¹⁷ The amended instructions would require that the expense percentages included in a fund's fee table be based upon total expenses (i.e., that the percentages include amounts paid with commission dollars).¹⁸ Similarly, the amendments would revise Form N-1A and Form N-2 to require that the "ratio of expenses to average net assets" in a fund's "financial highlights" table reflect expenses paid with commission dollars.¹⁹ The fee table and financial highlights table are required to be placed prominently in the prospectus, and are intended to be the primary means for the communication of fund expenses and performance to shareholders and prospective

(e.g., the payment of a specified fund expense), the portion of each commission used to pay for that benefit will decrease as the amount of commissions directed to the broker increases.

¹⁷ Item 2(a)(i) of Form N-1A, Item 3.1 of Form N-2, Item 3(a) of Form N-3, and Item 3(a) of Form N-4.

¹⁸ The amended instructions to the fee table would clarify that the "Other Expenses" set forth in the fee table should be determined by reference to the expense amounts reported in the fund's statement of operations, including adjustments to reflect expenses paid with commission dollars. Accordingly, references in the instructions to the omission of brokerage commissions and other similar costs (which are not reported on the statement of operations) would be deleted. The amended instructions are not intended otherwise to revise the substance of the fee table requirements. See Instructions 10 to Item 2(a)(i) of Form N-1A; Instruction 9 to Item 3.1 of Form N-2; Instruction 15 to Item 3(a) of Form N-3; and Instruction 17 to Item 3(a) of Form N-4.

¹⁹ Item 3(a) of Form N-1A and Item 4.1 of Form N-2. Amendments to the per share tables in Forms N-3 and N-4 are not being proposed.

shareholders.²⁰ The proposed amendments are intended to improve the ability of investors to use the fee table and financial highlights table to compare fund expenses.²¹

The financial highlights table in fund prospectuses presents key financial data for each of the last ten fiscal years. Funds may not be able to readily determine amounts paid with commission dollars during past years. Therefore, the proposed amendments would not require that total expenses be reflected in the expense ratio in the financial highlights table for fiscal years ending before the adoption of the amendments.²² A footnote would be required disclosing the change in the manner in which expenses have been determined.

C. Performance Information

Commission rules require that any quotation of yield in a mutual fund advertisement be calculated in accordance with a formula that reflects fund expenses accrued for the period.²³ Use of total expenses in the calculation of a fund's yield may be appropriate to reflect actual fund expenses and necessary to maintain the value of yield as an indicator of fund performance.²⁴ Therefore, the Commission is proposing instructions to the yield formulas for funds (other than money market funds)

²⁰ Unlike amounts paid with commission dollars, the amounts of any fee waivers or expense reimbursements would continue to be deducted from expenses for purposes of the fee table and financial highlights table. While, as discussed above, a fund bears the cost of expenses paid by a broker under a brokerage/service arrangement, it does not bear any cost to the extent an expense is waived or reimbursed.

²¹ The proposed instructions would not require the calculation of the "net investment income" and "ratio of net income to average net assets" entries in the financial highlights table based upon gross expenses. Net investment income in the financial highlights table would continue to correspond to the net investment income reported in the statement of operations.

²² If these proposals are adopted, the Commission may require funds to present the grossed-up expense information in statements of operations and financial highlights tables for the entire fiscal period ending on or after the date of adoption. Because funds ordinarily would maintain records related to these arrangements, this should not be burdensome. Comment is requested whether reflecting total expenses for the period beginning before adoption of the rule would be burdensome.

²³ Paragraph (e)(1) of rule 482 under the 1933 Act [17 CFR 230.482(e)(1)] requires that yield quotations included in fund advertisements be calculated in accordance with the formulas specified in fund registration forms. The yield formulas are set forth in Item 22(b)(ii) of Form N-1A, Item 25(b)(ii) of Form N-3, and Item 21(b)(ii) of Form N-4.

²⁴ As discussed *supra* at note 4, the characterization of costs as expenses or capital items does not affect a fund's total return, and, therefore, no amendment to the total return formula is being proposed.

to require that the costs of services paid for with brokerage commissions be reflected in quotations of yield in a fund's registration statement, and, as a result, in its advertisements.

As discussed above, the proposed amendments to Regulation S-X would require that adjustments to fund expenses be made at the end of a financial statement period.²⁵ Those amendments generally would not require funds to accrue or otherwise determine at the end of the thirty-day period for which yield is calculated the amount of expenses paid with brokerage commissions for that period. The proposed instructions to the yield formulas, therefore, would require funds to estimate amounts paid with commission dollars for the period of the yield quotation. Comment is requested on the feasibility of making such an estimate and whether there are alternative approaches.

The proposals would not revise the manner in which yield is calculated by money market funds. The money market fund yield formula is based upon the net change in the value of a hypothetical account, and any spread or mark-up paid by a fund would be amortized and reflected in that change in value.²⁶ Therefore, requiring money market funds to include fees paid with commission dollars in the calculation of yield would result in those fees being counted twice.²⁷ Comment is specifically requested whether the money market fund yield formula should be revised to reflect the cost of services paid for with commission dollars as expenses when they are incurred. Commenters should discuss the extent to which money market funds pay or can pay expenses through brokerage/service arrangements, and commenters suggesting revisions to the yield calculation should provide specific text or formulas.

D. Related Arrangements

The Commission is aware that funds enter into certain other arrangements that, like brokerage/service arrangements, have the effect of

²⁵ See Section II.A.1 *supra*.

²⁶ See Item 22(a) of Form N-1A, Item 25(a) of Form N-3, and Item 21(a) of Form N-4.

²⁷ The same double-counting problem does not arise with respect to non-money market funds because the yield formula for those funds generally requires that the amortization of premium and accretion of discount on debt securities be based upon the market value of the security, rather than the initial purchase price. See, e.g., Instruction 1(a) to Item 22(b)(ii) of Form N-1A. The mark-up or spread paid by the fund upon the purchase of a security is not reflected in the security's market value and therefore would not be a part of any premium amortized or discount accreted for the purposes of calculating yield.

reducing reported fund expenses. Some funds, for example, have "compensating balance" arrangements with their custodians under which their custodian fees are reduced if they maintain cash on deposit with the custodians in non-interest bearing accounts. In these arrangements expenses are reduced by forgoing income rather than by recharacterizing them as capital items. The Commission requests comment whether an adjustment to fund expenses similar to that being proposed for brokerage/service arrangements should be required for these expense offset arrangements, or whether these arrangements should be addressed in footnotes to the financial statements. Because a fund that enters into these arrangements forgoes income, comment also is requested whether such income should be estimated and reflected in fund financial information, and how such estimates might be made.

Some custodial arrangements may involve explicit oral or written understandings regarding the fee reductions that will occur when uninvested cash balances exceed predetermined levels. Often, however, a fund's custodian fee reflects an estimate of the income the custodian expects to derive from the fund's uninvested cash balances, and the resulting reduction in the fee is not explicitly disclosed in the custodial agreement. The Commission requests comment whether the amount of any increase in fund expenses to reflect these arrangements should include only amounts that are explicit in the agreements, or should also include amounts implicit in the basic custodian fee.²⁸

E. Average Commission Rates

Brokerage commissions and other costs incurred in connection with the execution of a fund's portfolio transactions are not reflected in the fund's statement of operations, financial highlights table or fee table because these costs are treated as capital items which increase the cost of securities purchased or reduce the proceeds of securities sold. The Commission is concerned that adequate information about these costs currently may not be provided to investors.²⁹ The Commission, therefore, is proposing to

²⁸ Footnote disclosure of compensating balance arrangements under which the withdrawal or use of cash or cash items is restricted, either legally or as a practical matter, is currently required by rule 6-04.5 of Regulation S-X [17 CFR 210.6-04.5].

²⁹ A fund is currently required to disclose in its Statement of Additional Information the aggregate amount of any brokerage commissions it paid during its three most recent fiscal years, as well as certain data about commissions paid to fund affiliates. Item 17 of Form N-1A.

require that the average commission rate paid by a fund (in cents per share) be disclosed in the financial highlights table next to the portfolio turnover rate.³⁰ Other fund transaction costs, such as mark-ups, mark-downs, and spreads, would not be included in this commission rate figure. Comment is requested whether these other costs should be reflected, and, if so, how they should be calculated or estimated.

III. General Request for Comments

Any interested persons wishing to submit written comments on the rule and form changes that are the subject of this Release, to suggest additional changes, or to submit comments on other matters that might have an effect on the proposals contained in this Release, are requested to do so. Comment is specifically requested regarding the prevalence and significant terms of brokerage/service arrangements, the expenses paid through the arrangements, and the effect of the arrangements on fund expenses and commissions.

IV. Cost/Benefit Analysis

The rule and form changes proposed today are intended to improve the reporting of investment company expenses and improve the ability of investors to compare investment company expenses and performance. While the rule and form changes may increase the costs to funds of preparing financial statements and fund registration materials, the Commission believes that any such cost increases would, at most, be minimal. A fund that has brokerage/service arrangements would be required to add two captions and a footnote to its statement of operations and replace the net expense figures currently disclosed in its fee table and financial highlights table with total expense figures. These figures will normally be readily determinable by the fund. Funds should also be able to readily estimate expenses paid with brokerage commissions for purposes of yield calculations. In short, the Commission believes that the costs of the amendments proposed today would be substantially outweighed by the benefits to investors of receiving more accurate and useful financial information about funds.

V. Summary of Initial Regulatory Flexibility Analysis

The Commission has prepared an Initial Regulatory Flexibility Analysis in

accordance with 5 U.S.C. 603 regarding the proposed amendments. The analysis notes that the rule and form proposals contained in this Release are intended to provide for the comparability of fund expenses reflected in fund disclosure documents and advertisements. Other aggregate cost-benefit information reflected in the "Cost/Benefit Analysis" section of this release also is reflected in the analysis. A copy of the Initial Regulatory Flexibility Analysis may be obtained by contacting Eric C. Freed, Securities and Exchange Commission, 450 Fifth Street, NW., Mail Stop 10-6, Washington, DC 20549.

VI. Text of Proposed Rule and Form Amendments

List of Subjects

17 CFR Part 210

Accounting, Reporting and recordkeeping requirements, Securities.

17 CFR Parts 239 and 274

Investment companies, Reporting and recordkeeping requirements, Securities.

For the reasons set out in the preamble, Chapter II, Title 17 of the Code of Federal Regulations is proposed to be amended as follows:

PART 210—FORM AND CONTENT OF AND REQUIREMENTS FOR FINANCIAL STATEMENTS, SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934, PUBLIC UTILITY HOLDING COMPANY ACT OF 1935, INVESTMENT COMPANY ACT OF 1940, AND ENERGY POLICY AND CONSERVATION ACT OF 1975

1. The authority citation for part 210 continues to read as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 77aa(25), 77aa(26), 78l, 78m, 78n, 78o(d), 78w(a), 78ll(d), 79e(b), 79j(a), 79n, 79t(a), 80a-8, 80a-20, 80a-29, 80a-30, and 80a-37, unless otherwise noted.

2. By adding a new paragraph 2(g) to the statements of operations in § 210.6-07 to read as follows:

§ 210.6-07 Statements of operations.

* * * * *

2. Expenses. * * *

(g) If a broker-dealer or an affiliate of the broker-dealer has, in connection with the direction of the person's brokerage transactions to the broker-dealer, provided, agreed to provide, paid for, or agreed to pay for, in whole or in part, services provided to the person (other than brokerage and research services as those terms are used in Section 28(e) of the Securities Exchange Act of 1934 [15 U.S.C. 78bb(e)]), reflect as the cost of any such services in the expense items set forth under this caption the amount that would have been incurred by the person for the services had it paid for the services directly

in an arms-length transaction. Show the total amount by which expenses are increased as a corresponding reduction in total expenses under this caption. In a note to the financial statements, list each expense that is increased and the amount of the increase in each expense, except that expenses increased by less than 5 percent of the unadjusted amount of the expense may be aggregated. The note should also include the total amount by which expenses are increased.

* * * * *

PART 239—FORMS PRESCRIBED UNDER THE SECURITIES ACT OF 1933

PART 274—FORMS PRESCRIBED UNDER THE INVESTMENT COMPANY ACT OF 1940

3. The authority citation for Part 239 continues to read, in part, as follows:

Authority: 15 U.S.C. 77f, 77g, 77h, 77j, 77s, 77sss, 78c, 78l, 78m, 78n, 78o(d), 78w(a), 78ll(d), 79e, 79f, 79g, 79j, 79l, 79m, 79n, 79q, 79t, 80a-8, 80a-29, 80a-30 and 80a-37, unless otherwise noted.

* * * * *

4. The authority citation for Part 274 continues to read as follows:

Authority: 15 U.S.C. 80a-1, *et seq.*, unless otherwise noted.

Note: The text of Form N-1A does not and the amendments will not appear in the Code of Federal Regulations.

5. By revising the introductory text of Instruction 10 to Item 2(a)(i) of Part A of Form N-1A (referenced in §§ 239.15A and 274.11A) to read as follows:

Form N-1A

* * * * *

Part A. Information Required in a Prospectus

* * * * *

Item 2. Synopsis

(a)(i) * * *

Instructions: * * *

10. "Other Expenses" include all expenses (except nonrecurring account fees and expenses reported in other items of the table) that are deducted from fund assets or charged to all shareholder accounts. The amounts of expenses deducted from fund assets are the amounts shown as expenses in the Registrant's statement of operations (including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with Registrant's brokerage commissions).

* * * * *

6. By amending Item 3(a) of Part A of Form N-1A (referenced in §§ 239.15A and 274.11A) by adding the phrase "Average Commission Rate Paid (in cents per share)" below "Portfolio Turnover Rate" and adding a new Instruction 15 to read as follows:

³⁰ The new information would only be required for fiscal years beginning after adoption of the amendments.

Form N-1A

* * * * *

Part A. Information Required in a Prospectus

* * * * *

Item 3. Condensed Financial Information

(a) * * *

Instructions: * * *

15. Compute the "ratio of expenses to average net assets" using the amount of expenses shown in the Registrant's statement of operations for the relevant fiscal year, including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with Registrant's brokerage commissions, and including reductions resulting from complying with paragraphs 2(a) and (f) of Rule 6-07 [17 CFR 210.6-07] regarding fee waivers and reimbursements. If a change in the methodology of determining the ratio of expenses to average net assets results from applying paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07], explain in a note that the ratio reflects fees paid with brokerage commissions only for fiscal years ending after [the effective date of the final rule amendments].

* * * * *

7. By redesignating Instructions 7 and 8 to Item 22(b)(ii) as Instructions 8 and 9, and adding a new Instruction 7 to Item 22(b)(ii) of Part B of Form N-1A (referenced in §§ 239.15A and 274.11A) to read as follows:

Form N-1A

* * * * *

Part B. Information Required in a Statement of Additional Information

* * * * *

Item 22. Calculation of Performance Data

* * * * *

(b) Other Registrants * * *

(ii) Yield. * * *

Instructions: * * *

7. If a broker-dealer or an affiliate (as defined in paragraph (b) of Rule 1-02 [17 CFR 210.1-02(b)] of Regulation S-X) of the broker-dealer has, in connection with the direction of the Registrant's brokerage transactions to the broker-dealer, provided, agreed to provide, paid for, or agreed to pay for, in whole or in part, services provided to the Registrant (other than brokerage and research services as those terms are used in Section 28(e) of the Securities Exchange Act of 1934 [15 U.S.C. 78bb(e)]), add to expenses accrued for the period an estimate of additional amounts that would have been accrued for the period if the Registrant had paid for the services directly in an arms-length transaction.

* * * * *

Note: The text of Form N-2 does not and the amendments will not appear in the Code of Federal Regulations.

8. By revising Instruction 9 to Item 3.1 of part A of Form N-2 (referenced in

§§ 239.14 and 274.11a-1) to read as follows:

Form N-2

* * * * *

Part A—Information Required in A Prospectus

* * * * *

Item 3. Fee Table and Synopsis

1. * * *

Instructions: * * *

9. "Other Expenses" include all expenses (except fees and expenses reported in other items in the table) that are deducted from the Registrant's assets and will be reflected as expenses in the Registrant's statement of operations (including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with brokerage commissions).

* * * * *

9. By amending Item 4.1 of part A of Form N-2 (referenced in §§ 239.14 and 274.11a-1) by adding the phrase "Average Commission Rate Paid (in cents per share)" below "Portfolio Turnover Rate" and adding a new Instruction 17 to read as follows:

Form N-2

* * * * *

Part A.—Information Required in a Prospectus

* * * * *

Item 4. Financial Highlights

1. General: * * *

Instructions: * * *

17. Compute the "ratio of expenses to average net assets" using the amount of expenses shown in the Registrant's statement of operations for the relevant fiscal year, including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with Registrant's brokerage commissions, and including reductions resulting from complying with paragraphs 2(a) and (f) of Rule 6-07 [17 CFR 210.6-07] regarding fee waivers and reimbursements. If a change in the methodology of determining the ratio of expenses to average net assets results from applying paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07], explain in a note that the ratio reflects fees paid with brokerage commissions only for fiscal years ending after [the effective date of the final rule amendments].

* * * * *

Note: The text of Form N-3 does not and the amendments will not appear in the Code of Federal Regulations.

10. By revising the introductory text of Instruction 15 to Item 3(a) of Part A of Form N-3 (referenced in §§ 239.17a and 274.11b) to read as follows:

Form N-3

* * * * *

Part A. Information Required in a Prospectus

* * * * *

Item 3. Synopsis

(a) * * *

Instructions: * * *

15. "Other Expenses" include all expenses (except expenses reported in other items in the table) that are deducted from separate account assets. The amounts of expenses are the amounts shown as expenses in the Registrant's statement of operations (including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with Registrant's brokerage commissions).

* * * * *

11. By redesignating Instruction 7 to Item 25(b)(ii) as Instruction 8, and adding a new Instruction 7 to Item 25(b)(ii) of Part B of Form N-3 (referenced in §§ 239.17a and 274.11b) to read as follows:

Form N-3

* * * * *

Part B. Information Required in a Statement of Additional Information

* * * * *

Item 25. Calculation of Performance Data

* * * * *

(b) Other Accounts * * *

(ii) Yield. * * *

Instructions: * * *

7. If a broker-dealer or an affiliate (as defined in paragraph (b) of Rule 1-02 [17 CFR 210.1-02(b)] of Regulation S-X) of the broker-dealer has, in connection with the direction of the Registrant's brokerage transactions to the broker-dealer, provided, agreed to provide, paid for, or agreed to pay for, in whole or in part, services provided to the Registrant (other than brokerage and research services as those terms are used in Section 28(e) of the Securities Exchange Act of 1934 [15 U.S.C. 78bb(e)]), add to expenses accrued for the period an estimate of additional amounts that would have been accrued for the period if the Registrant had paid for the services directly in an arms-length transaction.

* * * * *

Note: The text of Form N-4 does not and the amendments will not appear in the Code of Federal Regulations.

12. By revising the introductory text of Instruction 17 to Item 3(a) of Part A of Form N-4 (referenced in §§ 239.17b and 274.11c) to read as follows:

Form N-4

* * * * *

Part A. Information Required in a Prospectus

* * * * *

Item 3. Synopsis

(a) * * *

Instructions: * * *

17. "Other Expenses" include all expenses (except management fees) that are deducted from portfolio company assets. The amounts of expenses are the amounts shown as expenses in the portfolio company's statement of operations (including increases resulting from complying with paragraph 2(g) of Rule 6-07 [17 CFR 210.6-07] of Regulation S-X regarding fees paid with the portfolio company's brokerage commissions).

13. By redesignating Instructions 2 and 3 to Item 21(b)(ii) as Instructions 3 and 4, and adding a new Instruction 2 to Item 21(b)(ii) of Part B of Form N-4 (referenced in §§ 239.17b and 274.11c) to read as follows:

Form N-4

Part B. Information Required in a Statement of Additional Information

Item 21. Calculation of Performance Data

(b) *Other Sub-Accounts* * * *
(ii) *Yield*. * * *
Instructions: * * *

2. If a broker-dealer or an affiliate (as defined in paragraph (b) of Rule 1-02 [17 CFR 210.1-02(b)] of Regulation S-X) of the broker-dealer has, in connection with the direction of the portfolio company's brokerage transactions to the broker-dealer, provided, agreed to provide, paid for, or agreed to pay for, in whole or in part, services provided to the portfolio company (other than brokerage and research services as those terms are used in Section 28(e) of the Securities Exchange Act of 1934 [15 U.S.C. 78bb(e)]), add to expenses accrued for the period an estimate of additional amounts that would have been accrued for the period if the portfolio company had paid for the services directly in an arms-length transaction.

Dated: August 11, 1994.
By the Commission.

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 94-20114 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 600, 601, 606, 607, 610, 640, and 660

[Docket Nos. 94N-0066 and 94N-0080]

Review of Regulations for General Biologics and Licensing and Blood Establishments and Blood Products; Extension of Comment Periods

AGENCY: Food and Drug Administration, HHS.

ACTION: Intent to review regulations; extension of comment periods.

SUMMARY: The Food and Drug Administration (FDA) is extending to November 15, 1994, the comment periods for two documents. The documents requested comments on FDA's intent to review certain biologics regulations, and were published in the *Federal Register* of June 3, 1994 (59 FR 28821 and 28822, respectively). FDA is taking this action in response to requests to allow additional time for public comment.

DATES: Written comments by November 15, 1994.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Timothy W. Beth or Stephen M. Ripley, Center for Biologics Evaluation and Research (HFM-635), Food and Drug Administration, 1401 Rockville Pike, Rockville, MD 20852-1448, 301-594-3074.

SUPPLEMENTARY INFORMATION: In the *Federal Register* of June 3, 1994 (58 FR 28821, 28822), FDA issued two documents entitled "Review of General Biologics and Licensing Regulations" (Docket No. 94N-0066) and "Review of Regulations for Blood Establishments and Blood Products" (Docket No. 94N-0080). Interested persons were given until August 17, 1994, to respond to the documents.

The American Blood Resources Association has requested a 90-day extension of the comment periods for the two above mentioned documents. The Biotechnology Industry Organization and the Pharmaceutical Research and Manufacturers of America have requested a 60-day extension for the general biologics and licensing regulations document. In order to allow interested persons to fully respond to the requests for comments, FDA believes it is in the public interest to extend the comment period to allow interested persons to carefully review the regulations and submit written comments. Therefore, FDA is granting the request by extending the comment periods for both documents to November 15, 1994. Interested persons may, on or before November 15, 1994, submit written comments to the Dockets Management Branch (address above). Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the appropriate docket number found in brackets in the

heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

Dated: August 12, 1994.

Ronald G. Chesemore,

Associate Commissioner for Regulatory Affairs.

[FR Doc. 94-20198 Filed 8-12-94; 2:56 pm]

BILLING CODE 4160-01-F

DEPARTMENT OF LABOR

Mine Safety and Health Administration

30 CFR Part 75

RIN 1219-AA11

Safety Standards for Ventilation of Underground Coal Mines

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice of public hearings.

SUMMARY: The Mine Safety and Health Administration (MSHA) will hold public hearings to receive comments on the May 19, 1994, proposed rule revising certain provisions for ventilation of underground coal mines. These hearings are being held under section 101 of the Federal Mine Safety and Health Act of 1977. The hearings will be held in Price, Utah; Monaville, West Virginia; and Washington, Pennsylvania.

DATES: All requests to make oral presentations for the record should be submitted at least 5 days prior to each hearing date. Immediately before each hearing, any unallotted time will be made available to persons making late requests. The public hearings will be held at the following locations on the dates indicated:

- September 27, 1994, in Price, Utah.
- October 4, 1994, in Monaville, West Virginia.
- October 17, 1994, in Washington, Pennsylvania.

Each hearing will last from 9:00 a.m. to 5:00 p.m. and will continue into the next day if necessary.

ADDRESSES: The hearings will be held at the following locations:

- September 27, 1994, College of Eastern Utah, Students' Activities Center, Ballroom, 451 East, 400 North, Price, Utah 84501.
- October 4, 1994, National Guard Armory, 150 Armory Road, Drill Hall, Monaville, West Virginia 25653.
- October 17, 1994, Meadowlands Holiday Inn, Conference Center, 340

Race Track Road, Washington, Pennsylvania 15301.

Send requests to make oral presentations to: Mine Safety and Health Administration, Office of Standards, Regulations and Variances, Room 631, 4015 Wilson Boulevard, Arlington, Virginia 22203.

FOR FURTHER INFORMATION CONTACT: Patricia W. Silvey, Director, Office of Standards, Regulations and Variances, MSHA (703) 235-1910.

SUPPLEMENTARY INFORMATION: On May 19, 1994, MSHA published a proposed rule in the *Federal Register* (59 FR 26356) revising stayed provisions of MSHA's existing safety standards for ventilation of underground coal mines. The proposal also revised, clarified or repropoed certain other provisions in the existing rule; included some new provisions; and addressed concerns raised by the public. The comment period was scheduled to close on July 18, 1994, but, in response to a request from the mining community for additional time in which to prepare comments, MSHA extended the comment period to August 8, 1994 (59 FR 35071).

The purpose of the hearings is to receive relevant comments and to answer questions interpreting or clarifying the proposal. The hearings will be conducted in an informal manner by a panel of MSHA officials. Although formal rules of evidence or cross examination will not apply, the presiding official may exercise discretion to ensure the orderly progress of the hearings and may exclude irrelevant or unduly repetitious material and questions.

Each session will begin with an opening statement from MSHA, followed by an opportunity for members of the public to make oral presentations. The hearing panel will be available to address relevant questions. At the discretion of the presiding official, the time allocated to speakers for their presentations may be limited. In the interest of conducting productive hearings, MSHA will schedule speakers in a manner that allows all points of view to be heard as effectively as possible.

Verbatim transcripts of the proceedings will be prepared and made a part of the rulemaking record. Copies of the hearing transcripts will be made available to the public for review.

MSHA will also accept for the record additional written comments and other appropriate data from any interested party, including those not presenting oral statements. Written comments and data submitted to MSHA will be

included in the rulemaking record. To allow for the submission of any post-hearing comments the record will remain open until November 18, 1994.

Dated: August 11, 1994.

J. Davitt McAteer,
Assistant Secretary for Mine Safety and Health.

[FR Doc. 94-20199 Filed 8-16-94; 8:45 am]

BILLING CODE 4510-43-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[DC16-1-6286b, A-1-FRL-5052-7]

Approval and Promulgation of Air Quality Implementation Plans; District of Columbia—Small Business Stationary Source Technical and Environmental Compliance Assistance Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve the State Implementation Plan (SIP) revision submitted by the District of Columbia for the purpose of establishing a Small Business Stationary Source Technical and Environmental Compliance Assistance Program. In the final rules section of this *Federal Register*, EPA is approving the State's SIP revision as a direct final rule without prior proposal because the Agency views this as a noncontroversial SIP revision and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in response to this proposed rule, no further activity is contemplated and the direct final rule will become effective. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting on this action should do so at this time. **DATES:** Comments must be received on or before September 16, 1994.

ADDRESSES: Comments may be mailed to Thomas J. Maslany, Director, Air, Radiation, and Toxics Division, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, PA 19107. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air,

Radiation, and Toxics Division, U.S. Environmental Protection Agency, Region III, 841 Chestnut Building, Philadelphia, PA 19107; District of Columbia Environmental Regulation Administration, 2100 Martin Luther King, Jr., Avenue, SE., room 203, Washington, DC 20020.

FOR FURTHER INFORMATION CONTACT: Jennifer M. Abramson, (215) 597-2923.

SUPPLEMENTARY INFORMATION: See the information provided in the direct final action which is located in the Rules and Regulations section of this *Federal Register*.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Small business assistance program.

Authority: 42 U.S.C. 7401-7671q.

Dated: June 9, 1994.

Peter H. Kostmayer,

Regional Administrator, Region III.

[FR Doc. 94-20149 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

40 CFR Part 55

[FRL-5030-9]

Outer Continental Shelf Air Regulations; Consistency Update for California

AGENCY: Environmental Protection Agency ("EPA").

ACTION: Notice of proposed rulemaking ("NPRM")—consistency update.

SUMMARY: EPA is proposing to update a portion of the Outer Continental Shelf ("OCS") Air Regulations. Requirements applying to OCS sources located within 25 miles of states' seaward boundaries must be updated periodically to remain consistent with the requirements of the corresponding onshore area ("COA"), as mandated by section 328(a)(1) of the Clean Air Act ("the Act"), the Clean Air Act Amendments of 1990. The portion of the OCS air regulations that is being updated pertains to the requirements for OCS sources for which the Santa Barbara County Air Pollution Control District (Santa Barbara County APCD) and the Ventura County Air Pollution Control District (Ventura County APCD) are the designated COAs, and a requirement submitted by the state of California. The OCS requirements for the above Districts and the state of California, contained in the Technical Support Document, are proposed to be incorporated by reference into the Code of Federal Regulations and are listed in the appendix to the OCS air regulations.

Proposed changes to the existing requirements are discussed below.

DATES: Comments on the proposed update must be received on or before September 16, 1994.

ADDRESSES: Comments must be mailed (in duplicate if possible) to: EPA Air Docket (A-5), Attn: Docket No. A-93-16 Section VI, Environmental Protection Agency, Air and Toxics Division, Region 9, 75 Hawthorne St., San Francisco, CA 94105. Docket: Supporting information used in developing the proposed notice and copies of the documents EPA is proposing to incorporate by reference are contained in Docket No. A-93-16 (Section VI). This docket is available for public inspection and copying Monday-Friday during regular business hours at the following locations:

EPA Air Docket (A-5), Attn: Docket No. A-93-16 Section VI, Environmental Protection Agency, Air and Toxics Division, Region 9, 75 Hawthorne St., San Francisco, CA 94105.

EPA Air Docket (LE-131), Attn: Air Docket No. A-93-16 Section VI, Environmental Protection Agency, 401 M Street SW, Room M-1500, Washington, DC 20460.

A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT:

Christine Vineyard, Air and Toxics Division (A-5-3), U.S. EPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105. (415) 744-1197.

SUPPLEMENTARY INFORMATION:

Background

On September 4, 1992, EPA promulgated 40 CFR part 55,¹ which established requirements to control air pollution from OCS sources in order to attain and maintain federal and state ambient air quality standards and to comply with the provisions of part C of title I of the Act. Part 55 applies to all OCS sources offshore of the States except those located in the Gulf of Mexico west of 87.5 degrees longitude. Section 328 of the Act requires that for such sources located within 25 miles of a state's seaward boundary, the requirements shall be the same as would be applicable if the sources were located in the COA. Because the OCS requirements are based on onshore requirements, and onshore requirements may change, section 328(a)(1) requires

that EPA update the OCS requirements as necessary to maintain consistency with onshore requirements.

Pursuant to § 55.12 of the OCS rule, consistency reviews will occur: (1) At least annually; (2) upon receipt of a Notice of Intent (NOI) under § 55.4; and (3) when a state or local agency submits a rule to EPA to be considered for incorporation by reference in part 55. This NPRM is being promulgated in response to the submittal of rules by two local air pollution control agencies and one rule submitted by the state of California. Public comments received in writing within 30 days of publication of this notice will be considered by EPA before promulgation of the final updated rule.

Section 328(a) of the Act requires that EPA establish requirements to control air pollution from OCS sources located within 25 miles of states' seaward boundaries that are the same as onshore requirements. To comply with this statutory mandate, EPA must incorporate applicable onshore rules into part 55 as they exist onshore. This limits EPA's flexibility in deciding which requirements will be incorporated into part 55 and prevents EPA from making substantive changes to the requirements it incorporates. As a result, EPA may be incorporating rules into part 55 that do not conform to all of EPA's state implementation plan (SIP) guidance or certain requirements of the Act. Consistency updates may result in the inclusion of state or local rules or regulations into part 55, even though the same rules may ultimately be disapproved for inclusion as part of the SIP. Inclusion in the OCS rule does not imply that a rule meets the requirements of the Act for SIP approval, nor does it imply that the rule will be approved by EPA for inclusion in the SIP.

EPA Evaluation and Proposed Action

In updating 40 CFR part 55, EPA reviewed the state and local rules submitted for inclusion in part 55 to ensure that they are rationally related to the attainment or maintenance of federal or state ambient air quality standards or part C of title I of the Act, that they are not designed expressly to prevent exploration and development of the OCS and that they are applicable to OCS sources. 40 CFR 55.1. EPA has also evaluated the rules to ensure they are not arbitrary or capricious. 40 CFR 55.12 (e). In addition, EPA has excluded administrative or procedural rules.²

² Upon delegation the onshore area will use its administrative and procedural rules as onshore. In those instances where EPA does not delegate authority to implement and enforce part 55, EPA

A. As stated in the California Health and Safety Code, the following requirements shall be statewide, and no rule or regulation of any district that is applicable to sandblasting operations shall be stricter or less strict than the standards adopted by the state board pursuant to the recommendations of the committee appointed by the state board to adopt air pollution standards for sandblasting operations. After review of the rule submitted by the State of California against the criteria set forth above and in 40 CFR part 55, EPA is proposing to make the state abrasive sandblasting requirements applicable to OCS sources:

Barclays California Code of Regulations—Title 17 Subchapter 6

- 17 § 92000 Definitions (Adopted 5/31/91).
- 17 § 92100 Scope and Policy (Adopted 10/18/82)
- 17 § 92200 Visible Emission Standards (Adopted 5/31/91)
- 17 § 92210 Nuisance Prohibition (Adopted 10/18/82)
- 17 § 92220 Compliance with Performance Standards (Adopted 5/31/91)
- 17 § 92400 Visible Evaluation Techniques (Adopted 5/31/91)
- 17 § 92500 General Provisions (Adopted 5/31/91)
- 17 § 92510 Pavement Marking (Adopted 5/31/91)
- 17 § 92520 Stucco and Concrete (Adopted 5/31/91)
- 17 § 92530 Certified Abrasives (Adopted 5/31/91)
- 17 § 92540 Stucco and Concrete (Adopted 5/31/91)

B. After review of the rule submitted by the Santa Barbara County APCD against the criteria set forth above and in 40 CFR part 55, EPA is proposing to make the following rule applicable to OCS sources for which the Santa Barbara County APCD is designated as the COA. None of the existing OCS requirements were deleted. The following new rule was submitted by the District to be added:

Rule 359 Flares and Thermal Oxidizers (Adopted 6/28/94)

C. After review of the rules submitted by Ventura County APCD against the criteria set forth above and in 40 CFR part 55, EPA is proposing to make the following rules applicable to OCS sources for which Ventura County APCD is designated as the COA. None of the existing OCS requirements were deleted.

will use its own administrative and procedural requirements to implement the substantive requirements. 40 CFR 55.14(c)(4).

¹ The reader may refer to the Notice of Proposed Rulemaking, December 5, 1991 (56 FR 63774), and the preamble to the final rule promulgated September 4, 1992 (57 FR 40792) for further background and information on the OCS regulations.

The following rules were submitted as revisions to existing requirements:

- Rule 54 Sulfur Compounds (Adopted 6/14/94)
 Rule 64 Sulfur Content of Fuels (Adopted 6/14/94)

D. Regulatory Flexibility Act—The Regulatory Flexibility Act of 1980 requires each federal agency to perform a Regulatory Flexibility Analysis for all rules that are likely to have a "significant impact on a substantial number of small entities." Small entities include small businesses, organizations, and governmental jurisdictions.

As was stated in the final regulation, the OCS rule does not apply to any small entities, and the structure of the rule averts direct impacts and mitigates indirect impacts on small entities. This consistency update merely incorporates onshore requirements into the OCS rule to maintain consistency with onshore regulations as required by section 328 of the Act and does not alter the structure of the rule.

The EPA certifies that this notice of proposed rulemaking will not have a significant impact on a substantial number of small entities.

E. Paperwork Reduction Act—The Office of Management and Budget (OMB) has approved the information collection requirements contained in the final OCS rulemaking dated September 4, 1992 under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and has assigned OMB control number 2060-0249. This consistency update does not add any further requirements.

List of Subjects in 40 CFR Part 55

Administrative practice and procedures, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Nitrogen oxides, Outer continental shelf, Ozone, Particulate matter, Permits, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: July 22, 1994.

Felicia Marcus,
 Regional Administrator.

Title 40 of the Code of Federal Regulations, part 55, is proposed to be amended as follows:

PART 55—[AMENDED]

1. The authority citation for part 55 continues to read as follows:

Authority: Section 328 of the Clean Air Act (42 U.S.C. 7401 *et seq.*) as amended by Public Law 101-549.

2. Section 55.14 is proposed to be amended by adding paragraph

(e)(3)(i)(A), and revising paragraphs (e)(3)(ii)(F), (e)(3)(ii)(G), and (e)(3)(ii)(H) to read as follows:

§ 55.14 Requirements that apply to OCS sources located within 25 miles of states' seaward boundaries, by state.

* * * * *

(e) * * *

(3) * * *

(i) * * *

(A) *State of California Requirements Applicable to OCS Sources*

(ii) * * *

(F) *Santa Barbara County Air Pollution Control District Requirements Applicable to OCS Sources.*

(G) *South Coast Air Quality Management District Requirements Applicable to OCS Sources.*

(H) *Ventura County Air Pollution Control District Requirements Applicable to OCS Sources.*

* * * * *

4. Appendix A to part 55 is proposed to be amended by adding paragraph (a)(1), and revising paragraphs (b)(6), (b)(7), and (b)(8) under the heading "California" to read as follows:

Appendix A to 40 CFR Part 55—Listing of State and Local Requirements Incorporated by Reference Into Part 55, by State

* * * * *

California

(a) State Requirements.

(1) The following requirements are contained in *State of California Requirements applicable to OCS Sources*:

Barclays California Code of Regulations

The following section of Title 17 Subchapter 6:

- 17 § 92000 Definitions (Adopted 5/31/91)
 17 § 92100 Scope and Policy (Adopted 10/18/82)
 17 § 92200 Visible Emission Standards (Adopted 5/31/91)
 17 § 92210 Nuisance Prohibition (Adopted 10/18/82)
 17 § 92220 Compliance with Performance Standards (Adopted 5/31/91)
 17 § 92400 Visible Evaluation Techniques (Adopted 5/31/91)
 17 § 92500 General Provisions (Adopted 5/31/91)
 17 § 92510 Pavement Marking (Adopted 5/31/91)
 17 § 92520 Stucco and Concrete (Adopted 5/31/91)
 17 § 92530 Certified Abrasives (Adopted 5/31/91)
 17 § 92540 Stucco and Concrete (Adopted 5/31/91)

(b) Local requirements.

* * * * *

(6) The following requirements are contained in *Santa Barbara County Air*

Pollution Control District Requirements Applicable to OCS Sources:

- Rule 102 Definitions (Adopted 7/30/91)
 Rule 103 Severability (Adopted 10/23/78)
 Rule 201 Permits Required (Adopted 7/2/79)
 Rule 202 Exemptions to Rule 201 (Adopted 3/10/92)
 Rule 203 Transfer (Adopted 10/23/78)
 Rule 204 Applications (Adopted 10/23/78)
 Rule 205 Standards for Granting Applications (Adopted 7/30/91)
 Rule 206 Conditional Approval of Authority to Construct or Permit to Operate (Adopted 10/15/91)
 Rule 207 Denial of Application (Adopted 10/23/78)
 Rule 210 Fees (Adopted 5/7/91)
 Rule 212 Emission Statements (Adopted 10/20/92)
 Rule 301 Circumvention (Adopted 10/23/78)
 Rule 302 Visible Emissions (Adopted 10/23/78)
 Rule 304 Particulate Matter—Northern Zone (Adopted 10/23/78)
 Rule 307 Particulate Matter Emission Weight Rate—Southern Zone (Adopted 10/23/78)
 Rule 308 Incinerator Burning (Adopted 10/23/78)
 Rule 309 Specific Contaminants (Adopted 10/23/78)
 Rule 310 Odorous Organic Sulfides (Adopted 10/23/78)
 Rule 311 Sulfur Content of Fuels (Adopted 10/23/78)
 Rule 312 Open Fires (Adopted 10/2/90)
 Rule 316 Storage and Transfer of Gasoline (Adopted 12/14/93)
 Rule 317 Organic Solvents (Adopted 10/23/78)
 Rule 318 Vacuum Producing Devices or Systems—Southern Zone (Adopted 10/23/78)
 Rule 321 Control of Degreasing Operations (Adopted 7/10/90)
 Rule 322 Metal Surface Coating Thinner and Reducer (Adopted 10/23/78)
 Rule 323 Architectural Coatings (Adopted 2/20/90)
 Rule 324 Disposal and Evaporation of Solvents (Adopted 10/23/78)
 Rule 325 Crude Oil Production and Separation (Adopted 1/25/94)
 Rule 326 Storage of Reactive Organic Liquid Compounds (Adopted 12/14/93)
 Rule 327 Organic Liquid Cargo Tank Vessel Loading (Adopted 12/16/85)
 Rule 328 Continuous Emission Monitoring (Adopted 10/23/78)
 Rule 330 Surface Coating of Miscellaneous Metal Parts and Products (Adopted 11/13/90)
 Rule 331 Fugitive Emissions Inspection and Maintenance (Adopted 12/10/91)
 Rule 332 Petroleum Refinery Vacuum Producing Systems, Wastewater Separators and Process Turnarounds (Adopted 6/11/79)
 Rule 333 Control of Emissions from Reciprocating Internal Combustion Engines (Adopted 12/10/91)

- Rule 342 Control of Oxides of Nitrogen (NO_x from Boilers, Steam Generators and Process Heaters) (Adopted 03/10/92)
- Rule 359 Flares and Thermal Oxidizers (6/28/94)
- Rule 505 Breakdown Conditions Sections A., B.1., and D. only (Adopted 10/23/78)
- Rule 603 Emergency Episode Plans (Adopted 6/15/81)
- (7) The following requirements are contained in *South Coast Air Quality Management District Requirements Applicable to OCS Sources*:
- Rule 102 Definition of Terms (Adopted 11/4/88)
- Rule 103 Definition of Geographical Areas (Adopted 1/9/76)
- Rule 104 Reporting of Source Test Data and Analyses (Adopted 1/9/76)
- Rule 108 Alternative Emission Control Plans (Adopted 4/6/90)
- Rule 109 Recordkeeping for Volatile Organic Compound Emissions (Adopted 3/6/92)
- Rule 201 Permit to Construct (Adopted 1/5/90)
- Rule 201.1 Permit Conditions in Federally Issued Permits to Construct (Adopted 1/5/90)
- Rule 202 Temporary Permit to Operate (Adopted 5/7/76)
- Rule 203 Permit to Operate (Adopted 1/5/90)
- Rule 204 Permit Conditions (Adopted 3/6/92)
- Rule 205 Expiration of Permits to Construct (Adopted 1/5/90)
- Rule 206 Posting of Permit to Operate (Adopted 1/5/90)
- Rule 207 Altering or Falsifying of Permit (Adopted 1/9/76)
- Rule 208 Permit for Open Burning (Adopted 1/5/90)
- Rule 209 Transfer and Voiding of Permits (Adopted 1/5/90)
- Rule 210 Applications (Adopted 1/5/90)
- Rule 212 Standards for Approving Permits (9/6/91) except (c)(3) and (e)
- Rule 214 Denial of Permits (Adopted 1/5/90)
- Rule 217 Provisions for Sampling and Testing Facilities (Adopted 1/5/90)
- Rule 218 Stack Monitoring (Adopted 8/7/81)
- Rule 219 Equipment Not Requiring a Written Permit Pursuant to Regulation II (Adopted 9/11/92)
- Rule 220 Exemption—Net Increase in Emissions (Adopted 8/7/81)
- Rule 221 Plans (Adopted 1/4/85)
- Rule 301 Permit Fees (Adopted 6/11/93) except (e)(3) and Table IV
- Rule 304 Equipment, Materials, and Ambient Air Analyses (Adopted 6/11/93)
- Rule 304.1 Analyses Fees (Adopted 6/6/92)
- Rule 305 Fees for Acid Deposition (Adopted 10/4/91)
- Rule 306 Plan Fees (Adopted 7/6/90)
- Rule 401 Visible Emissions (Adopted 4/7/89)
- Rule 403 Fugitive Dust (Adopted 7/9/93)
- Rule 404 Particulate Matter—Concentration (Adopted 2/7/86)
- Rule 405 Solid Particulate Matter—Weight (Adopted 2/7/86)
- Rule 407 Liquid and Gaseous Air Contaminants (Adopted 4/2/82)
- Rule 408 Circumvention (Adopted 5/7/76)
- Rule 409 Combustion Contaminants (Adopted 8/7/81)
- Rule 429 Start-Up and Shutdown Provisions for Oxides of Nitrogen (Adopted 12/21/90)
- Rule 430 Breakdown Provisions, (a) and (e) only. (Adopted 5/5/78)
- Rule 431.1 Sulfur Content of Gaseous Fuels (Adopted 10/2/92)
- Rule 431.2 Sulfur Content of Liquid Fuels (Adopted 5/4/90)
- Rule 431.3 Sulfur Content of Fossil Fuels (Adopted 5/7/76)
- Rule 441 Research Operations (Adopted 5/7/76)
- Rule 442 Usage of Solvents (Adopted 3/5/82)
- Rule 444 Open Fires (Adopted 10/2/87)
- Rule 463 Storage of Organic Liquids (Adopted 12/7/90)
- Rule 465 Vacuum Producing Devices or Systems (Adopted 11/1/91)
- Rule 468 Sulfur Recovery Units (Adopted 10/8/76)
- Rule 473 Disposal of Solid and Liquid Wastes (Adopted 5/7/76)
- Rule 474 Fuel Burning Equipment—Oxides of Nitrogen (Adopted 12/4/81)
- Rule 475 Electric Power Generating Equipment (Adopted 8/7/78)
- Rule 476 Steam Generating Equipment (Adopted 10/8/76)
- Rule 480 Natural Gas Fired Control Devices (Adopted 10/7/77)
- Addendum to Regulation IV (Effective 1977)
- Rule 701 General (Adopted 7/9/82)
- Rule 702 Definitions (Adopted 7/11/80)
- Rule 704 Episode Declaration (Adopted 7/9/82)
- Rule 707 Radio—Communication System (Adopted 7/11/80)
- Rule 708 Plans (Adopted 7/9/82)
- Rule 708.1 Stationary Sources Required to File Plans (Adopted 4/4/80)
- Rule 708.2 Content of Stationary Source Curtailment Plans (Adopted 4/4/80)
- Rule 708.4 Procedural Requirements for Plans (Adopted 7/11/80)
- Rule 709 First Stage Episode Actions (Adopted 7/11/80)
- Rule 710 Second Stage Episode Actions (Adopted 7/11/80)
- Rule 711 Third Stage Episode Actions (Adopted 7/11/80)
- Rule 712 Sulfate Episode Actions (Adopted 7/11/80)
- Rule 715 Burning of Fossil Fuel on Episode Days (Adopted 8/24/77)
- Regulation IX—New Source Performance Standards (Adopted 4/9/93)
- Rule 1106 Marine Coatings Operations (Adopted 8/2/91)
- Rule 1107 Coating of Metal Parts and Products (Adopted 8/2/91)
- Rule 1109 Emissions of Oxides of Nitrogen for Boilers and Process Heaters in Petroleum Refineries (Adopted 8/5/88)
- Rule 1110 Emissions from Stationary Internal Combustion Engines (Demonstration) (Adopted 11/6/81)
- Rule 1110.1 Emissions from Stationary Internal Combustion Engines (Adopted 10/4/85)
- Rule 1110.2 Emissions from Gaseous and Liquid-Fueled Internal Combustion Engines (Adopted 9/7/90)
- Rule 1113 Architectural Coatings (Adopted 9/6/91)
- Rule 1116.1 Lightering Vessel Operations—Sulfur Content of Bunker Fuel (Adopted 10/20/78)
- Rule 1121 Control of Nitrogen Oxides from Residential-Type Natural Gas-Fired Water Heaters (Adopted 12/1/78)
- Rule 1122 Solvent Cleaners (Degreasers) (Adopted 4/5/91)
- Rule 1123 Refinery Process Turnarounds (Adopted 12/7/90)
- Rule 1129 Aerosol Coatings (Adopted 11/2/90)
- Rule 1134 Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Adopted 8/4/89)
- Rule 1140 Abrasive Blasting (Adopted 8/2/85)
- Rule 1142 Marine Tank Vessel Operations (Adopted 7/19/91)
- Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Adopted 1/6/89)
- Rule 1146.1 Emission of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Adopted 7/10/92)
- Rule 1148 Thermally Enhanced Oil Recovery Wells (Adopted 11/5/82)
- Rule 1149 Storage Tank Degassing (Adopted 4/1/88)
- Rule 1168 Control of Volatile Organic Compound Emissions from Adhesive Application (Adopted 12/4/92)
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds (Adopted 12/7/90)
- Rule 1176 Sumps and Wastewater Separators (Adopted 1/5/90)
- Rule 1301 General (Adopted 6/28/90)
- Rule 1302 Definitions (Adopted 5/3/91)
- Rule 1303 Requirements (Adopted 5/3/91)
- Rule 1304 Exemptions (Adopted 9/11/92)
- Rule 1306 Emission Calculations (Adopted 5/3/91)
- Rule 1313 Permits to Operate (Adopted 6/28/90)
- Rule 1403 Asbestos Emissions from Demolition/Renovation Activities (Adopted 10/6/89)
- Rule 1701 General (Adopted 1/6/89)
- Rule 1702 Definitions (Adopted 1/6/89)
- Rule 1703 PSD Analysis (Adopted 10/7/88)
- Rule 1704 Exemptions (Adopted 1/6/89)
- Rule 1706 Emission Calculations (Adopted 1/6/89)
- Rule 1713 Source Obligation (Adopted 10/7/88)
- Regulation XVII Appendix (effective 1977)
- Rule 2000 General (Adopted 10/15/93)
- Rule 2001 Applicability (Adopted 10/15/93)
- Rule 2002 Allocations for oxides of nitrogen (NO_x) and oxides of sulfur (SO_x) (Adopted 10/15/93)
- Rule 2004 Requirements (Adopted 10/15/93) except (1) (2 and 3)

- Rule 2005 New Source Review for RECLAIM (Adopted 10/15/93) except (i)
- Rule 2006 Permits (Adopted 10/15/93)
- Rule 2007 Trading Requirements (Adopted 10/15/93)
- Rule 2008 Mobiles Source Credits (Adopted 10/15/93)
- Rule 2010 Administrative Remedies and Sanctions (Adopted 10/15/93)
- Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_x) Emissions (Adopted 10/15/93)
- Appendix A—Volume IV—(Protocol for Oxides of Sulfur) (Adopted 10/93)
- Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x) Emissions (Adopted 10/15/93)
- Appendix A—Volume V—(Protocol for Oxides of Nitrogen) (Adopted 10/93)
- Rule 2015 Backstop Provisions (Adopted 10/15/93) except (b)(1)(C) and (b)(3)(B)
- (8) The following requirements are contained in *Ventura County Air Pollution Control District Requirements Applicable to OCS Sources*:
- Rule 2 Definitions (Adopted 12/15/92)
- Rule 5 Effective Date (Adopted 5/23/72)
- Rule 6 Severability (Adopted 11/21/78)
- Rule 7 Zone Boundaries (Adopted 6/14/77)
- Rule 10 Permits Required (Adopted 7/5/83)
- Rule 11 Application Contents (Adopted 8/15/78)
- Rule 12 Statement by Application Preparer (Adopted 6/16/87)
- Rule 13 Statement by Applicant (Adopted 11/21/78)
- Rule 14 Trial Test Runs (Adopted 5/23/72)
- Rule 15.1 Sampling and Testing Facilities (Adopted 10/12/93)
- Rule 16 Permit Contents (Adopted 12/2/80)
- Rule 18 Permit to Operate Application (Adopted 8/17/76)
- Rule 19 Posting of Permits (Adopted 5/23/72)
- Rule 20 Transfer of Permit (Adopted 5/23/72)
- Rule 21 Expiration of Applications and Permits (Adopted 6/23/81)
- Rule 23 Exemptions from Permits (Adopted 3/22/94)
- Rule 24 Source Recordkeeping, Reporting, and Emission Statements (Adopted 9/15/92)
- Rule 26 New Source Review (Adopted 10/22/91)
- Rule 26.1 New Source Review—Definitions (Adopted 10/22/91)
- Rule 26.2 New Source Review—Requirements (Adopted 10/22/91)
- Rule 26.3 New Source Review—Exemptions (Adopted 10/22/91)
- Rule 26.6 New Source Review—Calculations (Adopted 10/22/91)
- Rule 26.8 New Source Review—Permit To Operate (Adopted 10/22/91)
- Rule 26.10 New Source Review—PSD (Adopted 10/22/91)
- Rule 28 Revocation of Permits (Adopted 7/18/72)
- Rule 29 Conditions on Permits (Adopted 10/22/91)
- Rule 30 Permit Renewal (Adopted 5/30/89)

- Rule 32 Breakdown Conditions: Emergency Variances, A., B.1., and D. only. (Adopted 2/20/79)

Appendix II—A—Information Required for Applications to the Air Pollution Control District (Adopted 12/86)

Appendix II—B—Best Available Control Technology (BACT) Tables (Adopted 12/86)

- Rule 42 Permit Fees (Adopted 12/22/92)
- Rule 44 Exemption Evaluation Fee (Adopted 1/8/91)
- Rule 45 Plan Fees (Adopted 6/19/90)
- Rule 45.2 Asbestos Removal Fees (Adopted 8/4/92)
- Rule 50 Opacity (Adopted 2/20/79)
- Rule 52 Particulate Matter-Concentration (Adopted 5/23/72)
- Rule 53 Particulate Matter-Process Weight (Adopted 7/18/72)
- Rule 54 Sulfur Compounds (Adopted 6/14/94)
- Rule 56 Open Fires (Adopted 3/29/94)
- Rule 57 Combustion Contaminants-Specific (Adopted 6/14/77)
- Rule 60 New Non-Mobile Equipment-Sulfur Dioxide, Nitrogen Oxides, and Particulate Matter (Adopted 7/8/72)
- Rule 62.7 Asbestos—Demolition and Renovation (Adopted 6/16/92)
- Rule 63 Separation and Combination of Emissions (Adopted 11/21/78)
- Rule 64 Sulfur Content of Fuels (Adopted 6/14/94)
- Rule 66 Organic Solvents (Adopted 11/24/87)
- Rule 67 Vacuum Producing Devices (Adopted 7/5/83)
- Rule 68 Carbon Monoxide (Adopted 6/14/77)
- Rule 71 Crude Oil and Reactive Organic Compound Liquids (Adopted 6/8/93)
- Rule 71.1 Crude Oil Production and Separation (Adopted 6/16/92)
- Rule 71.2 Storage of Reactive Organic Compound Liquids (Adopted 9/26/89)
- Rule 71.3 Transfer of Reactive Organic Compound Liquids (Adopted 6/16/92)
- Rule 71.4 Petroleum Sumps, Pits, Ponds, and Well Cellars (Adopted 6/8/93)
- Rule 72 New Source Performance Standards (NSPS) (Adopted 7/13/93)
- Rule 74 Specific Source Standards (Adopted 7/6/76)
- Rule 74.1 Abrasive Blasting (Adopted 11/12/91)
- Rule 74.2 Architectural Coatings (Adopted 08/11/92)
- Rule 74.6 Surface Cleaning and Degreasing (Adopted 5/8/90)
- Rule 74.6.1 Cold Cleaning Operations (Adopted 9/12/89)
- Rule 74.6.2 Batch Loaded Vapor Degreasing Operations (Adopted 9/12/89)
- Rule 74.7 Fugitive Emissions of Reactive Organic Compounds at Petroleum Refineries and Chemical Plants (Adopted 1/10/89)
- Rule 74.8 Refinery Vacuum Producing Systems, Waste-water Separation and Process Turnarounds (Adopted 7/5/83)
- Rule 74.9 Stationary Internal Combustion Engines (Adopted 12/21/93)

- Rule 74.10 Components at Crude Oil Production Facilities and Natural Gas Production and Processing Facilities (Adopted 6/16/92)
- Rule 74.11 Natural Gas-Fired Residential Water Heaters-Control of NO_x (Adopted 4/9/85)
- Rule 74.12 Surface Coating of Metal Parts and Products (Adopted 11/17/92)
- Rule 74.15 Boilers, Steam Generators and Process Heaters (5MM BTUs and greater) (Adopted 12/3/91)
- Rule 74.15.1 Boilers, Steam Generators and Process Heaters (1–5MM BTUs) (Adopted 5/11/93)
- Rule 74.16 Oil Field Drilling Operations (Adopted 1/8/91)
- Rule 74.20 Adhesives and Sealants (Adopted 6/8/93)
- Rule 74.24 Marine Coating Operations (Adopted 3/8/94)
- Rule 75 Circumvention (Adopted 11/27/78)
- Appendix IV—A—Soap Bubble Tests (Adopted 12/86)
- Rule 100 Analytical Methods (Adopted 7/18/72)
- Rule 101 Sampling and Testing Facilities (Adopted 5/23/72)
- Rule 102 Source Tests (Adopted 11/21/78)
- Rule 103 Stack Monitoring (Adopted 6/4/91)
- Rule 154 Stage 1 Episode Actions (Adopted 9/17/91)
- Rule 155 Stage 2 Episode Actions (Adopted 9/17/91)
- Rule 156 Stage 3 Episode Actions (Adopted 9/17/91)
- Rule 158 Source Abatement Plans (Adopted 9/17/91)
- Rule 159 Traffic Abatement Procedures (Adopted 9/17/91)
- * * * * *

[FR Doc. 94-19764 Filed 8-16-94; 8:45 am]
BILLING CODE 6050-50-P

40 CFR Part 81

[W144-01-6426b; FRL-5053-6]

Designation of Areas for Air Quality Planning Purposes; Wisconsin; Redesignation of Oshkosh, WI, to Attainment for Carbon Monoxide

AGENCY: United States Environmental Protection Agency (USEPA).
ACTION: Proposed rule.

SUMMARY: The USEPA proposes to redesignate Oshkosh, Wisconsin from unclassifiable to attainment status for carbon monoxide. In the final rules section of this *Federal Register*, the USEPA is approving the redesignation as a direct final rule without prior proposal because the Agency views this as a noncontroversial redesignation and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no adverse comments are received in

response to the direct final rule, no further activity is contemplated in relation to this proposed rule. If the USEPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. The USEPA will not institute a second comment period on this document. Any parties interested in commenting on this document should do so at this time.

DATES: Comments on this proposed rule must be received in writing by September 16, 1994.

ADDRESSES: Written comments should be sent to: Carlton T. Nash, Chief, Regulation Development Section, Air Toxics and Radiation Branch (AT-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

Copies of the redesignation request and USEPA's analysis are available for inspection at the U.S. Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. (Please telephone Megan Beardsley at (312) 886-0669 to arrange an appointment before visiting the Region 5 Office.)

A copy of this SIP revision is also available at the Office of Air and Radiation, Docket and Information Center (Air Docket 6102), room M1500, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 260-7548.

FOR FURTHER INFORMATION CONTACT: Megan Beardsley, Environmental Scientist, Regulation Development Section, Air Toxics and Radiation Branch (AT-18J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 886-0669.

SUPPLEMENTARY INFORMATION: See the information provided in the direct final rule which is located in the Rules Section of this Federal Register.

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Authority: 42 U.S.C. 7401-7671q.

Dated: August 1, 1994.

Valdas V. Adamkus,

Regional Administrator.

[FR Doc. 94-20171 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-P

40 CFR Part 82

[FRL-5040-8]

Protection of Stratospheric Ozone

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed stay.

SUMMARY: In the rules Section of today's Federal Register, EPA is announcing a three-month stay and reconsideration of certain federal rules requiring the repair of leaks in industrial process equipment promulgated as part of the National Refrigerant Recycling Program. That action stays the effectiveness of 40 CFR 82.156(i), including the applicable compliance dates, as they apply to industrial process refrigeration equipment only. EPA is issuing that stay pursuant to Clean Air Act section 307(d)(7)(B), 42 U.S.C. 7607(d)(7)(B), which provides the Administrator authority to stay the effectiveness of a rule during reconsideration.

This notice proposes, pursuant to Clean Air Act sections 301(a)(1), 42 U.S.C. 7601(a)(1), to stay temporarily the effectiveness of 40 CFR 82.156(i), and applicable compliance dates, beyond the three months expressly provided in section 307(d)(7)(B), but only to the extent necessary to complete reconsideration (including any appropriate regulatory action) of the rules in question. Pursuant to the rulemaking procedures set forth in the Clean Air Act section 307(d), 42 U.S.C. 7607(d), EPA hereby requests public comment on this proposed temporary extension of the three-month stay.

DATES: Comments on this proposal must be received by September 16, 1994. Requests for a hearing should be submitted to Cynthia Newberg by September 1, 1994.

ADDRESSES: Written comments on this proposed action should be addressed to Public Docket No. A-92-01 VIII, Waterside Mall (Ground Floor) Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 in room M-1500.

A public hearing, if requested, will be held in Washington, DC. Interested persons may contact Ms. Newberg at Program Implementation Branch, Stratospheric Protection Division, Office of Atmospheric Programs, Office of Air and Radiation (6205-J), 401 M Street, SW., Washington, DC 20460 (202) 233-9729 to see if a hearing will be held and the date and location of any hearing. Any hearing will be strictly limited to the subject matter of this proposal, the scope of which is discussed below.

All supporting materials are contained in Docket A-92-01. Dockets

may be inspected from 8 a.m. until 4 p.m., Monday through Friday. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Cynthia Newberg at (202) 233-9729. The Stratospheric Ozone Information Hotline at 1-800-296-1996 can also be contacted for further information.

SUPPLEMENTARY INFORMATION:

In the rules Section of today's Federal Register, EPA announces that pursuant to Clean Air Act section 307(d)(7)(B), 42 U.S.C. 7607(d)(7)(B), it is convening a proceeding for reconsideration of certain federal rules requiring the repair of leaks of ozone-depleting substances for industrial process refrigeration equipment promulgated as part of the National Refrigerant Recycling Program (58 FR 28660, May 14, 1993). Readers should refer to that notice for a complete discussion of the background and rules affected. In that document EPA also announces a three-month stay of § 82.156(i) as it applies to industrial process refrigeration equipment only, and any applicable compliance dates, during reconsideration (including appropriate regulatory action) expressly provided by the Clean Air Act section 307(d)(7)(B). If EPA does not complete the reconsideration during the three-month stay, then it may be appropriate to extend the stay of these provisions for industrial process refrigeration and applicable compliance dates until EPA completes final rulemaking action upon reconsideration. By this action, EPA proposes a temporary extension of the stay beyond the three months to the extent necessary to complete reconsideration of the rules in question. If EPA takes final action to impose this proposed stay, the stay would extend until the effective date of EPA's final action following reconsideration of these rules.

By this notice EPA hereby proposes, pursuant to Clean Air Act sections 301(a)(1), 42 U.S.C. 7601(a)(1), a temporary administrative stay of the effectiveness of 40 CFR 82.156(i) as it applies to industrial process refrigeration equipment, including the applicable compliance dates, promulgated as final federal rules requiring the repair and/or retrofitting of equipment containing ozone-depleting refrigerants (58 FR 28660, May 14, 1993). Pursuant to the rulemaking procedures set forth in section 307(d) of the Clean Air Act, EPA hereby requests comment on such a proposed stay.

EPA is proposing this temporary administrative stay of the rules and associated compliance dates in order to complete reconsideration of these rules.

EPA intends to complete its reconsideration of the rules and, following the notice and comment procedures of section 307(d) of the Clean Air Act, take appropriate action. If the reconsideration results in repair and retrofit requirements for industrial process refrigeration equipment that are stricter than the existing and rules, EPA intends to propose an appropriate compliance period from the date of final action on reconsideration. EPA will seek to ensure that the affected parties are not unduly prejudiced by the Agency's reconsideration. Any EPA proposal regarding changes to the leak repair requirements and the appropriate compliance period would be subject to the notice and comment procedures of Clean Air Act section 307(d).

The regulatory requirements that are affected by today's proposal were raised in the context of a settlement agreement between EPA and the Chemical Manufacturers Association.¹ A 113(g) notice of the settlement agreement was published on June 14, 1994 (59 FR 30584). In recognition of the obligations of the settlement agreement, EPA will reconsider the regulations in question as expeditiously as practicable.

List of Subjects in 40 CFR Part 82

Administrative practice and procedure, Air pollution control, Chemicals, Chlorofluorocarbons, Exports, Hydrochlorofluorocarbons, Imports, Interstate commerce, Nonessential products, Reporting and recordkeeping requirements, Stratospheric ozone layer.

Dated: August 4, 1994.

Carol M. Browner,
Administrator.

Part 82, chapter I, title 40, of the code of Federal Regulations, is amended to read as follows:

PART 82—PROTECTION OF STRATOSPHERIC OZONE

1. The authority citation for part 82 continues to read as follows:

Authority: 42 U.S.C. 7414, 7601, 7671-7671q.

2. Section 82.156 is amended by adding paragraph (i)(5) to read as follows:

§ 82.156 Required practices.

* * * * *

(i) * * *

¹ The Chemical Manufacturers Association filed a petition for review with the United States Court of Appeals for the District of Columbia Circuit on July 13, 1993 (*Chemical Manufacturers Association v. Browner, et. al.*, D.C. Cir. Docket 93-1444).

(5) Rules stayed for reconsideration. Notwithstanding any other provisions of this subpart, the effectiveness of the following rules, only to the extent described below, is stayed from September 16, 1994, until the completion of the reconsideration of 40 CFR 82.156(i)(1), (i)(3), and (i)(4), as these provisions apply to industrial process refrigeration equipment only. [FR Doc. 94-19768 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 214

[FRA Docket No. RSOR 13, Notice No. 1]

RIN 2130-AA86

Roadway Worker Protection

AGENCY: Federal Railroad Administration (FRA); DOT.

ACTION: Notice of Proposal to Form a Negotiated Rulemaking Advisory Committee and Request for Representation.

SUMMARY: FRA proposes to establish a Negotiated Rulemaking Advisory Committee under the Negotiated Rulemaking Act of 1990 and the Federal Advisory Committee Act to develop a recommended rule concerning the protection of railroad roadway workers. The Committee would adopt its recommendations through a negotiation process. The Committee would be composed of persons who represent the interests affected by the rule, such as labor organizations, railroads, railroad associations, contractor associations, and the government. FRA invites interested parties to submit nominations and applications for membership on the Committee.

DATES: FRA must receive written comments and requests for representation or membership by September 16, 1994.

ADDRESSES: All written comments should be submitted in triplicate to the Docket Clerk, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Room 8201, Washington, D. C. 20590.

FOR FURTHER INFORMATION CONTACT: Christine Beyer, Trial Attorney, Office of Chief Counsel, FRA, 400 Seventh Street, S.W., Room 8201, Washington, D. C. 20590 (Telephone: 202-366-0621).

SUPPLEMENTARY INFORMATION:

I. Background

(A) History

The Rail Safety Enforcement and Review Act, Pub.L. No. 102-365, 106 Stat. 972, enacted September 3, 1992, required FRA to review its track safety standards and revise them based on data presented during that review. Among the topics to be addressed was "an evaluation of employee safety." FRA issued an Advance Notice of Proposed Rulemaking (ANPRM) on November 16, 1992 (57 FR 54038) to announce the opening of a proceeding to amend the Federal Track Safety Standards (49 CFR Part 213). That ANPRM addressed the general topics to be considered, including standards for railroad track itself, and protecting maintenance-of-way and other non-operating railroad employees from the hazards of moving railroad equipment.

As part of that proceeding, FRA conducted a series of workshops to obtain the industry's views on the need for and substance of any changes to FRA's regulations. One such workshop session, announced in Notice No. 4 of that ANPRM issued on February 18, 1993 (58 FR 8928), and held in Washington, D.C. on March 31, 1993 addressed specifically the issue of protection of roadway workers from being struck by moving trains and equipment. Since that workshop, FRA has received petitions for emergency orders and rulemaking on the topic from the Brotherhood of Maintenance-of-Way Employees and the Brotherhood of Railroad Signalmen.

FRA originally planned to include protection from moving trains and moving equipment into a new Subpart G of 49 CFR Part 213, but it will now be considered as part of 49 CFR Part 214, Railroad Workplace Safety. Given FRA's desire to address this issue on an expedited basis, and because it relates more closely to workplace safety than to track standards, this proceeding is now separated from FRA Docket No. RST-90-1 and has been placed in FRA Docket No. RSOR 13. Items related to this subject which were submitted as part of Docket No. RST-90-1 will be considered as part of this proceeding, as will the transcript of the public workshop on March 31, 1993.

(B) Purpose

FRA is taking this action for the purpose of reducing the risk of death or injury railroad roadway workers face when struck by moving trains and railroad equipment. Since 1989, 21 roadway workers have been fatally

injured by moving trains and equipment. Eight workers were struck by trains while performing work, three were struck by trains on track adjacent to the work location, five stepped into a train's path, and five were struck by maintenance-of-way equipment. These fatalities are among the following crafts: signal maintainers, machine operators, welders, track foremen, track inspectors, and track laborers.

These figures reflect a serious problem that may require changes in railroad operating rules, training and practices. In order to address the problem in the short term, FRA Administrator Molitoris convened a meeting on June 3, 1994 at which FRA distributed summaries of the fatalities, and enlisted the support of the industry to address the issue immediately on each railroad through local labor/management committees. FRA also discussed the option of proceeding with a negotiated rulemaking, and has since preliminarily concluded that this issue is an appropriate subject for negotiated rulemaking.

(C) Terminology

FRA proposes that the term "roadway worker" rather than "maintenance of way employee" be used in this proceeding to define the subject persons. This term would encompass all employees of a railroad or a contractor to a railroad who construct, maintain, inspect or repair railroad tracks, structures, signal and train control systems, communication systems, utility systems, or any other fixed property of a railroad while in close or potentially close proximity to tracks on which trains or equipment can be operated. The term would apply regardless of the craft or class title of the employee, affiliation with any labor organization, or rank within the railroad organization. Examples of subject persons would be trackmen, signal maintainers, bridge workers, communication technicians, electricians, surveyors, roadmasters and chief engineers, while performing their duties along the line of road.

FRA believes that extensive input from all interested parties is necessary to develop a rule that will address both the risk of injury from moving railroad equipment and the operational concerns that this issue presents. Therefore, this notice announces FRA's proposal to address these issues through a negotiated rulemaking.

Set forth below are the basic concepts of negotiated rulemaking, suggested procedures to be followed, and criteria for participant selection. In order to begin this process shortly, FRA asks that parties representing interests affected by

a roadway worker safety rule request appointment or representation on the Committee within thirty days of publication of this notice.

II. Regulatory Negotiation

Due to the increasing complexity and formalization of the written rulemaking process, it can be difficult for an agency to craft effective regulatory solutions to certain problems. In the typical rulemaking process, the participants often develop adversarial relationships that prevent effective communication and creative solutions. The exchange of ideas that may lead to solutions acceptable to all interested groups often does not occur in the traditional notice and comment system. As the Administrative Conference of the United States (ACUS) noted in its Recommendation 82-4:

Experience indicates that if the parties in interest were to work together to negotiate the text of a proposed rule, they might be able in some circumstances to identify the major issues, gauge their importance to the respective parties, identify the information and data necessary to resolve the issues, and develop a rule that is acceptable to the respective interests, all within the contours of the substantive statute.

ACUS adopted this recommendation in "Procedures for Negotiating Proposed Regulations," 47 FR 30708, June 18, 1982. The thrust of the recommendation is that representatives of all interests should be assembled to discuss the issue or hazard and all potential solutions, reach consensus, and prepare a proposed rule for consideration by the agency. After public comment on any proposal issued by the agency, the group would reconvene to review the comments and make recommendations for a final rule. This inclusive process is intended to make the rule more acceptable to all affected interests and prevent the need for petitions for reconsideration and litigation that often follow promulgation of a final rule.

The movement toward negotiated rulemaking gained impetus with enactment of the Negotiated Rulemaking Act of 1990 (Reg-Neg), 5 U.S.C. § 561, *et seq.* More recently, President Clinton issued Executive Order 12866 (EO) (58 FR 51735, October 4, 1993), which states the need to reform the current regulatory process into one that is effective, consistent, and understandable. The objectives of the EO are:

To reaffirm the primacy of Federal agencies in the regulatory decision-making process; to restore the integrity and legitimacy of regulatory review and oversight; and to make the process more accessible and open to the public.

Id. Section 6(a) of the EO charges government agencies with providing the public meaningful participation in the regulatory process:

In particular, before issuing a notice of proposed rulemaking, each agency should, where appropriate, seek the involvement of those who are intended to benefit from and those expected to be burdened by any regulation . . . Each agency is also directed to explore and, where appropriate, use consensual mechanisms for developing regulations, including negotiated rulemaking. *Id.* at 51740.

Although relatively new, negotiated rulemakings have been used successfully by many regulatory agencies, including the Federal Aviation Administration, the United States Coast Guard, the Environmental Protection Agency, and the Occupational Safety and Health Administration. FRA now intends to begin this process in a formalized manner for the first time, and does so with enthusiasm and high expectations. FRA welcomes the opportunity to work with those who will be affected directly by a roadway worker safety rule, and is confident that the agency and the industry will benefit from the process by creating an effective and reasonable regulation.

Pursuant to section 563(a) of Reg-Neg, an agency considering rulemaking by negotiation should consider whether:

- (1) There is a need for the rule;
- (2) There is a limited number of identifiable interests;
- (3) These interests can be adequately represented by persons willing to negotiate in good faith to reach a consensus;
- (4) There is a reasonable likelihood that the committee will reach consensus within a fixed period of time;
- (5) The negotiated rulemaking procedure will not unreasonably delay the notice of proposed rulemaking;
- (6) the agency has adequate resources and is willing to commit such resources to the process; and
- (7) The agency is committed to use the result of the negotiation in formulating a proposed rule if at all possible.

For the reasons stated in this Notice, FRA believes that these criteria have been met with respect to railroad roadway safety issues.

The regulatory negotiation FRA proposes would be carried out by an advisory committee (Committee) created under the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App., and in a manner that reflects appropriate rulemaking objectives, including pertinent Executive Orders. FRA will be represented on the Committee and will take an active part in the negotiations as a Committee member. However, pursuant to section

566(c) of Reg-Neg, the person(s) designated to represent FRA would not facilitate or otherwise chair the proceedings. The agency is committed to this process and is quite optimistic that it will result in the issuance of an NPRM and final rule that will be acceptable to the members of the Committee. Because of the need to issue a rule on this subject, FRA is prepared to go forward with an NPRM that is not the product of the negotiations in the unlikely event the negotiation fails or if the Committee's recommendation is not acceptable.

III. Procedures and Guidelines

The following proposed procedures and guidelines would apply to this process, subject to appropriate changes made as a result of comments received on this Notice or as are determined to be necessary during the negotiating process.

(A) *Facilitator*: FRA is seeking the services of a facilitator for the negotiating group. The facilitator will not be involved with substantive development of this regulation. This individual will chair the negotiations, may offer alternative suggestions toward the desired consensus, will help participants define and reach consensus, and will determine the feasibility of negotiating particular issues. The facilitator may ask members to submit additional information or to reconsider their position. FRA will contact mediation organizations for potential candidates, and will consider nominations made in comments received in response to this Notice.

(B) *Feasibility*: FRA has examined the issues and interests involved and has made a preliminary inquiry among representatives of those interests to determine whether it is possible to reach agreement on: (a) individuals to represent those interests; (b) the preliminary scope of the issues to be addressed; and (c) a schedule for developing a notice of proposed rulemaking. On the basis of the history of this issue and our preliminary inquiry, we believe that regulatory negotiation could be successful in developing a workable proposal for a notice of proposed rulemaking and a final rule, and that the potential participants listed below would adequately represent the affected interests.

(C) *Participants and Interests*: The number of committee participants generally should not exceed 25.

Please note that each individual or organization affected by a final rule need not have its own representative on the Committee. Rather, each interest

must be adequately represented, and the Committee should be fairly balanced. Individuals who are not part of the Committee may attend sessions and confer with or provide their views to Committee members.

The following interests have been tentatively identified as those that are likely to be significantly affected by the rule:

- (1) Railroad labor organizations;
- (2) Railroads, including classes 1 through 3, the short lines, public transit operations, and their associations;
- (3) Contractors to railroads who perform roadway work; and
- (4) The Federal government.

FRA proposes that persons selected by the various interests be named to the Committee. The following interests have been tentatively identified as those that would supply Committee members:

- (1) The Brotherhood of Maintenance-of-Way Employees;
- (2) The Brotherhood of Railroad Signalmen;
- (3) The American Train Dispatchers Association;
- (4) The Association of American Railroads;
- (5) The American Short Line Railroad Association;
- (6) American Public Transit Association; and
- (7) FRA.

As indicated in paragraph F of this notice, FRA invites applications for representation from any interests that will be affected by a rule, but are not named in this list. FRA is committed to an open and comprehensive negotiation, and therefore strongly encourages any such party to file an application for membership. These applications may come from railroads, labor organizations, associations, or other interests, must be filed within thirty days, and must meet the requirements set forth in this notice. Also, the interests listed above and those who apply for representation on the Committee should provide the name(s) of the individual(s) they propose to represent their interests. The Committee should not exceed twenty-five members.

(D) *Good Faith*: Participants must be committed to negotiate in good faith. It is therefore important that senior individuals within each interest group be designated to represent that interest. No individual will be required to "bind" the interests he or she represents, but the individual should be at a high enough level to represent the interest with confidence. For this process to be successful, the interests represented should be willing to accept the final Committee product.

(E) *Notice of Intent to Establish Advisory Committee and Request for*

Comment: In accordance with the requirements of FACA, an agency of the Federal government cannot establish or utilize a group of people in the interest of obtaining consensus advice or recommendations unless that group is chartered as a Federal advisory committee. It is the purpose of this Notice to indicate our intent to create a Federal advisory committee, to identify the issues involved in the rulemaking, to identify the interests affected by the rulemaking, to identify potential participants who will adequately represent those interests, and to ask for comment on the use of regulatory negotiation and on the identification of the issues, interests, procedures, and participants.

(F) *Requests for Representation*: One purpose of this Notice is to determine whether interests exist that may be substantially affected by a rule, but have not been represented in the list of prospective Committee members. Please identify such interests if they exist. Each application for membership or nomination to the Committee should include: (i) the name of the applicant or nominee and the interests such person would represent; (ii) evidence that the applicant or nominee is authorized to represent parties related to the interests the person proposes to represent; (iii) a written commitment that the applicant or nominee would participate in good faith; and (iv) the reasons any representative identified in the Notice does not represent the interests the nominee is alleged to represent. If an additional person or interest requests membership or representation on the Committee, FRA shall determine (i) whether that interest will be substantially affected by the rule, (ii) if such interest would be adequately represented by an individual already on the Committee, and (iii) whether the requester should be added to the group or whether interests can be consolidated to provide adequate representation.

(G) *Final Notice*: After evaluating comments received as a result of this notice, FRA will issue a final notice announcing the establishment of the Federal advisory committee, unless it determines that such action is inappropriate in light of comments received, and the composition of the Committee. After the Committee is chartered the negotiations would begin.

(H) *Administrative Support and Meetings*: Staff support would be provided by FRA and meetings would take place in Washington, D.C., unless agreed otherwise by the Committee.

(I) *Tentative Schedule*: If the Committee is established and selected, FRA will publish a schedule for the first

meeting in the **Federal Register**. The first meeting will focus on procedural matters, including dates, times, and locations of future meetings. Notice of subsequent meetings would also be published in the **Federal Register** before being held.

FRA expects that the Committee would reach consensus and prepare a report recommending a proposed rule within six months of the first meeting. However, if unforeseen delays occur, the Administrator may agree to an extension of that time if a consensus of the Committee believes that additional time will result in agreement. The process may end earlier if the facilitator so recommends.

(J) **Committee Procedures:** Under the general guidance of the facilitator, and subject to legal requirements, the Committee would establish the detailed procedures for meetings which it considers appropriate.

(K) **Record of Meetings:** In accordance with FACA's requirements, FRA would keep a record of all Committee meetings. This record would be placed in the public docket for this rulemaking. Meetings of the Committee would generally be open to the public.

(L) **Consensus:** The goal of the negotiating process is consensus. FRA proposes that the Committee would develop its own definition of consensus, which may include unanimity, a simple majority, or substantial agreement such that no member will disapprove the final recommendation of the Committee. However, if the Committee does not develop its own definition, consensus shall be unanimous concurrence.

(M) **Notice of Proposed Rulemaking and Final Rule:** The Committee's first objective is to prepare a report containing a notice of proposed rulemaking, preamble, and economic evaluation. If consensus is not obtained on some issues, the report should identify the areas of agreement and disagreement, and explanations for any disagreement. It is expected that participants will address cost/benefit, paperwork reduction, and regulatory flexibility requirements. FRA would prepare an economic assessment if appropriate.

FRA would issue the proposed rule as prepared by the Committee unless it is inconsistent with statutory authority of the agency or other legal requirements or does not, in the agency's view, adequately address the subject matter. If that occurs, FRA would explain the reasons for its decision, or would modify the proposal in a way that allows the public to distinguish modifications from the original proposal.

The Committee would reconvene to review comments received in response to publication of the proposed rule and would negotiate to produce a recommended final rule. FRA would issue the recommended final rule as prepared by the Committee unless it is inconsistent with statutory authority of the agency or other legal requirements or does not, in the agency's view, adequately address the subject matter. If that occurs, FRA would explain the reasons for its decision, or would modify the recommended final rule in a way that allows the public to distinguish modifications from the recommended final rule.

(N) **Key Issues for Negotiation:** FRA has reviewed correspondence, petitions, injury data, existing railroad operating practices, and has engaged in extensive dialogue concerning the protection of roadway workers. Based on this information and rulemaking requirements, FRA has tentatively identified major issues that should be considered in this negotiated rulemaking. Other issues related to roadway protection not specifically listed in this Notice may be addressed as they arise in the course of the negotiation. Comments are invited concerning the appropriateness of these issues for consideration and whether other issues should be added.

1. Are devices available that may be used to reduce the risk of danger to roadway workers? If so, how do these devices work and what are the costs associated with them?

2. Are there appropriate procedures or operating practices that may be instituted effectively to reduce the risk of danger to roadway workers? If so, what are the costs that will be associated with implementing these practices and procedures?

3. Are there appropriate training programs that may be given to reduce the risk of danger to roadway workers? If so, at what intervals should they be taught? Also, what are the costs and the time associated with such a program?

4. Are there peculiar topographical, environmental, and operational conditions that must be considered in developing a program to reduce the risk of harm to roadway workers? What are the specific conditions, and how do they vary from one region to another, and from one railroad to another? What would the cost for this program be?

5. Should any program developed vary according to the size of a railroad? If so, explain why such variations are necessary and how the programs should differ.

6. What recordkeeping and reporting requirements, if any, should be

instituted to advance the safety of roadway workers? What is the amount of time and cost involved with these requirements?

7. What enforcement procedures should FRA utilize to ensure compliance with any rule developed?

8. Aside from the obvious benefit of providing safer working conditions and so reducing the risk of injury and death for roadway workers, are there additional benefits (both monetary and non-monetary) that will result from the implementation of a rule concerning roadway workers?

9. Do any railroads currently have internal operating practices that address the intended purposes of this negotiated rulemaking? If so, please provide the background for implementation of these practices, and a description of their effectiveness. Also, what were the costs and benefits associated with implementing these practices?

IV. Public Participation

FRA invites comments on all issues, procedures, guidelines, interests, and suggested participants embodied in this Notice. All comments and requests for participation should be submitted to the Docket Clerk, Office of Chief Counsel, FRA, 400 Seventh Street, SW., Room 8201, Washington, DC 20590.

Issued this 11th day of August 1994.

Jolene M. Molitoris,
Administrator.

[FR Doc. 94-20078 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-06-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Notice of 90-day Finding on a Petition To List the Scaled Dune Buprestid Beetle

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of petition finding.

SUMMARY: The U.S. Fish and Wildlife Service (Service) announces a 90-day finding on a petition to list the scaled dune buprestid beetle (*Lepismadora algodones*) under the Endangered Species Act of 1973, as amended (Act). The Service determines that substantial information has not been presented indicating that the requested action may be warranted.

DATES: Comments from all interested parties will be accepted until further notice.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Field Supervisor, Carlsbad Field Office, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad, California 92008. The complete file for this action is available for public inspection, by appointment, during normal business hours at the address listed above.

FOR FURTHER INFORMATION CONTACT: Gail Kobetich at the above address (telephone 619/431-9440).

SUPPLEMENTARY INFORMATION:

Background

Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1533) (Act), requires that the Service make a finding on whether a petition to list, delist or reclassify a species presents substantial scientific or commercial information indicating that the petitioned action may be warranted. To the maximum extent practicable, this finding is to be published promptly in the *Federal Register*. The Service determines that the subject petition did not present substantial information indicating that the requested action may be warranted.

On August 10, 1992, the Service received a petition to list the scaled dune Buprestid beetle (*Lepismadora algodones*) as an endangered species. The petition was submitted by Dr. Charles Bellamy of Escondido, California and was dated August 5, 1992. The petition stated that *L. algodones* is imperiled because its current distribution is small, its population size is low, and its habitat is being depleted and degraded by off-highway vehicles (OHVs).

The scaled dune buprestid beetle was first collected in 1985 along the western

edge of the Algodones Sand Hills, near Glamis, Imperial County, California (Bellamy 1992). The beetle was first described in 1987 by R.K. Velten (Velten and Bellamy 1987). It is quite distinct from other buprestids in North America (Bellamy 1992). The species has been collected from its type locality every year since 1985.

The scaled dune buprestid beetle occupies ecotonal vegetation between Sonoran creosote bush scrub and southern dune scrub along the perimeter of the Algodones Sand Hills, an area of extensive sand dunes approximately 45 miles (70 kilometers) in length. Dominant shrubs in this habitat include *Larrea divaricata* (creosote), *Ephedra* sp., and *Eriogonum deserticola* (Imperial buckwheat). A variety of perennial herbs as also present in this habitat. Adult beetles have been observed feeding on *Tiquila plicata* (plicate coldenia), but no information is available on larval hosts or the species' population biology.

The Bureau of Land Management owns the lands supporting the beetle. Portions of the Algodones Sand Hills are heavily used by OHVs and are completely denuded of vegetation. A large portion of the sand hills are closed to OHV use, and much of the open section of the dunes are unaffected by OHVs, because the area is not easily accessible.

Dr. Bellamy (pers. comm. 1992) suggested that the scaled dune buprestid is restricted to a single large colony, located in the closed portion of the dunes. He acknowledge that seemingly suitable habitat exists along the perimeter of the Algodones Sand Hills. *Tiquila plicata*, an adult food plant, is common along the perimeter of the dunes. Dr. Bellamy indicated that much

of the area has not been surveyed because it is inaccessible without using OHVs, which would potentially damage the species habitat.

The Service has carefully reviewed the petition and interviewed Dr. Bellamy. Based upon this information, the Service has determined that substantial information has not been presented indicating that the listing of the scaled dune buprestid may be warranted. This finding is based upon a lack of data for the vast majority of apparently suitable habitat, coupled with a lack of documentation of threats facing this species.

References Cited

- Bellamy, C.L. 1991. Petition for listing the scaled dune buprestid *Lepismadora algodones* Velten (Coleoptera: Buprestidae) unpublished document.
- Velten, R.K., and C.L. Bellamy. 1987. A new genus and species of North American Coiroebini Bedel with a discussion of its relationship within the tribe (Coleoptera: Buprestidae). *The Coleopterists Bulletin* 41(2):185-192.

Author

This notice was prepared by Ellen Berryman, Carlsbad Field Office, Carlsbad Field Office (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Authority: 16 U.S.C. 1531-1544.

Dated: August 10, 1994.

Russell D. Earnest,

Director, U.S. Fish and Wildlife Service

[FR Doc. 94-20161 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-55-M

Notices

Federal Register

Vol. 59, No. 158

Wednesday, August 17, 1994

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Forms Under Review by Office of Management and Budget

August 12, 1994.

The Department of Agriculture has submitted to OMB for review the following proposal for the collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35) since the last list was published. The list is grouped into new proposals, revisions, extension, or reinstatements. Each entry contains the following information:

(1) Agency proposing the information collection; (2) Title the information collection; (3) Form number(s), if applicable; (4) How often the information is requested; (5) Who will be required or asked to report; (6) An estimate of the number of responses; (7) An estimate of the total number of hours needed to provide the information; (8) Name and telephone number of the agency contact person.

Questions about the items in the listing should be directed to the agency person named at the end of each entry. Copies of the proposed forms and supporting documents may be obtained from: Department Clearance Officer, USDA, OIRM, Room 404-W Admin. Bldg., Washington, DC 20250, (202) 690-2118.

Extension

- Federal Crop Insurance Corporation Raisins—Notice of Damage and Inspection; Supplement-Tonnage Report; and Reconditioning Pool, Production-To-Count

FCI-63-A, FCI-819, FCI-551

On occasion

Individuals or households; Farms; 500 responses; 200 hours

Bonnie L. Hart, (202) 254-8393

- Federal Crop Insurance Corporation Request for Actuarial Change and Request For Actuarial Change Continuation Sheet

FCI-5 and FCI-5-A

On occasion

Individuals or households; Farms; 2,000 responses; 2,000 hours

Bonnie L. Hart, (202) 254-8393

- Federal Crop Insurance Corporation Federal Crop Insurance Policies With Options and Optional Forms
- FCI-505, 506, 523, 539, 541, 547, 548, 550

On occasion

Individuals or households; Farms;

27,097 responses; 6,775 hours

Bonnie L. Hart, (202) 254-8393

Reinstatement

- Rural Electrification Administration Wholesale Contracts for the Purchase and Sale of Electric Power

On occasion

Businesses or other for-profit; Non-profit institutions; 165 responses; 990 hours

F. Lamont Heppie, Jr., (202) 720-9550

Larry K. Roberson,

Deputy Departmental Clearance Officer.

[FR Doc. 94-20179 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-01-M

Office of the Secretary

Privacy Act of 1974; Notice of a Computer Matching Program for Federal Salary Offset

AGENCY: Food and Nutrition Service, USDA.

ACTION: Notice of computer matching programs between the Food and Nutrition Service (FNS), United States Department of Agriculture (USDA), and the United States Postal Service (USPS).

SUMMARY: FNS, USDA, is giving notice that it intends to conduct a computer matching program with the USPS in order to identify USPS employees who owe certain delinquent debts to the United States Government under the Food Stamp Program administered by FNS for food stamp benefits which they received but to which they were not entitled.

DATES: Comments must be received September 16, 1994, to be considered. Unless comments are received which result in a contrary determination, the matching program covered by this Notice will begin no sooner than September 26, 1994.

ADDRESSES: Comments should be addressed to James I. Porter, Supervisor,

Issuance and Accountability Section, State Administration Branch, Program Accountability Division, Food Stamp Program, FNS, USDA, 3101 Park Center Drive, Room 905, Alexandria, Virginia 22302. Comments can be reviewed at that address during normal business hours.

FOR FURTHER INFORMATION CONTACT: James I. Porter, Supervisor, Issuance and Accountability Section, State Administration Branch, Program Accountability Division, Food Stamp Program, FNS, USDA, 3101 Park Center Drive, Room 905, Alexandria, Virginia 22302, telephone (703) 305-2385.

SUPPLEMENTARY INFORMATION: This computer matching program is being initiated as part of an effort by USDA to increase the collection of overissued food stamp benefits. These overissued benefits are benefits which households received but to which they were not entitled. As part of their responsibility for administering the Food Stamp Program, State agencies are responsible for establishing claims for these overissued benefits and for taking certain steps to try to collect those claims. This computer match will provide otherwise unavailable information which State agencies can use to try to collect delinquent food stamp claims owed by USPS employees and if necessary, which USDA can use to collect such claim by involuntarily offsetting USPS employee salaries.

This Notice is being published as required by Section (e)(12) of the Privacy Act of 1974 (5 U.S.C. 552a(e)(12)), as amended by the Computer Matching and Privacy Act of 1988 (Public Law 100-503).

The following information is provided as required by paragraph (b)(3) of Appendix I to Office of Management and Budget Circular A-130, dated July 2, 1993.

1. *Participating agencies:* The recipient agency is USPS. The source agency is USDA.

2. *Beginning and ending dates:* The matching program will begin in November 1994 and continue in effect no longer than 18 months (April 30, 1996). If within three months of that date, the Data Integrity Boards of both USDA and the USPS find that the matching program can be conducted without change and both USDA and the USPS certify that the matching program has been conducted in compliance with

the matching agreement, the matching program may be extended for one additional year.

3. *Purpose of the match:* In addition to providing information to assist in collecting food stamp recipient delinquent debts, the names of USPS employees identified through this matching program will be removed from lists of delinquent debts being referred to the Internal Revenue Service (IRS) for collection from Federal income tax refunds. This action is required to conform to an IRS requirement for the tax offset program. (A description of the Federal income tax refund offset program for the Food Stamp Program is contained in a General Notice dated August 20, 1991 at 56 FR 41325-31.)

4. *Description of the match:* The subject matching program will involve several steps. USDA will provide USPS a magnetic computer tape of claims submitted by State agencies participating in the Federal tax offset program. By computer, USPS will compare that information with its payroll file, establishing matched individuals on the basis of Social Security Numbers (SSN's). For each matched individual, the USPS will provide to USDA the individual's name, SSN, home address, date of birth, work location, and employee type (permanent or temporary).

USDA will prepare lists of matched individuals according to the State agencies which established the claim for the overissued benefits and will distribute the State lists accordingly. The respective State agencies will verify identity and debtor status of the matched individuals by manually comparing those list of matched individuals to their records on the debts, by conducting independent inquiries when necessary to resolve questionable identities, and by reviewing the records of payments to determine whether or not the debt is still delinquent.

In addition to verifying debtor identity and the status of the debt, prior to USDA taking any steps to effect involuntary offset of USPS employee salaries, State agencies will provide debtors with a 30-day written notice stating the amount of the debt and that the debtor may repay it voluntarily by entering into a written agreement with the State agency. Debts not repaid voluntarily would be referred to USDA for involuntary salary offset. Prior to such action, debtors would be notified and offered an opportunity for a hearing on the debt, including the right to copy documentation relating to the debt.

5. *Legal authorities:* This matching program will be conducted under the following authorities:

(a) The Debt Collection Act of 1982 (5 U.S.C. 5514), which gives authority to Federal agencies to offset the salaries of Federal and USPS employees who are delinquent on debts owed to the Federal government;

(b) Office of Personnel Management (OPM) regulations, 5 CFR part 550, subpart K (Collection by Offset from Indebted Government Employees), §§ 550.1101-1108, which set the standards for Federal agency rules implementing the Debt Collection Act;

(c) USDA regulations at 7 CFR part 3, subpart C, which implement 5 U.S.C. 5514 and OPM regulations, and which authorize USDA agencies to issue regulations governing debt collection by salary offset (7 CFR 3.68); and

(d) Section 13941 of the Omnibus Budget Reconciliation Act of 1993 (Pub. L. 103-66), which amended sections 11(e) (8) and 13 of the Food Stamp Act of 1977, 7 U.S.C. 2020(e)(8), 2022, to authorize the Federal salary offset program for the Food Stamp Program.

6. *Categories of individuals involved:* Two groups of individuals will be involved with this matching program. One group is USPS employees. The other is individuals who have participated in the Food Stamp Program but are no longer participating, and who owe delinquent debts for overissued food stamp benefits for which they are not making repayments. This group is further defined in that the individuals owe only delinquent debts resulting from inadvertent household errors and intentional Program violations. Individuals owing claims due to State agency administrative errors will be excluded (7 U.S.C. 2020(e)(8)(C)).

7. *Record systems used:* (a) USPS will use records from its Privacy Act system of records "Finance Records—Payroll System, USPS 050.020," containing payroll records for approximately 700,000 current employees. Disclosure will be made pursuant to routine use Number 24 of USPS 050.020, (57 FR 57515, dated December 4, 1992).

(b) USDA will use records from its Privacy Act system of records "Claims Against Food Stamp Recipients—USDA/FNS—3," containing approximately 230,000 records. Disclosure will be made pursuant to routine use Number 4 of record system USDA/FNS—3, (58 FR 48633, dated September 17, 1993).

8. *Agency contact:* Inquiries about this matching program should be directed to James I. Porter, Supervisor, Issuance and Accountability Section, State Administration Branch, Program

Accountability Division, Food Stamp Program, FNS, USDA, 3101 Park Center Drive, Room 905, Alexandria, Virginia 22302, telephone (703) 305-2385.

Signed at Washington, D.C. on August 10, 1994.

Mike Espy,
Secretary of Agriculture.

[FR Doc. 94-20180 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-30

Cooperative State Research Service

Solicitation of Recommendation for Nominees to the National Sustainable Agriculture Advisory Committee

AGENCY: Cooperative State Research Service, USDA.

ACTION: Solicitation of recommendations for nominees for the private sector members of the National Sustainable Agriculture Advisory Committee.

SUMMARY: The U.S. Department of Agriculture is soliciting recommendations for nominees to the National Sustainable Agriculture Advisory Committee (NSAAC), NSAAC will be appointed by the Secretary of Agriculture and will advise the Secretary in matters related to the Sustainable Agriculture Research and Education Program, consistent with Section 1622 of Public Law 101-624 (7 U.S.C. 5812).

DATES: Recommendations for nominees must be received on or before September 15, 1994.

SEND NOMINATIONS TO: A.J. Jones, Suite 342, Aerospace Building; U.S. Department of Agriculture/CSRS/SARE; 14th & Independence Ave., SW.; Washington, DC 20250-2260.

DOCUMENTATION REQUIRED: Kindly submit a resume addressing one or more of the NSAAC membership categories listed below. Special reference should be given to knowledge and experience in sustainable agriculture. As defined in 7 U.S.C. 3103, sustainable agriculture is—"an integrated system of plant and animal production practices having a site-specific application that will, over the long-term—(A) satisfy human food and fiber needs; (B) enhance environmental quality and the natural resource base upon which the agriculture economy depends; (C) make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls; (D) sustain the economic viability of farm operations; and (E) enhance the quality of life for farmers and society as a whole"—

MEMBERSHIP: As described in U.S. Department of Agriculture Regulation 1043-34, NSAAC shall consist of 14 public sector and 14 private sector members. The private sector members shall be composed of:

1. Four farmers/ranchers with knowledge and expertise in sustainable agriculture practices and systems—two representing best utilization of biological applications and one each representing integrated resource management and integrated crop management;

2. One farm/ranch family member (other than a farmer or rancher) having demonstrable expertise in sustainable agriculture, with special reference to the farm/ranch family and quality of rural life.

3. One human nutrition specialist with interest or expertise in sustainable agriculture;

4. Four private nonprofit organizations with demonstrable expertise in sustainable agriculture—two representing research or demonstration in the area of best utilization biological application and one each representing integrated resource management and integrated crop management and

5. Four representatives of agribusiness with knowledge and expertise in sustainable agriculture—two representing production system inputs, one representing independent consultants, and one representing post-harvest enterprises.

RESPONSIBILITIES: NSAAC is responsible to the Secretary of Agriculture through the Cooperative State Research Service and Extension Service. The Specific responsibilities are to:

1. Make recommendations to the Secretary of Agriculture concerning research and extension projects that should receive funding under Subtitle B of Title XVI of the Food, Agriculture, Conservation, and Trade Act of 1990;

2. Promote sustainable agriculture research and education programs at the national level;

3. Coordinate research and extension activities funded under Subtitle B of Title XVI of the Food, Agriculture, Conservation, and Trade Act of 1990;

4. Establish general procedures for awarding and administering resources;

5. Consider recommendations for improving the program;

6. Facilities cooperation and integration between sustainable agriculture, national water quality, integrated pest management, food safety, and other related programs; and

7. Prepare and submit an annual report of the activities of NSAAC to the

Secretary of the U.S. Department of Agriculture.

COMPENSATION: Members of NSAAC shall serve without compensation, but with reimbursement of travel expenses and per diem in lieu of subsistence, as is authorized in 5 U.S.C. 5703.

RESTRICTIONS: Nominees selected for further consideration will be required to submit financial and organizational affiliation disclosure statements.

ADDITIONAL INFORMATION: The U.S. Department of Agriculture has special interest in assuring that women, minority groups and the physically handicapped are adequately represented on NSAAC; and therefore, extends particular encouragement for recommendations for nominees that are appropriately qualified female, minority, or physically handicapped candidates.

Dated: August 12, 1994.

John Patrick Jordan,

Administrator, Cooperative State Research Service.

[FR Doc. 94-20183 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-22-M

Forest Service

Suitability Study for Eight Streams and Rivers Being Considered for National Wild and Scenic River Status

AGENCY: Forest Service, USDA.

ACTION: Revised notice of intent to prepare an Environmental Impact Statement (EIS) and Notice of Availability of EIS.

SUMMARY: The USDA, Forest Service, Tahoe National Forest and Lake Tahoe Basin Management Unit are preparing a Legislative Environmental Impact Statement (EIS) to determine the suitability or non-suitability of the approximately 58.8 miles (revised from previously published 61 miles) of eight eligible streams and rivers on the Tahoe National Forest and Lake Tahoe Basin Management Unit for inclusion in the National Wild and Scenic Rivers System. In addition to the Wild and Scenic River suitability analysis, the EIS will evaluate the environmental effects of possible Special Interest Area designation, a Forest Service Administrative designation, as an alternative to Wild and Scenic River designation. Lynn Sprague, Regional Forester, Pacific Southwest Region, U.S. Forest Service, 630 Sansome Street, San Francisco, California 94111, is the responsible official for Special Interest Area designation. Michael Espy, Secretary of Agriculture, U.S.

Department of Agriculture, Room 200-A, Adm. Bldg., Washington, D.C. 20250, is the responsible official for recommendations for wild and scenic river designation.

The Draft Environmental Impact Statement will be available for public review beginning August 18, 1994 and a copy can be obtained by writing: Forest Supervisor, Tahoe National Forest, P.O. Box 6003, Nevada City, California 95959 or telephone (916) 265-4531. The public comment period extends through November 18, 1994.

FOR FURTHER INFORMATION CONTACT: For additional information about the proposed DEIS, contact Phil Horning, P.O. Box 6003, Nevada City, California 95959, or telephone (916) 265-4531.

Dated: August 1, 1994.

Judie L. Tartaglia,

Acting Forest Supervisor, Tahoe National Forest.

[FR Doc. 94-20208 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-11-M

Suitability Study of the North Fork, South Fork and Mills Rivers for Inclusion in the National Wild and Scenic Rivers System; Pisgah National Forest (National Forests in North Carolina), Henderson and Transylvania Counties, NC

AGENCY: USDA, Forest Service.

ACTION: Notice of Intent to prepare an environmental impact statement.

SUMMARY: The Forest Service has prepared a Draft Environmental Impact Statement (DEIS) to evaluate the environmental impacts of including suitable segments of North Fork, South Fork and Mills Rivers classified as wild, scenic, or recreational rivers in the National Wild and Scenic Rivers System. The decision to recommend the nomination of suitable river segments to the National Wild and Scenic Rivers System rests with the Secretary of Agriculture. The Wild and Scenic Rivers Act (PL 90-542) reserves to Congress the authority to include rivers in the National Wild and Scenic Rivers System.

The agency invites written comments on the suitability of these rivers and recommendations related to classifying and including them in the National Wild and Scenic Rivers System. In addition, the agency gives notice of the full environmental analysis and decision making process that has been occurring on the proposal so that interested and affected people are aware of how they may participate and contribute to the final decision. The Supervisor of the National Forests in

North Carolina is responsible for the preparation of the EIS.

ADDRESSES: Send written comments to Mills River System Wild and Scenic River Study, c/o Randle Phillips, Forest Supervisor, P.O. Box 2750, Asheville, NC 28802.

FOR FURTHER INFORMATION CONTACT: Melinda McWilliams, Wild and Scenic Rivers Study Team Leader, U.S. Forest Service, P.O. Box 2750, Asheville, NC 28802, 704/257-4253.

SUPPLEMENTARY INFORMATION: In 1982, the Nationwide River Inventory developed by the National Park Service, U.S. Department of Interior, identified South Fork and Mills River as potential wild and scenic study rivers. The 1987 Final Environmental Impact Statement (FEIS) for the Land and Resource Management Plan for the Nantahala and Pisgah National Forests determined South Fork and Mills River to be eligible for designation with potential wild and recreational classifications for different segments of South Fork and recreational for Mills River. (That information and additional findings will be documented in this environmental impact statement.) The rivers were determined to be potentially suitable for designation pending further study. A follow-up study to the Forest Plan FEIS was begun in 1989. At the request of local citizens, through a North Carolina Congressional Delegate, North Fork was added to the study area. In November 1990, Public Law 101-538 was passed by Congress which designated 34.8 miles of the Mills River System (North Fork, South Fork and Mills Rivers) as a Wild and Scenic Study River. This Act excluded the segment of the Mills River from the confluence of the French Broad River to a point 750 feet upstream from the centerline of N.C. Highway 191/280.

The Environmental Impact Statement will consider the following river segments:

North Fork, Bottom of Hendersonville - reservoir spillway to South Fork	5.9 miles
South Fork, Pigeon Branch in headwaters to North Fork	25.4 miles
Mills River, Confluence North and South Forks to point 750 feet upstream from centerline of N.C. Highway 191/280	3.5 miles

The area of consideration for each stream is a corridor a minimum of 1/4 mile from each stream bank for the entire length of the study segment. These corridors include both public and private lands.

Significant issues identified during initial scoping include the potential for future dams along these rivers based on past proposals for impoundments, the

effects of designation on private lands, and protection of the free-flowing condition and resource values of these rivers.

A range of alternatives will be developed based on issues and concerns raised during the study process. As a minimum, one alternative will maintain current management with a recommendation of nondesignation for the three rivers (the no action alternative). Other potential alternatives include: 1. Recommend designation for all eligible segments. 2. Recommend designation or nondesignation for specific segments of each river based on identified issues and 3. Recommend designation of eligible segments with different classifications (wild, scenic, recreational) based on identified issues. The environmental impact statement will disclose the direct, indirect, and cumulative effects of implementing each alternative.

Public participation is important at several points during the analysis process. The first point was the scoping process (40 CFR 1501.7). The scoping process includes, but is not limited to: (1) Identifying potential issues, (2) identifying issues to be analyzed in depth, (3) eliminating insignificant issues or those that have been covered by a relevant previous environmental analysis, (4) exploring additional alternatives, and (5) identifying potential (direct, indirect, and cumulative) environmental effects of the alternatives.

During the scoping process, the Forest Service sought information, comments, and assistance from Federal, State, and local agencies and individuals or organizations who may be interested in or affected by the proposal. News releases were published in local newspapers; individual letters were distributed to government agencies, organizations, landowners along the rivers and individuals assumed to be interested in this action; and several meetings were held in the local community along the rivers. Informal contacts through phone calls and visits have also occurred throughout the study. Additional mailings and media releases will occur when the Draft EIS and Final EIS are completed and available for public review.

The responsible official is Mike Espy, Secretary of Agriculture, Administration Bldg., 12th Street and Jefferson Drive, SW., Washington, DC 20250.

The Draft Environmental Impact Statement is expected to be filed with the Environmental Protection Agency (EPA) and available for public review by August 1994. The comment period on the draft environmental impact

statement will be 45 days from the date the EPA publishes the Notice of Availability in the Federal Register.

The Forest Service believes, at this early stage, it is important to give reviewers notice of several court rulings related to public participation in the environmental review process. Upon release of the draft environmental impact statement, projected for August 1994, reviewers must structure their participation in the environmental review of the proposal so that it is meaningful and alerts an agency to the reviewer's position and contentions. *Vermont Yankee Nuclear Power Corp. vs. NRDC*, 435 U.S. 519, 553 (1978). Also, environmental objections that could be raised at the draft environmental impact statement stage, but are not raised until after the completion of the final environmental impact statement may be waived or dismissed by the courts. *City of Angoon vs. Hodel*, 803 F.2d 1016, 1022 (9th Cir. 1986) and *Wisconsin Heritages, Inc. vs. Harris*, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Because of these court rulings, it is very important that those interested in this proposal participate by the close of the 45 day comment period so that substantive comments and objections are made available to the Forest Service at a time when it can meaningfully consider and respond to them in the Final Environmental Impact Statement.

To assist the Forest Service in identifying and considering issues and concerns on the proposed action, comments on the draft environmental impact statement should be as specific as possible. It is also helpful if comments refer to specific pages and chapters of the draft statement. Comments may also address the adequacy of the draft environmental impact statement or the merits of the alternatives formulated and discussed in the statement. (Reviewers may wish to refer to the Council on Environmental Quality Regulations for implementing the procedural provisions at the National Environmental Policy Act at 40 CFR 1503.3 in addressing these points.)

After the comment period ends on the draft environmental impact statement, the comments will be analyzed and considered by the Forest Service in preparing the Final Environmental Impact Statement. The final statement is scheduled to be completed by March 1995.

The Secretary of Agriculture will consider comments, responses, and environmental consequences discussed in the final environmental impact statement and applicable laws, regulations, and policies in making his

recommendation to the President regarding the suitability of these rivers for inclusion in the National Wild and Scenic Rivers System. The decision on the inclusion of a river in the National Wild and Scenic Rivers System rests with the United States Congress.

Dated: July 29, 1994.

Bertha C. Gillam,

Acting Director of Environmental Coordination.

[FR Doc. 94-20209 Filed 8-16-94; 8:45 am]

BILLING CODE 3410-11-M

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-832, A-570-833, A-821-805, A-821-806, A-823-806]

Postponement of Preliminary Antidumping Duty Determinations: Pure and Alloy Magnesium From the People's Republic of China and the Russian Federation; and Pure Magnesium from Ukraine

AGENCY: Import Administration, International Trade Administration, Commerce.

EFFECTIVE DATE: August 17, 1994.

FOR FURTHER INFORMATION CONTACT: Erik Warga (202-482-0922) or David Golberger (202-482-4136), Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW, Washington, D.C. 20230.

SUMMARY: The Department of Commerce ("the Department") is postponing its preliminary determinations in the antidumping duty investigations of pure and alloy magnesium from the People's Republic of China (PRC) and the Russian Federation (Russia), and pure magnesium from Ukraine. The deadline for issuing these preliminary determinations is now no later than October 27, 1994.

SUPPLEMENTARY INFORMATION: On April 20, 1994, the Department initiated antidumping duty investigations of pure and alloy magnesium from the PRC, Russia, and Ukraine (59 FR 21748, April 26, 1994). The notice stated that we would issue our preliminary determinations on September 7, 1994.

On May 16, 1994, the U.S. International Trade Commission determined that there was not a likelihood that a U.S. domestic industry was materially injured, nor threatened with material injury, by reason of imports of alloy magnesium from Ukraine, thereby terminating the

investigation of alloy magnesium from Ukraine. With regard to pure and alloy magnesium from the People's Republic of China and the Russian Federation and pure magnesium from Ukraine, the ITC found that there was a reasonable indication that an industry in the U.S. is materially injured, or threatened with material injury, by reason of imports of pure and alloy magnesium from the People's Republic of China and the Russian Federation and pure magnesium from Ukraine.

We have determined that the remaining investigations are extraordinarily complicated within the meaning of section 733(c)(1)(B)(i) of the Tariff Act of 1930, as amended ("the Act"), and 19 CFR 353.15(b)(2). Given the non-market economy status of all countries subject to these investigations, the nature of government ownership of the participating companies must be clarified for each country. Additionally, these investigations involve unusually complex foreign trading channels as well as possible sales from foreign government stockpiles. Furthermore, we have determined that the parties concerned are cooperating, as required by section 733(c)(1)(B) of the Act and 19 CFR 353.15(b)(1), and that additional time is necessary to make these preliminary determinations in accordance with section 733(c)(1)(B)(ii) of the Act and 19 CFR 353.15(b)(3).

For these reasons, the deadline for issuing these determinations is now no later than October 27, 1994.

This notice is published pursuant to section 733(c)(2) of the Act and 19 CFR 353.15(d).

Dated: August 8, 1994.

Susan G. Esserman,

Assistant Secretary for Import Administration.

[FR Doc. 94-20201 Filed 8-16-94; 8:45 am]

BILLING CODE 3510-DS-M

U.S. Environmental Protection Agency, Notice of Decision on Application for Duty-Free Entry of Scientific Instrument

This decision is made pursuant to Section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Pub. L. 89-651, 80 Stat. 897; 15 CFR 301). Related records can be viewed between 8:30 A.M. and 5:00 P.M. in Room 4211, U.S. Department of Commerce, 14th and Constitution Avenue, N.W., Washington, D.C.

Comments: None received. Decision: Approved. No instrument of equivalent scientific value to the foreign instrument, for such purposes as it is

intended to be used, is being manufactured in the United States.

Docket Number: 94-042. Applicant: U.S. Environmental Protection Agency, Las Vegas, NV 89193-3478. Instrument: ICP Mass Spectrometer, Model VG PlasmaQuad. Manufacturer: Fisons Instruments, United Kingdom. Intended Use: See notice at 57 FR 18371, April 18, 1994. Reasons: The foreign instrument provides rapid multielemental analysis in both continuous-scan and peak-hopping modes with a sensitivity to 20 MHz/ppm for Co, In, Pb, Bi, and U and an average background of < 10 cps.

This capability is pertinent to the applicant's intended purpose and we know of no other instrument or apparatus of equivalent scientific value to the foreign instrument which is being manufactured in the United States.

Pamela Woods,

Acting Director, Statutory Import Programs Staff.

[FR Doc. 94-20200 Filed 8-16-94; 8:45 am]

BILLING CODE 3510-DS-F

National Oceanic and Atmospheric Administration

Monterey Bay National Marine Sanctuary Advisory Council; Meetings

AGENCY: Sanctuaries and Reserves Division (SRD), Office of Ocean and Coastal Resource Management (OCRM), National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Monterey Bay National Marine Sanctuary Advisory Council Open Meeting.

SUMMARY: The Advisory Council was established in December 1993 to advise and assist the Secretary of Commerce in the implementation of the management plan for the Monterey Bay National Marine Sanctuary.

TIME AND PLACE: August 24, 1994 from 9:30 until 2:30. The meeting location will be at the Cavalier Plaza, 9415 Hearst Drive, San Simeon, California.

AGENDA: General issues related to the Monterey Bay National Marine Sanctuary are expected to be discussed, including vessel traffic safety and strategic planning.

PUBLIC PARTICIPATION: The meeting will be open to the public. Seats will be available on a first-come, first-served basis.

FOR FURTHER INFORMATION CONTACT: Scott Kathey at (408) 647-4201 or Elizabeth Moore at (301) 713-3141.

Federal Domestic Assistance Catalog
Number 11.429, Marine Sanctuary Program.

Dated: August 10, 1994.

W. Stanley Wilson,

*Assistant Administrator for Ocean Services
and Coastal Zone Management.*

[FR Doc. 94-20092 Filed 8-16-94; 8:45 am]

BILLING CODE 3510-08-M

COMMITTEE FOR THE IMPLEMENTATION OF TEXTILE AGREEMENTS

Extension of an Import Restraint Limit for Certain Cotton Textile Products Produced or Manufactured in Myanmar

August 12, 1994.

AGENCY: Committee for the
Implementation of Textile Agreements
(CITA).

ACTION: Issuing a directive to the
Commissioner of Customs extending a
limit.

EFFECTIVE DATE: September 1, 1994.

FOR FURTHER INFORMATION CONTACT: Ross
Arnold, International Trade Specialist,
Office of Textiles and Apparel, U.S.
Department of Commerce, (202) 482-
4212. For information on the quota
status of this limit, refer to the Quota
Status Reports posted on the bulletin
boards of each Customs port or call
(202) 927-5850. For information on
embargoes and quota re-openings, call
(202) 482-3715.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March
3, 1972, as amended; section 204 of the
Agricultural Act of 1956, as amended (7
U.S.C. 1854).

The United States Government has
decided to continue the restraint limit
on Categories 347/348 for an additional
twelve-month period, beginning on
September 1, 1994 and extending
through August 31, 1995.

A description of the textile and
apparel categories in terms of HTS
numbers is available in the
CORRELATION: Textile and Apparel
Categories with the Harmonized Tariff
Schedule of the United States (see
Federal Register notice 58 FR 62645,
published on November 29, 1993). Also
see 58 FR 41737, published on August
5, 1993.

Rita D. Hayes,

*Chairman, Committee for the Implementation
of Textile Agreements.*

Committee for the Implementation of Textile
Agreements

August 12, 1994.

Commissioner of Customs,

*Department of the Treasury, Washington, DC
20229*

Dear Commissioner: Under the terms of
section 204 of the Agricultural Act of 1956,
as amended (7 U.S.C. 1854); and in
accordance with the provisions of Executive
Order 11651 of March 3, 1972, as amended,
you are directed to prohibit, effective on
September 1, 1994, entry into the United
States for consumption and withdrawal from
warehouse for consumption of cotton textile
products in Categories 347/348, produced or
manufactured in Myanmar and exported
during the period beginning on September 1,
1994 and extending through August 31, 1995,
in excess of 131,659 dozen.

Imports charged to this category limit for
the period September 1, 1993 through August
31, 1994 shall be charged against that level
of restraint to the extent of any unfilled
balance. Goods in excess of that limit shall
be subject to the limit established in this
directive.

In carrying out the above directions, the
Commissioner of Customs should construe
entry into the United States for consumption
to include entry for consumption into the
Commonwealth of Puerto Rico.

The Committee for the Implementation of
Textile Agreements has determined that this
action falls within the foreign affairs
exception of the rulemaking provisions of 5
U.S.C. 553(a)(1).

Sincerely,

Rita D. Hayes,

*Chairman, Committee for the Implementation
of Textile Agreements.*

[FR Doc. 94-20134 Filed 8-16-94; 8:45 am]

BILLING CODE 3510-DR-F

Extension of an Import Restraint Limit for Certain Cotton and Man-Made Fiber Textile Products Produced or Manufactured in Myanmar

August 12, 1994.

AGENCY: Committee for the
Implementation of Textile Agreements
(CITA).

ACTION: Issuing a directive to the
Commissioner of Customs extending a
limit.

EFFECTIVE DATE: October 3, 1994.

FOR FURTHER INFORMATION CONTACT: Ross
Arnold, International Trade Specialist,
Office of Textiles and Apparel, U.S.
Department of Commerce, (202) 482-
4212. For information on the quota
status of this limit, refer to the Quota
Status Reports posted on the bulletin
boards of each Customs port or call
(202) 927-5850. For information on
embargoes and quota re-openings, call
(202) 482-3715.

SUPPLEMENTARY INFORMATION:

Authority: Executive Order 11651 of March
3, 1972, as amended; section 204 of the
Agricultural Act of 1956, as amended (7
U.S.C. 1854).

The United States Government has
decided to continue the restraint limit

on Categories 340/640 for an additional
twelve-month period, beginning on
October 1, 1994 and extending through
September 30, 1995.

A description of the textile and
apparel categories in terms of HTS
numbers is available in the
CORRELATION: Textile and Apparel
Categories with the Harmonized Tariff
Schedule of the United States (see
Federal Register notice 58 FR 62645,
published on November 29, 1993). Also
see 58 FR 41738, published on August
5, 1993.

Rita D. Hayes,

*Chairman, Committee for the Implementation
of Textile Agreements.*

Committee for the Implementation of Textile
Agreements

August 12, 1994.

Commissioner of Customs,

*Department of the Treasury, Washington, DC
20229.*

Dear Commissioner: Under the terms of
section 204 of the Agricultural Act of 1956,
as amended (7 U.S.C. 1854); and in
accordance with the provisions of Executive
Order 11651 of March 3, 1972, as amended,
you are directed to prohibit, effective on
October 3, 1994, entry into the United States
for consumption and withdrawal from
warehouse for consumption of cotton and
man-made fiber textile products in Categories
340/640, produced or manufactured in
Myanmar and exported during the period
beginning on October 1, 1994 and extending
through September 30, 1995, in excess of
93,975 dozen.

Imports charged to this category limit for
the period October 1, 1993 through
September 30, 1994 shall be charged against
that level of restraint to the extent of any
unfilled balance. Goods in excess of that
limit shall be subject to the limit established
in this directive.

In carrying out the above directions, the
Commissioner of Customs should construe
entry into the United States for consumption
to include entry for consumption into the
Commonwealth of Puerto Rico.

The Committee for the Implementation of
Textile Agreements has determined that this
action falls within the foreign affairs
exception of the rulemaking provisions of 5
U.S.C. 553(a)(1).

Sincerely,

Rita D. Hayes,

*Chairman, Committee for the Implementation
of Textile Agreements.*

[FR Doc. 94-20133 Filed 8-16-94; 8:45 am]

BILLING CODE 3510-DR-F

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Meeting

AGENCY: Corporation for National and
Community Service.

ACTION: Notice of meeting.

SUMMARY: The Corporation for National and Community Service, gives notice under Public Law 92-463 (Federal Advisory Committee Act), that it will hold a meeting of the Civilian Community Corps (CCC) Advisory Board. The Board advises the Director of the CCC concerning the administration of the program and assists in the development and administration of the Corps. This meeting of the Board will discuss the progress to date and future direction of the program. The meeting will be open to the public up to the seating capacity of the room.

DATES: September 11, 1994, 3:00 pm-9:30 pm.; September 12, 1994, 8:00 am-9:30 pm.; September 13, 1994, 8:00 a.m.-12:00 pm.

ADDRESSES: Hotel Del Coronado, 1500 Orange Avenue, Coronado, CA 92118.

FOR FURTHER INFORMATION CONTACT: To assure adequate accommodation, contact Ms. Carla Sims, Protocol Officer, CCC at 1100 Vermont Avenue, NW, Washington, DC 20525; (202) 606-5000 ext 183 or (202) 606-5256 (TDD) prior to September 1, 1994.

Dated: August 11, 1994.

Donald L. Suss, Jr.,

Director.

[FR Doc. 94-20188 Filed 8-16-94; 8:45 am]

BILLING CODE 6050-28-M

DEPARTMENT OF DEFENSE

Aneptek Corp: Partially Exclusive Patent License

AGENCY: Department of the Navy, DOD.

ACTION: Intent to grant partially exclusive patent license; Aneptek Corporation.

SUMMARY: The Department of the Navy hereby given notice of its intent to grant to Aneptek Corporation a revocable, nonassignable, partially exclusive license in the United States to practice the Government-owned invention described in U.S. Patent Application Serial No. 07/749,244 entitled "Large Scale Purification of Contaminated Air" filed August 23, 1991.

Anyone wishing to object to the grant of this license has 60 days from the date of this notice to file written objections along with supporting evidence, if any. Written objections are to be filed with the Office of Naval Research (ONR OCCC), Ballston Tower One, Arlington, Virginia, 22217-5660.

FOR FURTHER INFORMATION CONTACT: Mr. R.J. Erickson, Staff Patent Attorney, Office of Naval Research (ONR OCCC), Ballston Tower One, 800 North Quincy

Street, Arlington, Virginia, 22217-5660, telephone (703) 696-4001.

Dated: August 10, 1994.

Lewis T. Booker, Jr.

LCDR, JAGC, USN Federal Register Liaison Officer.

[FR Doc. 94-20127 Filed 8-16-94; 8:45 am]

BILLING CODE 3810-AE-M

Department of the Air Force

Public Scoping Meeting for Disposal and Reuse of Gentile AFS, OH

The United States Air Force (AF) will conduct a public scoping meeting to provide a forum for public officials and the community to provide information and comments concerning the disposal and reuse of portions of Gentile AFS, OH. The meeting will be held September 14, 1994 beginning at 7 p.m. at the Kettering City Hall, 3600 Shroyer Road, Kettering, Ohio.

The purpose of this meeting is to identify the environmental issues and concerns that should be analyzed to support base disposal and reuse, and solicit potential disposal and reuse alternatives for consideration in developing the Environmental Impact Statement (EIS). In soliciting disposal and reuse alternatives, the AF will consider all reasonable alternatives offered by any federal, state, or local government agency, and any federally-sponsored or private entity or individual. The resulting EIS will be considered in making disposal decisions that will be documented in the Air Force's Final Disposal Plan and Record of Decision for Gentile AFS.

To ensure sufficient time to adequately consider public comments concerning environmental issues and disposal alternatives to be included in the EIS, the AF recommends that comments and reuse proposals be presented at the upcoming meeting or forwarded to the address below by December 1, 1994. The AF will, however, accept additional comments at any time during the environmental impact analysis process.

Please direct written comments or requests for further information concerning the base disposal and reuse EIS to: William Myers, 8106 Chennault Road, Brooks AFB TX 78235-5318, (210) 536-3860.

List of Subjects

Environmental Protection, Environmental Impact Statement, US Air Force, Gentile AFS, Scoping Meeting, Disposal and Reuse, Defense

Base Closure and Realignment Commission.

Patsy J. Conner,

Air Force Federal Register Liaison Officer.

[FR Doc. 94-20210 Filed 8-16-94; 8:45 am]

BILLING CODE 3910-01-P

Department of the Army

Finding of No Significant Impact (FNSI) and Environmental Assessment (EA) for Realignment of Fort Monmouth, NJ

AGENCY: Department of the Army, DoD.

ACTION: Finding of No Significant Impact.

SUMMARY: The proposed action implements the July 1993 Defense Base Closure and Realignment Commission's (BRAC 93) decision to realign all Department of Army personnel and missions out of the leased U.S. Army Communications-Electronics Command (CECOM) Office Building (Tinton Falls, New Jersey) and the Evans subpost (which is closing) onto the main post or Charles Wood subpost of Fort Monmouth. Personnel and missions from Vint Hill Farms Station (VHFS) in Warrenton, Virginia, will also be moved onto the main post or Charles Wood subpost as part of this action.

Since not all personnel can be accommodated in existing buildings, new facilities will be constructed. Actions to implement this realignment include the construction of up to 7 new buildings, demolition of 5 buildings, and renovation of 15 buildings.

Alternatives considered in the EA included:

Alternative 1: Consists of the following projects:

- Construction of a 16,000-square foot Intelligence and Electronic Warfare Directorate (IEWD) complex at main post.
- Construction of a 3,250-square foot calibration range laboratory at the Charles Wood subpost.
- Construction of a 2,600-square foot high bay facility at the Charles Wood subpost.
- Renovation of 14 main post buildings.
- Renovation of portions of the Myer Center (Building 2700) at the Charles Wood subpost.

Alternative 2: Alternative construction sites were identified on the Charles Wood subpost for the IEWD complex, the calibration range laboratory, and the high bay facility. No reasonable alternative to the building renovations at main post and the Charles Wood subpost of Fort Monmouth were identified.

Alternative 3: The No-Action Alternative. This alternative is the continuation of existing conditions without the implementation of, or in absence of, the proposed actions. The proposed actions are required by BRAC law and must be implemented. Therefore, the No-Action Alternative is being evaluated to provide a baseline for the other alternatives.

Alternative 2 was not selected for implementation based on the potential for significant environmental, biological and cultural resources impacts.

Implementation of the preferred alternative (Alternative 1) will not substantially alter baseline environmental conditions. Biological, physical, and cultural resources will not be impacted by the preferred alternative because construction sites for new buildings are located in previously disturbed areas. The increase in the workforce at Fort Monmouth will be largely off-set by the workforce decreases that will result from scheduled non-BRAC realignments and Department of Defense downsizing. This workforce decrease offsets potential impacts on infrastructure such as water, wastewater, solid waste and energy.

The proposed realignment is expected to have an insignificant impact on the socioeconomic environment, including total sales, employment, population and income.

Based on the EA, which is incorporated into the FNSI, it has been determined that implementation of the proposed action would have no significant individual or cumulative impacts on the quality of the natural or human environment. Because there will be no significant environmental impacts resulting from implementation of the proposed action, an Environmental Impact Statement is not required.

DATES: The Army plans to initiate the proposed action on or before September 16, 1994.

ADDRESSES: Copies of this EA may be obtained by writing to the U.S. Army Corps of Engineers, Mobile District, ATTN: CESAM-PD-E (Dr. Neil Robinson), P.O. Box 2288, Mobile, Alabama 36628-0001 or by calling (205) 441-5103 within 30 days of the date of publication of this notice.

Dated: August 9, 1994.

Raymond J. Fatz,

Acting Deputy Assistant Secretary of the Army (Environment, Safety & Occupational Health) OASA (IL&E).

[FR Doc. 94-20125 Filed 8-16-94; 8:45 am]

BILLING CODE 3710-08-M

Department of the Navy

Government-Owned Invention; Availability for Licensing

AGENCY: Department of the Navy, DOD.

ACTION: Notice of Availability of Invention for Licensing.

SUMMARY: The invention listed below is assigned to the United States Government as represented by the Secretary of the Navy and is available for licensing by the Department of the Navy.

Request for copies of patent application cited should be directed to the Office of Naval Research (ONR 00CC), Ballston Tower One, 800 North Quincy Street, Arlington, Virginia 22217-5660 and must include the application serial number.

FOR FURTHER INFORMATION CONTACT: Mr. R.J. Erickson, Staff Patent Attorney, Office of Naval Research (ONR 00CC), 800 North Quincy Street, Arlington, Virginia 22217-5660, telephone (703) 696-4001.

Patent Application 08/250,768: SILOXANES WITH STRONG HYDROGEN AND DONATING FUNCTIONALITIES; filed May 27, 1994.

Dated: July 26, 1994.

Lewis T. Booker, Jr.,

LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 94-20083 Filed 8-16-94; 8:45 am]

BILLING CODE 3810-AE-M

Invention for Licensing; Availability

AGENCY: Department of the Navy, DOD.

ACTION: Notice of Availability of Invention for Licensing.

SUMMARY: The invention listed below is assigned to the United States Government as represented by the Secretary of the Navy and is available for licensing by the Department of the Navy.

Requests for copies of the patent applications cited should be directed to the Office of Naval Research (ONR 00CC), Ballston Tower One, 800 North Quincy Street, Arlington, Virginia, 22217-5660, and must include the application serial number.

FOR FURTHER INFORMATION CONTACT: Mr. R.J. Erickson, Staff Patent Attorney, Office of Naval Research (ONR 00CC), 800 North Quincy Street, Arlington, Virginia, 22217-5660, telephone (703) 696-4001.

Patent application 08/136,586: SURFACE-LAMINATED PIEZOELECTRIC-FILM SOUND

TRANSDUCER; filed October 18, 1993; and

Patent application (Navy Case number 75,574): LOXANES WITH STRONG HYDROGEN BOND DONATING FUNCTIONALITIES; filed May 27, 1994.

Dated: July 26, 1994.

Lewis T. Booker, Jr.,

LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 94-20082 Filed 8-16-94; 8:45 am]

BILLING CODE 3810-AE-M

Partially Exclusive Patent License

AGENCY: Department of the Navy, DOD.

ACTION: Intent to Grant Partially Exclusive Patent License; First Choice Armor & Equipment, Inc.

SUMMARY: The Department of the Navy hereby gives notice of its intent to grant to First Choice Armor & Equipment, Inc., a revocable, nonassignable, partially exclusive license in the United States to practice the Government-owned invention described in U.S. Patent No. 5,060,314, entitled "Multi-Mission Ballistic Resistant Jacket" issued October 29, 1991.

Anyone wishing to object to the grant of this license has 60 days from the date of this notice to file written objections along with supporting evidence, if any. Written objections are to be filed with the Office of Naval Research (ONR 00CC), Ballston Tower One, 800 North Quincy Street, Arlington, Virginia 22217-5660.

FOR FURTHER INFORMATION CONTACT: Mr. R.J. Erickson, Staff Patent Attorney, Office of Naval Research (ONR 00CC), 800 North Quincy Street, Arlington, Virginia 22217-5660, telephone (703) 696-4001.

Dated: July 26, 1994.

Lewis T. Booker, Jr.,

LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 94-20081 Filed 8-16-94; 8:45 am]

BILLING CODE 3810-AE-M

DEPARTMENT OF EDUCATION

Proposed Information Collection Requests

AGENCY: Department of Education.

ACTION: Notice of Proposed Information Collection Requests.

SUMMARY: The Acting Director, Information Resources Management Service, invites comments on the proposed information collection

requests as required by the Paperwork Reduction Act of 1980.

DATES: Interested persons are invited to submit comments on or before September 16, 1994.

ADDRESSES: Written comments should be addressed to the Office of Information and Regulatory Affairs, Attention: Dan Chenok: Desk Officer, Department of Education, Office of Management and Budget, 725 17th Street, NW., Room 3208, New Executive Office Building, Washington, DC 20503. Requests for copies of the proposed information collection requests should be addressed to Patrick J. Sherrill, Department of Education, 400 Maryland Avenue, SW., Room 5624, Regional Office Building 3, Washington, DC 20202-4651.

FOR FURTHER INFORMATION CONTACT:

Patrick J. Sherrill (202) 708-9915. Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m., Eastern time, Monday through Friday.

SUPPLEMENTARY INFORMATION: Section 3517 of the Paperwork Reduction Act of 1980 (44 U.S.C. Chapter 35) requires that the Office of Management and Budget (OMB) provide interested Federal agencies and the public an early opportunity to comment on information collection requests. OMB may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State of Federal law, or substantially interfere with any agency's ability to perform its statutory obligations. The Acting Director of the Information Resources Management Service, publishes this notice containing proposed information collection requests prior to submission of these requests to OMB. Each proposed information collection, grouped by office, contains the following: (1) Type of review requested, e.g., new, revision, extension, existing or reinstatement; (2) Title; (3) Frequency of collection; (4) The affected public; (5) Reporting burden; and/or (6) Recordkeeping burden; and (7) Abstract. OMB invites public comment at the address specified above. Copies of the requests are available from Patrick J. Sherrill at the address specified above.

Dated: August 11, 1994.

Mary P. Liggett,

Acting Director, Information Resources Management Service.

Office of Special Education and Rehabilitative Services

Type of Review: REINSTATEMENT

Title: Quarterly Cumulative Caseload Report

Frequency: Quarterly

Affected Public: State or local governments

Reporting Burden:

Responses: 324

Burden Hours: 324

Recordkeeping Burden:

Recordkeepers: 81

Burden Hours: 81

Abstract: This report, submitted by State Vocational Rehabilitation agencies, collects data on caseload flows which includes persons served, rehabilitated and accepted for VR services. The Department will use the information for program management and budgeting purposes.

[FR Doc. 94-20126 Filed 8-16-94; 8:45 am]

BILLING CODE 4000-01-M

DEPARTMENT OF ENERGY

Metal Casting Industrial Advisory Board

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: Pursuant to the provisions of the Federal Advisory Committee Act (Public Law 92-463, 86 Stat. 770) notice is hereby given of the Metal Casting Industrial Advisory Board meeting.

DATES: Tuesday, September 13, 1994, 8 a.m.-5:30 p.m.

ADDRESSES: University of Alabama—Tuscaloosa, Student Union Building, Tuscaloosa, Alabama 35487-0200.

FOR FURTHER INFORMATION CONTACT: Douglas E. Kaempf, Program Manager, Department of Energy, Office of Industrial Technologies (EE-23), 1000 Independence Ave. SW., Washington, DC 20585, (202) 586-5264, Fax: (202) 586-3180.

SUPPLEMENTARY INFORMATION: Purpose of the Committee: The Metal Casting Industrial Advisory Board serves to provide guidance and oversight of research programs provided under the Metal Casting Competitiveness Research Program and to recommend to the Secretary of Energy new or revised program activities and Metal Casting Research Priorities.

Tentative Agenda

Tuesday, September 13, 1994

8:00 Welcome and Introductions—D. Kaempf

8:15 (30 minute) Presentations of the fiscal year 1994 selected projects research activities and management plans—C. Bates, L. Wang, J. Wallace, T. Piwonka

10:15 Break

10:30 Continue Presentations of the fiscal year 1994 selected projects research activities and management plans

11:30 Summary of comments and findings on the morning presentations—Board Members

12:00 Lunch

1:00

- Review of findings by subcommittees—Board Members
- Summary of comments on the fiscal year 1994 solicitation and selection of the research proposals and any recommendations

2:00 Break

2:30

- Comments and recommendations on the FY 94 selection criteria and/or operation of the metal casting program—Board Members
- Discussion and presentation of the recommended list of metal casting research priorities for the FY 95 solicitation

4:30 Public comment—Public

5:00 Closing comments and Adjournment—Co-Chairpersons: D. Cocks, D. Peters

A final agenda will be available at the meeting.

Public Participation: The meeting is open to the public. The Chairperson of the Board is empowered to conduct the meeting to facilitate the orderly conduct of business. Any member of the public who wishes to make oral statements pertaining to the agenda items should contact Douglas E. Kaempf at the address or telephone number listed above. Requests must be received at least 5 days prior to the meeting and reasonable provisions will be made to include the presentation on the agenda. Written statements may be filed with the Committee either before or after the meeting.

Transcript: Available for public review and copying at the Freedom of Information Public Reading Room, Room 1E-190, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

Issued at Washington, DC on August 12, 1994.

Marcia L. Morris,

Deputy Advisory Committee Management Officer.

[FR Doc. 94-20205 Filed 8-16-94; 8:45 am]

BILLING CODE 6450-01-P

Environmental Management Site Specific Advisory Board, Idaho National Engineering Laboratory

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: Pursuant to the provisions of the Federal Advisory Committee Act (Public Law 92-463, 86 Stat. 770) notice is hereby given of the following Advisory Committee meeting:

Environmental Management Site Specific Advisory Board (EM SSAB), Idaho National Engineering Laboratory.

DATES: Monday, August 29, 1994 from 8:30 am Mountain Daylight Time (MDT) until 6:00 pm MDT and Tuesday, August 30, 1994 from 8:00 am MDT until 5:00 pm MDT.

ADDRESSES: Littletree Inn, Teton Room (208) 523-5993, 888 North Holmes Avenue, Idaho Falls, ID 83401.

FOR FURTHER INFORMATION CONTACT: Idaho National Engineering Laboratory Information 1-800-708-2680 or Stephanie Jennings or Douglas Brown, Advanced Sciences, Inc. Staff Support 1-208-529-2002.

SUPPLEMENTARY INFORMATION: Purpose of the Committee: The Board will continue to develop operating procedures and identify and prioritize possible Department of Energy, Environmental Protection Agency, and State of Idaho issues for Board recommendations. There will be information presentations to the Board regarding the Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Draft Environmental Impact Statement. The Board will also discuss the contractor support services required for Fiscal year 1995.

Tentative Agenda

Monday, August 29, 1994

8:00 a.m.—Sign-in and Registration
8:30 a.m.

Facilitator Introduction

Old Business

Housekeeping Items: Meeting

Attendance Report Agenda

Acceptance/Revision for Day 1

9:00 a.m.—Budget Committee Report
9:15 a.m.

Budget Discussion

Contractor Support Discussion
9:30 a.m.—Procedure Committee Report
9:45 a.m.—Procedure Discussion
10:15 a.m.—Break
10:30 a.m.—Revise/Accept Procedures
11:30 a.m.—Plutonium Vulnerabilities Report
12:00 p.m.—Lunch Break
1:00 p.m.—EPA/State/DOE Top Five Issues
1:45 p.m.—EM SSAB-INEL Issue Prioritization
2:45 p.m.—Break
3:00 p.m.—Continue Issue Prioritization
3:30 p.m.—Environmental Impact Statement (EIS) Volume 1—Purpose and Alternatives
4:30 p.m.—EIS Volume 1—Questions and Answers
4:45 p.m.—Break
5:00 p.m.

Public Comment Availability
EIS Volume 1 Discussion
6:00 p.m. Adjourn Day 1

Tuesday, August 30, 1994

7:30 a.m.—Sign-In and Registration
8:00 a.m.

Public Comment Evaluation from Day 1
Old Business from Day 1
Agenda Acceptance/Revision for Day 2

8:30 a.m.—EIS Volume 2—Purpose and Alternatives
9:15 a.m.—EIS Volume 2—Questions and Answers
9:30 a.m.—EIS—Characterization of Spent Nuclear Fuel (SNF) and Waste Streams as They Affect Idaho and the INEL
9:45 a.m.—EIS—Transportation in Idaho
10:15 a.m.—Break
10:30 a.m.—EIS—Accident Analysis
11:00 a.m.—EIS—Environmental Consequences
12:00 p.m.—Lunch Break
1:00 p.m.—EIS—Cost Considerations and Trade-Offs
1:30 p.m.—EIS—Questions and Answers
2:00 p.m.—EM SSAB-INEL Open Discussion and Working Session on EIS Recommendations/Comment
2:45 p.m.—Break
3:00 p.m.

Continue EIS Working Session
Draft EIS Recommendations/
Comments
Develop/Assign Sub-Committees if Necessary

4:30 p.m.
Confirm Next EM SSAB-INEL Meeting date(s) and Location
Develop Draft Agenda Items for Next Meeting
5:00 p.m.—Adjourn Day 2

A final agenda will be available at the meeting.

Public Comment Availability: The two-day meeting is open to the public, with a Public Comment Availability session scheduled for Monday, August 28, 1994 from 5:00 p.m. to 6:00 p.m. MDT. The Board will be available during this time period to hear verbal public comments or to review any written public comments. If there are no members of the public wishing to comment or no written comments to review, the board will continue with its current discussion. Written statements may be filed with the Committee either before or after the meeting. Individuals who wish to make oral statements pertaining to agenda items should contact the Idaho National Engineering Laboratory Information line or Stephanie Jennings or Doug Brown at the addresses or telephone numbers listed above. Requests must be received 5 days prior to the meeting and reasonable provision will be made to include the presentation in the agenda. The Designated Federal Official is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Each individual wishing to make public comment will be provided a maximum of 5 minutes to present their comments. Due to programmatic issues that had to be resolved, the **Federal Register** notice is being published less than fifteen days before the date of the meeting. Written comments will be accepted at the address above within 15 days after publication of this notice.

Minutes: The minutes of this meeting will be available for public review and copying at the Freedom of Information Public Reading Room, 1E-190, Forrestal Building, 1000 Independence Avenue, SW, Washington, DC 20585 between 9:00 a.m. and 4 p.m., Monday-Friday, except Federal holidays.

Issued at Washington, DC on August 12, 1994.

Marcia L. Morris,

Deputy Advisory Committee Management Officer.

[FR Doc. 94-20203 Filed 8-16-94; 8:45 am]

BILLING CODE 6450-01-P

Environmental Management Site Specific Advisory Board, Savannah River Site

AGENCY: Department of Energy.

ACTION: Notice of Open Meeting.

SUMMARY: Pursuant to the provisions of the Federal Advisory Committee Act (Public Law 92-463, 86 Stat. 770) notice is hereby given of the following

Advisory Committee meeting:
Environmental Management Site
Specific Advisory Board (EM SSAB),
Savannah River Site.

DATES: Monday, August 22, 1994: 6:00 p.m.—7:00 p.m. (public comment session); Tuesday, August 23, 1994: 8:30 a.m.—4:00 p.m..

ADDRESSES: The public comment session will be held at the Telfair Inn, 326 Greene St, Augusta, Georgia. The August 23 meeting will be held at: Building 703-41A, U.S. Department of Energy Savannah River Site, Aiken, South Carolina.

FOR FURTHER INFORMATION CONTACT: Tom Hennen, Manager, Environmental Restoration and Solid Waste, Department of Energy Savannah River Operations Office, P.O. Box A, Aiken, S.C. 29802 (803) 725-8074.

SUPPLEMENTARY INFORMATION: Purpose of the Board: The purpose of the Board is to make recommendations to DOE and its regulators in the areas of environmental restoration, waste management, and related activities.

Tentative Agenda

Monday, August 22, 1994

6:00 p.m.—Public Comment Session (5-minute rule)
7:00 p.m.—Adjourn

Tuesday, August 23, 1994

8:00 a.m.—Registration
8:30 a.m.—Briefings on the high-level waste program at SRS, the board's bylaws, and the annual SRS Environmental (Monitoring) Report for 1993
3:30 p.m.—Public Comment Session (5-minute rule)
4:00 p.m.—Adjourn

If needed, time will be allotted after public comments for old business, new business, items added to the agenda, and administrative details.

A final agenda will be available at the meeting Monday, August 22, 1994.

Public Participation: The meeting is open to the public. Written statements may be filed with the Committee either before or after the meeting. Individuals who wish to make oral statements pertaining to agenda items should contact Tom Heenan's office at the address or telephone number listed above. The Designated Federal official is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Each individual wishing to make a public comment will be provided a maximum of 5 minutes to present their comments. Due to programmatic issues that had to be resolved, the Federal Register notice is

being published less than fifteen days before the date of the meeting. Written comments will be accepted at the address above 15 days after publication of this notice.

Minutes: The minutes of this meeting will be available for public review and copying at the Freedom of Information Public Reading Room, IE-190, Forrestal Building, 1000 Independence Avenue, SW, Washington, DC 20585 between 9:00 a.m. and 4 p.m., Monday-Friday, except Federal holidays. Minutes will also be available by writing to Tom Heenan, Department of Energy Savannah River Operations Office, P.O. Box A, Aiken, S.C. 29802, or by calling him at (803)-725-8074.

Issued at Washington, DC on August 12, 1994.

Marcia L. Morris,

Deputy Advisory Committee Management Officer.

[FR Doc. 94-20202 Filed 8-16-94; 8:45 am]

BILLING CODE 6450-01-M

Advisory Committee on Human Radiation Experiments

AGENCY: Department of Energy.
ACTION: Notice of open meeting.

SUMMARY: Under the provisions of the Federal Advisory Committee Act (Pub. L. No. 92-463, 86 Stat. 770), notice is hereby given of the following meeting:

DATES AND TIMES: September 12, 1994, 9 a.m.—5 p.m.; September 13, 1994, 9 a.m.—3 p.m.

PLACE: Ramada Plaza Hotel, 10 Thomas Circle, Washington, D.C.

FOR FURTHER INFORMATION CONTACT: Steve Klaidman, The Advisory Committee on Human Radiation Experiments, 1726 M Street, NW., Suite 600, Washington, DC 20036. Telephone: (202) 254-9795 Fax: (202) 254-9828.

SUPPLEMENTARY INFORMATION:

Purpose of the Committee

The Advisory Committee on Human Radiation Experiments was established by the President, Executive Order No. 12891, January 15, 1994, to provide advice and recommendations on the ethical and scientific standards applicable to human radiation experiments carried out or sponsored by the United States Government. The Advisory Committee on Human Radiation Experiments reports to the Human Radiation Interagency Working Group, the members of which include the Secretary of Energy, the Secretary of Defense, the Secretary of Health and Human Services, the Secretary of Veterans Affairs, the Attorney General,

the Administrator of the National Aeronautics and Space Administration, the Director of Central Intelligence, and the Director of the Office of Management and Budget.

Tentative Agenda

Monday, September 12, 1994

9 a.m.—Call to Order and Opening Remarks
9:10 a.m.—Briefing on Background Issues, Advisory Committee Members
10:45 a.m.—Break
11 a.m.—Briefing of Background Issues, Advisory Committee Members (continue)
12:15 p.m.—Lunch
1:15 p.m.—Discussion, Status and Strategies of Document Collection and Review
3:15 p.m.—Break
3:30 p.m.—Public Comment (5 minute rule)
5 p.m.—Meeting Adjourn

Tuesday, September 13, 1994

9 a.m.—Opening Remarks
9:15 a.m.—Discussion, Status of Document Collection and Review
10:45 a.m.—Break
11 a.m.—Discussion, Status of Document Collection and Review (continued)
12:15 p.m.—Lunch
1:30 p.m.—Discussion, Status of Document Collection and Review (continued)
3 p.m.—Meeting Adjourned

A final agenda will be available at the meeting.

Public Participation

The meeting is open to the public. The chairperson is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business. Any member of the public who wishes to file a written statement with the Advisory Committee will be permitted to do so, either before or after the meeting. Members of the public who wish to make a 5 minute oral statement should contact the Advisory Committee at the address or telephone number listed above. Requests must be received at least five business days prior to the meeting and reasonable provisions will be made to include the presentation on the agenda.

Transcript

Available for public review and copying at the office of the Advisory Committee at the address listed above between 9 a.m. and 4 p.m., Monday through Friday except Federal holidays.

Issued at Washington DC on: August 12, 1994.

Marcia L. Morris,

Deputy Advisory Committee Management Officer.

[FR Doc. 94-20204 Filed 8-16-94; 8:45 am]

BILLING CODE 6450-01-P

Assumptions and Methodology Document for the Spent Nuclear Fuel Management Cost Evaluation

AGENCY: Department of Energy.

ACTION: Notice of availability.

SUMMARY: The Department of Energy has issued an Assumptions and Methodology Document for a cost evaluation of the management of Spent Nuclear Fuel, which discusses the assumptions and methodologies that will be used by the Department in preparing a cost evaluation report. The Department invites interested agencies, organizations, and the general public to provide comments on the Assumptions and Methodology Document.

DATES: All comments on the Assumptions and Methodology Document are due by September 30, 1994. The Department will consider all comments received before preparing the Cost Evaluation Report, scheduled for release in April, 1995.

ADDRESSES: The Assumptions and Methodology Document is available in Department of Energy Public Reading Rooms and Information Locations, which are listed below. Comments should be sent to: Public Comment on the Assumptions and Methodology Document, Attention: Brooks Weingartner, DOE Idaho Operations Office, P.O. Box 1625, Idaho Falls, Idaho, 83402-1625. Copies of the Assumptions and Methodology Document may be obtained by writing to the above address, or by calling 1-800-682-5583.

FOR FURTHER INFORMATION CONTACT: Mr. Brooks Weingartner, U.S. Department of Energy, Idaho Operations Office, 850 Energy Plaza, MS 2518, Idaho Falls, Idaho, 83401, at (208) 526-7043.

SUPPLEMENTARY INFORMATION: During the last fifty years, the Department of Energy has engaged in extensive nuclear energy operations that have made large contributions to our national defense and knowledge of nuclear technology. In the process, substantial quantities of spent nuclear fuel were generated. The Department must manage that spent nuclear fuel, and a much smaller amount that will be generated over the next 40 years, until final decisions about its ultimate disposition are made.

In June 1994, the Department issued the Department of Energy Programmatic Spent Nuclear Fuel Management and Idaho National Engineering Laboratory Environmental Restoration and Waste Management Programs Draft Environmental Impact Statement (SNF & INEL EIS) (DOE/EIS-0203-D) for review and comment. A Notice of Availability was issued on June 24, 1994 (59 FR 32688). The SNF & INEL EIS evaluates potential environmental impacts that may occur under several different alternatives for managing spent nuclear fuel over the next 40 years.

Potential monetary costs associated with implementing the spent nuclear fuel management alternatives will be considered in the Department's decision-making on the alternatives identified in the EIS. The Cost Evaluation Report will also contain other information (for example, estimated costs of disposal in a geologic repository) which will be useful in the Department's efforts to establish baseline estimates for life-cycle program costs.

Such information is relevant to the Department's environmental restoration and waste management responsibilities and is being consolidated into the Baseline Environmental Management Report to be issued later this year.

Cost Evaluation Report

The Department is seeking public input on the Assumptions and Methodology Document, which is to be used in preparing the Cost Evaluation Report. The Cost Evaluation Report will be made available to the public before the EIS Record of Decision is issued in June 1995. Portions of this evaluation are among the many factors that will be considered by the Department when preparing the EIS Record of Decision.

Scope of the Cost Evaluation

The Assumptions and Methodology Document presents the approach to be used in developing the cost evaluation, which has two primary purposes: to compare the monetary costs of the alternatives discussed in the SNF and INEL EIS and to explore estimated life-cycle costs to be used as relevant information to the Department's environmental restoration and waste management responsibilities. The Cost Evaluation Report will address a reasonable range of potential spent nuclear fuel management project expenses, which (depending upon the alternative) include potential costs for research and development, plant and equipment, operations and maintenance, capital/construction, decommissioning and decontamination,

and potential costs associated with disposal. Some spent nuclear fuel management decisions may not be made for several years. Future selection of technologies or decisions on how to prepare some fuels for storage or disposition, for example, may significantly affect cost. Therefore, only relative predictions of these costs can be made at this time.

Assumptions:

The assumptions used in the Assumptions and Methodology Document cover three tiers:

Tier 1: Programmatic assumptions reflecting current Department policies and directives.

Tier 2: Implementation of site-specific assumptions reflecting a site-specific planning basis.

Tier 3: Technical assumptions based on expert knowledge and local conditions.

Assumptions will be based on:

- When, where, and how spent nuclear fuel will be managed and dispositioned
- Technologies and requirements for stabilization (including processing), storage, transport, and licensing
- The time frame required for various factors in managing spent nuclear fuel.
- Facility lifespan, upgrades, new building, decontamination and decommissioning.

Methodology:

The Assumptions and Methodology Document is intended to provide a methodology for a relative comparison of costs that could be involved in Department of Energy spent nuclear fuel management. The DOE sites already engaged in spent nuclear fuel management activities will be evaluated to determine the feasibility of utilizing existing facilities and the costs of operating and maintaining those facilities. Certain functions or facilities are not available at all sites under all management strategies and alternatives. Generic facility descriptions and associated costs will be developed to fill the gap between existing and needed facilities.

To define the possible spread of costs for each alternative. To the extent practicable, estimates will be based upon historic data; analyses of similar activities and projecting cost to provide estimates for new actions; use of estimates developed in other programs that address some aspect of spent nuclear fuel management; and expert opinion.

DOE Public Reading Rooms

- U.S. Department of Energy, Oakland Operations Office, Environmental Information Center, 1301 Clay Street, Room 700 North, Oakland, CA 94612, (510) 637-1762, Monday-Friday: 8:30 a.m. to 5:00 p.m.
- U.S. Department of Energy, Rocky Flats Office, Public Reading Room, Front Range Community, College Library, 3645 West 112th Avenue, Level B, Center of the Building, Westminster, CO 80030, (303) 469-4435, Monday & Tuesday: 10:30 a.m. to 6:30 p.m., Wednesday: 10:00 a.m. to 4:00 p.m., Thursday: 8:00 a.m. to 4:00 p.m.
- U.S. Department of Energy, Headquarters, Freedom of Information Reading Room, 1E-190 Forrestal Building, 1000 Independence Avenue, SW., Washington, D.C. 10585, (202) 586-6020, Monday-Friday: 9:00 a.m. to 4:00 p.m.
- U.S. Department of Energy, Idaho Operations Office, Public Reading Room, 1776 Science Center Drive, Idaho Falls, ID 83402, (208) 526-9162, Monday-Friday: 8:00 a.m. to 5:00 p.m.
- U.S. Department of Energy, Chicago Operations Office, Public Reading Room, University of Illinois at Chicago Library, Government Documents Section, 801 South Morgan Street, Chicago, IL 60607, (312) 996-2738, Monday-Friday: 8:00 a.m. to 10:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m.
- U.S. Department of Energy, Albuquerque Operations Office, Public Reading Room, National Atomic Museum, 20358 Wyoming Boulevard, SE, Albuquerque, NM 87185, (505) 845-4378, Monday-Friday: 9:00 a.m. to 5:00 p.m.
- U.S. Department of Energy, Nevada Operations Office, Public Reading Room, Coordination and Information Center, 3084 South Highland Drive, Las Vegas, NV 89106, (702) 295-0731, Monday-Friday: 7:00 a.m. to 4:00 p.m.
- U.S. Department of Energy, Fernald Field Office, Public Environmental Center, JANTER Building 10845, Hamilton-Cleves Highway, Harrison, OH 45030, (513) 738-0164, Monday, Thursday: 9:00 a.m. to 8:00 p.m., Tuesday, Wednesday, Friday: 9:00 a.m. to 4:30 p.m., Saturday: 9:00 a.m. to 1:00 p.m.
- U.S. Department of Energy, Savannah River Operations Office, Public Reading Room, Road 1A, Building 703A, D232, Aiken, SC 29802, (803) 725-1408, Monday-Thursday: 8:00 a.m. to 11:00 p.m., Friday: 8:00 a.m. to 5:00 p.m., Saturday: 10:00 a.m. to

5:00 p.m., Sunday: 2:00 p.m. to 11:00 p.m.

- U.S. Department of Energy, Oak Ridge Operations Office, Public Reading Room, 55 Jefferson Avenue, Oak Ridge, TN 37831, (615) 576-1216, Monday-Friday: 8:00 a.m. to 11:30 a.m. and 12:30 p.m. to 5:00 p.m.
- U.S. Department of Energy, Richland Operations Office, Public Reading Room, Washington State University Tri-Cities, 100 Sprout Road, Room 130W, Richland, WA 99352, (509) 376-8583, Monday-Friday: 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 4:00 p.m.

Navy Information Locations**Norfolk Naval Shipyard**

- Chesapeake Central Library, 298 Cedar Rd., Chesapeake, VA 23320-5512, (804) 436-8300, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Newport News Public Library, Grissom Branch, 366 Deshazor Dr., Newport News, VA 23602, (804) 886-7896, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 6:00 p.m.

- Kirn Library, 301 East City Hall Ave., Norfolk, VA 23510, (804) 441-2429, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday: 9:00 a.m. to 5:30 p.m., Saturday: 9:00 a.m. to 5:00 p.m.

- Hampton Public Library, 4207 Victoria Boulevard, Hampton, VA 23669, (804) 727-1154, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m.

- Portsmouth Public Library, Main Branch, 601 Court St., Portsmouth, VA 23704, (804) 393-8501, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m.

- Virginia Beach Central Library, 4100 Virginia Beach Blvd., Virginia Beach, VA 23452, (804) 431-3001, Monday-Thursday: 10:00 a.m. to 9:00 p.m., Friday-Saturday: 10:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.

Puget Sound

- Kitsap Regional Library, 1301 Sylvan Way, Bremerton, WA 98310, (206) 377-7601, Monday-Thursday: 9:30 a.m. to 9:00 p.m., Friday-Saturday: 9:30 a.m. to 5:30 p.m., Sunday: 12:30 p.m. to 5:30 p.m.

- Kitsap Regional Library, Downtown Branch, 612 5th Ave., Bremerton, WA 98310, (206) 377-3955, Monday-Friday: 10:00 a.m. to 6:00 p.m.

- Suzzallo Library, SM25, University of Washington Libraries, University of Washington, Seattle, WA 98185, (206)

543-9158, Monday-Thursday: 7:30 a.m. to 12:00 midnight, Friday: 7:30 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m. Sun. 12:00 p.m. to 12:00 midnight

Portsmouth Naval Shipyard

- Rice Public Library, 8 Wentworth St., Kittery, ME 03904, (207) 439-1553, Monday-Wednesday, Friday: 10:00 a.m. to 5:00 p.m., Thursday: 10:00 a.m. to 8:00 p.m., Saturday: 10:00 a.m. to 4:00 p.m.
- Portsmouth Public Library, 8 Islington St., Portsmouth, NH 03801, (804) 393-8501, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m.

Pearl Harbor

- Aiea Public Library, 99-143 Monalua Rd., Aiea, HI 96701, (808) 488-2654, Monday, Thursday: 10:00 a.m. to 8:00 p.m., Tuesday, Wednesday, Friday, Saturday: 10:00 a.m. to 5:00 p.m.
- Hawaii State Library, 478 S. King St., Honolulu, HI 96813, (808) 586-3535, Monday, Wednesday, Friday, Saturday: 9:00 a.m. to 5:00 p.m., Tuesday, Thursday: 9:00 a.m. to 8:00 p.m.

- Pearl City Public Library, 1138 Waimano Home Rd., Pearl City, HI 96782, (808) 455-4134, Monday-Wednesday: 10:00 a.m. to 8:00 p.m., Thursday-Saturday: 10:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Pearl Harbor Naval Base Library, Code 90L, 1614 Makalapa Dr., Pearl Harbor, HI 96860-5350, (808) 471-8238, Tuesday-Thursday: 10:00 a.m. to 7:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m.

Kesselring Site

- Albany Public Library, Reference and Adult Services, 161 Washington Ave., Albany, NY 12210, (518) 449-3380, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday: 9:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m.
- Saratoga Springs Public Library, 320 Broadway, Saratoga Springs, NY 12866, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday: 9:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Schenectady County Library, 99 Clinton St., Schenectady, NY 12305, (518) 388-4511, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 5:00 p.m.

Other Information Locations

- Main Library, University of Arizona, Tucson, AZ 85721, (602) 621-6433, School Hours: Sunday-Thursday: 8:00 a.m. to 1:00 a.m., Friday-

- Saturday: 9:00 a.m. to 5:00 p.m., Summer Hours: Monday–Thursday: 7:30 a.m. to 11:00 p.m., Friday: 7:30 a.m. to 6:00 p.m., Saturday: 10:00 a.m. to 8:00 p.m., Sunday: 12:00 noon to 11:00 p.m.
- Main Library, University of California at Irvine, Government Publications Receiving Dock, Irvine, CA 92717, (714) 856-7290, School Hours: Monday–Thursday: 8:00 a.m. to 7:00 p.m., Friday: 8:00 a.m. to 5:00 p.m., Saturday–Sunday: 1:00 p.m. to 5:00 p.m. Summer Hours: Monday–Friday: 8:00 a.m. to 5:00 p.m., Saturday–Sunday: 1:00 p.m. to 5:00 p.m.
- Pleasanton Public Library—Reference Desk, 400 Old Bernal Avenue, Pleasanton, CA 94566, (510) 462-3535, Monday, Tuesday: 1:00 p.m. to 8:00 p.m., Wednesday, Thursday: 10:00 a.m. to 6:00 p.m., Saturday: 2:00 p.m. to 6:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- San Diego Public Library, 820 "E" Street, San Diego, CA 92101 (619) 236-5867, Monday–Thursday: 10:00 a.m. to 9:00 p.m., Friday–Saturday: 9:30 a.m. to 5:30 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Denver Public Library, 1357 Broadway, Denver, CO 80203, (303) 640-8845, Monday–Wednesday: 10:00 a.m. to 9:00 p.m., Thursday–Saturday: 10:00 a.m. to 5:30 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- George A. Smathers Libraries, Library West, University of Florida Library, Room 241, P.O. Box 117001, Gainesville, FL 32611-7001, (904) 392-0367, Monday–Thursday: 8:00 a.m. to 9:30 p.m., Friday: 8:00 a.m. to 5:00 p.m. Sunday: 2:30 p.m. to 9:30 p.m.
- Atlanta Public Library, 1 Margaret Mitchell Square, Atlanta, GA 30303, (404) 730-1700, Monday: 9:00 a.m. to 6:00 p.m., Tuesday–Thursday: 9:00 a.m. to 8:00 p.m., Friday: 9:00 a.m. to 5:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m.
- Reese Library, Augusta College, 2500 Walton Way, Augusta, GA 30904-2200, (706) 737-1744, School Hours: Monday–Thursday: 7:45 a.m. to 10:30 p.m., Friday: 7:45 a.m. to 5:00 p.m.; Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:30 p.m. to 9:30 p.m.; Summer Hours: Monday–Friday: 8:00 a.m. to 5:00 p.m.
- Chatham-Effingham-Liberty Regional Library, 2002 Bull Street, Savannah, GA 31401, (912) 234-5127, Monday–Thursday: 9:00 a.m. to 9:00 p.m., Friday: 9:00 a.m. to 6:00 p.m., Saturday: 10:00 a.m. to 6:00 p.m.
- Parks Library, Iowa State University, Government Publications Department, Ames, IA 50011-2140, (515) 294-3642, School Hours: Monday–Thursday: 7:30 a.m. to 12:00 midnight, Friday: 7:30 a.m. to 10:00 p.m., Saturday: 10:00 a.m. to 10:00 p.m., Sunday: 12:30 p.m. to 12:00 midnight; Summer Hours: Monday–Thursday: 7:30 a.m. to 10:00 p.m., Friday: 7:30 a.m. to 5:00 p.m., Saturday: 12:30 p.m. to 5:00 p.m., Sunday: 12:30 p.m. to 10:00 p.m.
- Boise Public Library, 715 South Capitol Boulevard, Boise, ID 83702, (208) 384-4023, Monday, Friday: 10:00 a.m. to 6:00 p.m., Tuesday–Thursday: 10:00 a.m. to 9:00 p.m.; Saturday: 1:00 p.m. to 5:00 p.m.
- Idaho Department of Health and Welfare, Idaho National Engineering Laboratory Oversight Program Library, 1410 North Hilton, Boise, ID 83706, (208) 334-0498, Monday–Friday: 8:00 a.m. to 5:00 p.m.
- Idaho State Library, 325 West State Street, Boise, ID 83702, (208) 334-2152, Monday–Friday: 9:00 a.m. to 5:00 p.m.
- Shoshone-Bannock Library, Bannock and Pima Streets, HRDC Building, Fort Hall, ID 83203, (208) 238-3882, Monday–Friday: 8:00 a.m. to 4:30 p.m.
- Idaho Falls Public Library, 457 Broadway, Idaho Falls, ID 83402, (208) 529-1462, Monday–Thursday: 8:00 a.m. to 7:00 p.m., Friday: 8:00 a.m. to 5:00 p.m., Saturday: 9:00 a.m. to 1:00 p.m.
- University of Idaho Library, Rayburn Street, Moscow, ID 83844-2353, (208) 885-6344, Monday–Friday: 8:00 a.m. to 12:00 midnight, Saturday: 9:00 a.m. to 12:00 midnight, Sunday: 10:00 a.m. to 12:00 midnight
- Pocatello Public Library, 812 East Clark Street, Pocatello, ID 83201, (208) 232-1263, Monday–Thursday: 10:00 a.m. to 9:00 p.m., Friday–Saturday: 10:00 a.m. to 6:00 p.m.
- Twin Falls Public Library, 434 Second Street East, Twin Falls, ID 83301, (208) 733-2964, Monday–Thursday: 10:00 a.m. to 6:00 p.m., Friday: 10:00 a.m. to 5:00 p.m., Saturday: 12:00 noon to 5:00 p.m.
- Main Library, Third Floor, University of Illinois, 801 South Morgan, Mail Code 234, Chicago, IL 60607, (312) 413-2594, Monday–Thursday: 7:30 a.m. to 10:00 p.m., Friday: 7:30 a.m. to 5:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m.; Sunday: 1:00 p.m. to 9:00 p.m.
- Documents Library, 200-D, University of Illinois, 1408 W. Gregory Drive, Urbana, IL 61801, (217) 244-2060, School Hours: Monday–Thursday: 8:00 a.m. to 12:00 midnight, Friday: 8:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 1:00 p.m. to 12:00 midnight Summer Hours: Monday–Thursday: 8:00 a.m. to 9:00 p.m., Friday: 8:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Engineering Library, Purdue University, West Lafayette, IN 47907, (317) 494-2871, School Hours: Monday–Friday: 8:00 a.m. to 12:00 midnight, Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 12:00 noon to 12:00 midnight Summer Hours: Monday–Friday: 8:00 a.m. to 8:00 p.m.
- Manhattan Public Library, Juliette and Poyntz, Manhattan, KS 66502, (913) 776-4741, Monday–Friday: 9:00 a.m. to 9:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 2:00 p.m. to 6:00 p.m.
- Massachusetts Institute of Technology, Science Library, 160 Memorial Drive Building 14, Cambridge, MA 02139, (617) 253-5685, Monday–Thursday: 8:00 a.m. to 12:00 midnight, Friday, Saturday: 8:00 a.m. to 8:00 p.m.; Sunday: 12:00 noon to 12:00 midnight
- O'Leary Library, University of Massachusetts, 1 University Ave, Lowell, MA 01854, (508) 934-3205, School Hours: Monday–Thursday: 7:30 a.m. to 11:00 p.m., Friday: 7:30 a.m. to 5:00 p.m.; Saturday: 10:00 a.m. to 6:00 p.m., Summer Hours: Monday–Friday: 8:30 a.m. to 9:00 p.m., Sunday: 2:00 p.m. to 7:00 p.m.
- Worcester Public Library, 3 Salem Square, Worcester, MA 01608, (508) 799-1655, Monday, Wednesday: 12:00 noon to 9:00 p.m., Tuesday: 10:00 a.m. to 9:00 p.m., Thursday–Saturday: 10:00 a.m. to 5:30 p.m.
- Bethesda Public Library, 7400 Arlington Road, Bethesda, MD 20814, (301) 986-4300, Monday–Thursday: 10:00 a.m. to 8:30 p.m., Friday: 10:00 a.m. to 5:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Gaithersburg Regional Library, 18330 Montgomery Village Avenue, Gaithersburg, MD 20879, (301) 840-2515, Monday–Thursday: 10:00 a.m. to 8:30 p.m., Friday: 10:00 a.m. to 5:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Hyattsville Public Library, 6530 Adelphi Road, Hyattsville, MD 20782, (301) 779-9330, Monday–Thursday: 10:00 a.m. to 9:00 p.m., Friday: 10:00 a.m. to 6:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Ann Arbor Public Library, 343 South 5th Avenue, Ann Arbor, MI 48104, (313) 994-2333, Monday: 10:00 a.m. to 9:00 p.m., Tuesday–Friday: 9:00 a.m. to 9:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.

- Zanhow Library, Saginaw Valley State University, 7400 Bay Road, University Center, MI 48710, (517) 790-4240, School Hours: Monday-Thursday: 8:00 a.m. to 11:00 p.m., Friday: 8:00 a.m. to 4:30 p.m.; Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 9:00 p.m.; Summer Hours: Monday-Thursday: 8:00 a.m. to 10:30 p.m., Friday: 8:00 a.m. to 4:30 p.m., Saturday: 10:00 a.m. to 2:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Ellis Library, University of Missouri, Columbia, MO 65201, (314) 882-0748, School Hours: Monday-Thursday: 7:30 a.m. to 12:00 midnight, Friday: 7:30 a.m. to 11:00 p.m., Saturday: 9:00 a.m. to 9:00 p.m., Sunday: 12:00 noon 1:00 a.m.; Summer Hours: Monday, Thursday: 8:00 a.m. to 8:00 p.m., Tuesday-Friday: 8:00 a.m. to 5:00 p.m., Saturday: 12:00 noon to 5:00 p.m.
- Curtis Laws Wilson Library, University of Missouri Library, Rolla, MO 65401-0249, (314) 341-4227, School Hours: Monday-Thursday: 8:00 a.m. to 12:00 midnight, Friday: 8:00 a.m. to 10:30 p.m., Saturday: 8:00 a.m. to 5:00 p.m., Sunday: 2:00 p.m. to 12:00 midnight; Summer Hours: Monday-Friday: 8:00 a.m. to 10:00 p.m., Saturday: 8:00 a.m. to 5:00 p.m., Sunday: 2:00 p.m. to 10:00 p.m.
- D.H. Hill Library, North Carolina State University, P.O. Box 7111, Raleigh, NC 27695-7111, (919) 515-3364, School Hours: Monday-Thursday: 7:00 a.m. to 1:00 a.m., Friday: 7:00 a.m. to 6:00 p.m.; Saturday: 9:30 a.m. to 5:30 p.m., Sunday: 1:00 p.m. to 1:00 a.m. Summer Hours: Monday-Thursday: 7:00 a.m. to 11:00 p.m., Friday: 7:00 a.m. to 6:00 p.m., Saturday: 9:30 a.m. to 5:30 p.m., Sunday: 1:00 p.m. to 11:00 p.m.
- Omaha Public Library, 215 S. 15th Street, Omaha, NE 68102, (402) 444-4800, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday, Saturday: 9:00 a.m. to 5:30 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- General Library, University of New Mexico, Albuquerque, NM 87131-1466, (505) 277-5441, School Hours: Monday-Thursday: 8:00 a.m. to 9:00 p.m., Friday: 8:00 a.m. to 5:00 p.m.; Saturday: 1:00 p.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.; Summer Hours: Monday-Friday: 8:00 a.m. to 6:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m.
- U.S. DOE Community Reading Room, 1450 Central Avenue, Suite 101, MS C314, Los Alamos, NM 87544, (505) 665-2127, Monday-Friday: 8:00 a.m. to 5:00 p.m.
- Lockwood Library, State University of New York-Buffalo, Buffalo, NY 14260-2200, (716) 645-2816, School Year: Monday-Thursday: 8:00 a.m. to 10:45 p.m., Friday: 8:00 a.m. to 9:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 10:45 p.m. Summer Hours: Monday, Wednesday, Thursday, Friday: 9:00 a.m. to 6:00 p.m., Tuesday: 9:00 a.m. to 10:00 p.m., Sunday: 1:00 p.m. to 9:00 p.m.
- Engineering Library, Cornell University, Carpenter Hall, Main Floor, Ithaca, NY 14853, (607) 255-5762, School Hours: Monday-Thursday: 8:00 a.m. to 11:00 p.m., Friday: 8:00 a.m. to 6:00 p.m.; Saturday: 10:00 a.m. to 6:00 p.m., Sunday: 12:00 p.m. to 11:00 p.m.; Summer Hours: Monday-Friday: 8:00 a.m. to 6:00 p.m., Saturday: 12:00 p.m. to 6:00 p.m.
- Cardinal Hayes Library, Manhattan College, 4531 Manhattan College Parkway, Riverdale, NY 10471, (718) 920-0100, School Hours: Monday-Thursday: 8:00 a.m. to 11:00 p.m., Friday: 8:00 a.m. to 6:30 p.m., Saturday: 10:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 11:00 p.m.; Summer Hours: Monday-Friday: 8:30 a.m. to 6:30 p.m.
- Brookhaven National Laboratory, 25 Brookhaven Avenue, Building 477 A, P.O. Box 5000, Upton, NY 11973-5000, (516) 282-3489, Monday-Friday 8:30 a.m. to 9:00 p.m., Saturday-Sunday: 10:00 a.m. to 6:00 p.m.
- Columbus Metropolitan Library, 96 South Grant Avenue, Columbus, OH 43215, (614) 645-2710, Monday-Thursday: 9:00 a.m. to 9:00 p.m., Friday-Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.
- Kerr Library, Oregon State University, Corvallis, OR 97331-4905, (503) 737-0123, Monday-Friday: 7:45 a.m. to 2:00 a.m., Saturday-Sunday: 10:00 a.m. to 2:00 a.m.; Summer Hours: Monday-Friday: 7:45 a.m. to 9:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m.; Sunday: 10:00 a.m. to 9:00 p.m.
- Brantford Price Millar Library, Portland State University, 934 S.W. Harrison, Portland, OR 97201, (503) 725-4617, Monday-Friday: 8:00 a.m. to 10:00 p.m., Saturday: 10:00 a.m. to 10:00 p.m., Sunday: 11:00 a.m. to 10:00 p.m.
- Pattee Library, Pennsylvania State University, University Park, PA 16801, (814) 865-2112, School Hours: Monday-Thursday: 8:00 a.m. to 12:00 midnight, Friday: 8:00 a.m. to 10:00 p.m., Saturday: 8:00 a.m. to 9:00 p.m., Sunday: 1:00 p.m. to 12:00 midnight, Summer Hours: Monday-Thursday: 7:45 a.m. to 10:00 p.m., Friday: 7:45 a.m. to 9:00 p.m., Saturday: 8:00 a.m. to 9:00 p.m., Sunday: 1:00 p.m. to 10:00 p.m.
- Narragansett Public Library, 35 Kingston Road, Narragansett, RI 02882, (401) 789-9507, Monday: 10:00 a.m. to 9:00 p.m., Tuesday-Friday: 10:00 a.m. to 6:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m. (Saturday hours September to May only)
- Charleston County Main Library, 404 King Street, Charleston, SC 29403, (803) 723-1645, Monday-Thursday: 9:30 a.m. to 9:00 p.m., Friday-Saturday: 9:30 a.m. to 6:00 p.m., Sunday: 2:00 p.m. to 6:00 p.m.
- South Carolina State Library, 1500 Senate Street, Columbia, SC 29201, (803) 734-8666, Monday-Friday: 8:15 a.m. to 5:30 p.m., Saturday: 9:00 a.m. to 1:00 p.m.
- Clinton Public Library, 118 South Hicks Street, Clinton, TN 37716, (615) 457-0519, Monday, Thursday: 10:00 a.m. to 8:00 p.m., Tuesday, Wednesday, Friday, Saturday: 10:00 a.m. to 5:00 p.m.
- Harriman Public Library, 601 Walden Street, Harriman, TN 37748, (615) 882-3195, Monday-Thursday: 9:00 a.m. to 5:00 p.m., Friday-Saturday: 9:00 a.m. to 1:00 p.m.
- Kingston Public Library, 1000 Bradford Way Building #3, Kingston, TN 37763, (615) 376-9905, Monday, Thursday: 10:00 a.m. to 7:30 p.m., Tuesday, Wednesday, Friday: 10:00 a.m. to 5:30 p.m., Saturday: 10:00 a.m. to 2:00 p.m.
- Lawson McGhee Public Library, 500 West Church Avenue, Knoxville, TN 37902, (615) 544-5750, Monday-Thursday: 9:00 a.m. to 8:30 p.m., Friday: 9:00 a.m. to 5:30 p.m., Saturday-Sunday: 1:00 p.m. to 5:00 p.m.
- Oak Ridge Public Library, Civic Center, Oak Ridge, TN 37830, (615) 482-8455, Monday-Thursday: 10:00 a.m. to 9:00 p.m., Friday: 10:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 2:00 p.m. to 6:00 p.m.
- Oliver Springs Public Library, 607 Easterbrook Avenue, Oliver Springs, TN 37840, (615) 435-2509, Tuesday-Thursday: 2:00 p.m. to 4:00 p.m., Saturday: 9:00 a.m. to 12:00 midnight
- Rockwood Public Library, 117 North Front Avenue, Rockwood, TN 37854, (615) 354-1281, Monday, Wednesday, Friday, Saturday: 10:00 a.m. to 5:00 p.m., Tuesday, Thursday: 10:00 a.m. to 8:00 p.m.
- General Library, University of Texas, PCL 2.402X, Austin, TX 78713, (512) 495-4262, School Hours: Monday-Friday: 8:00 a.m. to 2:00 a.m., Saturday: 9:00 a.m. to 2:00 a.m.; Sunday: 12:00 p.m. to 2:00 a.m.; Summer Hours: Monday-Friday: 8:00 a.m. to 10:00 p.m., Saturday: 9:00 a.m.

to 10:00 p.m., Sunday: 12:00 noon to 10:00 p.m.

Evans Library, Texas A&M University, MS 5000, College Station, TX 77843-5000, (409) 845-8850, School Hours: Monday-Thursday: 7:00 a.m. to 12:00 midnight, Friday: 7:00 a.m. to 10:00 p.m., Saturday: 9:00 a.m. to 10:00 p.m., Sunday: 12:00 noon to 10:00 p.m., Summer Hours: Monday-Thursday: 7:00 a.m. to 11:00 p.m., Friday: 7:00 a.m. to 7:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 11:00 p.m.

Mariott Library, University of Utah, Salt Lake City, UT 84112, (801) 581-8394, School Hours: Monday-Thursday: 7:00 a.m. to 11:00 p.m., Friday: 7:00 a.m. to 5:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 11:00 a.m. to 9:00 p.m., Summer Hours: Monday-Thursday: 7:00 a.m. to 10:00 p.m., Friday: 7:00 a.m. to 5:00 p.m., Saturday: 9:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.

Alderman Library, University of Virginia, Charlottesville, VA 22903-2498, (804) 924-3133, School Hours: Monday-Thursday: 8:00 a.m. to 12:00 midnight, Friday: 8:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 12:00 p.m. to 12:00 midnight Summer Hours: Monday-Thursday: 8:00 a.m. to 10:00 p.m., Friday: 8:00 a.m. to 6:00 p.m., Saturday: 9:00 a.m. to 6:00 p.m., Sunday: 2:00 p.m. to 10:00 p.m.

Owen Science & Engineering Library, Washington State University, Pullman, WA 99164-3200, (509) 335-4181, School Hours: Monday-Thursday: 8:00 a.m. to 11:00 p.m., Friday: 8:00 a.m. to 9:00 p.m., Saturday: 12:00 noon to 9:00 p.m., Sunday: 12:00 noon to 11:00 p.m.; Summer Hours: Monday, Thursday: 7:30 a.m. to 11:00 p.m., Tuesday, Wednesday, Friday: 7:30 a.m. to 6:00 p.m., Saturday-Sunday: 12:00 noon to 6:00 p.m.

Foley Center, Gonzaga University, East 502 Boone Avenue, Spokane, WA 99258, (509) 328-4220, extension 3125, School Hours: Monday-Thursday: 8:00 a.m. to 12:00 midnight, Friday-Saturday: 8:00 a.m. to 9:00 p.m., Sunday: 11:00 a.m. to 12:00 midnight, Summer Hours: Monday-Friday: 8:00 a.m. to 9:00 p.m., Saturday: 10:00 a.m. to 6:00 p.m., Sunday: 1:00 p.m. to 7:00 p.m.

Madison Public Library, 201 W. Mifflin Street, Madison, WI 53703, (608) 266-6350, Monday-Wednesday: 8:30 a.m. to 9:00 p.m., Thursday-Friday: 8:30 a.m. to 5:30 p.m., Saturday: 9:00 a.m. to 5:30 p.m.

Teton County Public Library, 320 South King Street, Jackson, WY 83001, (307) 733-2164, Monday, Wednesday, Friday: 10:00 a.m. to 5:30 p.m., Tuesday, Thursday: 10:00 a.m. to 9:00 p.m., Saturday: 10:00 a.m. to 5:00 p.m., Sunday: 1:00 p.m. to 5:00 p.m.

Issued in Washington, DC on August 12, 1994.

John J. Jicha, Jr.,

Director, Office of Spent Fuel Management, Office of Waste Management, Office of Environmental Management.

[FR Doc. 94-20206 Filed 8-16-94; 8:45 am]

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Federal Energy Regulatory Commission

[Docket No. EC94-23-000, et al.]

The Washington Water Power Company and Sierra Pacific Power Company, et al.; Electric Rate and Corporate Regulation Filings

August 9, 1994.

Take notice that the following filings have been made with the Commission:

1. The Washington Water Power Company and Sierra Pacific Power Company

[Docket No. EC94-23-000]

Take notice that on August 4, 1994, The Washington Water Power Company (Water Power) and Sierra Pacific Power Company (Sierra Power) (together Applicants) filed, pursuant to Section 203 of the Federal Power Act and Part 33 of the Commission's Regulations, a Joint Application requesting authorization to merge and reorganize Applicants' utility operations and to dispose of Applicants' jurisdictional facilities.

Pursuant to an Agreement and Plan of Reorganization and Merger, Sierra Pacific Resources Inc., Sierra Pacific and Water Power will merge into a new corporation, Resources West Energy Corporation (Resources West) and Water Power and Sierra Pacific will operate as separate utility divisions of Resource West. The subsidiaries of Water Power and Sierra Pacific Resources (excluding Sierra Pacific, but including Sierra Pacific's subsidiaries) will become subsidiaries of Resources West. The merger will be effected through an exchange of stock, with Sierra Pacific Resources and Water Power shareholders exchanging their shares for the right to receive shares in Resources West.

Applicants have submitted the direct testimony of nine witnesses who provide, *inter alia*, a description of the

merger, the projected benefits for ratepayers and shareholders, an explanation of how Resources West will provide comparable service to customers, and an analysis of the effects of the merger on competition in the relevant markets. Applicants also have submitted *pro forma* open-access point-to-point transmission and network integration service tariffs for Resources West's Water Power and Sierra Pacific Divisions which provide a range of flexible services at rates, terms and conditions designed to be comparable to Resources West's use of Applicants' systems.

Applicants have requested, in a companion motion, that the Commission adopt an alternative procedural mechanism to expedite consideration of the Joint Application by providing for discovery and a technical conference, followed by a paper hearing if necessary.

Copies of the Joint Application have been served on the state utility regulatory commissions in Washington, Idaho, Oregon, Montana, Nevada and California.

Comment date: September 9, 1994, in accordance with Standard Paragraph E at the end of this notice.

2. North Carolina Electric Membership Corporation v. Carolina Power & Light Company

[Docket No. EL94-84-000]

Take notice that on August 1, 1994, North Carolina Electric Membership Corporation (NCEMC) and Brunswick Electric Membership Corporation (Brunswick) tendered for filing a complaint against Carolina Power & Light Company (CP&L) requesting the initiation of an investigation to determine whether CP&L's present rates for wholesale firm power to the cooperatives served under FERC Resale Service Schedule RS88-1C, are unjust, unreasonable and unduly discriminatory and, if so, to modify those rates to a just, reasonable and unduly discriminatory and, if so, to modify those rates to a just, reasonable level. NCEMC and Brunswick also request the Commission to set a refund effective date at the earliest date permitted by law.

Comment date: September 8, 1994, in accordance with Standard Paragraph E at the end of this notice.

3. PSI Energy, Inc.

[Docket No. ER93-700-001]

Take notice that on August 1, 1994, PSI Energy, Inc. tendered for filing its compliance filing in the above-referenced docket pursuant to the

Commission's Letter Order issued on July 1, 1994.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

4. Delmarva Power & Light Company

[Docket Nos. ER93-96-005 and EL93-11-002]

Take notice that on August 2, 1994, Delmarva Power & Light Company tendered for filing its compliance refund report in the above referenced dockets.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

5. Kentucky Utilities Company

[Docket No. ER94-209-001]

Take notice that Kentucky Utilities Company (KU) on July 19, 1994, amended its filing on June 1, 1994, in this docket to substitute a revised Exhibit II, Service Schedule B.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

6. Nevada Power Company

[Docket No. ER94-404-000]

Take notice that on July 19, 1994, Nevada Power Company tendered for filing an amendment to its December 23, 1993, filing in the above-referenced docket.

Comment date: August 19, 1994, in accordance with Standard Paragraph E at the end of this notice.

7. Public Service Company of Oklahoma

[Docket No. ER94-1036-000]

Take notice that on July 13, 1994, the Public Service Company of Oklahoma tendered for filing an amendment in the above-referenced docket.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

8. Madison Gas & Electric Company

[Docket No. ER94-1147-000]

Take notice that on July 27, 1994, Madison Gas & Electric Company tendered for filing an amendment in the above-referenced docket.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

9. Consolidated Edison Company of New York, Inc.

[Docket No. ER94-1267-000]

Take notice that on August 3, 1994, Consolidated Edison Company of New York, Inc. (Con Edison) tendered for filing additional material relating to an agreement to provide interruptible

transmission service for the Power Authority of the State of New York (Power Authority).

Con Edison states that a copy of this filing has been served by mail upon the Power Authority.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

10. Northern States Power Company (Minnesota)

[Docket No. ER94-1324-000]

Take notice that on July 27, 1994, Northern States Power Company tendered for filing an amendment in the above-referenced docket.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

11. Northern States Power Company

[Docket No. ER94-1341-000]

Take notice that on July 27, 1994, Northern States Power Company tendered for filing an amendment in the above-referenced docket.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

12. Central Power and Light Company

[Docket No. ER94-1344-000]

Take notice that on August 4, 1994, Central Power and Light Company (CP&L) tendered for filing an amendment to its June 10, 1994, filing of proposed Wholesale Riders 6 and 7 to its FERC Electric Tariff.

Copies of the filing have been served on the tariff customers and the Public Utility Commission of Texas.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

13. PacifiCorp

[Docket No. ER94-1361-000]

Take notice that on August 1, 1994, PacifiCorp, tendered for filing, in accordance with § 35 of the Commission's Rules and Regulations, an amendment to its filing dated June 14, 1994. This amended filing has been prepared to correct the identified names and/or addresses of Chicago Energy Exchange of Chicago, Inc.; LG&E Power Marketing Inc.; Torco Energy Marketing, Inc.; and Vesta Energy Alternatives Company and to revise the Tariff in preparation for future sales to Independent Power Marketers. Also, PacifiCorp has included fully executed Service Agreements with Enron Power Marketing, Inc. and North American Energy Conservation, Inc. which were previously filed with the Commission as unexecuted Service Agreements.

PacifiCorp respectfully renews its request pursuant to § 35.11 of the Commission's Rules and Regulations, that a waiver of prior notice be granted and that these Service Agreements and Tariff revisions be accepted for filing effective on June 1, 1994.

Copies of this filing were supplied to the Public Utility Commission of Oregon.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

14. Puget Sound Power & Light Company

[Docket No. ER94-1494-000]

Take notice that on July 27, 1994, Puget Sound Power & Light Company (Puget) tendered for filing the Agreement for Purchase and Sale of Power (the Agreement), dated as of August 1, 1994, between Puget and Public Utility District No. 1 of Douglas County (the District).

Puget states that the Agreement relates to the sale and purchase of on-peak capacity and associated energy and the off-peak return of energy. A copy of the filing was served upon the District.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

15. Indiana Michigan Power Company

[Docket No. ER94-1495-000]

Take notice that on July 27, 1994, Indiana Michigan Power Company (AEPSC), tendered for filing as an initial rate schedule on behalf of Indiana Michigan Power Company (I&M), a Network Transmission and Interchange Agreement between I&M and Wabash Valley Power Association, Inc. (WVPA).

The Network Transmission and Interchange Agreement provides WVPA more flexible and lower cost transmission service as an alternative to that provided by a 1988 Settlement Agreement, and permits coordination transactions between the parties.

Copies of the filing were served upon WVPA, the Indiana Utility Regulatory Commission and the Michigan Public Service Commission.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

16. Entergy Power, Inc.

[Docket No. ER94-1496-000]

Take notice that Entergy Power, Inc. (Entergy Power), on July 27, 1994, tendered for filing a Second Amendment to a unit power sales agreement between Entergy Power and East Texas Electric Cooperative, Inc. Entergy Power requests waiver of the

Commission's cost support and notice requirements under Section 35.12 or 35.13 of the Commission's Regulations, to the extent they are otherwise applicable to this filing.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

17. Boston Edison Company

[Docket No. ER94-1509-000]

Take notice that on July 29, 1994, Boston Edison Company (Edison) filed a letter agreement between itself and Montaup Electric Company (Montaup) concerning the contract (Boston Edison Rate Schedule No. 69) under which Montaup has an 11% entitlement in Edison's Pilgrim nuclear power plant, the 1992 billings to Montaup under that contract, and Docket No. EL94-73-000. The letter agreement provides that Boston Edison will apply the results of the Docket No. EL94-73-00 litigation or any settlement of that proceeding to Montaup. The letter agreement makes no other changes to the rates, terms, and conditions of the affected Pilgrim contract.

Edison states that it has served copies of this filing upon each of the affected customers and upon three other Pilgrim power purchasers: Reading Municipal Light Department, Commonwealth Electric Company and the thirteen Massachusetts municipal electric systems who have Pilgrim unit power purchase contracts.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

18. Public Service Company of New Hampshire

[Docket No. ER94-1512-000]

Take notice that on August 1, 1994, Public Service Company of New Hampshire (PSNH) tendered for filing an amendment (the Amendment) that would reduce rates and make other changes to the Partial Requirements Resale Service Agreement, designated as PSNH FERC Electric Rate Schedule No. 142 (the Partial Requirements Agreement), between PSNH and the New Hampshire Electric Cooperative, Inc. (the NHEC). The parties have requested an effective date for the Amendment of October 1, 1994.

PSNH states that the Amendment would make three changes to the Partial Requirements Agreement: (i) it would reduce the amount of power the NHEC is required to purchase under the Partial Requirements Agreement in order to account for a separate power transfer agreement between the parties; (ii) it would reduce wholesale power rates to

the NHEC for power resold to certain of the NHEC's customers or under certain of the NHEC's regulatory-approved demand-side management programs; and (iii) it would modify record keeping requirements and audit rights to reflect the amended arrangements.

PSNH further states that copies of the filing were served upon both parties to the Partial Requirements Agreement.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

19. Public Service Company of New Hampshire

[Docket No. ER94-1513-000]

Take notice that on August 1, 1994, Public Service Company of New Hampshire (PSNH) tendered for filing an Interruptible Power Supply Service Agreement (Interruptible Agreement) between PSNH and the New Hampshire Electric Cooperative, Inc. (the NHEC). PSNH requests that the Commission permit the Interruptible Agreement to become effective October 1, 1994.

PSNH states that power sold to the NHEC under the Interruptible Agreement will replace higher-priced, higher-quality service that PSNH now provides to the NHEC under another rate schedule. Accordingly, the Interruptible Agreement will effectively reduce overall purchased power costs to be paid by the NHEC.

PSNH further states that a copy of the filing was served upon the NHEC. In addition, PSNH also served a copy of the filing upon the New Hampshire Public Utilities Commission.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

20. Public Service Company of Colorado

[Docket No. ER94-1514-000]

Take notice that on August 1, 1994, Public Service Company of Colorado tendered for filing an amendment to its FERC Electric Service Rate Schedule, FERC No. 47. Under the proposed amendment Public Service is seeking to revise the points of delivery and levels of power and energy delivered for the Western Area Power Administration. This amendment will have no impact on the rates for service under this agreement.

Public Service requests an effective date of August 1, 1994, for the proposed amendment.

Copies of the filing were served upon the Western Area Power Administration Loveland Area Office, and state jurisdictional regulators which include the Public Utilities Commission of the

State of Colorado and the State of Colorado Office of Consumer Counsel.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice

21. The Montana Power Company

[Docket No. ER94-1515-000]

Take notice that on August 1, 1994, The Montana Power Company (Montana) tendered for filing with the Federal Energy Regulatory Commission as an initial rate schedule pursuant to 18 CFR 35.13 a supplement to Rate Schedule FERC No. 027; a Contribution in Aid of Construction Letter Agreement (Agreement) between Montana, PacifiCorp and Idaho Power Company (Idaho) dated June 30, 1994.

Montana states that the Agreement relates to relaying equipment installed for the improved operation of the 230 kV "AMPS" transmission line.

A copy of the filing was served upon PacifiCorp and Idaho, Administration.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

22. PSI Energy, Inc.

[Docket No. ER94-1517-000]

Take notice that PSI Energy, Inc. (PSI) on August 1, 1994, tendered for filing an Interchange Agreement, dated July 1, 1994, between PSI and Rainbow Energy Marketing Corporation (REMC).

The Interchange Agreement provides for the following service between PSI and REMC:

1. Exhibit A—Power Sales by REMC
2. Exhibit B—Power Sales by PSI

Copies of the filing were served on Rainbow Energy Marketing Corporation, North Dakota Public Service Commission and the Indiana Utility Regulatory Commission.

Comment date: August 23, 1994, in accordance with Standard Paragraph E at the end of this notice.

23. Commonwealth Electric Company

[Docket No. ER94-1518-000]

Take notice that on August 1, 1994, Commonwealth Electric Company (Commonwealth) filed, under Section 205 of the Federal Power Act, its proposed FERC Electric Tariff, Original Volume No. 1, Tariff for Firm Transmission Service which Commonwealth proposes to become effective on September 30, 1994. The proposed tariff would provide firm transmission service over Commonwealth's transmission facilities providing the same priority as Commonwealth's firm service to its native load customers.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

24. Massachusetts Electric Company

[Docket No. ER94-1525-000]

Take notice that on August 2, 1994, Massachusetts Electric Company tendered for filing a Certificate of Cancellation of power sales to 13 specified locations of the Massachusetts Bay Transportation Authority.

Comment date: August 24, 1994, in accordance with Standard Paragraph E at the end of this notice.

Standard paragraphs:

E. Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 18 CFR 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,
Secretary

[FR Doc. 94-20097 Filed 8-16-94; 8:45 am]
BILLING CODE 6717-01-P

[Docket No. GP94-10-000]

Railroad Commission of Texas Tight Formation Area Determinations Vicksburg Formation; Notice of Informal Conference

August 11, 1994.

M Sand (Texas-112) FERC# JD93-04541T
R Sand (Texas-113) FERC# JD93-04589T
S Sand (Texas-114) FERC# JD93-04590T
T Sand (Texas-115) FERC# JD93-04591T

Take notice that on informal conference will be convened in the above referenced proceedings on Friday, August 19, 1994, at 1:00 PM. The conference will be held in Room No. 3400-C, at the offices of the Federal Energy Regulatory Commission, at 825 North Capitol Street, N.E., Washington, D.C. 20426.

For further information, contact Marilyn Rand, Deputy Director, Division

of Pipeline Certificates, at (202) 208-0444.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20098 Filed 8-16-94; 8:45 am]
BILLING CODE 6717-01-M

[Project No. 11278-001]

Iowa Hydropower Development Corp.; Notice of Surrender of Preliminary Permit

August 11, 1994.

Take notice that the Iowa Hydropower Development Corporation, permittee for the Mississippi River Lock & Dam #15 Project No. 11278, located on the Mississippi River, Scott County, Iowa, and Rock Island County, Illinois, has requested that its preliminary permit be terminated. The preliminary permit was issued on August 6, 1992, and would have expired on July 31, 1995. The permittee states that the project would be economically infeasible.

The permittee filed the request on July 13, 1994, and the preliminary permit for Project No. 11278 shall remain in effect through the thirtieth day after issuance of this notice unless that day is a Saturday, Sunday or holiday as described in 18 CFR 335.2007, in which case the permit shall remain in effect through the first business day following that day. New applications involving this project site, to the extent provided for under 18 CFR part 4, may be filed on the next business day.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20099 Filed 8-16-94; 8:45 am]
BILLING CODE 6717-01-M

Project No. 11375-001 Kansas

Tuttle Creek Hydro Associates; Notice of Surrender of Preliminary Permit

August 11, 1994.

Take notice that the Tuttle Creek Hydro Associates, permittee for the Tuttle Creek Project No. 11375, located on the Big Blue River, in Riley and Pottawatomie Counties, Kansas, has requested that its preliminary permit be terminated. The preliminary permit was issued on June 8, 1993, and would have expired on May 31, 1996. The permittee states that the project would be economically infeasible.

The permittee filed the request on July 14, 1994, and the preliminary permit for Project No. 11375 shall remain in effect through the thirtieth day after issuance of this notice unless that day is a Saturday, Sunday or

holiday as described in 18 CFR 385.2007, in which case the permit shall remain in effect through the first business day following that day. New applications involving this project site, to the extent provided for under 18 CFR Part 4, may be filed on the next business day.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20100 Filed 8-16-94; 8:45 am]
BILLING CODE 6717-01-M

[Docket No. RP92-237-013]

Alabama-Tennessee Natural Gas Co.; Notice of Proposed Changes in FERC Gas Tariff

August 11, 1994.

Take notice that on August 9, 1994, Alabama-Tennessee Natural Gas Company (Alabama-Tennessee), tendered for filing as part of its FERC Gas Tariff, Second Revised Volume No. 1, a revised tariff sheet setting forth its firm and interruptible transportation rates, pursuant to the settlement approved by the Commission in its letter order issued on December 30, 1993, in this proceeding. Alabama-Tennessee proposes that the tariff sheet be made effective as of September 1, 1994.

Alabama-Tennessee has requested such waiver of the Commission's regulations as may be necessary to accept and approve its filing as proposed.

Alabama-Tennessee states that copies of its filing were served upon the Company's jurisdictional customers and interested public bodies, as well as all the parties shown on the Commission's official service list established in this proceeding.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC 20426, in accordance with §385.211 of the Commission's Rules and Regulations. All such protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20101 Filed 8-16-94; 8:45 am]
BILLING CODE 6717-01-M

[Docket No. QF87-128-001]

**Bear Mountain Limited Partnership;
Amendment to Filing**

August 11, 1994

On August 9, 1994, Bear Mountain Limited Partnership (Applicant) tendered for filing a supplement to its filing in this docket.

The amendment provides additional information pertaining to the operator of the facility and Applicant's affiliation with the thermal host. No determination has been made that the submittal constitutes a complete filing.

Any person desiring to be heard or objecting to the granting of qualifying status should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with rules 211 and 214 of the Commission's Rules of Practice and Procedure. All such motions or protests must be filed by September 1, 1994, and must be served on the Applicant. 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.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20207 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-223-003]

**Colorado Interstate Gas Co.; Filing of
Refund Report**

August 11, 1994.

Take notice that on July 20, 1994, Colorado Interstate Gas Company (CIG) filed a refund report in Docket No. RP94-223-003. CIG states that both the filing and refunds were made to comply with the Commission's order issued May 26, 1994, in RP94-223-000 (67 FERC ¶ 61,230 (1994)), and that it paid these refunds on July 5, 1994.

CIG states that the refund report summarizes transportation refund amounts for the period October 1, 1993, through April 30, 1994, as pursuant to ordering paragraph (D) of the Commission's May 26, 1994, order.

CIG states that copies of the filing have been served on CIG's transportation customers, interested state commission, and all parties to the proceedings.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rule 211 of the Commission's Rules of Practice and Procedure (18 CFR 385.211). All such protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20103 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. TM95-1-24-000]

**Equitrans, Inc.; Proposed Changes in
FERC Gas Tariff**

August 11, 1994

Take notice that on August 9, 1994, Equitrans, Inc. (Equitrans), tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, the following tariff sheets to be effective October 1, 1994.

Third Revised Sheet No. 5

Third Revised Sheet No. 6

Third Revised Sheet No. 8

Pursuant to Order No. 472, the Commission has authorized pipeline companies to track and pass through to their customers their annual charges under an Annual Charge Adjustment (ACA) clause. The 1994 ACA unit surcharge approved by the Commission is \$.0024 per Mcf. Equitrans has converted this Mcf rate to a dekatherm (Dth) rate of \$.0022 per Dth.

Pursuant to Section 154.51 of the Commission's Regulations, Equitrans requests that the Commission grant any waivers necessary to permit the tariff sheets to become effective October 1, 1994.

Equitrans states that a copy of its filing has been served upon its purchasers and interested state commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Section 385.211 and 385.214 of the Commission's Rules of Practice and Procedures (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the

Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20104 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-354-000]

**National Fuel Gas Supply Corp;
Petition To Waive Tariff Provision**

August 11, 1994.

Take notice that on August 5, 1994, National Fuel Gas Supply Corporation (National) filed a Petition for Waiver of a provision of Rate Schedule FT.

National requests a waiver of Section 3.2 of National's FT Rate Schedule to the extent necessary to permit National to accept a letter of credit or alternative financial assurances acceptable to National from Iroquois Energy Management, Inc. and Medina Power Company (the Shippers) in an amount in excess of the cost of performing the service requested by the Shippers for a three-month period. National states that the limited financial assurances permitted by Section 3.2 would not secure National's capital cost for facilities required to serve the Shippers, and that the Shippers fully support the instant petition. The facilities required are those proposed by Tennessee Gas Pipeline Company, as operator of the Niagara Spur Loop Line, in Docket No. CP94-587-000.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 382.211 and 385.214). All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20105 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket Nos. RP94-87-000, et al. RP94-346-005 and RS92-45-000, et al.]

Natural Gas Pipeline Company of America; Docketing

August 11, 1994

Take notice that the "Stipulation and Agreement on Recovery of Gas Supply Realignment and Account No. 858 Costs from G Customers" submitted on August 3, 1994, by Natural Gas Pipeline Company of America (Natural) in Docket Nos. RS92-45-000, RP94-87-000, et al., RP94-86-000, RP94-179-000, and RP94-252-000, has been docketed in Docket Nos. RP94-346-005 and RP94-87-000, et al. This docketing is consistent with the "Notice of Redocketing Filings and Compliance Filing and Establishment of Restricted Service List," issued August 4, 1994, in Docket Nos. RS92-45-000, RP94-87-000, et al., RP94-346-000, and RP94-346-004, concerning certain settlements filed by Natural Gas Pipeline Company of America (Natural) and related materials.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20106 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. GT94-60-000]

Northwest Pipeline Corp.; Proposed Changes in FERC Gas Tariff

August 11, 1994.

Take notice that on August 8, 1994, Northwest Pipeline Corporation (Northwest) tendered for filing as part of its FERC Gas Tariff, the following tariff sheets, with a proposed effective date of September 8, 1994:

Third Revised Volume No. 1

Second Revised Sheet No. 375

Second Revised Sheet No. 377

Northwest states that the purpose of this filing is to update Northwest's Index of Shippers. Columbia Power has notified Northwest of its intent to terminate its Rate Schedule TF-1 agreement number F-103 effective March 31, 1995, and Washington Energy Marketing, Inc. has assigned its Rate Schedule SGS-2F contract demand to Washington Energy Gas Marketing Company and to Cabot Oil and Gas Trading Corporation effective May 1, 1994.

Northwest states that a copy of this filing has been served upon all of Northwest's jurisdictional customers and affected state regulatory commissions.

Any person desiring to be heard or protest said filing should file a motion

to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC 20426, in accordance with Sections 385.214 and 385.211 of the Commission's Rules of Practice and Procedure. All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20107 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. TM94-2-37-003]

Northwest Pipeline Corp.; Proposed Change in FERC Gas Tariff

August 11, 1994.

Take notice that on August 8, 1994, Northwest Pipeline Corporation (Northwest) tendered for filing as part of its FERC Gas Tariff, Third Revised Volume No. 1, the following tariff sheets with a proposed effective date of October 1, 1994:

First Revised Substitute Third Revised Sheet No. 5

First Revised Substitute Third Revised Sheet No. 5-A

First Revised Sheet No. 19

Original Sheet No. 19-A

First Revised Sheet No. 102

Second Revised Sheet No. 224

Third Revised Sheet No. 225

Northwest states that the purpose of this filing is to comply with the Federal Energy Regulatory Commission's (Commission) directives in the Order Granting Rehearing, dated July 8, 1994, in Docket No. TM94-2-37-002.

Northwest states that it has revised its tariff to reflect the appropriate maximum rate for volumetric releases of capacity and has revised its rate sheet to include a separate statement of the maximum rate applicable to the reservation component of volumetric releases. Northwest has also filed tariff language to reflect the treatment of Gas Research Institute ("GRI") surcharges in discounted capacity release transactions.

Northwest states that a copy of this filing has been served upon all intervenors in Docket No. TM94-2-37-002; upon Northwest's jurisdictional

customers, and upon affected state regulatory commissions.

Any person desiring to protest said filing should file a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC 20426, in accordance with Section 385.211 of the Commission's Rules of Practice and Procedure. All such protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available public inspection in the Public Reference Room.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20108 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-355-000]

City Utilities of Springfield, Missouri v. Williams Natural Gas Co.; Notice of Complaint

August 11, 1994.

Take notice that on August 5, 1994, City Utilities of Springfield, Missouri (CU) filed with the Commission a complaint against Williams Natural Gas Company (WNG) and motion for expedited relief pursuant to Section 5 of the Natural Gas Act (NGA)¹ and Rules 206 and 212 of the Commission's Rules of Practice and Procedure.²

CU, an LDC customer of WNG, asks that the Commission investigate and either summarily rule on or, alternatively, set for hearing WNG's application of the right of first refusal provision in its tariff.

CU seeks an order from the Commission finding that: (1) bids made by Tartan Energy Company (Tartan) for CU capacity on WNG were not bona fide bids; (2) WNG erred in requiring CU to match the Tartan bids; and (3) WNG wrongly awarded Tartan the right to acquire 69,460 Dth of CU's 79,460 Dth of firm transportation capacity.

Any person desiring to be heard or to protest said complaint should file a motion to intervene or a protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, DC 20426, in accordance with Rules 214 and 211 of the Commission's Rules of Practice and Procedure 18 CFR 385.214, 385.211. All such motions or protests should be filed

¹ 15 U.S.C. § 717d.

² 18 CFR 385.206 and .212.

on or before September 12, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection. Answers to this complaint shall be due on or before September 12, 1994.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20102 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-360-000]

Tariff Filing

August 11, 1994.

Take notice that on August 9, 1994, Overthrust Pipeline Company (Overthrust), tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1-A, Second Revised Sheet No. 58, to be effective August 1, 1994.

Overthrust states that tariff sheet is being filed pursuant to 18 CFR 154.63(a)(1) and as follow-up to Overthrust's tariff filing in Docket No. MT94-14-000, revises Section 11.1(c) of the General Terms and Conditions of Overthrust's tariff to facilitate operations under Order No. 566.

Overthrust states that it seeks Commission waiver of 18 CFR 154.22 so that the tendered tariff sheet may become effective August 1, 1994, the proposed effective date of Overthrust's tariff filing in compliance with Order No. 566.

Overthrust states further that this filing was served upon its jurisdictional customers and interested public service commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC, 20426, in accordance with Rules 385.211 and 385.214 of the Commission's Rules and Regulations (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the

Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20109 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-359-000]

Questar Pipeline Co.; Tariff Filing

August 11, 1994.

Take notice that on August 9, 1994, Questar Pipeline Company, tendered for filing as part of its FERC Gas Tariff, First Revised Volume No. 1, Third Revised Sheet No. 71 and Second Revised Sheet No. 72, to be effective August 1, 1994.

Questar states that these tariff sheets revise currently effective tariff provisions to facilitate Questar's operations under Order No. 566.

Questar states that it seeks Commission waiver of 18 CFR 154.22 so that the tendered tariff sheets may become effective on August 1, 1994, the effective date of Order No. 566.

Questar states further that this filing was served upon its jurisdictional customers and the Wyoming and Utah Public Service Commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C. 20426, in accordance with Rules 385.211 and 385.214 of the Commission's Rules and Regulations (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,

Secretary.

[FR Doc. 94-20110 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-357-000]

Texas Eastern Transmission Corp.; Proposed Changes in FERC Gas Tariff

August 11, 1994

Take notice that on August 8, 1994, Texas Eastern Transmission Corporation (Texas Eastern), tendered for filing as part of its FERC Gas Tariff, Sixth Revised Volume No. 1, the following

tariff sheets, with a proposed effective date of October 1, 1994:

First Revised Sheet No. 206

Sheet Nos. 207-210

Second Revised Sheet No. 216

Texas Eastern states that by this filing, it proposes to grant, effective October 1, 1994, customers under Rate Schedules CDS and FT-1 enhanced transportation rights with respect to deliveries and receipts in Texas Eastern's Market Zones 1, 2 and 3. Texas Eastern states that it proposes to add new Sections 13 and 15 to Rate Schedules CDS and FT-1, respectively. Pursuant to the enhanced transportation rights contemplated by these new tariff provisions, Texas Eastern proposes to increase transportation rights for customers paying rates pursuant to Section 3.2 of Rate Schedules CDS and FT-1.

Texas Eastern states that the proposed tariff provisions will permit qualifying customers to deliver gas in one Market Zone up to the lesser of customer's MDQ or the sum of customer's maximum daily contractual entitlements on the 24-inch line, the 30-inch line, the Texas Gas Transmission Corporation loop, and the Trunkline Gas Company loop applicable to the upstream Market Zone in which the delivery is to be made without necessarily impacting or limiting, as is the current situation, its capacity rights in a downstream Market Zone.

The proposed effective date of the tariff sheets is October 1, 1994, a date which corresponds to the date that necessary changes to Texas Eastern's scheduling procedures and computer information systems can be implemented to accommodate the proposed tariff changes.

Texas Eastern states that copies of the filing were served on firm customers of Texas Eastern and interested state commissions.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure. All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the

Commission and are available for public inspection.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20111 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-358-000]

**Transcontinental Gas Pipe Line Corp.;
Proposed Changes in FERC Gas Tariff**

August 11, 1994.

Take notice that on August 8, 1994, Transcontinental Gas Pipe Line Corporation (TGPL) tendered for filing certain revised tariff sheets to its FERC Gas Tariff, Third Revised Volume No. 1, enumerated in Appendix A attached to the filing. The tariff sheets are proposed to be effective as set forth in Appendix A to the filing.

TGPL states that the purpose of the filing is: (i) to set forth in TGPL's Volume No. 1 tariff the rates and charges under Rate Schedule FT-R applicable to capacity released under incremental firm transportation services which have been assigned or converted from Section 7(c) service to firm transportation service under Part 284 (hereinafter referred to as "Converted Services"); and (ii) to set forth the appropriate minimum rates under Rate Schedule FT for such Converted Services.

TGPL states that copies of the instant filing are being mailed to customers, State Commissions, and other interested parties.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE Washington, DC 20426, in accordance with Sections 385.214 and 385.211 of the Commission's Rules and Regulations. All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20112 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP94-356-000]

**Trunkline Gas Co.; Account No. 191
Filing**

August 11, 1994.

Take notice that on August 5, 1994, Trunkline Gas Company (Trunkline), in accordance with the Commission's order dated March 2, 1993, in Docket No. RS92-25-000, notifies the Commission that the balance in its Account No. 191 (Purchased Gas Adjustment Deferred Account) as of May 31, 1994, is \$47,889,684.87.

Trunkline also states that as of this date, it has not begun the direct billing of the amount pursuant to Section 27.1 of the General Terms and Conditions of Trunkline's FERC Gas Tariff, First Revised Volume No. 1.

Trunkline further states that since it has not begun any direct billing, it is not necessary to consider adjustments to amounts being collected to reflect the final posting to Account No. 191 as of this time.

Trunkline requests any waiver of the Commission's Rules and Regulations which may be necessary for the acceptance of this filing as being in compliance with the Commission's directives.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, N.E., Washington, D.C., 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before August 18, 1994. Protests will be considered by the Commission in determining the appropriate action to be taken but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection.

Lois D. Cashell,
Secretary.

[FR Doc. 94-20113 Filed 8-16-94; 8:45 am]

BILLING CODE 6717-01-M

**ENVIRONMENTAL PROTECTION
AGENCY**

[FRL-50539]

**Proposed Settlement; Acid Rain Core
Rules Litigation**

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice of Proposed Settlement;
Request for Public Comment.

SUMMARY: In accordance with section 113(g) of the Clean Air Act ("Act"), notice is hereby given of a proposed second partial settlement of *Environmental Defense fund v. Carol M. Browner, et al.*, No. 93-1203 (and consolidated cases) (D.C. Cir.).

The case involves challenges by several parties to the acid rain core rules published in the *Federal Register* on January 11, 1993, at 58 FR 3590 (January 11, 1993). The proposed settlement relates primarily to the "control" requirement for substitution plans under section 404(b) of the Clean Air Act and § 72.41 of the January 11, 1993 rules.

For a period of thirty (30) days following the date of publication of this notice, the Agency will receive written comments relating to the settlement from persons who were not named as parties to the litigation in question. EPA or the Department of Justice may withhold or withdraw consent to the proposed settlement if the comments disclose facts or circumstances that indicate that such consent is inappropriate, improper, inadequate, or inconsistent with the requirements of the Act. Copies of the settlement are available from Phyllis Cochran, Air and Radiation Division (2344), Office of General Counsel, U.S. Environmental Protection Agency, 401 Street SW., Washington, DC 20460, (202) 260-7606. Written comments should be sent to Patricia A. Embrey at the above address and must be submitted on or before [insert date 30 days after publication].

Dated: August 9, 1994.

Jean C. Nelson,
General Counsel.

[FR Doc. 94-20170 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-M

[FRL-5027-1]

**Fuels and Fuel Additives; Waiver
Decision/Circuit Court Remand**

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice

SUMMARY: On July 12, 1991, under section 211(f)(4) of the Clean Air Act (Act), the Ethyl Corporation (Ethyl) requested a waiver to permit the sale of its gasoline additive, methylcyclopentadienyl manganese tricarbonyl (MMT), an octane enhancer commercially labeled by Ethyl as HiTEC 3000, for use in unleaded gasoline. The Administrator of EPA denied Ethyl's

application for a waiver on January 8, 1992, based primarily on concerns regarding the potential for increases in hydrocarbon emissions resulting from MMT use. Ethyl subsequently sought judicial review of that decision in the U.S. Court of Appeals for the District of Columbia Circuit. Based on new emissions data developed and submitted to EPA by Ethyl, EPA requested that the Court of Appeals remand Ethyl's application to the Agency for further action.

On November 30, 1993, the Administrator of EPA found that Ethyl had met its burden to demonstrate under section 211(f)(4) that approval of its remanded application would not cause or contribute to a failure to meet emission standards. Ethyl agreed to resubmit its application at that time, thereby affording further time for the Agency to consider the issue of potential health effects associated with use of MMT in unleaded gasoline. Ethyl and EPA later agreed to further extend the deadline for final action on Ethyl's application to July 13, 1994. The Agency is today denying Ethyl's request for a waiver for HiTEC 3000 based on unresolved concerns regarding the potential impact of manganese emissions resulting from MMT use on public health.

ADDRESSES: Copies of the information relative to this application are available for inspection in public docket A-93-26, A-91-46 and A-90-16 at the Air Docket (LE-131) of the EPA, Room M-1500, 401 M Street, S.W., Washington, D.C. 20460, (202) 260-7548, between the hours of 8:30 a.m. to noon and 1:30 p.m. to 3:30 p.m. weekdays. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

FOR FURTHER INFORMATION CONTACT: Joseph R. Sopata, Chemist, or James W. Caldwell, Chief, Fuels Section, Field Operations Support Division (6406J), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, (202) 260-2635.

SUPPLEMENTARY INFORMATION:

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I. Background

Section 211(f)(1)(A) of the Act makes it unlawful, effective March 31, 1977, for any manufacturer of a fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use in light-duty motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206 of the Act. An interpretive rule defining the term "substantially similar" under section 211(f)(1)(A) was promulgated for unleaded gasoline at 46 FR 38582 (July 28, 1981), and revised at 56 FR 5352 (February 11, 1991). Section 211(f)(1)(B) of the Act makes it unlawful, effective November 15, 1990, for any manufacturer of a fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model-year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206 of the Act. Thus, section 211(f)(1)(B) expands the prohibitions of 211(f)(1)(A), which apply only to light-duty vehicles.

Section 211(f)(4) of the Act provides that upon application by any fuel or fuel additive manufacturer, the Administrator of EPA may waive the

prohibitions of section 211(f)(1) if the Administrator determines that the applicant has established that such fuel or fuel additive will not cause or contribute to a failure of any emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emissions standards to which it has been certified pursuant to section 206 of the Act. If the Administrator does not act to grant or deny a waiver within 180 days of receipt of the application, the statute provides that the waiver shall be treated as granted. The subject of this notice is an application by Ethyl under section 211(f)(4) of the Act for a waiver for the fuel additive methylcyclopentadienyl manganese tricarbonyl (MMT), commercially labeled by Ethyl as HiTEC 3000, to be blended in unleaded gasoline resulting in a level of 0.03125 (1/32) gram per gallon manganese (gpg Mn).

This Agency action is a reconsideration of Ethyl's fourth application for a waiver for MMT. Ethyl's first application was submitted on March 17, 1978 for concentrations of MMT resulting in 1/16 and 1/32 gpg Mn in unleaded gasoline. Ethyl's second application was submitted on May 26, 1981 for concentrations of MMT resulting in 1/64 gpg Mn in unleaded gasoline. The Administrator denied these requests for waivers due to concerns regarding increases in exhaust hydrocarbon emissions resulting from MMT use. The decisions and justifications thereof may be found in the September 18, 1978 *Federal Register*, 43 FR 41424, and the December 1, 1981 *Federal Register*, 46 FR 58630. Ethyl's third application was submitted on May 9, 1990, for concentrations of MMT resulting in a level of 0.3125 (1/32) gpg Mn in unleaded gasoline (the same levels which are requested in the application which is the subject of today's notice). Ethyl withdrew its third application on November 1, 1990, before the deadline for the Administrator to make a determination on the application. Because no determination had been made at the time Ethyl withdrew that application, EPA accepted the withdrawal and immediately terminated the proceeding without action on the application.

Ethyl's fourth application was submitted on July 12, 1991. This application was, from a practical standpoint, an extension of the third application, the entire record of which was incorporated by Ethyl into the current proceeding. On January 8, 1992, the Administrator of EPA denied Ethyl's

fourth application for a waiver (57 FR 2535, January 22, 1992). The application was denied based in part upon data submitted by Ford Motor Company (Ford) which indicated that, for the model groups tested by Ford and, for the conditions under which Ford tested its vehicles, the increases in hydrocarbon exhaust emissions as a result of the use of MMT were substantially greater than those observed in the Ethyl test program. The Agency stated in its decision that a likely factor which might account for the differences observed between the Ethyl and Ford test programs was the severity of the driving cycle. However, the Agency also concluded that other factors might be responsible for the observed differences. In the denial decision, the Agency stated that it had always accepted data from test programs which "model" the fleet in support of waiver applications, but that if an interested party were to present data indicating that a potentially significant subset of the fleet, not tested by the applicant, was especially susceptible to the negative effects of the additive, the Agency could reasonably require specific testing on representative models of that sub-fleet.

In its decision, the Agency also stated that it believes it is reasonable to consider the effect of a fuel on vehicles' ability to meet future emissions standards. (The "Tier I" tailpipe standards prescribed by section 202(g) of the Act began to take effect in model year 1994, which began approximately in September 1993.¹) Therefore, regarding the Ford data mentioned above, the Agency stated in its decision that the concerns raised by that data related to both current and future standards.

Although not the basis of the 1992 denial, another important issue arose during the consideration of Ethyl's third and fourth applications. The Agency, as well as several commenters, expressed concerns regarding the possible adverse health effects of an increase in airborne manganese resulting from MMT use. These concerns were centered around: (1) The known severe neurotoxic effects of high-level exposure to manganese through inhalation, (2) the lack of data regarding the chronic effects of low-level inhalation exposure to manganese in humans, and (3) the lack of knowledge regarding potential exposures due to MMT use. It was repeatedly pointed out by commenters that neurotoxic damage could occur prior to the onset of overt symptoms.

In those proceedings, Ethyl also submitted comments regarding

manganese emissions. Ethyl indicated that the manganese emissions resulting from the use of MMT in unleaded gasoline would be so small as to not materially affect human exposure to airborne manganese. In support of its view, Ethyl submitted analyses and data on exposure modeling and monitoring in both its 1990 and 1991 applications (and in subsequent submissions associated with the remand discussed below). (The issue of manganese emissions and public health is discussed in more detail in Section VI of this document.)

During EPA's consideration of the 1990 Ethyl submission, EPA's Office of Research and Development (ORD) conducted a manganese inhalation risk assessment based on the available data which found that because of "the considerable uncertainties and data gaps in the available information * * * it is not possible * * * to conclude definitively that the increased use of MMT as a fuel additive will (or will not) increase public health risk."² (EPA also investigated potential hazards associated with water contamination resulting from accidental spills or leakages of pure MMT and concluded that spills or leaks, if they occurred, are likely to be contained and therefore would not pose a human health risk due to groundwater contamination. However, data available to EPA are insufficient to determine whether spills and leaks could affect exposure to benthic organisms.)

Additionally, in order to obtain assistance in describing information needed to improve its manganese health risk assessment (and also to improve its environmental hazard identification of issues associated with MMT itself), EPA, in conjunction with the National Institute of Environmental Health Sciences, conducted a Manganese/MMT Symposium and Workshop on March 12-15, 1991. The conference allowed the Agency to solicit scientific information from invited extramural scientists reflecting a wide range of scientific disciplines. Invited participants included representatives of Ethyl Corporation, the Environmental Defense Fund, the Centers for Disease Control, the U.S. Food and Drug Administration and Environment Canada. A summary of the workshop discussions was provided to each participant and the information obtained from this meeting was also used by EPA to prepare a report on prioritized research needed for

² See "Comments on the Use of Methylcyclopentadienyl Manganese Tricarbonyl in Unleaded Gasoline", Docket A-90-16.

improving its manganese inhalation risk assessment.³

EPA raised the issue of potential health effects associated with manganese exposure as a concern in its January 1992 denial, but did not base its decision on this concern because the Agency concluded that the uncertainties regarding hydrocarbon emissions increases prevented EPA from making the requisite "cause or contribute" determination concerning effects on regulated emissions.

On February 13, 1992, Ethyl filed a petition for review of the January 8, 1992 waiver denial decision in the United States Court of Appeals for the District of Columbia Circuit. EPA and Ethyl subsequently entered discussions concerning a possible settlement of the court case. In the context of those discussions, Ethyl submitted to the Agency new emissions test data developed by Ethyl since the denial decision.

Based on its inspection and analysis of the new Ethyl data, EPA tentatively concluded that the data indicated that driving cycle did not contribute significantly to MMT-induced increases in HC emissions. (EPA's preliminary analysis was placed in docket A-92-41.) However, in addition to addressing the issue of driving cycle, the Ethyl data appeared to confirm the finding by Ford that 1991 Escorts experienced a much higher MMT-induced HC increase than that observed in other models tested (either in Ethyl's new program or in the original Ethyl test program). The Agency remained concerned that these data might indicate that certain engine and emissions control system configurations are more vulnerable to a MMT-induced emissions increase irrespective of driving cycle.

To facilitate further settlement discussions with Ethyl, EPA decided to attempt to formulate an emission testing program intended to address in a timely manner specific unresolved issues concerning the effect of MMT on emissions: (1) whether other vehicles utilizing fuels containing MMT are likely to experience increases in hydrocarbon emissions similar to those observed in 1991 Ford Escorts; and (2) whether fuels containing MMT have significant adverse effects on emissions from vehicles utilizing the technologies

³ Preuss, P.W. (1991) ORD Document on Information Needed to Improve the Risk Characterization of Manganese Tetraoxide (Mn₂O₇) and Methylcyclopentadienyl Manganese Tricarbonyl, December 12, 1991 (memorandum to Richard Wilson). Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development; December 16, 1991. For further information the reader is referred to Air Docket A-93-26, II-A-16.

¹ 56 FR 25724-25790 (June 5, 1991).

most likely to be employed to meet future standards. On October 28, 1992, EPA held a public workshop to assist the Agency in its attempt to formulate such an emission testing program (57 FR 44740, September 29, 1992). In particular, EPA hoped to obtain information and assistance from technical experts outside of the Agency concerning the test program and, in view of the significance of any future waiver decision concerning MMT for the auto industry and the general public, EPA was interested in obtaining comments concerning a decisional framework designed to address and resolve these issues. A proposed emission test program developed by the Agency and presented at the public workshop, was effectively adopted by Ethyl as its most recent vehicle emissions test program involving the 1993 model fleet.

Although further settlement discussions between Ethyl and EPA were held subsequent to the public workshop, the parties were not successful in reaching a settlement. However, despite the failure of the parties to reach agreement, EPA concluded that the Administrator's denial decision should be reconsidered in light of the new emissions data generated by Ethyl subsequent to the decision. Accordingly, EPA requested that the United States Court of Appeals for the District of Columbia remand the denial decision to EPA for reconsideration.

On April 6, 1993, the Court of Appeals issued a decision granting the Agency's motion and remanding the case to the Agency to redetermine within 180 days whether to grant or deny Ethyl's application. The mandate implementing this judgement was transmitted to the Agency on June 3, 1993. Pursuant to the court's remand decision, the Agency published a notice indicating the commencement of a comment period (58 FR 35950, July 2, 1993). The Administrator's final decision on remand was due within 180 days after the transmittal of the court's mandate, or by November 30, 1993.

After the Court of Appeals granted the Agency's motion to remand the denial decision concerning Ethyl's July 12, 1991 application, Ethyl submitted to EPA a substantial amount of additional data on emission testing with fuels containing MMT. (Specific aspects of these data are discussed below in Section IV of this document).

During the course of the remand of Ethyl's waiver application, the EPA Office of Research and Development (ORD) reviewed the available data concerning the health effects associated

with inhalation of manganese as part of a process to revise the reference concentration (RfC) for inhaled manganese.⁴ An inhalation reference concentration is defined as an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious non-cancer health effects during a lifetime. The methodology for establishing an RfC accounts for uncertainties and gaps in the health data base through the assignment of uncertainty factors. In November, 1993, ORD completed preparation and review of, and EPA released to Ethyl, a document identifying and describing the rationale for a new inhalation RfC of 0.05 $\mu\text{g}/\text{m}^3$ for manganese and manganese compounds.

Ethyl subsequently provided to EPA a detailed critique of the approach utilized to derive the revised manganese RfC. Among other things, Ethyl argued that EPA used an inappropriate procedure to derive the RfC from a study of occupational manganese exposures by Roels, et al. (1992). Ethyl also argued that use of MMT would not result in significant changes in background manganese exposures, and that the favorable effects on public health resulting from changes in the composition of gasoline when MMT is utilized would outweigh any potential for adverse health effects. (Copies of documents describing the revised RfC and of the Ethyl comments are available in the public docket.)

As the deadline of November 30, 1993, for final action by EPA on Ethyl's waiver application approached, EPA concluded that the extensive data base on the emission effects of MMT assembled by Ethyl and others during the consideration of the application was sufficient to permit a decision concerning whether Ethyl had satisfied the statutory requirement to show that use of MMT will not cause or contribute to exceedance of emission standards. However, there had been insufficient opportunity for public comment concerning the use of a revised

manganese inhalation RfC in assessing any risks that might be posed by granting Ethyl's application. Ethyl argued that it had not been afforded an adequate opportunity to study the derivation of the RfC and to comment on its implications for Ethyl's application. While EPA scientists did not necessarily agree with the specific technical arguments concerning the revised RfC and other issues pertaining to health effects made by Ethyl, EPA concluded that it might be useful to review the revised RfC in light of further analyses of the available data as well as the underlying data from occupational studies of inhaled manganese if such data could be readily obtained. EPA also concluded that it would be desirable in any case to have further dialogue with Ethyl and other interested parties on issues related to the health effects of manganese before EPA was to make a final decision concerning Ethyl's waiver application.

As a result of these factors, Ethyl and EPA entered into discussions concerning a possible extension of the deadline for a decision. Ultimately, an agreement between Ethyl and EPA concerning such an extension was implemented on November 30, 1993, and notice of the agreement was published in the *Federal Register* on December 9, 1993 (58 FR 64761). The agreement provided for an extension of 180 days in the deadline for final action by EPA on Ethyl's waiver application for HiTEC 3000.⁵ EPA was thus required to take final action either granting or denying Ethyl's resubmitted application by May 29, 1994. For purposes of the resubmitted application, the EPA Administrator determined that Ethyl had demonstrated, as required by section 211(f)(4), that use of HiTEC 3000 at the specified concentration will not cause or contribute to a failure of any emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified.⁶ The Agency stated clearly in the December 9, 1993 *Federal Register* notice that this determination would not preclude any subsequent regulatory action based on emission effects under Clean Air Act

⁴ In 1990, an inhalation reference concentration (RfC) for manganese of 0.4 $\mu\text{g}/\text{m}^3$ was verified and placed on IRIS. The original RfC for manganese figured into a 1990 risk assessment of MMT prepared by the EPA Office of Research and Development (ORD). Subsequently, in light of new information submitted by Ethyl and new results from more recently published studies concerning manganese inhalation health effects in workers, EPA reexamined the RfC for manganese and revised it to a value of 0.05 $\mu\text{g}/\text{m}^3$ in 1993. This revised RfC for manganese was made available to Ethyl and placed on IRIS in November 1993.

⁵ To implement this agreement, Ethyl withdrew its July 12, 1991 waiver application, as remanded by the Court of Appeals, and immediately resubmitted the application.

⁶ As is explained in section IV of this document, this decision was based primarily upon application of the previously used statistical tests to the submitted emissions data. As is also explained in section IV, the Agency believes that these tests may be outdated and is considering a formal change in its method of analysis of such data.

section 211(c) or any other provision of the Clean Air Act in the event that the resubmitted Ethyl waiver application were to be granted in the future. The Agency also made it clear that this determination would not apply in the context of any other new waiver application concerning HiTEC 3000 or MMT which might be submitted in the future if EPA were to deny Ethyl's resubmitted waiver application on other grounds. Further review of Ethyl's application during this 180 day period focused in particular on the issues relating to the potential health effects on public health if EPA were to permit use of MMT as a fuel additive.

Ethyl and EPA both desired and intended to assure continuity between the proceedings concerning the July 12, 1991 waiver application, as remanded to EPA by the Court of Appeals, and Ethyl's resubmitted waiver application. The entire administrative record compiled by EPA in support of the original denial decision, as well as all submissions to the public docket concerning the remanded application, was incorporated in the record this final decision on the resubmitted application. The docket number for the resubmitted waiver application also remained the same.

The additional 180 days that were provided by Ethyl's agreement to resubmit the waiver application were utilized by EPA to evaluate remaining issues that may have been relevant to today's decision. In particular, EPA continued to examine the effects on public health that might be associated with approval of Ethyl's application. EPA considered any additional underlying data concerning studies of occupational manganese exposure that were obtained by or submitted to EPA, as well as any additional data or information pertaining to the health effects of manganese submitted by Ethyl or other interested persons during the comment period. Any additional information that was submitted was also considered in exploring alternative candidate RfC estimates and their relationship to the verified revised RfC. EPA also used the additional time provided by the extension to make a decision on how the RfC should be utilized in assessing health effects that may be associated with MMT use, evaluate potential exposure to manganese compounds associated with MMT use, complete a risk assessment concerning Ethyl's application, and decide what additional data, if any, should be provided by Ethyl either before or after MMT is introduced into the market.

On April 28, 1994, EPA provided Ethyl Corporation with a draft of the revised risk assessment, which updated the 1991 ORD assessment and incorporated further analyses performed during the 180-day extension period. Subsequent to providing Ethyl with this draft, Ethyl provided EPA with comments on the draft and some additional new data on ambient manganese concentrations in several Canadian cities. In order to allow the Agency time to consider this new data, Ethyl requested, and the Agency agreed to, an extension of the decision deadline until July 13, 1994. An agreement implementing this extension was executed by EPA and Ethyl counsel on May 24, 1994.

II. Statutory Framework

A. History of Statute

Congress first added section 211(f) to the Clean Air Act in 1977 based primarily on concerns that fuels or additives might damage vehicle emission control devices. Thus, the original statute focused on vehicles designed to use unleaded gasoline, prohibiting the general use in fuels of materials not "substantially similar" to fuels used to certify vehicles to emissions standards. Section 211(f) also provided that the Administrator of EPA "may waive the prohibitions * * * if he determines that the applicant has established that such fuel or fuel additive * * * will not cause or contribute to a failure of any emission control device or system * * * to achieve compliance by the vehicle with the emission standards with respect to which it has been certified pursuant to section 206."⁷ Additionally, the statute provides that if the Administrator does not act to grant or deny the waiver request within 180 days of receipt of the application, the waiver request shall be treated as granted.

Section 211(f) was initially interpreted by the Agency as applying only to unleaded gasoline. In the 1990 Amendments, section 211(f)(1) was broadly expanded to cover all other fuels and fuel additives, including leaded gasoline, diesel fuel, and consumer additives.⁸ The 1990

⁷ Section 206 of the Act sets forth the certification requirements with which vehicle manufacturers must comply in order to introduce into commerce new model year motor vehicles. Under § 202 of the Act, standards for hydrocarbon (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) emissions for gasoline, gaseous fuel, diesel and methanol-powered motor vehicles have been established. For gasoline, gaseous fuel and diesel-powered motor vehicles, standards have also been established for particulate emissions.

⁸ H.R. Rep. No. 490, Part 1, 101st Cong., 2d Sess. 313 (1990).

Amendments also apply the provisions of this subsection to vehicles other than light-duty vehicles. Section 211(f)(1)(B) of the Act makes it unlawful, effective November 15, 1990, for any manufacturer of a fuel or fuel additive to first introduce into commerce, or to increase the concentration in use of, any fuel or fuel additive for use by any person in motor vehicles manufactured after model year 1974 which is not substantially similar to any fuel or fuel additive utilized in the certification of any model year 1975, or subsequent model year, vehicle or engine under section 206 of the Act. Thus, section 211(f)(1)(B) expands to all motor vehicles the fuel prohibitions of the original section 211(f)(1) (now redesignated as section 211(f)(1)(A)), which apply only to light-duty vehicles.⁹

In adding section 211, the first focus of Congress was to prevent the introduction of new additives which may prove harmful to emission control devices but to allow for the introduction of such additives if it could be demonstrated that they would not harm emission control devices. Furthermore, in framing the statute such that the Administrator was not required to grant a waiver, Congress provided authority to the Administrator to take into account other considerations associated with introduction of the new material into commerce.

B. Two Stage Process

Section 211(f)(4) of the Act provides the legal authority for this waiver decision.¹⁰ The Agency interprets

⁹ An interpretive rule defining the term "substantially similar" under section 211(f)(1)(A) was promulgated for unleaded gasoline at 46 FR 38582 (July 28, 1981), and revised at 56 FR 5352 (February 11, 1991). An advance notice of proposed rulemaking (ANPRM) has been published to begin the process of promulgating an interpretive rule to define the term "substantially similar" under § 211(f)(1)(B) for diesel fuel and diesel fuel additives. See 56 FR 24362 (May 30, 1991).

¹⁰ Section 211(f)(4) states that "The Administrator, upon application of any manufacturer of any fuel or fuel additive, may waive the prohibitions established under paragraph (1) or (3) of this subsection, or the limitation specified in paragraph (2) of this subsection, if he determines that the applicant has established that such fuel or fuel additive or a specified concentration thereof, and the emission products of such fuel or additive or specified concentration thereof, will not cause or contribute to a failure of any emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified pursuant to section 206. If the Administrator has not acted to grant or deny an application under this paragraph within one hundred and eighty days of receipt of such application, the waiver authorized by this paragraph shall be treated as granted."

section 211(f)(4) of the Act as establishing a two stage process for the decision to grant or deny a waiver application. The first stage of the process focuses solely on whether a waiver applicant has met its burden to demonstrate that a fuel does not cause or contribute to a failure to meet emission standards. The second stage of the process reflects the discretionary authority provided to the Agency by the statute.

In the first stage of the waiver process, the sole issue is whether a fuel "causes or contributes" to an emission standard failure. The waiver applicant bears the burden of demonstrating that a fuel will neither cause nor contribute to an emission standard failure for any regulated pollutant. Balancing of the emission effects of a fuel for one pollutant against those for other pollutant(s) is not permissible under the statutory language. For example, an applicant would not meet its burden of proof if its testing of a fuel shows that it causes or contributes to an emission standard failure for CO, even though testing shows decreases in emissions of HC and NOx. If an applicant does not meet its burden of demonstrating that the "cause or contribute" test is met, the Agency cannot grant a waiver. If an applicant does meet its burden, the Agency may then exercise its discretion to grant or to deny a waiver in the second stage of the process.¹¹

The statute provides that the Agency "may" grant a waiver application if the "cause or contribute" test is met, but does not require such an action. The Agency may therefore choose not to grant a waiver based on other issues (e.g., public health effects) that indicate that it would not be in the public interest to do so. In this second stage of the process, the Agency has a great deal of discretion to determine which issues should be examined and to balance the potential positive and negative impacts of a waiver. Such discretionary authority is grounded not only in Congress' use of the term "may" rather than the term "shall" in section 211(f)(4), but also in the goals and purposes of section 211 when read as a whole. The Agency does not believe that Congress intended to require EPA to grant a waiver under section 211(f)(4) when available information indicates that the fuel would be potentially subject to regulatory control under section 211(c)(1) immediately upon issuance of the waiver. Similarly, EPA

believes that Congress did not intend to preclude a determination of whether issuance of a waiver is consistent with other important goals of the Act once it has been demonstrated that the mandatory "cause or contribute" test has been met.

This does not mean that the Administrator has unfettered discretion to deny a waiver application for any reason. The grounds for any denial must not be arbitrary or capricious or constitute an abuse of discretion. Thus, in using discretion to deny an application, the Administrator must identify and explain the factors on which a discretionary denial decision is based and must assure that the policy adopted is consistent for all similarly situated waiver applicants.

C. Consideration of Potential Health Effects

Although the basis for a discretionary denial must be rational and non-arbitrary, nothing in the statute limits the type of factors which the Administrator may consider in deciding whether to deny an application. Section 101(b)(1) states that one of the purposes of the Act is to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." Given this general goal of the Act, certainly the potential effects on public health of vehicle emissions would be a factor which the Administrator may reasonably consider when utilizing the discretion which section 211(f)(4) authorizes.

Furthermore, under sections 211(b)(2) and 211(e), the Administrator must require the manufacturer of a fuel or additive to produce data concerning potential health effects as a condition of, or a prerequisite to, registration of the fuel or additive.¹² Under section 211(c)(1), the Administrator may, based on data collected under sections 211(b) and 211(e) or otherwise available, issue regulations controlling manufacture or sale of any fuel or fuel additive which the Administrator finds "may reasonably be anticipated to endanger the public health or welfare." These provisions indicate that Congress intended that the Administrator be concerned about the potential health effects of fuels and fuel additives.

The fact that the Administrator may control fuels or fuel additives which pose potential health effects under section 211(c)(1) does not mean that the

Administrator may not consider health effects as a factor in deciding whether to grant a waiver under section 211(f)(4). Such a construction of the statute would lead to absurd results, precluding the Administrator from denying a waiver application and leading to potential introduction of a fuel or additive into commerce, even in the specific circumstances where the Administrator has concluded that there are grounds for issuance of a proposed regulation prohibiting the fuel or additive under section 211(c). However, although this reasoning indicates that Congress could not have reasonably intended to completely preclude the consideration of health effects under section 211(f)(4), this does not mean that section 211(c) limits the circumstances in which the Administrator may consider potential health effects as part of a waiver decision. Clearly, it was the intention of Congress to treat fuels and fuel additives already registered and being sold for a particular purpose differently than those which have not already been introduced into commerce.

III. Method of Review

A. "Causes or Contributes" to Emission Standard Failure

Under section 211(f)(4) of the Act, twenty-three applications for waivers of the section 211(f)(1) prohibitions have been received. Of these, twenty-two applications have sought a waiver for additives for unleaded gasoline. One, the most recent, sought a waiver of the section 211(f)(1)(B) prohibitions for an additive to diesel fuel.¹³ Of these twenty-three applications, ten applications have been granted (some with conditions attached), ten have been denied, and three were withdrawn by the applicant prior to the Agency's decision.

Section 211(f)(4) clearly places upon the waiver applicant the burden of establishing that its fuel will not cause or contribute to the failure of any vehicle to meet emission standards. Absent a sufficient showing, the Administrator cannot make the required determination and cannot grant the waiver. If interpreted literally, however, this burden of proof imposed by the Act would be virtually impossible for an applicant to meet, as it requires the proof of a negative proposition: that no vehicle will fail to meet emission standards to which it has been certified. Such a literal interpretation could be construed as requiring the testing of every vehicle. Recognizing that Congress contemplated a workable

¹¹ Under the statute, if the Agency does not take action to grant or deny a waiver application within 180 days of submittal, the waiver is deemed granted.

¹² Sections 211(a) and 211(b)(1) require the registration of fuels and additives designated by the Administrator as a precondition to introduction into commerce.

¹³ 57 FR 45790 (October 5, 1992).

waiver provision, EPA has previously indicated that reliable statistical sampling and fleet testing protocols may be used to demonstrate that a fuel under consideration would not cause or contribute to a significant failure to meet emission standards by vehicles in the national fleet.¹⁴

To determine whether a waiver applicant has established that the proposed fuel will not cause or contribute to vehicles failing emission standards, EPA reviews all the material in the public docket, including the data submitted with the application and public comments on the application, and analyzes the data to ascertain the fuel's emission effects. The analysis concentrates on four major areas of concern—exhaust emissions, evaporative emissions, materials' compatibility, and driveability—and evaluates the data under statistical methods appropriate to the various types of emission effects. Emission data are analyzed according to the effects that a fuel is predicted to have on emissions over time. If the fuel is predicted to have only an instantaneous effect on emissions (that is, the emission effects of the fuel are immediate and remain constant throughout the life of the vehicle when operating on the waiver fuel), then "back-to-back" emissions testing will suffice.¹⁵

Unlike materials traditionally allowed in unleaded gasoline, metallics, such as MMT, produce non-gaseous combustion products, some of which may be deposited in the parts of the vehicle that come in contact with the combustion products of the burned fuel. These areas of the vehicle include the combustion chamber, the catalyst, the oxygen sensor, and all parts of the exhaust system.¹⁶ Since these materials build up over time,¹⁷ it has been traditionally

accepted that the emissions effects of such additives occur over time as miles are accumulated, and that the method of deposition suggests that the effects are permanent. If the fuel is predicted to have such a long-term deteriorative effect, durability testing over the useful life of the vehicle,¹⁸ in addition to back-to-back testing, is appropriate.¹⁹

In addition to emissions data, EPA also reviews data on fuel composition and specifications, both to fully characterize a proposed fuel, and to determine whether that fuel would cause or contribute to a failure of vehicles to comply with their emission standards. Such a failure often can be predicted from characterization data. For example, volatility specifications of the fuel could demonstrate a tendency for high evaporative emissions. Similarly, data on materials compatibility could show potential failure of fuel systems, emission related parts, and/or emission control parts from use of the fuel. Such failures could result in greater emissions. Likewise, fuel characteristics that could cause significant driveability problems could result in tampering with emission controls and, thus, increased emissions.

One issue raised previously in the context of Ethyl's present application was whether Ethyl was required to show that MMT will not cause or contribute to noncompliance with emission standards by vehicles certified to "future" emission standards (i.e., 1994 model year standards, which were not in effect at the time of the waiver application), as well as vehicles certified to "current" standards (i.e., standards in effect at the time of the waiver application). Ethyl believes that the statute only requires it to establish

that MMT will not cause or contribute to the failure of vehicles to meet current emission standards. For the reasons outlined in the Agency's January 1992 waiver decision, EPA disagrees with this reading of the statute and continues to believe that it is appropriate to consider the effects of an additive on vehicles' ability to meet more stringent future standards under circumstances similar to these.²⁰ (See 57 FR 2537-8 January 22, 1992.)

In the past, EPA has analyzed both instantaneous emission effects and durability effects using statistical tests to determine if the fuel additive will cause a "significant" number of vehicles to fail emissions tests.²¹ Generally speaking, these tests have focused on the portion of the fleet that will actually fail emission standards as a result of using the fuel or additive.²² Thus, the tests used to date by the Agency primarily consider only the "cause" language in the statute and do not consider the portion of the statute which requires that the applicant must also show that the fuel or additive will not "contribute" to the non-compliance of vehicles with emission standards.

The Agency believes that its present statistical tests and criteria do not give adequate weight to the requirement in Section 211(f)(4) that an applicant demonstrate that a fuel will not "contribute" to an emission standard failure.²³ This is of particular significance in light of the Clean Air Amendments of 1990, which evidence a strong Congressional concern that more needs to be done to ensure that people are not exposed to unhealthy levels of airborne pollution. EPA is presently reviewing alternative criteria and statistical methodologies for determining whether use of a fuel or fuel additive will "cause or contribute" to emission exceedances. The Agency expects to initiate a rulemaking in the near future which will propose more appropriate criteria and statistical methodologies for reviewing waiver applications and will afford formal

¹⁴ See Waiver Decision on Tertiary Butyl Alcohol ("TBA"), 44 FR 10530 (February 2, 1979).

¹⁵ Back-to-back emission testing involves testing a vehicle on a base fuel (i.e., a gasoline which meets specifications for certification fuel or is representative of a typically available commercial gasoline), then testing that same vehicle on the fuel for which the waiver is requested. The difference in emission levels is attributed to the waiver fuel.

¹⁶ Automakers and catalyst manufacturers point out that, since catalysts are designed with a honeycomb structure in order to maximize contact between engine combustion gases and catalyst materials, if channels within the honeycomb become blocked, the catalyst is less able to break down the exhaust gases. Furthermore, although the mechanisms associated with manganese deposits have not been completely described, catalyst manufacturers suggest that the mere disposition of manganese (without blockage of channels) would hinder the catalytic activity of the catalyst. Ethyl, however, believes that the manganese disposition on the catalyst does not hinder its activity.

¹⁷ Reply Comments of Ethyl Corporation in Support of the HITEC 3000 Waiver Application, August 10, 1990, 28.

¹⁸ The "useful life" of a 1993 or earlier model year light-duty vehicle (LDV) (i.e., the amount of time or mileage accumulation through which the LDV must meet the standards to which it has been certified) is 50,000 miles or five years, whichever occurs first (§ 202(d)). The 1990 Amendments extended the useful life of LDVs to 100,000 miles or ten years, beginning with 1994 model year vehicles. The amendments also tightened emissions standards for 40 percent of a vehicle manufacturer's LDV and light-duty truck (LDT) sales in model year 1994, 80 percent in model year 1995 and for all vehicles after model year 1995 (§ 202(g)). The useful life for heavy-duty vehicles and engines is generally 120,000 miles or eleven years.

¹⁹ Durability testing over the useful life of the vehicle has involved testing two identical sets of vehicles for 50,000 miles (in the case of pre-1994 standards for LDVs), one set using the base fuel and the other using the waiver fuel. Each vehicle is tested for emissions at 5,000 mile intervals. This is essentially the same testing pattern which has been required for certification of a new motor vehicle under § 206 of the Act. As noted above, under the 1990 Amendments, the useful life of LDVs has been extended to 100,000 miles beginning with the 1994 model year when more stringent emissions standards took effect (see § 202 (d) and (g)).

²⁰ EPA also considered effects on compliance with future standards in a previous MMT decision. See 43 FR 41424 (September 18, 1978). In Re Application for MMT Waiver.

²¹ For a detailed description of the statistical tests which have been used in the past for instantaneous effects see "Decision Document", Texas Methanol Waiver Decision, U.S. EPA Air Docket Number EN-87-06, and for those used for durability effects, see 43 FR 41426.

²² In fact the primary criteria allows for the failure of some portion of the fleet as a result of use of the fuel or additive.

²³ In fact, the Agency raised questions about the appropriateness of these previously used approaches in its original decision on Ethyl's 1991 MMT waiver application. See 57 FR 2535, 2537 and 2538 (January 22, 1992).

notice to future applicants of the Agency's intention to adopt revised criteria and methodologies.

As explained below, the Agency has concluded that it would not be appropriate to utilize new criteria and statistical tests concerning which Ethyl received no prior notice in evaluating Ethyl's application. However, in the event that Ethyl reapplies in the future for a section 211(f)(4) waiver to allow the use of MMT or any other additive, that application will be evaluated in accordance with any new fuel waiver criteria in effect at that time.

B. Discretionary Review

As discussed in part II of this decision, above, the Agency believes that the use of the term "may" in Section 211(f)(4) of the Act affords the Administrator broad discretion to consider other factors in deciding whether to grant a waiver, once a waiver applicant has demonstrated that a fuel or fuel additive will not cause or contribute to an emission standard failure. This construction of section 211(f)(4) is also consistent with the other provisions of and the general purposes underlying the Clean Air Act. Although the Administrator has not relied on this discretionary authority to deny a waiver in the past, certain general principles should guide the Administrator's exercise of such authority.

Although the discretion of the Administrator to consider other factors in making a waiver decision is broad, it is not unfettered. To assure that any decision based on factors other than emission standard failures is not arbitrary and is based on a proper record, the applicant and other interested persons should be afforded proper notice of any additional factors to be considered by the Administrator and an opportunity to comment or submit information concerning those factors. Any decision based on the discretionary authority of the Administrator to consider other factors should include an explanation of the factors which were considered and the relation of those factors to the decision. Moreover, any policy adopted as part of a decision to deny a waiver on a discretionary basis should be applied consistently to all similarly situated applicants.

Protection of the public health is a major goal of both the Clean Air Act in general and the section 211 fuels provisions in particular. Accordingly, the Agency believes that when a waiver is sought for a fuel or fuel additive and there are unresolved concerns regarding the potential impact of that fuel or fuel

additive on public health, potential health effects can and should be examined as part of the waiver process.

As part of this examination of the potential health effects of a fuel or additive, the Agency should review any relevant studies or analyses of which it is aware or which are brought to its attention by the waiver applicant or by commenters on the waiver application.

In addition to potential health effects, the Agency may consider other factors as appropriate in deciding whether it would be in the public interest to grant a waiver. In particular, the Agency may consider whether a waiver would be consistent with the objectives of the Clean Air Act. In each instance, the factors considered and relied upon should be clearly identified.

IV. Analysis of Emissions Data

A. Description of Previous Test Programs

In support of its request, Ethyl conducted an extensive test program to determine the effect of MMT on the ability of vehicles to comply with current and future emission standards. It also considered the impact of MMT on nonregulated vehicle emissions, urban smog or ozone, refinery emissions, and crude oil use. Ethyl claimed that its test results established that MMT would not cause or contribute to exceedences of current or future emission standards. It also claimed that MMT use would result in other benefits consistent with Clean Air Act goals.

In 1988, Ethyl assembled a test fleet of 48 light-duty vehicles, composed of eight different model types (six Buick Centurys (2.5 liter), six Buick Centurys (2.8 liter), six Buick Centurys (3.8 liter), six Chevrolet Cavaliers (2.0 liter), six Ford Escorts (1.9 liter), six Ford Taurus (3.0 liter), six Ford Crown Victorias (5.0 liter) and six Dodge Dynastys (3.0 liter)) that together represented a broad spectrum of then current (1988) technology vehicles. To accumulate mileage, Ethyl utilized the "Alternative Mileage Accumulation Cycle" (AMA) which is a standard procedure utilized to accumulate mileage for certification purposes.²⁴ It

²⁴ A driving cycle is a description of how to drive a vehicle to accumulate mileage, including such things as a what percentage of driving should be done at what speed and what the overall average speed should be. The AMA cycle is described in EPA Mobile Source Advisory Circular 37-A. (See Docket A-91-46) and is essentially prescribed for use by manufacturers to accumulate mileage for certification of vehicles (See 40 CFR 86.092-26). A driving cycle is used so that test vehicles accumulate mileage in a manner that is supposedly representative of in-use vehicles. The emissions of a test vehicle that has accumulated mileage according to a driving cycle representative of in-use

utilized two laboratories to measure each vehicle's exhaust emissions of the regulated pollutants (HC, oxides of nitrogen (NO_x) and carbon monoxide (CO)) at 5,000-mile intervals up to 75,000 miles in the case of most vehicles and up to 100,000 miles in the case of several.²⁵ It also tested a number of these vehicles for evaporative HC, particulate and manganese emissions, materials compatibility, driveability and catalyst durability.

Ethyl analyzed the data collected using EPA's previously used statistical tests (43 FR 41424, September 18, 1978) and additional tests developed by its consultants to further characterize the data. Its analysis indicated that, on average, MMT at the requested concentration would result in a 0.018 gpm increase in HC emissions and decreases in NO_x and CO emissions. The analyses further indicated that, when EPA's previously used tests are applied, the increase in HC emissions would not cause or contribute to vehicles' failure to meet the current HC emission standard. The results of Ethyl's testing for materials compatibility, driveability and catalyst durability also indicated that MMT would have no significant adverse effects on vehicles' ability to meet current emission standards under average driving conditions. On that basis, Ethyl claimed that it had made its statutorily required showing.

Ethyl also submitted data on the catalyst efficiency of the vehicles which it tested. Ethyl performed back-pressure tests²⁶ on all its vehicle fleet except one model group after accumulation of 75,000 miles. Back-pressure tests were also performed on a pair of Ford Crown Victorias, one operated on MMT-fuel and one on clear fuel, at speeds higher than those used in Ethyl's 48-vehicle

vehicles are more likely to be representative of in-use vehicles' emissions. There are actually three alternative cycles associated with the AMA; however, the average speeds of the three alternatives are very similar, ranging from 29.9 mph to 30.72 mph.

²⁵ The "useful life" of model year 1993 and earlier light-duty vehicles (LDV's) is 50,000 miles or five years, whichever occurs first (section 202(d)). However, the Clean Air Act Amendments of 1990 extended the useful life of LDV's to 100,000 miles or ten years, beginning with 1994 model year vehicles. For the standards that begin to take effect in model year 1994, section 207(c) provides for intermediate in-use standards for several years.

²⁶ Back pressure tests are used to determine if significant plugging has occurred in a vehicle's catalyst. The total pressure ahead of the catalyst is back pressure. This pressure is a measure of constriction in flow through the exhaust system caused by flow of the exhaust through the emissions control system and the noise-reducing components of the vehicle. If plugging has occurred in a vehicle, the total pressure ahead of its catalyst, the back pressure, should be greater than expected (e.g., greater than a matching control vehicle).

test program.²⁷ The results of these tests indicated that back-pressure was not significantly different in the MMT vehicles when compared to the clear fuel vehicles. Ethyl also operated two 5.7 liter Corvettes at extremely high speeds (100 mph) for 25,000 miles, one using MMT fuel and one using clear fuel. Although similar in magnitude, the back pressure for the MMT vehicle was slightly higher than that for the clear vehicle. Ethyl also presented catalyst efficiency²⁸ data based on engine-out emissions of its fleet and based on "slave engine" testing²⁹ for half of its fleet. Results of the slave engine testing indicated no statistically significant difference between the catalyst efficiencies for the MMT vehicle components when compared with the clear vehicle components. Finally, four Chevrolet Corsicas were operated to 100,000 miles, two utilizing MMT fuel and two with clear fuel. The purpose of this testing was to investigate MMT's effect on the catalyst for a longer mileage interval than the 75,000 miles over which most of Ethyl's fleet had been driven. Catalyst efficiencies of the MMT vehicles were not significantly different when compared to the clear fuel vehicles.

Ford presented original test data which Ford said supported its contention that actual in-use MMT-induced HC emissions increases are potentially far greater than those reported by Ethyl.³⁰ Ford conducted testing on a more limited scale utilizing eight vehicles, representing two model groups, run for 105,000 miles. Ford chose two model groups which were representative of its newest technology vehicles at the time. One (the Explorer) represented a technology that Ford believed may be especially prone to exhibit a buildup of manganese, due to significantly higher operating temperatures and loads than those of passenger cars. The other model group,

²⁷ In this program the maximum speed was 65 mph for the first 25,000 miles and 80 mph for an additional 10,000 miles.

²⁸ Catalyst efficiency is a measure of what fraction of the emissions entering the catalyst are actually removed (or catalyzed) by the catalyst.

²⁹ "Slave engine" testing is the testing of vehicle components on a single engine which is not in a vehicle. In this case, catalyst efficiencies between control and MMT vehicles were investigated using exhaust gases from this single engine which were routed through the removed catalysts. This would likely result in a more accurate analysis of catalyst efficiency, since one possible confounding factor, vehicle to vehicle variability, would be eliminated.

³⁰ EPA's emissions testing lab and Ford's lab routinely undergo correlation testing and the data indicate that correlation is good between the labs. (See memorandum, with attached data, from Martin E. Reineman, EPA Manager of Correlation and Engineering Services, Office of Mobile Sources, January 3, 1992, Docket A-91-46.)

the Escorts, had close-coupled catalysts, a design which is being incorporated into many new vehicles in order to meet tighter emissions standards. Like Ethyl, Ford operated part of its test fleet on clear fuel and part on fuel containing 1/32 gpg MMT. However, Ford's test program differed from Ethyl's program in several ways. When accumulating mileage, Ford utilized a commercial gasoline which contained all of the additives (detergents, etc.) typically found in such fuels. Ethyl utilized a very high quality test fuel with tight specifications and no additives.

(Although used for actual emissions testing purposes, Ethyl's fuel would not be allowed for mileage accumulation when certifying vehicles since it is not representative of in-use fuel.) When accumulating mileage, Ford utilized what it called its "durability cycle" which it had previously developed. Compared to the AMA cycle used by Ethyl, Ford's driving cycle had a higher average speed (54 miles per hour (mph) versus 30 mph), and a higher percentage of high speed driving.³¹ (As previously mentioned, Ethyl utilized the AMA cycle used for certification purposes.) Additionally, in the Ford program, vehicles were tested for emissions at five mileage intervals (5,000, 20,000, 55,000, 85,000³² and 105,000 miles) and six emissions tests were done at each testing interval. Ethyl, by comparison, conducted testing every 5,000 miles to 75,000 miles (15 intervals) and utilized two emissions tests at each interval.³³ Ford's test vehicles showed an elevation of HC emissions with MMT that was substantially greater than the 0.018 gpm reported by Ethyl from its test program.

Toyota also submitted data on a single vehicle which was operated for 30,000 miles on MMT-containing fuel after which the oxygen sensor and catalyst were replaced with new components and then driven on fuel not containing MMT for 30,000 miles. Toyota also used

³¹ Ford indicated that drivers who accumulated mileage in its test program were asked to follow posted speed limits. Ford indicated that the cycle consisted of 5% city driving (25 to 45 mph), 5% gravel or off road driving (25 to 45 mph), 20% rural driving (45 to 55 mph), and 70% highway driving (65 mph). Posted speed limits are shown in parentheses. By way of comparison, the AMA cycle consists of 16.1% of driving at 30 mph, 22.6 at 35 mph, 20.9 at 40 mph, 6.4 at 45 mph, 17% at variable speed and one of the three following options: 16.7% at 50 mph or 16.5% at 55 mph or 8.6% and 7.9% at 55 mph and 70 mph, respectively.

³² In fact, only two of the four Escorts were tested at 85,000 miles.

³³ Although Ethyl conducted additional emissions tests at some mileage intervals when the initial two tests showed high variation, these additional tests were not used in Ethyl's analysis of its data.

a driving cycle with an average speed (41.7 mph) higher than that used by Ethyl for mileage accumulation and used fuel with what Toyota believed was a relatively high trace level of lead than that usually found in unleaded gasoline (0.0045 gpg lead) and oil with a relatively high phosphorus level (0.13 weight percent). Toyota referred to this test procedure as the "Toyota 9-Laps" and presented evidence which it said suggested that the catalyst degradation seen by vehicles using the Toyota 9-Lap test was very similar to in-use catalysts tested by Toyota. Hence, Toyota suggested, these "adjustments" made in creating the Toyota 9-Lap make the testing of a vehicle more consistent with what would happen in actual in-use driving. Toyota's data indicated an HC level after the first 30,000 miles of vehicle use (on MMT fuel) about 0.1 gpm higher than the same vehicle after the vehicle was driven for a second 30,000 mile interval with a new catalyst and oxygen sensor. Toyota also submitted data indicating that the efficiency at which the catalyst was operating for the MMT-exposed components was less than that for the non-MMT exposed components.

Some time after EPA's January 8, 1992 denial decision, EPA and Ethyl entered into discussions concerning a possible settlement of the court case which Ethyl had filed. In the context of these discussions, Ethyl submitted to the Agency new data it had developed since the denial decision. Ethyl tested six 1991 Escorts, using both the relatively high-speed driving pattern similar to that utilized by Ford in its testing of 1991 Escorts (the Ford cycle) and, also, after changing emissions system components (catalyst and oxygen sensor), the driving cycle used by Ethyl in the original test program (EPA's durability certification cycle also known as the AMA). Half of the vehicles utilized MMT-containing fuel and half were run on clear fuel (fuel not containing MMT). Ethyl also performed some catalyst efficiency tests on these vehicles utilizing a "slave engine."

Ethyl also tested six 1988 Escorts which were used in its original test program driven on the AMA cycle. In the new program, after replacing the catalyst and oxygen sensor, Ethyl continued mileage accumulation, from 75,000 to 100,000 miles, utilizing the Ford cycle. Likewise, Ethyl tested six 1988 Buicks from its original fleet accumulating mileage (100,000 to 115,000 miles) using the Ford cycle but without replacing any components. Ethyl also accumulated mileage on seven pairs of 1992 vehicles (four Crown Victorias, Six Buick Regals and

four Ford Mustangs) in test programs covering from 45,000 to 100,000 miles beyond break-in with and without MMT, using the Ford cycle.

Based on its inspection and analysis of the new Ethyl data, the Agency ultimately concluded that Ethyl's program had demonstrated driving cycle does not contribute significantly to MMT-induced increases in hydrocarbon emissions. However, in addition to addressing the issue of driving cycle, the Ethyl data appeared to confirm the finding by Ford that 1991 Escorts experienced a much higher MMT-induced HC increase than that observed in other models tested (either in Ethyl's 1992 fleet or in the original 1988 Ethyl fleet). The Agency was concerned that these data could indicate that certain engine and emissions control system configurations were more vulnerable to an MMT-induced emissions increase irrespective of driving cycle.

To further assist the Agency in developing a test program, EPA held a workshop in October of 1992 and presented a proposed test program which could address in a timely manner specific unresolved issues concerning the effect of MMT on emissions: (1) Whether other vehicles utilizing fuels containing MMT are likely to experience increases in hydrocarbon emissions similar to those observed in 1991 Ford Escorts; and (2) whether fuels containing MMT have significant adverse effects on emissions from vehicles utilizing the technologies most likely to be employed to meet future standards.

Ultimately the court case was not settled; however, the test program presented by the Agency at the workshop was largely adopted by Ethyl and is the basis of its most recent test program involving the 1993 fleet. These vehicles (with the previously mentioned 1992 vehicles) comprise Ethyl's most recent dataset.³⁴

Ethyl accumulated mileage on three 1992 model year vehicles (four Crown Victorias to 100,000 test miles,³⁵ six Buick Regals to 65,000 test miles and four Ford Mustangs to 45,000 test miles) and six 1993 model year vehicles (six Toyota Camrys to 85,000 test miles, six Oldsmobile Achievas to 65,000 test miles, six Dodge Shadows to 55,000 test miles, six TLEV Ford Escorts to 85,000

test miles, six Honda Civics to 80,000 test miles and four 49-state Ford Escorts to 30,000 test miles) with and without MMT. The driving cycles used for these vehicles were an intermediate driving cycle of 45 mph on average for the 1993 model year vehicles, an average 55 mph driving cycle (i.e., the Ford Cycle) for all mileage accumulation on the 1992 Ford Mustangs and for the initial 45,000 miles of operation on the 1992 Crown Victorias and Buick Regals and an average driving cycle of 45 mph was utilized for these two models thereafter.

B. Comments on Vehicle Emissions Issues

EPA provided an opportunity for the public to submit written comments.³⁶ Many comments were received from a wide variety of interests, including refiners, automakers, emission control manufacturers, states committees, environmental and public interest groups and private citizens. Taken together, the comments touched on every aspect of Ethyl's application. The following is a summary of the comments.

Four automakers (Ford Motor Company (Ford), General Motors Corporation (GM), Toyota Technical Center, U.S.A., Inc. (Toyota), and Chrysler Motors Corporation (Chrysler)), the American Automobile Manufacturers Association (AAMA), and the Manufacturers of Emission Controls Association (MECA) all recommended denial of Ethyl's request and expressed several concerns with regard to the addition of MMT to unleaded gasoline. First, they noted that the use of MMT will cause an increase in HC emissions. Most indicated that the more stringent emissions standards that began taking effect in model year 1994 will make any increase in HC emissions particularly troublesome. Further, they stated that newer technology vehicles will likely be equipped with catalysts which are nearer the engine (more "closely coupled") and that such close coupling, they stated, results in higher catalyst temperatures that may make the catalyst more prone to the deposition of manganese. These commenters indicated that deposition of manganese compounds on the surface of the catalyst would impair the catalytic breakdown of emissions from the engine, thereby decreasing catalyst effectiveness. Additionally, they were concerned that MMT, even at the 1/32 gpg Mn concentration requested, would

plug catalysts and thus reduce the surface area of the catalyst available to break down emissions from the engine, especially in the case of vehicles operated under driving conditions which result in higher temperatures such as heavy load or high speed. Under such conditions, it was pointed out, the vehicle may be more prone to deposition of manganese.

Ethyl indicated that the assertions that it must "conclusively" demonstrate the absence of negative effects is not required by the section 211(f)(4) standard. Ethyl believes that it need only demonstrate, by a preponderance of evidence, that the additive will not cause or contribute to the failure of emission control devices to comply with applicable emission standards, and, further, it believes that it has made this showing. Ethyl also stated that the EPA test program proposed at its October 1992 workshop involving the accumulation of 65,000 test miles, would be sufficient for purposes of gauging the effect of MMT on emissions. Ethyl commented that it followed this proposal in the 1992/93 test fleet, although mileage accumulation has continued beyond 65,000 miles for three of the eight model year vehicles tested without new emission results different from the trends established through 65,000 miles.

With respect to the automakers' concerns about effect of MMT on newer emission technology such as close-coupled catalysts, Ethyl indicated that the use of the 1993 Transitional Low Emission Vehicle (TLEV) Honda Civic in its most recent test program was intended so as to introduce a vehicle which has the most physically possible close-coupled emission technology (i.e., one connected directly to the exhaust manifold). Despite such close-coupling, Ethyl indicated that the differences in hydrocarbon emissions between clear and MMT-fueled 1993 TLEV Honda Civics was minimal. Ethyl also indicated that this concern about close-coupled catalysts completely ignores that Ethyl tested two 1988 models and three 1993 models equipped with close-coupled catalysts without showing any significant adverse effects on emissions.

Toyota submitted data on catalysts and oxygen sensors from in-use customer vehicles from Canada where MMT is used as a fuel additive. Toyota believes that these catalysts and oxygen sensors indicate that exhaust emissions of hydrocarbons and carbon monoxide are higher from catalysts/oxygen systems collected in Canada than comparable catalyst/oxygen systems from U.S. vehicles. Also Toyota submitted photographs of a catalyst

³⁴ On May 25, 1993, and on subsequent dates, Ethyl provided summaries of the 1992/93 test data to EPA staff and these have been placed in public docket A-93-26.

³⁵ As referred to here, "test miles" indicates mileage accumulated after break-in (break-in mileages vary among these models) and during which some vehicles were run on fuel containing MMT while control vehicles were run on clear fuel.

³⁶ As mentioned previously, the comments received concerning Ethyl's remanded waiver application are available in public docket A-93-26.

taken from a high mileage Canadian Hilux pickup truck which showed plugging of the catalyst passages.

Ethyl's response to Toyota's catalyst/oxygen system data is that it is not clear from the description of the Toyota test results precisely what can be concluded from the test program. Ethyl stated that, without a detailed vehicle history, there is no basis to conclude that MMT had an effect on the catalyst/oxygen system data.

Chrysler submitted data on the analysis of four catalysts, which was completed by Johnson Matthey Incorporated (JMI) at Chrysler's request, that had various degrees of manganese deposition from Canadian vehicles exposed to MMT in the fuel. It indicated that the results of the analysis demonstrate that the washcoat of both the partially plugged catalysts and unaffected catalysts exhibit a clear layer of "densified" washcoat containing large quantities of manganese oxides. Chrysler believes that the JMI report supports its concern that manganese oxides can fill the catalyst pores, thereby covering precious metal sites or decreasing wash coat surface area, consequently eventually decreasing catalyst activity. Regarding the automakers' concerns about the Additive's effect on emissions system components, such as exhaust oxygen sensors, exhaust gas recirculation valves, catalysts and oxygen sensors, Ethyl stated that it has already provided extensive data showing that the Additive does not adversely effect any of these emission system components.³⁷ (Ethyl's test programs are discussed in the previous section.)

Nineteen small refiners including the National Petroleum Refiners Association all recommended approval. They concurred in Ethyl's assessment of the economic benefits and reduced refinery and vehicle emissions that would accrue from the replacement of octane obtained through higher-severity refining with octane obtained from MMT. Several emphasized that MMT would be especially helpful to small refiners since octane enhancement from MMT requires less capital investment than other means of increasing octane. Many refiners also pointed out that refinery operations at lower severity would result in decreased aromatic and benzene emissions from vehicles and increased yield for each barrel of crude oil refined.

³⁷Public Docket A-92-41, No. IV-D-3 (summarizing Ethyl's emission control component testing.)

C. Available Data Meet Previously Used Criteria

The criteria and statistical tests previously used by EPA to examine durability waiver applications were used only once by the Agency prior to Ethyl's 1990 application for the use of MMT.³⁸ These tests include a variety of approaches to durability data designed to determine whether the additive causes increases in regulated pollutants and, if so, whether those increases bring about failure of vehicles in the fleet to meet the standards to which they were certified. While EPA has some concerns regarding the appropriateness of these criteria and tests for current conditions, the Agency does not intend in this action to hold Ethyl to any new criteria and/or tests that are not currently in place. Accordingly, the following discussion is addressed primarily to the results of applying the most critical of the previously used EPA tests.³⁹

The earliest set of test results under consideration here (tests of 1988 vehicles submitted with Ethyl's 1990 application) exhibit the most pronounced MMT-caused emissions increases of the data generated by the applicant (about 0.02 gm/mi⁴⁰, but these increases fall substantially short of failure on the determinative "cause or contribute" test⁴¹ (3 of 8 vehicle models tested fail for HC and 4 of 8 models fail for CO, while 7 of the 8 models tested are required to fail before the additive fails this overall test on either pollutant).

When the larger body of all available and appropriate⁴² long-term emissions

³⁸The test were used in EPA's examination of Ethyl's 1978 application. For a description of these tests, see EPA's decision on the application at 43 FR 41424, September 18, 1978.

³⁹EPA has carefully reviewed Ethyl's application of the test to these data in various combinations and has concluded that the tests were conscientiously and accurately applied. This review focused particularly upon the application of the "integrated emissions test", the "cause or contribute" test, and the overall sign test.

⁴⁰Determined by integration of emissions test results gathered over the full range of mileage supplied by the applicant.

⁴¹Ethyl's consultant, Systems Applications, Inc., describes this test on page 19 of a report that was included as Appendix 2A in Ethyl's May 9, 1990 application for waiver. This co-called "cause or contribute" test, really addresses the question of whether the additive "causes" a failure to meet the certified standard for a regulated pollutant for each model group and then looks to see if enough model groups failed the test to warrant the conclusion with high confidence that more than half of the models are caused to fail by operation on the additive.

⁴²Appropriate data are considered to be those collected with Federal Test Procedure (FTP) testing using an experimental design with a control group and no obvious sources of bias. The data referred to here include the eight 1988 models tested by Ethyl, the two 1991 models tested by Ford, and the eight 1992 and 1993 models tested by Ethyl.

data on High-Tech 3000 is evaluated using these previously used EPA tests, the conclusion is that these increases (averaging 0.02 gm/mi for HC) bring about failure of the "cause or contribute" test in only 4 (for HC) or 5 (for CO) of the 19 model groups tested by the applicant and others. Failure of that test⁴³ must occur in at least 13 of the 19 model groups examined before the additive is deemed to have failed the overall test with 90% confidence.

Fourteen of 19 must fail before the test is failed at the 95% confidence level.⁴⁴

If the newer technology 1992 and 1993 vehicles tested by the applicant are examined in isolation from the earlier test programs, the data (with an average HC effect of 0.002 gm/mi) pass the historical tests even more easily than is the case for the data combinations examined above. None of the nine models failed the "cause or contribute" test for hydrocarbons and only one failed for carbon monoxide. Seven of nine models would have to fail for the additive to fail the overall sign test at the 90 percent confidence level and eight would have to fail for 95 percent confidence.

The overall conclusion from the above analysis, then, is that Ethyl's additive passes the most critical of the historical tests with a comfortable margin.

D. Data on Newer-Technology Vehicles Meet More Stringent Criteria

Notwithstanding the Agency's conclusion that it would not be appropriate to require Ethyl to satisfy new statistical tests concerning which it has not been given prior notice and the Agency's decision to evaluate Ethyl's application primarily according to the previously utilized statistical tests, the Agency nevertheless considers its existing tests and the criteria that they implement to be obsolete under current conditions.⁴⁵

⁴³In order for a model to fail the test, emissions from the additive-fueled vehicles must be sufficiently high that then percent of the represented fleet of that model group using the additive is predicted to exceed the standard before the end of its useful life. The control vehicles must reach this failure rate at a higher mileage than the additive-fueled vehicles.

⁴⁴These "confidence levels" correspond, respectively, to the 0.10 and 0.05 significance levels. The significance level is the probability that a decision to reject the null hypothesis (and find an increase) will be a result of sampling error and thus be incorrect.

⁴⁵The tests are extremely conservative in that they place most of the burden of proof on the Agency rather than on the applicant. The "cause or contribute" test is failed by an engine family only under circumstances where emissions from the family are so high that an additive-caused increase in some pollutant pushes more than ten percent of the vehicle fleet into violation of the standard.

Continued

Therefore, EPA has gone beyond the historical tests to examine Ethyl's data on the use of the additive with newer technology vehicles under more stringent criteria of the sort that seem to be warranted by current conditions. For this analysis, EPA chose to examine the additive's performance against the most stringent of the possible criteria—a requirement that the additive cause no statistically significant increase in emissions.

If one uses a one-sided null hypothesis that the additive causes no increase in HC emissions, one may employ various statistical tests to examine the credibility of that hypothesis in light of the test results. One such test is the computer-intensive "permutation test" in a form called an "approximate randomization" test.⁴⁶ Application of this test to the full mileage range of HC emissions data from Ethyl's tests of 1992 and 1993 vehicles results in a failure to discern any "real" emissions increase at all—that is, no increase that we may not reasonably attribute to sampling error

Moreover, the final sign test that is applied to the model-specific results is failed by the additive only when it may be concluded with high confidence that more than half of the models in the represented population would fail the model-specific test. In practical situations with relatively small samples, this sign test permits a high percentage of the models in the sample to fail before the additive is declared to have failed the test. These tests, then, may permit the granting of waivers in the face of substantively significant emissions increments attributable to an additive—increments that would tend to offset the benefits from an increasingly stringent regulatory program aimed at bringing the nation's most serious air quality problems under control. Agency concerns with these tests were addressed previously in its decision on Ethyl's 1990 application (57 FR 2535, January 22, 1992) and in (58 FR 64761, December 9, 1993).

⁴⁶ The permutation test is built around the idea that, if the null hypothesis is correct, the increase due to the additive in the sample is only one member of a distribution of all possible such increases computed from assignments of vehicle emissions to fuel groups within models. Only if the fuel-related increase from the sample is an extremely unusual result in this distribution of possible increases is it reasonable to reject the null hypothesis and conclude that the additive actually brought about an increase in emissions. The way that this method works in practice is that, on each iteration of the computer program, the computer randomly rearranges the fuel group assignments among the emission results within each model group separately. The emission values assigned (for that iteration) to the additive fuel group are then summed over the entire sample to form the test statistic. This process is repeated a very large number of times (one million in this case) and the resulting test statistics are tabulated. Only if the same test statistic, as computed from the empirical sample, exceeds a pre-determined percentage of the simulated test statistics may we reject the "no-difference" hypothesis and conclude with the necessary degree of certainty that an increase has occurred.

rather than to an additive effect on HC in the sampled vehicle population.⁴⁷

E. Finding

Based on all of the information then available concerning the potential effect of use of MMT in unleaded gasoline on regulated emissions, as submitted by Ethyl and others, the Administrator of EPA determined on November 30, 1994 that, "Ethyl has satisfied its burden under Clean Air Act 211(f)(4) to establish that use of HiTEC 3000 at the specified concentration will not cause or contribute to a failure of any emission control device or system (over the useful life of any vehicle in which such device or system is used) to achieve compliance by the vehicle with the emission standards with respect to which it has been certified." The basis for this determination was described briefly in the Administrator's November 30, 1994 notice, and has been reviewed in detail above.

The November 30, 1994 determination was specific to Ethyl's present waiver application. As the Administrator made clear in the notice announcing the determination, it does not apply to any new application concerning either HiTEC 3000 or MMT in the event that this decision to deny Ethyl's application on the basis of concerns regarding potential health effects is upheld in any subsequent judicial review. Although Ethyl may be able to sustain its burden under Section 211(f)(4) in the context of any future waiver application, any such application must include satisfactory data addressing the effect on vehicles in production at that time and will be evaluated according to the statistical methods and criteria for evaluation of waiver applications in effect at that time.

V. The Onboard Diagnostics Issue

Prior to the Administrator's November 30, 1994 finding concerning emission effects, three auto manufacturers, Ford, General Motors (GM), and Chrysler, and the American Automobile Manufacturers Association (AAMA), all commented on concerns about the impact of the oxidative products of MMT on onboard diagnostic (OBD II)

⁴⁷ This conclusion holds even when the test is performed at the 0.10 significance level used in conducting the statistical testing on the data from Ethyl's 1978 application. It is important to note that the original Ethyl test fleet of 1988 model year vehicles that are now older than those representing the newest Ethyl data set did not fare as well and, as mentioned previously, do demonstrate statistically significant increases in HC emissions.

systems employing before-catalyst and after-catalyst oxygen sensors.⁴⁸

GM concerns regarding the OBD II system were two-fold. Its first concern was that since it is known that manganese oxide has the ability to store oxygen, a potential problem could occur with dual oxygen sensor systems. GM stated that, with manganese oxide covering the catalyst and the oxygen sensors, a false oxygen storage capacity of the catalyst could be indicated by the OBD II system, which could then indicate that the catalyst was still working properly while the opposite could be true. GM's second concern was that the catalyst would act as a "filter" and manganese oxide from MMT combustion passing through the exhaust system would coat the before-catalyst oxygen sensor and after-catalyst oxygen sensors unevenly, thus causing the OBD II system to malfunction. GM also stated that in the 1994 model year GM planned to market two engine families equipped with OBD II systems employing before- and after-catalyst oxygen sensors.

With respect to the automakers' concern that use of MMT would adversely affect operation of the OBD II system, on July 15, 1993, Ethyl submitted data which it believed demonstrated that this concern has no basis.⁴⁹ Ethyl stated that no production vehicles were then equipped with OBD-II systems and that the primary hardware approach being considered by the automobile manufacturers involves the use of exhaust gas oxygen (EGO) sensors before and after the catalytic converter to monitor converter efficiency. Ethyl further commented that test data generated by Ethyl showed that use of the additive would have no adverse effect on either the hardware component of these planned OBD-II systems (i.e., the oxygen sensors), or on the catalytic converter itself. Ethyl noted that, "[s]ince these future systems are currently under development, it is

⁴⁸ An Onboard Diagnostic System, with the present generation commonly known as OBD-II, monitors the activity of an automobile's emission control system, primarily the catalytic converter, and alerts the driver via a dashboard light in the event of a malfunction. Put simply, this aspect of the OBD system functions by utilizing devices before and after the catalyst which "sense" the presence of oxygen. If the catalyst is functioning properly, it will absorb a certain amount of oxygen and a specified decrease in oxygen content in the exhaust gases can be determined by comparing the oxygen "sensed" before and after the catalyst. If the catalyst is functioning improperly, oxygen storage by the catalyst is impaired and a drop in exhaust gas oxygen after the catalyst beyond the proper range is "sensed" by the OBD system.

⁴⁹ See Public Docket A-93-26, Number II-D-8, Appendix 5.

impossible to consider the long term effects of MMT on these systems."

On November 4, 1994, only 26 days prior to the mandatory date for a decision on Ethyl's waiver application, Ford Motor Company submitted a report describing bench testing⁵⁰ of catalysts, in which Ford measured the oxygen storage capacity of catalysts which had been deliberately degraded and then exposed to the emissions from MMT-containing fuel. Ford's conclusion based on these tests was that the exhaust gas oxygen (EGO) sensors would be affected by the deposition of manganese oxides associated with MMT use, thus sending incorrect signals to the diagnostic control system in the vehicle.

Although the Agency regarded the concerns expressed by Ford in its November 4, 1994 submission regarding the effect of MMT use on OBD systems as potentially very important, based on the very limited analysis which could be undertaken prior to the November 30, 1994 deadline for a decision concerning Ethyl's application, the Agency concluded that the limited bench testing submitted by Ford did not allow a conclusion concerning the likelihood that a significant impact would actually occur during vehicle operation. In addition, the Agency had several questions regarding the procedures involved in the Ford testing which could not be resolved within the available time. The November 30, 1994 notice announcing the Administrator's determination concerning emission effects made it clear that EPA was concerned about this issue and would retain the authority to take appropriate action in the future pursuant to Clean Air Act Section 211(c).

EPA met with staff of Ford in February of 1994 in order to discuss Ford's concerns raised in its November 4, 1993 submission. Ford generally expressed the same concerns as had been expressed by GM (and discussed above).⁵¹ According to Ford, its testing showed that combustion of gasoline containing MMT deposits a layer of manganese oxide on top of the catalyst washcoat and that this causes the EGO Sensor to measure a lower oxygen level, thereby indicating a higher oxygen storage capacity than that which would be indicated by the catalyst without

MMT. As a result, a malfunctioning catalyst might not be detected. Ford expressed particular concern because it had just introduced three 1994 model year vehicle families employing OBD-II, whereas the other automakers will not have systems out until the 1996 model year.

Recently, on May 3, 1993, Ford submitted additional information which the Agency is currently reviewing. This new information appears to provide further evidence to substantiate the concerns expressed by Ford regarding the impact of MMT use on OBD systems. Unlike the previously submitted Ford data, the new data address an actual production vehicle fitted with a failed catalyst and the effect use of MMT had on the OBD system's ability to detect failure of the catalyst.

The Agency is continuing to investigate the question of the potential impact of use of MMT in unleaded gasoline on OBD systems. If after further investigation EPA concludes that the concerns expressed by the vehicle manufacturers are warranted, EPA intends to initiate an appropriate rulemaking under Section 211(c).

VI. Manganese Health Assessment⁵²

A. Introduction

In 1990, the EPA Office of Research and Development (ORD) assessed the potential health risks associated with the use of methylcyclopentadienyl manganese tricarbonyl (MMT) as an additive in unleaded gasoline (U.S. Environmental Protection Agency, 1990).⁵³ Later, ORD (Preuss, 1991) reaffirmed its assessment after considering a resubmitted waiver application for MMT from Ethyl Corporation. As identified in earlier ORD evaluations (U.S. Environmental Protection Agency, 1990; Preuss, 1991), a key issue is the potential health risk associated with inhalation exposure to manganese tetroxide (Mn_3O_4), which is the primary by-product resulting from the combustion of MMT in gasoline. New information on manganese (Mn) health effects and exposure is incorporated in this revised risk assessment. (United States

Environmental Protection Agency, 1994b)

This reevaluation has four components: (1) a health effects assessment, (2) an exposure assessment, (3) a risk characterization relating the first two, and (4) a summary and conclusions. This evaluation summarizes earlier ORD assessments and incorporates information from certain other major new reports and analyses.⁵⁴

B. Health Effects Assessment

1. Background

The toxicity of Mn varies according to the route of exposure. By ingestion, Mn has relatively low toxicity at typical exposure levels due in part to a low rate of absorption from the gastrointestinal tract and in part to efficient regulation by homeostatic mechanisms. Manganese is considered a nutritionally essential trace element and is required for certain enzymes important for normal functioning of the central nervous system and other body organs. However, by inhalation, Mn has been known since the early 1800s to be toxic to workers. It should be noted that Mn occupational studies predominantly (and sometimes exclusively) involve men. Neurobehavioral, respiratory, and reproductive effects are the primary features of excessive occupational exposure to Mn. Manganism is characterized by various psychiatric and movement disorders, with some general resemblance to Parkinson's disease in terms of difficulties in the fine control of some movements, lack of facial expression, and involvement of underlying neuroanatomical and neurochemical factors. Neurobehavioral effects of Mn intoxication are generally more clinically prominent than respiratory or reproductive effects. However, respiratory effects (e.g., pneumonitis) and reproductive dysfunction (e.g., reduced libido) are also frequently reported features of occupational Mn intoxication. The available evidence is inadequate to determine whether or not Mn is carcinogenic; some reports suggest that it may even be protective against cancer. Based on this mixed but insufficient

⁵⁰ Bench testing means the testing of components during which time the components are not actually in the vehicle. The details of this testing can be found in Document II-D-56 in Docket A-93-26. (An incomplete preliminary report of this information was submitted to the Agency in Document II-D-38, Docket A-93-26.)

⁵¹ Ford's concerns are discussed in more detail in a memo to docket A-93-26, with an attachment submitted to the Agency entitled "Section 211(c) Impacts of MMT".

⁵² The assessment presented here is taken from "Reevaluation of Inhalation Health Risks Associated with Methylcyclopentadienyl Manganese Tricarbonyl (MMT) in Gasoline" (United States Environmental Protection Agency, 1994b) which can be found in the docket in its entirety.

⁵³ The many references in this section of the decision dealing with manganese health effects are referred to in parentheses and listed at the end of this section in subsection E.

⁵⁴ The reader is referred to the appendices of the full EPA/ORD reevaluation for more detailed background information. This report, "Reevaluation of Inhalation Health Risks Associated with Methylcyclopentadienyl Manganese Tricarbonyl (MMT) in Gasoline", can be found in its entirety, including the appendices, in docket A-91-46. Appendix A presents dose-response analyses, Appendix B presents an exposure assessment, and Appendix C contains the current verified Mn inhalation reference concentration (RFC) as it appears in the U.S. EPA Integrated Risk Information System (IRIS, 1993).

evidence, EPA has placed Mn in a Group D weight-of-evidence category, which signifies that it is not classifiable as to human carcinogenicity. Given these features of Mn toxicity, the health assessment focuses on the potential for chronic noncancer effects.

Various epidemiological studies of male workers exposed to Mn at average levels below the current American Conference of Governmental Industrial Hygienists Threshold Limit Value (TLV) (5 mg/m^3)⁵⁵ have shown neurobehavioral, reproductive, and respiratory effects, both by objective testing methods and by workers' self-reported symptoms on questionnaires. Neurobehavioral effects generally have reflected disturbances in the control of hand movements (e.g., tremor, reduced hand steadiness) and/or the speed of movement (e.g., longer reaction time, slower finger-tapping speed). Reproductive effects have included a decrease in the number of children born to Mn-exposed workers (compared to matched controls) and various self-reported symptoms of sexual dysfunction. In recent studies at low to moderate occupational exposure levels, respiratory effects have been reflected primarily in self-reported symptoms of respiratory tract illnesses rather than in differences between objective pulmonary function measurements in Mn-exposed and control workers. However, the lack of studies using more sensitive investigational methods and the existence of some limited evidence from an epidemiological study of school children raise a degree of concern about pulmonary function effects in relation to lower level Mn exposure.

The precise mechanisms of Mn neurotoxicity are not well understood, but it appears that Mn can affect several different aspects of central nervous system (CNS) function and structure. Some experimental evidence suggests that the mechanisms of Mn toxicity may depend on the oxidation state of Mn. However, both the trivalent form (Mn^{3+}) and the divalent form (Mn^{2+}) have been demonstrated to be neurotoxic.⁵⁶ Also, both forms of Mn can cross the blood-brain barrier, although research suggests that Mn^{3+} is predominantly transported bound to the

protein transferrin (Aschner and Gannon, 1994), whereas Mn^{2+} may enter the brain independently of such a transport mechanism (Murphy et al., 1991). Unlike ingested Mn, inhaled Mn is transported directly from the respiratory system to the vicinity of the brain before its first pass by the liver. Depending on the form of Mn inhaled, its conversion to other oxidation states (e.g., oxidation of Mn^{2+} to Mn^{3+} or reduction of Mn^{4+} to Mn^{3+}), and its ability to enter the brain (through a protein transport mechanism or otherwise), it is quite possible that a significant fraction of even small amounts of inhaled Mn would be able to reach target sites in the CNS. Thus, the apparently greater toxicity of inhaled versus ingested Mn may reflect important pharmacodynamic and pharmacokinetic differences of Mn that enters the body by different routes. A more definitive understanding of these issues will require more empirical information.

2. Earlier Assessments

Earlier ORD health assessments have been based on the RfC, which is defined as an estimate (with uncertainty spanning about an order of magnitude) of a continuous inhalation exposure level for the human population (including sensitive subpopulations) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. The basic procedure for derivation of an RfC entails identifying a no-observed-adverse-effect level (NOAEL) and a lowest-observed-adverse-effect level (LOAEL) from a "principal" study, generally defined as the available study that best defines the highest NOAEL or lowest LOAEL for the most sensitive endpoint affected by a chemical. When an investigation of occupationally exposed humans is the principal study (as in the case of the Mn RfC), the NOAEL or LOAEL is adjusted for differences in ventilation rates and exposure durations between the occupational exposure scenario (10 m^3 air breathed per 8-h workday, 5 days/week) and the "general public" scenario (20 m^3 air breathed per 24-h day, 7 days/week). The adjusted NOAEL or LOAEL is then divided by uncertainty factors and a modifying factor. In the case of the original (1990) RfC for Mn, uncertainty factors of 10 each were used for extrapolating from a healthy worker population to the general population (including sensitive subpopulations) and for extrapolating from a LOAEL to a NOAEL. Also, an uncertainty factor of 3 (approximately one-half of 10 on a log scale) was used for extrapolating from subchronic to chronic exposure. A

modifying factor of 3 was used because of statements by the authors of the principal study (Roels et al., 1987) that past exposure levels of workers in the subject study were probably lower than those measured at the time the study was conducted. The resulting RfC of $0.4 \text{ } \mu\text{g Mn/m}^3$ was used for the earlier ORD risk assessment (U.S. Environmental Protection Agency, 1990) and was entered on EPA's IRIS computer database of human health risk and regulatory information in December 1990.

3. 1993 Revised RfC

The original RfC for Mn was revised, in part, because newer information supplied in conjunction with the resubmittal of the MMT waiver application by Ethyl indicated that the workers' exposure levels in the principal study had probably not increased over time, and thus the modifying factor could be "eliminated" (i.e., set equal to 1). Another reason for revising the original RfC was that more recent studies (Roels et al., 1992; Mergler et al., 1994) provided additional evidence of health effects in workers at relatively low airborne concentrations of Mn.

Independently of their earlier study of Mn-exposed workers (Roels et al., 1987), Roels et al. (1992) conducted a cross-sectional study of neurobehavioral and other endpoints in another group of workers from a different factory—namely, 92 male alkaline-battery plant workers exposed to manganese dioxide (MnO_2) dust—who were compared to a matched control group of 101 male workers without industrial Mn exposure. The geometric mean occupational-lifetime integrated respirable dust concentration was $793 \text{ } \mu\text{g Mn/m}^3 \times \text{years}$ (range: 40 to 4,433). The equivalent value for total dust was $3,505 \text{ } \mu\text{g Mn/m}^3 \times \text{years}$ (range: 191 to 27,465). The authors noted that the monitored concentrations were representative of the usual exposures of the workers because work practices had not changed during the last 15 years of the plant's operation. No data on particle size or chemical purity were provided in the report by Roels et al. (1992), but based on information provided by Roels et al. (1992) and Roels (1993), the median cut point for the respirable dust fraction was $5 \text{ } \mu\text{m}$ aerodynamic diameter. The respirable fraction is more representative of the toxicologically significant particles (i.e., the smaller particles that are inhaled and deposit predominantly in the lower respiratory tract). Total dust measurements comprised the respirable dust as well as larger particles that deposit predominantly in the nose and

⁵⁵ The American Conference of Governmental Industrial Hygienists (1992) has given notice of intent to lower the TLV to 0.2 mg/m^3 .

⁵⁶ Various elements can exist in more than one form of charged atom, depending on the number of negatively charged and positively charged particles contained in the atom. Manganese is one such element where, depending on the number of charged particles associated with the atom, the atom may have a net charge of two or three "plus" charges resulting in a "divalent" or "trivalent" form, respectively.

throat region (via nasal breathing) and would be cleared more rapidly from the respiratory tract than the smaller particles retained in the lower regions. Therefore, the respirable dust measurements were considered to be a more accurate indicator of exposure in relation to the observed health effects.

Manganese-exposed workers in the 1992 study by Roels et al. performed significantly worse than matched controls on several measures of neurobehavioral function, particularly visual reaction time, eye-hand coordination, and hand steadiness. Similar neurobehavioral impairments were also found in the earlier study by Roels et al. (1987) of a different occupational population exposed to mixed Mn oxides and salts at approximately the same levels of total dust (respirable dust was not measured). In addition, a recent study in Canada by Mergler et al. (1994) indicated that, among other effects, performance on tests of the ability to make rapid alternating hand movements, to maintain hand steadiness, and to perform other aspects of fine motor control was significantly worse, compared to matched controls, in workers who were exposed to even lower concentrations of respirable dust ($35 \mu\text{g Mn/m}^3$ at the time of the study). If Mergler et al. had included information on integrated past exposure levels (which they have since provided to ORD in a preliminary form not yet submitted for publication), their study would have provided a fivefold lower LOAEL for the derivation of the RfC. In addition, reports of a Swedish study of Mn-exposed steel workers (Iregren, 1990; Wennberg et al., 1991, 1992) provided compelling evidence of comparable neurobehavioral impairments, including slower reaction time and finger-tapping speed. The median total dust concentration in the Swedish study was $140 \mu\text{g Mn/m}^3$, with respirable dust reported as constituting 20 to 80% of individual workers' total dust exposures. Thus, the LOAEL from this study would be somewhat lower than that from Roels et al. (1992), but the less fully characterized exposure histories in the Swedish study made it more appropriate as a supporting (rather than principal) study for deriving the Mn RfC.

Taken together, the above epidemiological studies provide a consistent pattern of evidence indicating that neurotoxicity is associated with low-level occupational Mn exposure. The fact that speed and coordination of motor function are especially impaired is particularly noteworthy, given its consistency with

other epidemiological, clinical, and experimental animal evidence of higher concentration Mn intoxication.

Differences among these studies in the duration of workers' exposure to Mn raise another issue of relevance to this discussion. In the Roels et al. (1992) study, the mean period of exposure was 5.3 years (range: 0.2 to 17.7 years). In the other studies, the mean durations of exposure were longer: 7.1 years in Roels et al. (1987), 9.9 years in Iregren (1990), and 16.7 years in Mergler et al. (1994). The indications of lower LOAELs in the Canadian and Swedish studies suggest that neurobehavioral effects might occur at lower concentrations of Mn if the exposure periods were longer. In addition, the age of the workers may be an important factor in interpreting these findings. The oldest worker in the Roels et al. (1992) study was less than 50 years old; also, the average age in that study was only 31.3 years, versus 34.3 years in Roels et al. (1987), 43.4 years in Mergler et al. (1994), and 46.4 years in Iregren (1990). These points suggest that longer exposure and/or testing later in life might result in the detection of effects at lower concentrations than is possible after shorter periods of exposure and/or in younger workers. On the other hand, it is also evident from these studies that a much shorter period than a full lifetime of occupational Mn exposure may be sufficient to induce Mn neurotoxicity.

As Roels et al. (1992) and other investigators have noted, a threshold for the neurotoxic effects of Mn has not been reported in the epidemiological literature. Therefore, instead of a NOAEL, a LOAEL was obtained from the study by Roels et al. (1992) by dividing the geometric mean integrated respirable dust concentration ($793 \mu\text{g Mn/m}^3 \times \text{years}$) by the average period of worker exposure (5.3 years) to eliminate time (in years) from the time-weighted average, thereby yielding a LOAEL of $150 \mu\text{g Mn/m}^3$. (The geometric mean concentration was used to represent the average exposure because the workers' exposure measurements were log-normally distributed, and the arithmetic mean exposure period was used because it was the only value reported by Roels et al. (1992).) The workplace-based LOAEL of $150 \mu\text{g Mn/m}^3$ was then adjusted for nonoccupational lifetime exposure by multiplying it by (1) the quotient of $10 \text{ m}^3/\text{day}$ divided by $20 \text{ m}^3/\text{day}$ (for worker versus nonworker ventilation rates) and (2) the quotient of 5 days divided by 7 days (for work week versus full week). The resulting adjusted LOAEL, labeled the human equivalent concentration (HEC), was $50 \mu\text{g Mn/m}^3$, which was then divided by a total

uncertainty factor of 1,000 to yield an RfC of $0.05 \mu\text{g/m}^3$. The total uncertainty factor of 1,000 incorporated the following factors: 10 to protect sensitive individuals; 10 for using a LOAEL in lieu of a NOAEL; and a composite factor of 10 for database limitations reflecting the less-than-chronic periods of exposure and the lack of reproductive and developmental toxicity data, as well as potential but unquantified differences in the toxicity of different forms of Mn. A modifying factor was not used (i.e., it was set equal to 1).

Each RfC is assigned an overall rating of low, medium, or high confidence level, based on two subsidiary confidence ratings reflecting the quality of the evidence from the principal studies and the quality of the overall database for the chemical in question, respectively. The revised Mn RfC was assigned a medium level of confidence. The evidence for the neurobehavioral effects of low-level Mn exposure by inhalation was compelling and consistent across several well-conducted studies. However, the limited duration of exposure and the lack of a NOAEL for neurotoxicity in any of the principal or supporting studies prevented assigning a confidence level greater than medium. Also, the lack of definitive data on the concentration-response relationship and on the potential reproductive and developmental toxicity of inhaled Mn limited the degree of confidence in the database to a medium rating. Virtually all of the human health evidence is based on healthy, adult male workers. No known studies have investigated human female reproductive function, and even though male worker reproductive function is known to be affected by Mn exposure, it has not received adequate investigation. The limited available information concerning the developmental toxicity of inhaled Mn suggests the possibility that prenatal exposure of laboratory rodents to MnO_2 (via the air supplied to the pregnant mother) may depress neurobehavioral activity in neonatal rats and that continued postnatal exposure of the pups may intensify this depression. In addition, several studies have demonstrated alterations in neurochemical (dopamine) levels in young mice and rats exposed during early postnatal development to Mn via other routes. Thus, the potential for developmental toxicity due to Mn exposure exists. The concentrations and durations of exposure sufficient to induce such effects are not known. Although adequate epidemiological studies of children and the elderly have

not been conducted, it is known that certain populations, such as children, pregnant women, elderly persons, iron- or calcium-deficient individuals, and individuals with liver impairment, may have an increased potential for excessive Mn body burdens due to increased absorption or altered clearance mechanisms.

Another concern raised by the lack of studies involving longer periods of exposure and/or older subjects is that the compensatory or reserve capacity of certain neurological mechanisms may be stressed by Mn exposure earlier in life, with manifestations of impairments only becoming evident much later, perhaps at a geriatric stage. One reason for the latter concern is that Parkinson's disease is typically a geriatric disease in which symptoms are only seen when the loss of brain cells that produce dopamine (which is also apparently involved in Mn toxicity) reaches 80% or more. Indeed, some neurologists think that a long latency period of perhaps several decades may precede various parkinsonian syndromes. These points lead to a concern that if Mn reduces the compensatory or reserve capacity of the nervous system, parkinsonian-type effects might occur earlier in life than they would otherwise. Thus, several questions remain to be answered before higher confidence in the accuracy of the RfC can be achieved.

The two studies of Roels et al. (1992, 1987) were considered coprincipal studies for the derivation of the revised RfC, with supporting evidence in the reports of Mergler et al. (1994), Iregren (1990), and Wennberg et al. (1991, 1992). Given the fact that these studies involved exposure to various oxides and salts of Mn, the RfC is designated as applying to Mn and Mn compounds (including Mn_3O_4). The previous RfC of $0.4 \mu g/m^3$ applied to Mn only, due to undifferentiated forms of Mn in the principal study. Given that different forms of metals may have different toxic properties (due to different oxidation states, different solubilities, and possibly other factors), it is likely that different compounds of Mn vary in toxicity. However, sufficient data on the comparative toxicity of various compounds of Mn are not available to judge the relative toxicity of Mn_3O_4 specifically.

As noted above, Mn affects multiple organ systems, including the respiratory and reproductive systems as well as the CNS. However, because the only available evidence suggests that the CNS is the most sensitive target for Mn toxicity, neurobehavioral endpoints were the focus of the RfC derivation. Although other types of effects remain

a concern, it is presumed, based on the limited data now available, that protecting against neurotoxicity provides protection against these other, apparently less sensitive endpoints.

In revising the RfC for Mn, a draft version was subjected to peer review by external experts (from academic and non-EPA governmental institutions) as well as internal experts. Following this peer review, a further-revised version was submitted to and verified by an EPA-wide RfD/RfC work group in September 1993. The current RfC for Mn was made available through IRIS in early November 1993 through two mechanisms. A special notice beginning November 1 in the news section of EPA's internal IRIS2 database announced the availability of a hard copy of the text to EPA requesters who contacted the Risk Information Hotline; also, the text was obtainable through the National Library of Medicine's publicly accessible on-line computer database, TOXNET, beginning November 10, 1993. It also became available on line via the EPA IRIS database beginning December 1, 1993.⁵⁷

4. Alternative Approaches to Deriving RfCs

After the revised RfC for Mn became available to the public, Ethyl Corporation and other interested parties submitted comments on the RfC and issues related to it. One of the primary comments concerned the availability of various statistical techniques for deriving a NOAEL from the study by Roels et al. (1992) and/or from supplementary data for that study provided to ORD by Roels (1993). In response to Ethyl Corporation's request that EPA consider alternative approaches to analyzing these data and deriving an RfC for Mn, further analyses of the subject data were undertaken using a variety of statistical methods. These approaches may be identified as (1) conventional NOAEL- or LOAEL-based analyses, (2) "no statistical significance of trend" (NOSTASOT) analyses of the type described by Tukey et al. (1985), (3) benchmark dose analyses of the type described by Crump (1984), and (4) Bayesian analyses of the type described by Jarabek and Hasselblad (1991). These analyses and their results⁵⁸ yield several possible RfC estimates, so designated because the current and only verified RfC for Mn is

that which has been verified by the EPA-wide RfD/RfC work group and entered on IRIS. It must be emphasized that the RfC estimates developed for the purpose of this risk assessment do not represent a revision of the current verified RfC for Mn. Reexamination of the current Mn RfC, and any decision to revise or reaffirm the current RfC, will be under the purview of the EPA-wide RfD/RfC work group at some future date.

A fundamental issue pertaining to all of the approaches presented here is the selection of a measure of exposure. Roels et al. (1992) described two measures of respirable dust, the occupational lifetime respirable dust concentration (LIRD), expressed as $\mu g/m^3 \times \text{years}$, and the current concentration of respirable dust (CRD), expressed as $\mu g/m^3$. The CRD concentration was measured at the time the study was conducted by Roels et al. and refers to a representative concentration measured for the type of job performed by a worker (e.g., electrician, maintenance worker). The LIRD value for each worker was a cumulative exposure measure derived by adding the CRD values over the worker's entire period of employment. If a worker changed jobs within the plant during his period of employment, the CRD for each job held was multiplied by the number of years the worker performed that job. Thus, if more than one job classification was worked, the worker's LIRD was the sum of the products of CRD multiplied by years of performance of the respective jobs. However, if a worker held only one job classification, his LIRD was simply equal to his CRD multiplied by the number of years employed. Another measure of exposure may be derived from LIRD by dividing an individual worker's LIRD value by his total number of years of employment. The latter measure, designated as the average concentration of respirable dust (ACRD), reflects a worker's time-weighted cumulative exposure level but removes years from the unit of measurement of LIRD and is expressed as $\mu g/m^3$. Although Roels et al. (1992) did not refer to ACRD, this value could be calculated for each individual and for the entire cohort by using the unpublished data provided to ORD by Roels (1993). For reasons to be discussed later, ACRD offers advantages for certain analyses and, unless otherwise noted, is the exposure measure used in the alternative RfC estimates discussed here.

a. *Conventional NOAEL- or LOAEL-Based Approach.* The conventional method, and only method used thus far by EPA, to derive an RfC has been to

⁵⁷ The complete text of the revised RfC as it exists on IRIS2 may be found in Appendix C in the docket.

⁵⁸ See "Reevaluation of Inhalation Health Risks Associated with Methylcyclohexadienyl Manganese Tricarbonyl (NMT) in Gasoline", Appendix A, Docket A-91-46.

identify a NOAEL or LOAEL from a study and divide that concentration by uncertainty factors, as described above for the Mn RfC. In the case of the study by Roels et al. (1992), the geometric mean LIRD concentration of the Mn-exposed workers was used as a LOAEL. Roels et al. (1992) also performed an exposure-response analysis of their data by grouping the exposed workers into three exposure categories and comparing the prevalence of abnormal neurobehavioral scores for each of the three groups to those of controls. As indicated in the summary sheet for the Mn RfC (see Appendix C), the results of this exposure-response analysis were not used in deriving the revised Mn RfC because the reported analysis did not correct for multiple comparisons. However, ORD's analyses of additional data provided by Roels (1993) suggest a possible RfC estimate of $0.03 \mu\text{g}/\text{m}^3$ (versus the current RfC of $0.05 \mu\text{g}/\text{m}^3$), if a one-tailed test of statistical significance is accepted (see Appendix A, "Reevaluation of Inhalation Health Risks Associated with Methylcyclopentadienyl Manganese Tricarbonyl (MMT) in Gasoline" as referenced in the reference section below, hereafter referred to as Appendix A). Because it was based on an exposure-response analysis, this RfC estimate is labeled as such in Figure 1, which could not be reproduced in the Federal Register. It is available by calling the person listed in the FOR FURTHER INFORMATION CONTACT section of this notice. It is also available in docket A-93-26, item number II-A-17, page 12 (see ADDRESS section of this notice for docket location).

b. NOSTASOT Approach. Another approach to analyzing dose-response data makes use of a procedure known as NOSTASOT, described by Tukey et al. (1985). In essence, the procedure applies a trend test sequentially to determine the highest noneffective dose of a series of doses by eliminating one dose at a time. In this manner, the dose level at which the response is not significantly different from controls is determined to be the NOSTASOT dose, which could therefore be considered a NOAEL. Applied to Roels' (1993) epidemiologic data by beginning with the highest individual ACRD exposure and moving downward (i.e., a "top-down" approach), the procedure yielded a NOSTASOT of $285 \mu\text{g}/\text{m}^3$ for eye-hand coordination (see Table A-4, Appendix A). This approach implies that once nonsignificance is reached, further application of trend tests to lower dose groups would also yield nonsignificance. However, this was not

the case with Roels' (1993) epidemiologic data, and thus it was important to determine not simply the highest NOAEL but the highest NOAEL below the lowest LOAEL. By this "bottom-up" approach, the highest nonsignificant exposure below the lowest statistically significant exposure was $21 \mu\text{g}/\text{m}^3$, for visual reaction time. Using the latter value as a NOAEL and a total uncertainty factor of 100 (the same as that used for the current Mn RfC, except omitting a factor of 10 for extrapolating from a LOAEL to a NOAEL), one would obtain a value of $0.07 \mu\text{g}/\text{m}^3$ for an RfC estimate (Figure 1). Disparities in the NOSTASOTs obtained for various endpoints by the top-down and bottom-up approaches raise questions about the suitability of this technique for deriving a NOAEL from the data of Roels (1993).

c. Benchmark Analyses. Another approach to deriving an RfC estimate is the benchmark dose (BMD) approach, which has been described by Crump (1984) and others (e.g., Kimmel and Gaylor, 1988; Faustman et al., 1994; Allen et al., 1994). A BMD is an estimate of the dose (the term dose is used interchangeably here with concentration, although the latter is more appropriate for inhalation exposure) that will produce a specified effect (e.g., a 10% increase in the prevalence of abnormal scores on a neurobehavioral test in the case of the study by Roels et al. (1992)). The BMD is calculated by fitting a mathematical model to the available data and obtaining a maximum likelihood estimate of the dose associated with a specified increase in response (typically 10, 5, or 1%). A lower confidence limit is then calculated for the BMD (usually the 95th percentile), and the result is denoted as a benchmark dose level (BMDL), which has been proposed as a substitute for a NOAEL in deriving RfCs or RfCs (Crump, 1984; Barnes et al., 1994). Subscripts designate the effect level (10, 5, or 1%) for which the BMDL has been calculated, as in BMDL₁₀, BMDL₅, or BMDL₁.

A large number of mathematical models could be used for deriving BMDLs, but six frequently used models have been selected for the present exercise (as discussed in Appendix A). In applying these models to the dataset provided by Roels (1993), it appears that the models fit the CRD and ACRD data better than the LIRD data. (As explained in Appendix A, it made little difference whether the LIRD values were obtained from the group data provided in the report by Roels et al. (1992) or from the individual exposure data supplied by Roels (1993), so the latter LIRD data

were used here.) In principle, LIRD is superior to CRD as a measure of long-term or cumulative exposure. One reason for the difference in goodness of fit between LIRD and either CRD or ACRD is that two workers with low LIRD values had abnormal eye-hand coordination responses (exceeding the 95th percentile of control scores). These two subjects appear to have had rather short exposure durations (0.3 and 0.4 years) and moderately high CRD values ($201 \mu\text{g}/\text{m}^3$ each). Thus, these two data points suggest an LIRD exposure-response relationship that is better fit by a supralinear curve with a power term <1 (see Figures A-3 and A-5 in Appendix A) than by the more nearly linear curve such as that produced by the quantal linear or restricted Weibull model (see Figures A-1 and A-4 in Appendix A). If CRD or ACRD exposure data are used, however, the two individuals tend to fall in line better with a linear model (see Figures A-7 to A-10 in Appendix A). Another factor contributing to difficulty in fitting the Roels (1993) data with linear models is a tendency for the prevalence of abnormal eye-hand coordination responses to decline slightly at the highest LIRD, CRD, and ACRD concentrations (evident in Figures A-1 to A-6).

The supralinear exposure-response curve for abnormal eye-hand coordination scores suggests a possible corollary to the healthy worker phenomenon; namely, the existence of newly employed, relatively sensitive workers vis-à-vis long-term, relatively nonsensitive workers. It may be that the two above-noted workers happened to be rather susceptible to Mn toxicity but had not been employed long enough for their greater sensitivity to become otherwise evident. There could be a tendency for such workers to move to other types of employment, leaving a greater proportion of relatively less sensitive individuals among the older workers. Although irregularities of the type posed by the data for these two workers create complexities for model fitting, it is important to recognize that statistical curve fitting is secondary to the objective of selecting the most biologically appropriate exposure variable. However, given that the final results obtained with LIRD, CRD, and ACRD are roughly equivalent, ACRD has been selected for discussion here because it estimates an average exposure over time and yet provides as good or better goodness of fit as CRD or LIRD for most of the models considered.

Of the six models considered, the quantal linear model fits the data reasonably well and is the least complex

(see Appendix A). It also gives equivalent results to the restricted Weibull model for BMDL calculations (although the two models differ slightly when used in the Bayesian analyses, to be described below). Although much more conservative results would be obtained if the unrestricted Weibull or unrestricted log-logistic model were used, the NOAEL/LOAEL surrogates obtained with the latter models are so small as to be practicably incalculable and extend far below the range of actual measurements. Therefore, the following discussion is focused on the results obtained with the quantal linear model.

In addition to choosing a model, a specified rate of increase in the effect of concern must be selected in using the BMD approach. This percentage increment is expressed in terms of the effective concentration that would yield the stated increase. Increases of 10, 5, and 1% in the incidence of abnormal eye-hand coordination scores (as dichotomized by Roels et al., 1992) have been considered, with the concentrations associated with these levels called "effective concentrations" and designated as EC₁, EC₅, and EC₁₀, respectively. One guide to the choice of an effect level is that the resulting BMD (before calculating the lower confidence limit) is preferably near or within the range of observed exposure concentrations (cf. Barnes et al., 1994). Because the BMD for EC₁ falls outside this range of observed concentrations, the primary focus in this discussion is devoted to the BMD₅ and the BMD₁₀.

It should be kept in mind that the BMDL represents the lower 95th percent confidence interval for the effective concentration in question, and therefore the BMDL probably inherently reflects some degree of conservatism. However, the degree of conservatism obviously varies with the effective concentration for different percentage effect levels and with the nature of the effect (e.g., severe versus moderate impairment). For the purposes of this assessment, if one treats the BMDL₁₀ derived from the dichotomized (quantal) data of Roels as if it were a minimal (less severe) LOAEL and the BMDL₅ as if it were a NOAEL, uncertainty factors of 3 and 1, respectively, would be warranted. On this basis, as shown in Figure 1 and in Table A-39 of Appendix A for the quantal linear model using ACRD, an RfC estimate of 0.09 µg/m³ would be obtained by using the quantal BMDL₁₀ as if it were a LOAEL and a total uncertainty factor of 300 (10 for intraspecies sensitivity, 10 for database limitations, and 3 for a minimal severity LOAEL). Similarly, the quantal BMDL₅ would yield an RfC estimate of 0.1 µg/

m³, based on a total uncertainty factor of 100 (10 for intraspecies sensitivity, 10 for database limitations, and 1 for a NOAEL). As applied here, the benchmark approach yields candidate RfC estimates of 0.09 to 0.1 µg/m³.

d. Bayesian Analyses. Another approach to deriving a substitute for a conventional LOAEL or NOAEL, which bears some resemblance to the BMD approach just described, is known as the Bayesian approach (see Appendix A). In essence, the Bayesian approach yields a distribution of concentrations (rather than a point estimate) associated with a specified effect. Some features of the BMD approach are common to the Bayesian approach: a mathematical model must be fit to the data, an effect level must be selected, and a confidence bound on the estimated concentration associated with a given effect level must be calculated (although the calculation procedures are different). If these choices are consistent with those for the BMD approach, the results are quite similar. By the Bayesian analysis, for a 10% increase in abnormal eye-hand coordination scores, the lower 90% credible set limit (roughly equivalent to the quantal BMDL 95% confidence limit⁵⁹ based on the estimated median concentration obtained with the quantal linear model is 73 µg/m³. Adjusting this value to a human equivalent concentration (HEC) and treating the result (26 µg/m³) as if it were a LOAEL(HEC), one may divide by a total uncertainty factor of 300 (10 for intraspecies sensitivity, 10 for database limitations, and 3 for a minimal severity LOAEL) and obtain an RfC estimate of 0.09 µg/m³. Similarly, the 5% effect level yields an RfC estimate of 0.1 µg/m³, based on a total uncertainty factor of 100. Thus, as applied here, the Bayesian approach yields candidate RfC estimates of 0.09 to 0.1 µg/m³, essentially identical to the results of the benchmark analysis (Figure 1).

One advantage of the Bayesian approach is that it lends itself well to using continuous as well as dichotomous data. Although Roels et al. (1992) did not provide individual continuous data (i.e., actual raw scores instead of designations of normal/abnormal) on the performance of the workers in their study, they did report mean differences and standard deviations. With this information, it is possible to estimate the concentration at

which certain effect levels would occur based on the Bayesian posterior distribution. For example, a 10% increase in the proportion of subjects with abnormal scores would be associated with a median concentration of 112 µg/m³, which has a lower 90% credible set limit of 90 µg/m³. Adjusting the latter value as if it were a LOAEL(HEC) yields a concentration of 32 µg/m³ and an RfC estimate value of 0.1 µg/m³, based on a total uncertainty factor of 300 (10 for intraspecies sensitivity, 10 for database limitations, and 3 for a minimal severity LOAEL). Note that these calculations based on continuous data essentially approximate the quantal BMD and Bayesian calculations for a 10% effect level based on dichotomous data (see Figure 1). Similar calculations for the actually observed difference (i.e., 13%) between the Mn-exposed and control workers in the Roels et al. (1992) study yield an RfC estimate of 0.2 µg/m³, based on a total uncertainty factor of 300 (including a factor of 3 for a minimal severity LOAEL). Calculating the concentration associated with the difference between the exposed and control mean values that just achieves statistical significance (a 4% difference in this case) also results in a candidate RfC value of 0.2 µg/m³, based on a total uncertainty factor of 100 (eliminating the minimal LOAEL factor of 3). Thus, as applied here, the Bayesian analyses of continuous data yield candidate RfC estimates of 0.1 to 0.2 µg/m³.

e. Summary of RfC Estimates. Figure 1 displays the current, verified RfC along with over 100 possible Mn RfC estimates based on various exposure measures, models, effects measures, and uncertainty factors. Not all of these RfC estimates are equally plausible or worthy of consideration in assessing the potential health risks associated with Mn inhalation exposure due to MMT usage. As discussed above, some combinations of the three exposure measures and six mathematical models fit one another better than other combinations. Based primarily on considerations of cumulative dose toxicity, statistical goodness-of-fit, and parsimony, ACRD and the quantal linear model appear to achieve the best results in this respect. Given the similarities of the benchmark and Bayesian analytic results using ACRD and the quantal linear model, little distinction can be made between the two analytic approaches in the present application. As for the results obtained for different effect levels, using a severity uncertainty factor of 3 with a 10% effect level (for either benchmark or Bayesian

⁵⁹U.S. Environmental Protection Agency. (1994a) "Reevaluation of inhalation health risks associated with methylcyclopentadienyl manganese tricarbonyl (9MMT) in gasoline." Washington, DC: Office of Research and Development; EPA report no. 600/R-94/062. For further information see Air Docket A-93-26, II-A-12.

analyses) is essentially equivalent to using a severity UF of 1 with a 5% effect level. Note that the terms LOAEL and NOAEL do not actually correspond to the results for 10% and 5% effect levels, and therefore neither is preferable to the other in the sense that a NOAEL is preferable to a LOAEL in deriving an RfC. Therefore, benchmark and Bayesian results for 10% and 5% effect levels (using ACRD with the quantal linear model) are regarded as equally worthy of consideration here. These particular analyses yield Mn RfC estimates of 0.09 to 0.1 $\mu\text{g}/\text{m}^3$.

In general, continuous response data are preferred to dichotomized data, primarily because they provide more information and avoid the basically arbitrary division of effect measurements into categories (e.g., normal versus abnormal). The Bayesian analysis based on mean differences between exposed and control groups offers some of the advantages of using continuous data, in that the reported means and standard deviations (from Roels et al., 1992) provide a basis for estimating the distribution of continuous response measures. However, this use of continuous data is not immune to certain common problems, such as the issue of statistical power associated with studies of limited size, for the approaches calculating observed or just-statistically significant differences. Also, whereas the dichotomous data analyses yield more precision in estimating the effective concentration associated with a somewhat imprecise response variable, the continuous data analyses offer the opposite trade off (i.e., more precision in the response variable but less in the exposure estimate). Nevertheless, the continuous data analyses appear to merit consideration as well as the analyses based on dichotomous data. By the Bayesian analyses of continuous data, Mn RfC estimates of approximately 0.1 to 0.2 $\mu\text{g}/\text{m}^3$ are obtained.

Based on the available data and on decisions and assumptions involved in analyses of these data, the leading candidate estimates for an alternative Mn RfC appear to fall in a range of approximately 0.09 to 0.2 $\mu\text{g}/\text{m}^3$. (Ethyl Corporation (1994) has proposed an alternative RfC estimate based on a BMDL₁₀ value of 87 $\mu\text{g}/\text{m}^3$. Treating this value as essentially a NOAEL (thereby eliminating an uncertainty factor for use of a LOAEL), Ethyl Corporation divided the adjusted NOAEL(HEC) by a single uncertainty factor of 10 for sensitive

subpopulations to derive a Mn RfC estimate of 3 $\mu\text{g}/\text{m}^3$.)⁶⁰

C. Exposure Assessment

1. Background

Very limited data have been available by which to estimate potential Mn personal exposure levels likely to be associated with the use of MMT as an additive in unleaded gasoline. For example, after the completion of ORD's 1990 exposure assessment for Mn (U.S. Environmental Protection Agency, 1990), Ethyl Corporation provided EPA a brief report of a personal monitoring study as part of Ethyl Corporation's resubmittal of a waiver application for MMT. The study focused on 6 taxi drivers and 17 office workers in Toronto, ON, where the allowable MMT concentration in gasoline is $\frac{1}{16}$ (0.062) g Mn/gal. (In the Toronto study, the actual concentration was reported as $\frac{1}{26}$ (0.039) g Mn/gal, which is only slightly greater than the $\frac{1}{32}$ (0.031) g Mn/gal concentration proposed for the United States. As confirmed by Kirshenblatt (1993), MMT concentrations in Canadian gasoline average well below the allowable limit there.) In comments on Ethyl's resubmittal, ORD considered the Toronto data in conjunction with results from independent field studies of personal exposures to carbon monoxide to develop a revised Mn exposure assessment (Preuss, 1991). A key element of the 1991 ORD assessment was the assumption that taxi drivers (six of whom were monitored in Toronto within a 2-week period) were members of a high-exposure cluster reflecting the upper 4% of the population in a model based on the carbon monoxide field studies. The result of the 1991 assessment was an estimate that 4% of the general public might be exposed to Mn at approximately 0.09 $\mu\text{g}/\text{m}^3$, although this estimate had an undetermined amount of uncertainty due to the inadequacies of the available data.

2. Additional Canadian Studies

Since the 1991 ORD assessment, additional personal exposure studies have been completed in Montreal and Toronto (described in Appendix B, "Reevaluation of Inhalation Health Risks Associated with Methyl cyclopentadienyl Manganese Tricarbonyl (MMT) in Gasoline" as referenced in the reference section

⁶⁰The RfC listed here is not simply the BMDL₁₀ of 87 $\mu\text{g}/\text{m}^3$ reduced by the uncertainty factor of 10 because the BMDL₁₀ must first be adjusted to produce an adjusted NOAEL(HEC) (i.e., to go from an occupational exposure scenario to a scenario for the general public) prior to reduction by the uncertainty factor.

below, hereafter referred to as Appendix B.) As shown in Figure B-10 of Appendix B, the average concentrations reported in the Canadian studies vary by as much as an order of magnitude for small groups (5 to 19 persons each) of garage mechanics, taxi drivers, and office workers. The highest average Mn personal exposure level was 0.25 $\mu\text{g}/\text{m}^3$ for Montreal garage mechanics while at work; the other averages ranged from 0.002 to 0.035 $\mu\text{g}/\text{m}^3$ for various particle size fractions. Although it is impossible to extrapolate the results of these studies to the distribution of Mn exposure levels for the general population, it does appear that there is a general relationship between personal exposure levels of Mn and proximity to vehicular emissions of combusted MMT. Thus, populations living near high traffic-volume areas such as inner cities and expressways would probably tend to experience higher Mn exposure levels in relation to MMT usage.

Some of the limitations of the Canadian studies with respect to development of a quantitative exposure assessment are reviewed in detail in Appendix B and may be summarized briefly as follows.

- The studies did not have adequate sample sizes and did not sample according to a probabilistic statistical design that would help ensure the representativeness of the sampled individuals.
- The sampling periods were relatively short, 1 to 2 weeks at most. Meteorological and other factors that would be expected to influence ambient measurements over relatively short periods of time were not characterized.
- Because the studies did not use ambient monitors collocated with reference monitors (such as the dichotomous samplers used by Canadian agencies), it is difficult to relate data from the studies to larger databases from the government monitoring networks.
- Because the studies did not use identical monitors to measure personal exposure levels and outdoor ambient levels, it is difficult to distinguish between personal exposures and ambient levels or to relate one to the other.
- Quality assurance and certain other important methodological details are not fully provided in the available reports.

Because of the substantial limitations of the above exposure studies, no quantitative assessment of personal exposures to Mn in a Canadian population is possible at present.

3. The PTEAM Study

The only published study that has used a probability-based representative sampling design for evaluating exposure levels of Mn in a general population is the Particle Total Exposure Assessment Methodology (PTEAM) study, which was conducted in Riverside, CA, over a

7-week period in the fall of 1990 (Pellizzari et al., 1992). This study used personal and stationary monitors to measure Mn concentrations indoors and outdoors. The personal samplers collected PM_{10} , and the stationary samplers collected $PM_{2.5}$ as well as PM_{10} (see glossary of terms in Attachment B-6 to Appendix B). Of the 139,000 nonsmoking residents age 10 years and older in Riverside, 178 individuals were selected through a stratified sampling plan to represent the general population and were monitored over two 12-hour periods (daytime and nighttime). More than 2,750 particle samples were collected. Quality assurance and other procedures are summarized in Appendix B and are described extensively elsewhere (e.g., Pellizzari et al., 1992; Clayton et al., 1993; Thomas et al., 1993). The PTEAM study has been presented in various peer-reviewed publications and discussed in several scientific forums (see Attachment B-5 to Appendix B). It represents the best available information on an actual distribution of general population exposures to Mn. It also provides valuable information on potential Mn exposure associated with MMT use, because MMT was used in leaded gasoline in California prior to and during the period of the PTEAM study.

4. Estimated Mn Exposure Levels Associated with MMT Usage

As noted above, the substantial limitations of the available Canadian exposure studies make them unsuitable for estimating population exposure levels of Mn in relation to MMT usage. In addition, ambient monitoring data typically underestimate and may be uncorrelated with personal exposure levels of automotive-source pollutants. Therefore, of the currently existing published evidence pertaining to Mn exposure levels in relation to MMT usage, only the PTEAM Riverside study (Pellizzari et al., 1992) provides a reasonable basis for estimating potential future exposure levels in relation to a scenario where 100% of unleaded gasoline contains $\frac{1}{32}$ g Mn/gal as proposed by Ethyl Corporation.

In the PTEAM study, measurements of personal exposure levels of PM_{10} Mn indicated that approximately half of the population in Riverside in the 1990 study period had 24-hour personal exposures to PM_{10} Mn above $0.035 \mu\text{g}/\text{m}^3$, with the highest 1% of the population having exposures above $0.223 \mu\text{g}/\text{m}^3$ PM_{10} Mn. However, given the use of PM_5 Mn exposure measurements in the study of Roels et al. (1992), it would be preferable to consider a population distribution of

personal exposure levels of PM_5 Mn. Due to limitations in the available data, the exposure assessment in Appendix B focuses on estimated personal exposure levels for PM_4 Mn, not PM_5 . Although the difference is probably small, PM_4 levels are an underestimate of PM_5 levels. The derivation of the projected exposure estimates involved several steps, which may be summarized as follows.

The automotive and nonautomotive contributions to particulate Mn exposures in the PTEAM study were estimated using data from Lyons et al. (1993), who reported particle size distributions up to PM_4 of selected trace metals, including Mn, at two locations near Riverside in the winter and summer of 1989. They attributed most of the PM_4 Mn to automotive sources. Based on their findings and data from other sources, it is possible to estimate that 69% of the $PM_{2.5}$ fraction of PM_4 Mn they measured was derived from automotive sources (namely the combustion of MMT in motor vehicle fuel, as then allowed in leaded gasoline in California) and that 31% was derived from paved road dust (mostly earth crustal material). Next, the PTEAM Mn measurements from stationary indoor monitors (SIMs) were used to estimate personal exposure levels by adjusting the SIM $PM_{2.5}$ Mn data to reflect the typically higher levels of all elements measured by personal exposure monitors (PEMs). This adjustment was made in two ways, either by the PEM:SIM ratio obtained for Mn or by the ratio obtained for lead (Pb), another element related to automotive fuel usage. These two methods of adjusting the SIM data to PEM values resulted in two projected distributions, as will be described below. The next step in the derivation procedure involved adjusting the $PM_{2.5}$ personal exposure estimates to reflect PM in the size range from 2.5 to $4 \mu\text{m}$ (based again on data from Lyons et al., 1993).

With these estimates of PM_4 Mn personal exposure levels due to automotive sources, it was then possible to project from the situation in Riverside around the time of the PTEAM study (when leaded-MMT gasoline constituted about 14% of the gasoline sold and contained an average of 0.048 g Mn/gal) to a future scenario that assumes 100% of the unleaded gasoline contains MMT at $\frac{1}{32}$ (0.031 g Mn/gal). This aspect of the derivation is described in detail in Attachment B-4 to Appendix B. In essence, a factor was calculated to reflect the estimated increase in MMT usage between 1990 and 1995 (i.e., the first full year in the near future). This projection factor assumed an increase of

1% per year in gasoline usage and no difference in the Mn emission rate (grams Mn emitted per gram Mn in fuel combusted) for noncatalyst vehicles using leaded-MMT gasoline in 1990 versus catalyst vehicles using unleaded-MMT gasoline in 1995.

Next, the nonautomotive contribution to PM_4 Mn was estimated and added to the estimated automotive contribution to obtain the projected personal exposure levels of total PM_4 Mn. Assuming the estimated PM_4 Mn distribution has the same form as the PM_{10} Mn distribution from PTEAM (approximately lognormal with equal geometric standard deviations), the ratio of the PM_4 : PM_{10} arithmetic mean personal exposure levels yields a scaling factor that can be applied to the PM_{10} distribution to obtain the PM_4 distributions. Because of the alternative bases for adjusting the SIM $PM_{2.5}$ data for personal exposures (as noted above), two different scaling factors were multiplied by the PM_{10} distribution, thereby producing a higher and a lower estimate of the distribution of 24-hour average PM_4 Mn personal exposure levels.

In addition, because long-term exposures are likely to have less variance than 24-hour exposures, it is appropriate to adjust the distributions of 24-hour average exposure levels to better reflect longer periods of exposure. Of various methods that may be used for this purpose (Wallace et al., 1994), two approaches were applied to adjust the geometric standard deviations of the two projected exposure distributions, based on data from either the PTEAM study or the smaller pilot study that preceded the PTEAM Riverside study. These alternative methods were applied to the two estimated distributions of 24-hour average exposures to yield the distributions of long-term average PM_4 Mn personal exposure levels depicted as lines 1 and 2 in Figure 2 (only the highest and lowest of the four resulting estimates are shown). It must be emphasized that these two distributions do not represent upper and lower bounds, because even higher or lower estimates could be produced by alternative assumptions and adjustments of the data. Moreover, if data were available for another time of the year (e.g., spring in addition to fall), the estimates would not be season-specific and could possibly be much higher or much lower. Nevertheless, given the limited available data, lines 1 and 2 in Figure 2 represent two reasonable estimates of the projected long-term (autumnal) personal exposure levels of PM_4 Mn in relation to MMT

usage at $\frac{1}{32}$ g Mn/gal in 100% of unleaded gasoline.

By examination of the logarithmic-probability plot of long-term personal exposure levels of Mn, it is estimated that half of the population would be exposed to PM_{10} Mn levels of more than approximately 0.045 to $0.050 \mu\text{g}/\text{m}^3$. Also, based on the two projection estimates, approximately 5 to 10% of the population would have personal exposure levels around $0.1 \mu\text{g}/\text{m}^3$ PM_{10} Mn or higher. The highest 1% would be predicted to have PM_{10} Mn exposure levels above $0.15 \mu\text{g}/\text{m}^3$. It should be noted that these projections refer specifically to Riverside, CA, with a population of more than 139,000 persons. However, in many significant respects (e.g., meteorology and traffic volume), Riverside is reasonably representative of the greater metropolitan area of Los Angeles, which

has a total population of over 14.5 million persons. The exposure projection estimates for Riverside imply the possibility that hundreds of thousands of persons in the Los Angeles area alone could be exposed to PM_{10} Mn levels exceeding $0.1 \mu\text{g}/\text{m}^3$. To the extent that any other U.S. cities (e.g., in the Southwest) share some degree of resemblance in meteorology, vehicle miles traveled (VMT), and possibly other characteristics of relevance to automotive Mn levels, the estimated exposure levels for Riverside could be pertinent, at least qualitatively, to other locales or portions of locales as well. Similarities and differences in point-source contributions to Mn exposure would also figure into comparisons with other communities. The presence of a major point source or sources of Mn in a community (which was not a factor in Riverside) would add some increment to

the level of Mn exposure experienced by the persons in that community. Although these Riverside estimates cannot be applied quantitatively to any other U.S. metropolitan areas, the total population of the U.S. counties with VMT levels greater than that of Riverside (apart from the four counties Los Angeles comprises) is approximately 15 million persons. Possibly, then, several hundreds of thousands of persons could be exposed to PM_{10} Mn levels of approximately $0.1 \mu\text{g}/\text{m}^3$ or higher if MMT were used in 100% of the unleaded gasoline in all of these areas. However, it must be emphasized that because of the limited available data, a great deal of uncertainty surrounds such estimates. The actual exposure levels could be much higher or lower.

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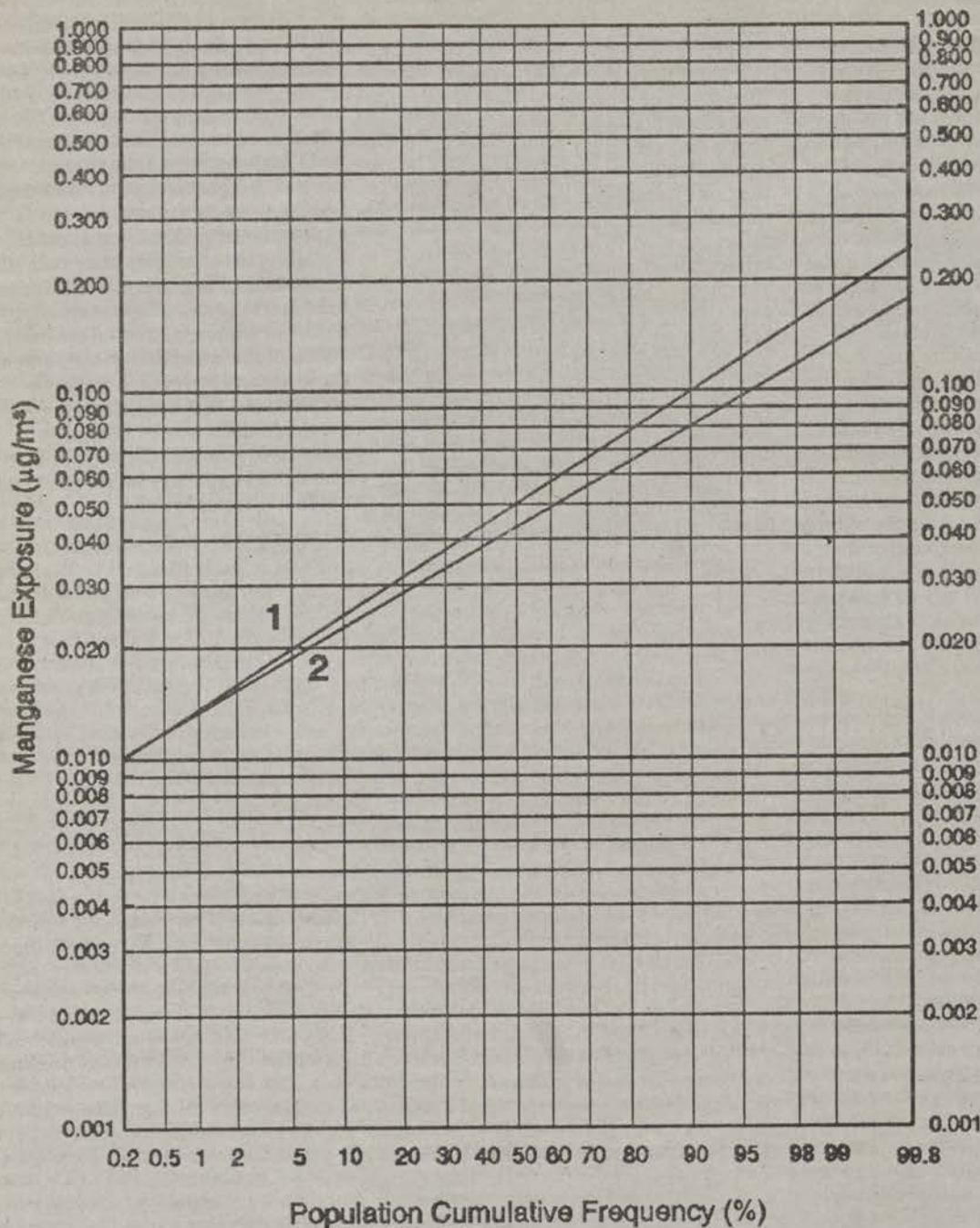


Figure 2. Logarithmic-probability plot of projected estimates of long-term personal exposure levels of $PM_{4} Mn$ for the fall season in Riverside, CA, if MMT were used in 100% of unleaded gasoline at 1/32 g Mn/gal. The two lines reflect different approaches for estimating personal exposure levels from stationary indoor monitoring data and different methods of adjusting 24-h averages to long-term averages, as explained in the accompanying text and Appendix B.

D. Risk Characterization

To assess the public health risk associated with the use of MMT in gasoline in the United States, the available qualitative and quantitative health effects information on Mn must be related to the available exposure information. From the standpoint of a qualitative hazard identification, the available evidence amply demonstrates that inhaled Mn is toxic to the nervous system, the respiratory system, and the male reproductive system. The toxicity of Mn by different routes of exposure has been demonstrated by numerous medical reports and epidemiological and experimental studies. However, available data do not allow quantitative estimation of the relative toxicological potency of different Mn compounds or permit quantitative route-to-route extrapolations for predicting the effects of Mn₂O₄.

The focus of the above health assessment discussion has been on the RfC and the types of risks associated with chronic Mn exposures because, for the most part, acute effect levels appear to be considerably higher than the highest projected exposure levels. However, the issue of less-than-chronic exposures does arise with respect to the potential for developmental toxicity. It is widely recognized that the human CNS develops over a period of several years, prenatally and postnatally, and can be vulnerable to long-term or irreversible effects if damage occurs during certain "critical stages" of development. Recent evidence from ongoing longitudinal studies of children indicates that lead (Pb) exposure (measured as blood Pb level) around 2 years of age in particular is associated with reduced cognitive performance at 4 to 10 years of age. Such evidence raises the concern that exposure to another neurotoxic metal such as Mn during part of early development might also be capable of inducing permanent or irreversible damage to the developing CNS. Moreover, the ramifications of such damage might extend to other important functions, such as reproduction.

Children may also be at higher risk in terms of exposure because of biomedical and metabolic differences at a young age (greater uptake and retention) and/or because of the longer duration of their exposure over a lifetime. Over time, small impairments in neurobehavioral function may accumulate. For this reason, the elderly, whose neurobehavioral function may already be compromised by normal aging processes and possibly by other disease states (e.g., parkinsonism or preclinical

parkinsonism), also represent a special population of concern. The ability of the elderly or other subpopulations to compensate for such declines in neurobehavioral function may be overwhelmed eventually by additional, albeit possibly quite small, insults due to Mn. If so, the effect could be manifested as a more severe or earlier onset of declining function in senescence, with consequent implications for increased societal health-care costs.

Special subpopulations at increased risk may be defined not only in terms of their biological susceptibility, as exemplified above by the young and the elderly, but also by their increased risk of exposure. In this respect, inner city residents and others who live near high traffic areas such as expressways (e.g., low-income and minority communities) would possibly have a disproportionate likelihood of higher Mn exposure levels due to their closer proximity to vehicular emissions.

The nature of the neurobehavioral effects observed in occupational studies such as Roels et al. (1992) should be understood as effects that probably would not be treated by, or even be readily evident to, a clinical physician. Nonetheless, they are significant from a public health standpoint when considered in terms of population effects. This concept is illustrated by the well documented findings on low-level Pb neurotoxicity in children, where changes of as little as 1 or 2 points in IQ have been repeatedly demonstrated in several independent, prospective, epidemiological studies in recent years. Such changes could not be reliably demonstrated either in a clinical setting or in earlier cross-sectional epidemiological studies; yet they are now well established to be "real" and significant from a public health standpoint. With regard to the reductions in neurobehavioral function observed in various epidemiological studies of Mn-exposed workers, these studies independently converge on findings of impaired motor function (e.g., reductions in eye-hand coordination, slower hand or finger movements, and less control of fine movement). As recently expressed in a document prepared by the Subcommittee for Risk Assessment of the Federal Coordinating Council for Science, Engineering and Technology (Federal Register, 1993), an adverse effect can include "both unwanted effects and any alteration from baseline that diminishes the ability to survive, reproduce or adapt to the environment." Thus, it can be argued that these effects in themselves warrant consideration as

adverse health effects. They may also have ramifications for health and safety of an even more serious nature, if a person's ability to react quickly and accurately to a situation (e.g., traffic conditions) was impaired.

Another aspect of the findings from available occupational studies concerns the temporal relationship between exposure and effect. As noted above, the geometric mean average period of Mn exposure of the workers in the Roels et al. (1992) study was only 4 years, with the longest period of Mn exposure for any one individual being less than 18 years. Also, the oldest worker in the Roels et al. (1992) study was less than 50 years old. This relatively limited period of exposure along with the absence of older subjects in the Roels study raises the question of whether sufficient time had elapsed for the full expression of the toxic effects of Mn. Some reports in the literature indicate that Mn toxicity may not be clinically evident until some years after exposure occurred or terminated (e.g., Cotzias et al., 1968; Rodier, 1955), and other reports point to a greater sensitivity of elderly persons, compared to middle-aged or young adults, for acute as well as chronic Mn toxicity (e.g., Kawamura et al., 1941). An uncertainty factor for extrapolation from a subchronic exposure to chronic exposure was included in deriving the RfC estimates shown in Figure 1. However, a "half-factor" of 3 was used for this area of uncertainty. If the average period of Mn exposure (geometric mean: 4 years) in the Roels et al. (1992) study is compared to an assumed lifetime of 70 years, one could argue that a factor of $70/4=17.5$, or at least 10, would be a more appropriate adjustment for subchronic to chronic exposures. Given the limited available data, this area of uncertainty is difficult to express in a quantitative manner, but in general practice, EPA has used an uncertainty factor of 3 for other chemicals with comparable databases. Nevertheless, this area of concern suggests that the Mn RfC estimates derived here with an uncertainty factor of 3 for subchronic to chronic exposure probably do not tend to err in the direction of being too conservative.

Another qualitative concern that should be recognized in considering the potential health effects of Mn is the possibility of certain types of effects that are suggested by clinical and other evidence but are difficult to measure quantitatively or demonstrate with currently available methods. Specifically, much of the clinical literature on manganese refers to a psychiatric component of the illness,

which often involves striking emotional or mood changes that tend to appear before changes in motor function are evident. Such effects are inherently difficult to measure in a quantitative manner. However, the possibility of such effects at lower levels of exposure than those at which motor control is affected should not be discounted out of hand. Some reports in the literature (e.g., Gottschalk et al., 1991) suggest that aggressive behavior may be associated with Mn exposure (as reflected in the concentration of Mn in hair of prison inmates). Such reports require substantiation by further studies, and the validity and relevance of hair Mn levels to environmental Mn exposure remains to be established, but the suggestion that an association might exist between hair Mn and behavior cannot be totally dismissed.

Quantitative analyses of neurobehavioral data obtained from an occupational cohort provide a range of possible RfC estimates in addition to the current, verified Mn RfC value of 0.05 $\mu\text{g}/\text{m}^3$. In ORD's judgment, the leading candidates for a possible alternative RfC estimate are approximately 0.09 to 0.2 $\mu\text{g}/\text{m}^3$, based on currently available information. By definition, RfC analyses do not yield a precise concentration that defines a demarcation between safety and hazard. Rather, interpretation of a Mn RfC estimate is best made in relation to an assessment of population exposures to Mn, with the understanding that the RfC is a protective level, not a predictive value.

The exposure assessment, based largely on data from the PTEAM study, provides some reasonable but necessarily uncertain estimates of personal exposure levels of Mn that might result from the use of MMT in gasoline. These estimates indicate that if MMT (at $\frac{1}{32}$ g Mn/gal) were used in all unleaded gasoline in Riverside, CA (or the greater Los Angeles metropolitan area), approximately 40 to 50% of the population could experience PM_{10} Mn exposures exceeding the current RfC of 0.05 $\mu\text{g}/\text{m}^3$ (derived from PM_{10} Mn health effects data), and approximately 5 to 10% could experience PM_{10} Mn exposure levels around 0.1 $\mu\text{g}/\text{m}^3$ or higher (see Figure 2). In terms of the Los Angeles area population of 14.5 million persons, even an estimate of 5% of the population implies over 700,000 persons.

Uncertainties are inherent in any risk assessment. In this case, on the health assessment side, the numerical uncertainty factors used in the RfC analyses presented here have been explicitly described and explained in and summarized above. These factors

are intended to provide a reasonable degree of public health conservatism reflecting areas of biological knowledge as well as areas of information deficit. In addition, an RfC estimate by definition reflects uncertainty spanning perhaps an order of magnitude, and thus there is no significant difference between the verified RfC of 0.05 $\mu\text{g}/\text{m}^3$ and alternative estimates of 0.09 to 0.2 $\mu\text{g}/\text{m}^3$. Other qualitative uncertainties are also discussed above. On the exposure assessment side, the primary uncertainties are related to projections from the PTEAM data, rather than the PTEAM data per se. Inferences about the relative contributions of crustal and automotive sources to PM_{10} Mn were drawn from studies conducted in geographical and temporal proximity to the PTEAM study, but both the data from these studies and the inferences based on them introduce uncertainties. Attempts to adjust the PTEAM data in various ways, including any extrapolation from the 24-hour average distribution obtained in the fall of 1990 to a long-term average for other seasons, introduce progressively greater uncertainties at each step. Some adjustments have not even been attempted. For example, a weighting of the daytime and nighttime PTEAM exposure data to reflect a higher average ventilation rate during daytime activities and a lower ventilation rate during nighttime activities (e.g., sleeping) would have resulted in higher personal exposure estimates. Thus, given other approaches or assumptions, different projection estimates are possible. It must therefore be emphasized that the two projections of Mn exposure levels in Figure 2 should not be interpreted as upper and lower bound estimates, for even the higher projection could possibly underestimate, or the lower projection overestimate, the PM_{10} Mn exposure levels associated with MMT.

As for the relevance of the PTEAM Riverside personal exposure estimates to other communities, the PTEAM study was, strictly speaking, only designed to statistically represent Riverside, CA. In that respect, the design and conduct of the PTEAM study provide a high degree of confidence that it does accurately represent 24-hour average Mn exposure concentrations for the Riverside population in the fall of 1990. In ORD's judgment, the PTEAM study provides a reasonable representation of the Los Angeles Basin as well, given the commonalities in geography, vehicle usage, and meteorology. However, the relevance of the Riverside data to other U.S. communities depends upon their

similarities or differences in the most relevant characteristics or dimensions. For example, to the extent that several other major U.S. metropolitan areas (or subcommunities in these areas) also have a high level of vehicle usage, the Riverside projections may have greater relevance. To the extent that these same areas do not share the meteorological conditions that contribute to the Mn exposure levels measured in Riverside, the Riverside projections have lesser relevance. It is also important to consider other sources of Mn exposure apart from automotive and crustal sources. Although Riverside had no major point sources of Mn contributing to the personal exposure levels measured in the PTEAM study, other communities may have such sources, and thus the personal exposure levels of Mn from all sources might be higher in other communities than in Riverside.

The exposure estimates shown in Figure 3 are in the range of or exceed some candidate RfC estimates as well as the current RfC. Exceeding the RfC does not necessarily indicate that a public health risk will occur. At present, it is impossible to state whether projected exposures above the RfC would result in an adverse health effect for either an individual or the general population. At a sufficiently high level of exposure, adverse effects would be expected to occur, first in any sensitive subpopulations, then with greater prevalence in the general population and extending to other types of effects (e.g., reproductive and/or respiratory as well as neurobehavioral effects in the case of Mn). However, the relationship between such "sufficiently high" levels and the population exposure levels estimated by the projection methods employed here is unknown. Expressed differently, given the gap between observed or modeled effect levels and the RfC values obtained by applying uncertainty factors of orders of magnitude, it is impossible to state whether projected population exposures would lie above or below a presumed threshold level on the actual concentration-response curve for Mn neurotoxicity. This gap between projected exposure levels and the lowest concentrations obtained by modeling the concentration-response relationship (at least, by the quantal linear model) makes it impossible to make any assertion regarding the likelihood of a health risk at projected exposure levels. However, this conclusion should not be interpreted to imply that, therefore, no health risk is expected to exist at exposure levels exceeding the RfC.

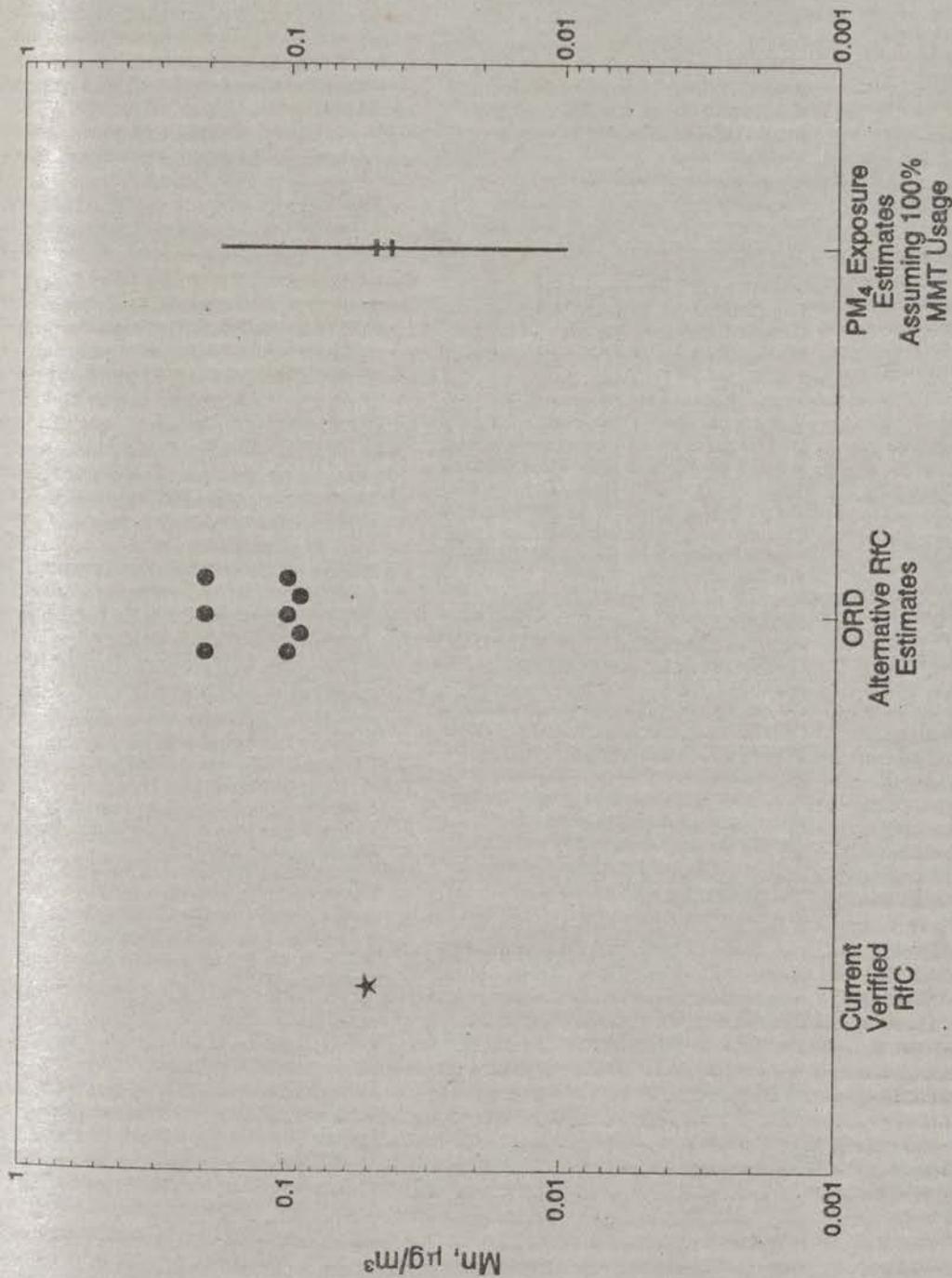


Figure 3. Summary of Mn RfC estimates and personal exposure levels of Mn. The two PM₄ exposure distributions from Figure 2 are overlaid, with both medians shown as horizontal marks.

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F. Comments on Health Assessment and EPA Response

The focus of most of Ethyl's comments regarding the effects on public health and welfare resulting from the use of MMT in unleaded gasoline deal with issues related to EPA's risk assessment and specifically to the calculation of an RfC for manganese by the utilization of various analytical methods, to the uncertainty factors used by the Agency in determining the RfC for manganese, and to the exposure assessment for manganese. A summary discussion of the significant issues related to these comments follows.⁶¹

Generally, Ethyl states that "ORD openly concedes that after four years of efforts it is unable to conclude that a public health risk would exist for even the most highly exposed segment of the population." The Agency indicated to Ethyl in 1991 the research it could conduct to provide for a more quantitative assessment of the MMT issue. Thus, assessment of the risks or benefits of MMT could be, or perhaps could already have been, improved if more empirical information were provided by Ethyl to the Agency.

Ethyl commented on ORD's April 28, 1994 draft MMT Risk Assessment that, depending on the methodology used for the derivation of the RfC for manganese, the level of manganese concentrations "without appreciable risk" lies somewhere within the range of 0.1 to 3.0 $\mu\text{g}/\text{m}^3$ and that all of ORD's RfC calculations fall within this range. Contrary to Ethyl's statement, the inclusion of Ethyl's proposed RfC estimate of 3.0 $\mu\text{g}/\text{m}^3$ in tables and figures summarizing the RfC estimates obtained by different methods was merely an attempt by the Agency to illustrate all of the RfC estimates. The Agency did not imply or state a conclusion that "The majority of ORD's RfC calculations fall in the 0.1-3.0 $\mu\text{g}/\text{m}^3$ range." ORD focused on a leading candidate RfC estimate of approximately 0.1 $\mu\text{g}/\text{m}^3$, while explicitly noting that the current official RfC of 0.05 $\mu\text{g}/\text{m}^3$ is not meaningfully different from a possible alternative RfC estimate of 0.1 $\mu\text{g}/\text{m}^3$.

To more effectively avoid possible ambiguity that is reflected in Ethyl's comment, Figure 1 of the final MMT Risk Assessment (U.S. Environmental Protection Agency, 1994b) shows all of the RfC estimates contained in Table A-

39 of Appendix A. Ethyl's preferred RfC estimate of 3 $\mu\text{g}/\text{m}^3$ is now omitted from Figure 1 because it is not a value obtained by any of ORD's analyses. Moreover, it is ORD's view that the best estimate of an alternative RfC estimate for Mn, based on the analyses and data considered to date, probably lies in the range of 0.09 to 0.2 $\mu\text{g}/\text{m}^3$. This judgment is based on the strengths and weaknesses of the various analytic approaches considered by ORD in the April 28 draft assessment.⁶²

Ethyl has stated that EPA has failed to address issues regarding both the statistical treatment of the data underlying the RfC and EPA's decision to employ a 1000-fold factor of uncertainty in calculating the RfC. EPA disagrees. Appendix A of the ORD Risk Assessment addresses each of these issues. The extensive analyses the Agency has conducted represent a concerted effort to respond to the statistical issues raised by Ethyl. The fact that EPA does not adopt Ethyl's advocated position is not a failure to address the issues. In fact, no scientific consensus or policy exists on many of these issues, such as the selection of a specific mathematical dose-response model, the selection of an effect level, how to address continuous data, and the appropriate magnitude of severity regarding production of uncertainty factors for the various effect levels. As is specifically described in the "Response to Comments" document, ORD utilized scientific judgment in determining the appropriateness of certain models and the inclusion of specific uncertainty factors.

Ethyl also expressed concerns that EPA had not adequately addressed alternative analyses for estimating an RfC by utilizing different groupings of subjects in the Roels analysis. JCF Kaiser, a consultant for Ethyl, commented that "ORD ignores alternative analyses which most closely resemble the conventional method for calculating RfCs." The alternative approach Ethyl employed to group the data from the study by Roels et al. (1992) has no evident rationale other than providing a statistically nonsignificant effect level. The groupings employed by Roels et al. (1992) and used by ORD appear to have

been selected because they provided approximately equal numbers of subjects per group. The groupings selected by Ethyl result in both smaller and more disparate numbers of subjects per group, with a consequent reduction in statistical power to detect a significant difference between a Mn-exposed group and controls. Further, as explained in the Response to Comments Document previously cited, ORD does not view the use of the upper boundary of the concentration associated with a group as a scientifically appropriate or representative metric to describe the exposure of the entire group.

Ethyl also took issue with the Agency for focusing on analyses using the average concentration of respirable dust (ACRD). The decision to focus on ACRD was not arbitrary or designed to yield lower RfC estimates but, as explained in Appendix A of the ORD Risk Assessment, was based on both an explicit consideration of the advantages ACRD offered for fitting dose-response models and its ability to reflect average past exposure, thereby obviating some of the apparent disadvantages of the two exposure measures reported by Roels et al. (1992), LIRD and CRD. Although the Agency views ACRD as the best choice of these three available exposure measures for the analytical approaches employed in the ORD risk assessment, Figure 1 (See Section VI-B, above.) illustrates all of the RfC estimates presented for all three exposure measures and all analytical approaches.

Ethyl recommends that certain analyses should be omitted from consideration on the ORD risk assessment. To some extent, the Agency believes the difference between Ethyl's and EPA's positions is related to differing interpretations of what is reasonable versus unreasonable, biologically plausible versus implausible, or valid versus invalid. As addressed before, the Agency's basic approach in the ORD risk assessment was to present all of the results of its analyses and then identify a subset of the total that have a scientifically stronger basis for being considered preferentially.⁶³

Ethyl offers several arguments directed at reducing the overall uncertainty and specifically the composite uncertainty factor (UF) of 10 for database limitations applied in deriving estimates of an RfC for manganese. Ethyl's first argument concerns the basic "biological plausibility" of the RfC, suggesting that

⁶²The reader is referred to Air Docket A-93-26, II-A-15, "ORD's Response to Public Comments on the Reference Concentration for Manganese and on the Draft ORD Risk Assessment of MMT, for further evaluation of the various analytical approaches that were investigated by the Agency. ORD views the 10 and 5% benchmark and Bayesian analyses of dichotomous data and the Bayesian analyses of continuous data using the quantal linear model as having greater scientific strengths than the other analyses considered by ORD or by Ethyl.

⁶¹For a complete description of the EPA response to Ethyl's comments, the reader is referred to Air Docket A-93-26, (Docket A-93-26, II-A-15) "ORD's Response to Public Comments on the Reference Concentration for Manganese and on the Draft ORD Risk Assessment of MMT."

⁶³For specific discussion related to these issues the reader is referred to Air Docket A-93-26, II-A-12.

inhaled manganese cannot be as toxic (compared to ingested manganese) as the roughly 100-fold difference in RfC and RfD estimates would indicate.⁶⁴ The Agency believes that a fundamental problem with Ethyl's comparison is that it is limited to what Ethyl estimates is the "systemic dose." The key issue is not systemic dose but delivered dose, i.e., the amount of manganese that actually reaches and enters a critical target organ such as the brain. Furthermore, the Agency believes that, depending on the form of manganese inhaled, and its ability to enter the brain, it is quite possible that a significant fraction of even small amounts of inhaled manganese would be able to reach target sites in the central nervous system. Thus, the apparently greater toxicity of inhaled versus ingested manganese may reflect important pharmacodynamic and pharmacokinetic differences of manganese that enters the body by different routes of exposure. Ethyl's analysis of systemic dose does not adequately address this issue.⁶⁵

The more specific critique Ethyl offers regarding the composite UF of 10 for database limitations deals with three areas of inadequate information represented by the composite factor: chronic exposure effects, reproductive/developmental effects, and differences

in toxicity of different forms of manganese. In deriving RfCs for other chemicals, any one of these three areas of uncertainty has, in one case or another, warranted a full UF of 10.⁶⁶

The Agency believes that given the possible accumulation of manganese, the effects of chronic exposure to inhaled manganese are of concern. The maximum average exposure duration of the available occupational studies cited by both ORD and Ethyl is 16.7 years (Mergler et al. 1994),⁶⁷ which does not constitute chronic exposure. Ethyl's comments ignore the point that the RfC is in fact aimed at extrapolation to 70 exposure years. Reproductive and developmental toxicity are widely recognized as significant public health concerns and therefore warrant specific consideration as uncertainties in RfC derivation. The available animal studies on reproductive and developmental effects almost exclusively involved oral dosing of manganese and are inadequate for inhalation RfC purposes. Studies of such effects in humans are limited for males and nonexistent for females.

The potential difference in toxicity potency of Mn₃O₄ in comparison to MnO₂ or other compounds of manganese is a significant uncertainty because no existing study has directly compared the toxicities of these compounds by inhalation exposure. Ethyl's comparison of studies involving not only different routes of exposure but significant differences in methods, subjects/subject populations, and other key features does not constitute an adequate quantitative assessment.

In summary, the three areas of uncertainty reflected in the composite UF of 10 used in deriving the manganese RfC estimates are appropriate because they are not adequately addressed by available studies.

Ethyl stated that ORD has overlooked evidence from the Canadian exposure studies that indicate personal exposure levels of manganese are likely to be lower than indicated by the PTEAM Riverside Study. The Agency considers Ethyl's exposure assessment based on Canadian data to be deficient in several respects. Given the fundamental differences in the sampling procedures for the Canadian and Riverside studies, as well as other differences in the design and conduct of the studies in question,

the Agency continues to judge the PTEAM Riverside data to be far more useful to exposure assessment purposes than the Canadian data. The "consistency" in the Canadian data that Ethyl emphasizes is a subjective matter that can be considered from more than one perspective.⁶⁸

Ethyl also disagrees with certain assumptions and features of ORD's draft exposure assessment. In particular, Ethyl claims that ORD's draft "PTEAM Riverside exposure model" overestimates manganese exposure levels for selected Canadian cities by a factor of approximately three when used with a factor for projected increases in MMT usage. Ethyl's application of the "Riverside model" is incorrect for several reasons, including Ethyl's use of ambient monitoring data to estimate personal exposure levels (ORD used stationary indoor monitoring data collected as part of a personal exposure study). The Agency notes that qualitative differences in meteorology and the degree of automobile usage provide a more likely basis for the differences between Riverside and the Canadian cities cited by Ethyl.

Ethyl also states that the manganese emission rate from catalyst vehicles should be a factor of three lower than that for noncatalyzed vehicles, which would lower ORD's projected exposure estimates by almost the same factor. After reevaluating the limited data on manganese emissions from noncatalyst and catalyst vehicles, ORD has concluded that no specific emission rate can be justified by the available data and that, consequently, an assumption of equivalent emission rates for both types of vehicles is reasonable and appropriate.

Ethyl cited data pertaining to the amount of iron and manganese in soil and paved road dust (PRD) in Riverside that indicate the percentage of automotive contribution to personal exposure levels of PM₁₀ manganese should be lower than the value ORD used. ORD agrees that the iron:manganese data for Riverside PRD provide a more geographically specific basis for estimating automotive contributions, and therefore the projection estimates of personal exposure levels of manganese would be slightly lower because of this adjustment.⁶⁹ This adjustment in the exposure assessment was incorporated

⁶⁴ See Air Docket A-93-26. The Reference Dose or RfD is analogous to the RfC but for ingestion as opposed to inhalation. Document II-A-13 (in the docket), Table 1, compares the "systemic dose" of manganese for the Recommended Daily Intake (now termed "Recommended Daily Allowance" by FDA) of ingested manganese, the RfC for inhaled manganese, and the RfD for manganese in drinking water. This tabular comparison does not address several issues that the Agency has identified as factors in its assessment on inhaled manganese toxicity.

⁶⁵ In fact, as is indicated in "ORD's Response to Comments on MMT" document, many studies indicate that inhalation exposure does result in a greater delivered dose. This evidence includes, for example, a report by Coulston and Griffin (1977), who exposed monkeys to the whole combustion products of MMT (Mn₂O₃) for 23 hr/day for up to 66 weeks. According to the authors, monkeys breathed 0.86 L/min, or 119 L in a 23-hr exposure day AT 100 µg/m³, approximately 120 µg Mn would be inhaled daily, which would equate to a systemic dose of about 24 µg/day (assuming 20% deposition and 100% absorption). In addition, both control and inhalation-exposed monkeys ingested about 4-5 mg Mn/day in their diet, which would equate to a systemic dose of approximately 135 µg/day (assuming 3% absorption). Even though these calculations indicate that the diet accounted for about six times more Mn entering the body of the exposed animals, the relatively small inhalation fraction doubled the delivered dose of Mn in the brains of the inhalation-exposed monkeys. Furthermore, the authors found blood levels of Mn to be equivalent in the exposed and control monkeys, despite the higher brain levels in the inhalation-exposed animals. Thus, extrapolations based on estimated systemic dose by ingestion underpredict doses delivered to the brain by inhalation.

⁶⁶ The decision whether to utilize the full uncertainty factor of 10 is based on a judgement by the RfC workgroup on a case-by-case basis.

⁶⁷ Mergler D.; Huel, G.; Bowler, R.; Iregren, A.; Belanger, S.; Baldwin, M.; Tardif, R.; Smargiassi, A.; Martin, L. (1994) Nervous system dysfunction among workers with long-term exposure to manganese. *Environ. Res.* 64: 151-180.

⁶⁸ For specific discussion related to these issues the reader is referred to Air Docket A-93-26, II-A-15.

⁶⁹ This and other adjustments in the exposure assessment are incorporated in to the final ORD assessment. For further information regarding this matter, see Air Docket A-93-26, II-A-12.

into the final assessment as described above in section VI-C.

Ethyl states that Riverside is not representative of other U.S. cities, and ORD does not disagree. Nevertheless, ORD believes Riverside is reasonably representative of the greater Los Angeles metropolitan area. Consequently, the PTEAM Riverside exposure assessment can be considered representative for at least 14.5 million people (the population of the greater Los Angeles area). To the extent that other U.S. cities share some degree of resemblance in meteorology, vehicles miles traveled, and possibly other characteristics of relevance to automotive manganese levels, the estimated exposure levels for Riverside may be pertinent to other locales and portions of locales as well. However, ORD can only point to qualitative similarities and is unable to make any quantitative statement on the degree of relevance of the Riverside data to other U.S. cities.

In its May 27 submission,⁷⁰ Ethyl has noted that a distribution of 24-hour average exposure levels is likely to have higher exposures at the upper portion of the distribution than would a longer term average for the same population. ORD agrees that this is likely, but the lack of adequate exposure data make it impossible to determine what the actual distribution would be. Although Ethyl attempts to correct the distribution of 24-hour average data to represent a longer term average, ORD notes unstated assumptions and possible errors in Ethyl's calculations and prefers alternative approaches to estimating such a correction to the distribution.⁷¹

Ethyl commented that ORD's newly released PTEAM exposure modeling shows that *no* (emphasis in original) portion of the population would experience manganese exposures above the 0.1–0.3 $\mu\text{g}/\text{m}^3$ range. The Agency believes that Ethyl is mistaken in making this conclusion. Statements and graphical information in ORD's risk assessment indicate that an estimated 5–10% of the Riverside/Los Angeles population would be projected to experience personal exposure levels of PM_{10} manganese at or above 0.1 $\mu\text{g}/\text{m}^3$. Ethyl's statement regarding EPA's exposure assessment would be correct only if it were to replace "0.1–0.3 $\mu\text{g}/\text{m}^3$ range" with "0.3 $\mu\text{g}/\text{m}^3$ range".

Ethyl commented that the "ORD risk assessment projects that the 99th percentile manganese exposure would be about 0.2 $\mu\text{g}/\text{m}^3$ or lower, while the 90th to 95th percentiles would

experience manganese exposures below even 0.1 $\mu\text{g}/\text{m}^3$." On the contrary, as shown in the ORD risk assessment, by *one* estimate, the 98th percentile exposure level would be approximately 0.2 $\mu\text{g}/\text{m}^3$, and both estimates are above 0.1 $\mu\text{g}/\text{m}^3$ at the 95th percentile. (See Figure 2, Section VI-C of this Decision.)

Finally, Ethyl raises issues from comparing ORD's assessment of MMT with ORD's assessment of methyl tertiary butyl ether (MTBE). Ethyl reduces the official EPA RfC for MTBE by inappropriate uncertainty factors, compares the result to both appropriate and inappropriate exposure values for MTBE, finds an overlap of these health and exposure assessments for MTBE, and concludes that, by comparison, MMT was treated too conservatively or erroneously. Basically, because of substantial differences between the databases and characteristics of MTBE (a volatile organic compound that remains in the body for a matter of hours to days) and Mn (a metal that accumulates in the body), Ethyl's direct comparisons are not valid.⁷²

Comments from other interested parties regarding potential health concerns related to manganese exposure are addressed in "ORD's Response to Public Comments" found in Docket A-93-26.

VII. Fuels and Fuel Additives Registration and Research Needs

To more accurately define an RfC for manganese and to more accurately predict the distribution of expected manganese exposures associated with MMT use, additional research will have to be completed. Such research would ultimately lead to a risk assessment which could better define the risk associated with MMT use. Furthermore, regulations under sections 211(a), (b), and (e) of the Act, set forth a procedure under which required health and exposure data must be submitted prior to any new use of a fuel or additive. Given the basis for today's decision and the purpose of the testing requirements imposed by these regulations, the Agency expects that the testing required to resolve the concerns upon which today's decision is based will also be required under these regulations. The following section explains these newly promulgated requirements and how they would apply to the use of MMT in unleaded gasoline.

Under section 211 of the Clean Air Act, certain fuels and additives must be registered with EPA as a precondition to

introduction into commerce. Section 211(a) of the Act authorizes EPA to designate any fuel or fuel additive for registration. Upon designation, fuels or additives may not be introduced into commerce unless they have been registered by EPA in accordance with section 211(b). In 1975, EPA issued regulations (40 CFR Part 79) implementing basic registration requirements, as stipulated by section 211(b)(1), that required applicants to submit certain information, such as commercial identifying information, range of concentration, purpose-in-use, and chemical composition, in order to register a fuel or fuel additive.

The 1970 Clean Air Act also gave EPA discretionary authority to establish additional registration requirements under section 211(b)(2). This section authorized EPA to require fuel and fuel additive manufacturers "to conduct tests to determine potential public health effects of such fuel(s) or additive(s) (including but not limited to, carcinogenic, teratogenic, or mutagenic effects)," and to further furnish other "reasonable and necessary" information to identify fuel and fuel additive emissions and determine their effects on vehicular emission control performance and on public health and welfare.

EPA did not exercise its discretionary authority to require testing of fuels and fuel additives under section 211(b)(2) when general registration regulations were first adopted in 1975. However, in the Clean Air Act Amendments of 1977 (Public Law 95-95, August 7, 1977), Congress added section 211(e), which required EPA to take certain actions to implement section 211(b)(2). A final rule was signed by the Administrator of EPA on May 27, 1994 and was published in the *Federal Register* on June 27, 1994 (59 FR 33042). The final rule, "Fuels and Fuel Additives Registration Regulations", implemented additional registration requirements under sections 211(b)(2) and 211(e) of the Clean Air Act. The rule requires manufacturers to provide EPA with information to assist EPA in identifying and evaluating potential adverse health effects of motor vehicle fuel and fuel additive emissions, and to support and guide related regulatory actions in the future.

The recently promulgated health effects testing requirements incorporate a three-tiered health effects evaluation structure. Under Tier 1, fuel and fuel additive manufacturers are required to perform a literature search on the health and welfare effects of fuel and fuel additive emissions, characterize the emissions, and provide exposure information. Tier 2 includes short-term

⁷⁰ See Air Docket A-93-26, Category II-D-98.

⁷¹ For further information regarding this matter, see Air Docket A-93-26, Category II-A-15, page 40.

⁷² For further discussion regarding this matter, the reader is referred to Air Docket A-93-26, II-A-15, Section IV.

biological testing to screen for specific health effects endpoints, involving the exposure of laboratory animals to the whole emissions of fuels or fuel/additive mixtures.

Where appropriate, EPA has retained authority to modify or augment the standard Tier 2 test requirements. Under "alternative Tier 2" procedures set forth in § 79.58(c), EPA may substitute alternative tests for standard Tier 2 tests or impose additional testing requirements. Alternative Tier 2 procedures may be utilized to modify standard Tier 2 requirements, but may not be utilized to entirely delete testing for any of the standard endpoints. The alternative Tier 2 provision affords the Agency flexibility when available information indicates that another testing regimen is preferable to the standard set of Tier 2 tests. Instances where Alternative Tier 2 requirements may be appropriate include scenarios where previously available information may cause EPA to be concerned about potential health effects related to an endpoint not specifically addressed in Tier 2, or when otherwise available information identifies a potentially significant public health risk related to a Tier 2 endpoint such that more definitive testing will be required for this endpoint than is ordinarily required. In both of these scenarios, alternative Tier 2 testing can facilitate earlier and potentially more efficient acquisition of the required data.

After receipt and review of a manufacturer's Tier 1 and Tier 2 submittals, EPA determines, on a case-by-case basis, if additional testing is needed under Tier 3 to evaluate the risk of a particular fuel or fuel additive (or group of fuels or fuel additives) on human health or welfare. Tier 3 testing could include any emission analysis, health effects, welfare effects, and/or exposure testing or analysis deemed necessary by EPA for this purpose.

The Agency has considerable discretion to formulate and impose appropriate testing requirements under either alternative Tier 2 or Tier 3 procedures. In practice, EPA will be more likely to utilize alternative Tier 2 procedures in instances where additional data needs are apparent even prior to completion and submission of the standard Tier 2 tests, and prompt formulation of appropriate alternative testing requirements will result in a more efficient use of industry and governmental resources. Tier 3 procedures will be preferred in those instances where standard Tier 2 tests are necessary to assist EPA in identification of potential hazards and/or in design or

selection of appropriate follow-up studies.

For fuels and fuel additives registered as of the date of promulgation of the final rule, registrants must submit Tier 1 and Tier 2 test data within six years of that date. On the other hand, manufacturers seeking to register new fuel and fuel additive products after the date of promulgation must satisfy all testing requirements before registration will be granted.

In this regard, the new rule clarifies what constitutes a "new" fuel or fuel additive, distinguishing between two types of unregistered products which a manufacturer might seek to register after the promulgation of the final rule: (1) fuel and fuel additive products similar in composition and usage to those already allowed wide commercial distribution (e.g., registered for general use by other manufacturers), and (2) fuel and fuel additive products which differ significantly in composition and/or usage from such current products. To effectuate this distinction, EPA's final rule, promulgated under sections 211(b) and (e), makes use of grouping system concepts and definitions. Specifically, a fuel additive product not registered by its manufacturer⁷³ for a specific type of fuel as of the date of promulgation of this rule is designated as "registrable" if the fuel/additive mixture resulting from use of the additive in the specific fuel is in the same fuel/additive group as one or more currently registered fuels or bulk additives.⁷⁴ The grouping system establishes various fuel/additive groups within each fuel family.⁷⁵ Conversely, a

⁷³ For purposes of these definitions, registration is product-specific. Thus, if a particular fuel or fuel additive product has not been registered by its manufacturer, then that manufacturer does not have the right to introduce, market, and/or sell this product, even if a compositionally similar or identical product has been registered by another manufacturer.

⁷⁴ A "bulk additive," sometimes called a "general use" additive was defined as a product added to fuel at the refinery as part of the original blending stream or after the fuel is transported from the refinery, but before the fuel is purchased for introduction into the fuel tank of a motor vehicle. In contrast, an "aftermarket additive," sometimes called a consumer additive, is an additive product marketed for introduction directly into the fuel system of a motor vehicle.

⁷⁵ "Fuel Family" refers to the primary categorization of fuels and fuel additives within the proposed grouping system. A fuel family was defined as a set of F/FAs which share basic chemical and physical formulation characteristics and can be used in the same engine or vehicle. Six such fuel families were proposed (unleaded gasoline, leaded gasoline, diesel, methanol, ethanol, methane, and propane). EPA did not include a leaded gasoline family in the final rule because Clean Air Act section 211(n) prohibits on-road use of leaded fuel after December 31, 1995. In the definition of "registrable," the restriction "in the same fuel family" means that the similarity of an applicant F/FA to a bulk additive currently

fuel additive product not registered by its manufacturer for a specific type of fuel as of the date of promulgation is designated as "new" if the fuel/additive mixture resulting from use of the additive in the specific fuel cannot be grouped with one or more currently registered fuels or bulk additives. In these definitions, the term "currently registered" refers to the date on which the prospective applicant seeks registration for the fuel or fuel additive in question.

According to these definitions, an unregistered fuel additive which meets the criteria for grouping only with a currently registered aftermarket additive (and not also with a currently registered fuel and/or bulk additive) is not registrable. This does not preclude an unregistered aftermarket additive from being registrable (since aftermarket additives can group with fuels and bulk additives), nor does it affect the registration status of currently registered aftermarket additives.

For example, an unregistered detergent additive (either bulk or aftermarket) intended for use in unleaded gasoline and conforming to the "substantially similar" criteria for unleaded gasoline (56 FR 5352) would be registrable, since it would be able to group with currently registered baseline unleaded gasoline fuels and bulk additives.⁷⁶ On the other hand, MMT is considered "new" rather than "registrable" for unleaded gasoline, because there are no currently registered manganese-containing fuels or bulk additives in the unleaded gasoline family with which a mixture of MMT and unleaded gasoline could be grouped. This is true even though products containing MMT are currently registered for bulk use in leaded gasoline and as aftermarket additives grandfathered prior to the ban on such aftermarket additives.⁷⁷

registered for use in another fuel family would not suffice to make the applicant F/FA registrable. This restriction is consistent with the general principles of the grouping system, which permits grouping of F/FAs only within defined fuel families.

⁷⁶ The ability to join the unleaded gasoline baseline group assumes that the detergent additive does not exceed oxygen and sulfur limits applicable to the baseline unleaded gasoline category.

⁷⁷ Until the 1990 CAA Amendments went into effect, the statutory language of section 211(f) was interpreted as applying only to unleaded gasoline fuels and related bulk additives. Thus, prior to November 15, 1990 (the effective date of the CAA Amendments), aftermarket additives intended for use in unleaded gasoline and containing elements other than carbon, hydrogen, oxygen, nitrogen, and sulfur were allowed to be registered. Under the 1990 CAA Amendments, all types of motor vehicle fuels and fuel additives were placed under 211(f) jurisdiction. All aftermarket additives that were not "substantially similar" and were introduced on or after November 15, 1990, were banned. However

The recently finalized rule requires that manufacturers of new fuel and fuel additive products (i.e., fuel and fuel additive products not registered by their specific manufacturers as of the date of promulgation and not fitting the registrable criteria) submit all testing requirements prior to registration, including any alternative Tier 2 tests or Tier 3 tests prescribed by the Agency. As discussed above, under the fuel and fuel additive testing rule, MMT is designated as "new" for purposes of registration for use in unleaded gasoline. Accordingly, any data required to register MMT for use in unleaded gasoline must be submitted prior to registration.

As noted above, Tier 1 requires manufacturers of designated fuels or fuel additives (or groups of manufacturers pursuant to § 79.56) to supply to the Administrator: (1) the identity and concentration of certain emission products of such fuel and fuel additives, (2) an analysis of potential emissions exposures, and (3) any available information regarding the health and welfare effects of the whole and specified emissions.

Under the General Provision of the emission characterization requirements of Tier 1, it is stated in § 79.52(b)(1)(ii) that the emissions shall be generated three times (on three different days) without a functional aftertreatment device and, if applicable, three times (on three different days) with a functional aftertreatment device, and each such time shall be analyzed according to the remaining provisions in this section (b). Measurement of background emissions, under § 79.52(b)(1)(iii), states that it is required that ambient/dilution air be analyzed for levels of background chemical species present at the time of emission sampling (for both combustion and evaporative emissions) and that background chemical species profiles be reported with emissions speciation data. Ethyl has yet to provide the Agency with data on the characterization of emissions resulting from the use of MMT in unleaded gasoline which meets the requirements of Tier 1 under these subsections. Thus, to EPA's knowledge, data has not yet been collected which would fully satisfy Tier 1 requirements under § 79.52(b)(1) (ii) and (iii).

Standard Tier 2 testing includes certain specific types of short-term

biological testing to screen for specific health effects endpoints, involving the exposure of laboratory animals to the whole emissions of the fuel additive (when added to a base fuel). Where appropriate, the Agency may impose an alternative Tier 2 test in lieu of a standard Tier 2 test or prescribe additional Tier 2 testing in addition to the standard Tier 2 tests.

EPA's Office of Research and Development has prepared a report that specifically identifies research which would allow a more accurate evaluation of the risk involved in utilizing MMT in unleaded gasoline.⁷⁸ Some of the research described in the ORD report is intended to address toxicologic endpoints which are also addressed by standard Tier 2 tests,⁷⁹ while other research described in the report is intended to address other endpoints. EPA presently has an adequate basis to conclude that there are public health concerns associated with the potential use of MMT in unleaded gasoline, and anticipates that research addressing each of the areas identified in the ORD report will be necessary to support registration of MMT for use in unleaded gasoline. It is not necessary, and would be inefficient, to wait for the completion and submission of all of the standard Tier 2 tests in order to identify the requisite test data, and use of alternative Tier 2 procedures is therefore appropriate.

If Ethyl or any other party seeks to register MMT for use in unleaded gasoline, it will need to submit the required test data in addition to obtaining the required waiver. In that case, EPA expects to identify specific alternative Tier 2 tests which must be

⁷⁸ ORD originally reviewed the information needed to improve the risk characterization in: Preuss, P.W. (1991) ORD Document on Information Needed to Improve the Risk Characterization of Manganese Tetraoxide (Mn₂O₄) and Methylcyclopentadienyl Manganese Tricarbonyl, December 12, 1991 (memorandum to Richard Wilson). Washington, DC: U.S. Environmental Protection Agency, Office of Research and Development; December 16, 1991. For further information the reader is referred to Air Docket A-93-26, II-A-16. ORD has reevaluated these information needs in light of new information. See Memo from Peter W. Preuss to Richard Wilson dated July 13, 1994, Docket A-93-26, II-A-18.

⁷⁹ For example, it is clear that the standard Tier 2 neurotoxicity will not address adequately the potential neurotoxicity of inhaled manganese to humans. Although the precise mechanisms of such neurotoxicity are not fully understood, it has been shown that manganese toxicity may be associated with degeneration of certain tissues in the brain. These brain tissues include the substantia nigra which is found only in primates and not in lower mammals. Laboratory rodents typically employed in the standard Tier 2 neurotoxicity test do not physically possess this target for manganese toxicity in the brain.

performed prior to registration.⁸⁰ In the case of endpoints addressed by the ORD report, that report will serve as the starting point for EPA in identifying appropriate alternative Tier 2 tests. In each instance where EPA does not adopt any alternative Tier 2 requirement for an endpoint which is addressed by standard Tier 2 tests, standard information or testing requirements will continue to apply. The process for establishment of alternative Tier 2 testing requirements for a product includes specific procedures for notification of the manufacturer and an opportunity for comment, and is set forth in 40 C.F.R. 79.58(c).

Submission of any data which is required by the registration regulations prior to registration of MMT for use in unleaded gasoline is not itself a specific legal prerequisite to the granting of a waiver under section 211(f)(4). However, in these circumstances, since the Agency is declining to grant the requested waiver based on potential health effects, the Agency considers it reasonable to require that Ethyl submit the same health effects and exposure test data which will be required prior to registration of MMT for unleaded gasoline before it will consider taking favorable action on another waiver application.

As the health effects testing rule indicates, EPA believes that it should exercise particular caution in registering new fuel or fuel additive products that are significantly different from, or have a usage pattern which is significantly different in scope or character from, currently registered fuel or fuel additive products. EPA also believes that the same cautious approach is appropriate in evaluating waiver applications under section 211(f)(4).

In the event that Ethyl wishes to undertake the testing required to register MMT for unleaded gasoline, EPA will work with Ethyl to resolve the details of all necessary test data. Further, once the data requirements for registration have been duly established, EPA will not require submission of any additional health effects and exposure data as part of a new waiver application.

VIII. Other Issues

Ethyl has stated that certain other considerations and data associated with MMT use should be taken into account by the Administrator in utilizing the discretion authorized under section

⁸⁰ If there is any reason why Ethyl would prefer to complete the standard set of Tier 2 tests and submit such tests prior to imposition of further data requirements, EPA is willing in the alternative to impose additional testing requirements under Tier 3 procedures.

this ban does not apply to products first introduced into commerce prior to November 15, 1990 (CAA section 211(f)(1)(B)). Thus, "non-sub-sim" gasoline aftermarket additives which had been registered prior to that date were allowed to retain their registrations. These are so-called "grandfathered" aftermarket additives.

211(f)(4). These issues include (1) decreased emissions of toxic air pollutants due to decreases in aromatic use when MMT is substituted as an octane enhancer; (2) decreased refinery emissions due to decreased reformer severity; (3) decreased carbon monoxide (CO) and oxides of nitrogen (NO_x) vehicle emissions, (4) increased crude oil yield and associated energy savings, and (5) decreased levels of tropospheric ozone associated with lower levels of reactive hydrocarbon emissions and NO_x emission decreases.

Regarding CO emission decreases, EPA's analysis indicates that examination of all of the available test data on the CO effects of MMT shows a small (0.07 gpm or 2% of applicable standards⁸¹) decrease attributable to the additive.⁸² With the exceptions of two vehicle models, the CO effects in both directions were relatively small. The most significant exception to this general pattern is the test data from the 1988 Ford Crown Victoria 5L, which showed a decrease of 0.72 gpm (or 21% of the standard). The other unusual vehicle was also a Ford Crown Victoria—a 1992 model with a 0.36 gpm decrease (11% of standard). The small average size and somewhat erratic nature of the CO decreases seen in the vehicle sample lead to questions about whether this small potential benefit is likely to actually occur in the vehicle fleet.

EPA also examined NO_x emissions changes demonstrated by the data which had been submitted by both Ethyl and Ford. The test data for NO_x show a more substantial and more consistent decrease for this pollutant than was the case for CO. The average across models was 0.08 gpm or 8% of the standard. The largest decreases were seen in the 1992 Ford Mustang 5.0L model and the 1988 Ford Crown Victoria 5L (each showing a 0.30 gpm decrease or 30% of the standard). Other models with substantial decreases were the 1988 Ford Taurus (0.22 gpm or 22% of the standard) and the 1992 Buick Regal 3.8L (0.19 gpm or 19% of the standard).

It is difficult to clearly determine the effects which NO_x decreases of this magnitude might have on tropospheric ozone concentrations, since such effects are influenced heavily by the mix of

ozone precursors and the atmospheric chemistry of particular non-attainment areas. Modeling studies performed by EPA have shown that NO_x reductions in NO_x limited areas can significantly reduce regional ozone levels. However, although the regional ozone decreased, some urban areas showed slight increases in ozone levels. It is not possible to quantify the degree of reduction in ozone associated with the introduction of MMT in general because many factors affect ambient ozone. In order to achieve such a quantification, individual cities would need to be analyzed to determine their VOC/NO_x ratios and the mobile source contribution to those ratios.

EPA has therefore concluded that it is likely that in certain NO_x-limited areas, ambient levels of ozone would decrease based on the expected NO_x reductions resulting from MMT use. It is impossible to quantify the exact degree of these decreases or the magnitude of the area which would be affected.⁸³

Ethyl indicates that "use of the Additive will result in as many as 25 fewer cancer cases [emphasis in the original] attributable to automotive exhaust over the 1995-2010 span." Although ORD has not independently verified Ethyl's current analysis, it is nevertheless possible to evaluate their analysis by taking it at face value. Significant uncertainties are inherent in any prediction of a net change in cancer risk. For example, there are various models and assumptions underlying estimated changes in carcinogen exposures. Assumptions must be made regarding the composition of gasoline at different times in the future; projected fleet emissions must be estimated based on measurements from a few vehicles; the impact of MMT on such emissions must be estimated. In addition, the relationship of changes in emissions is assumed to be related to population exposure levels.

Cancer risk, whether characterized in terms of the number of cases in the entire U.S. population or in terms of individual unit risk estimates, also has inherent uncertainties. According to Ethyl, the predicted reduction in estimated cancer cases is 0.6 to 2.0 cases per year. These represent upper bound estimates, and thus the true impact is very unlikely to be higher and may in fact be less. Ethyl also predicts that the changes in the probability of an individual contracting cancer is lowered

with MMT use from about 12 cases per 100,000 to 6 cases per 100,000. Again these estimates represent upper bounds, so the true risk to an individual would not be expected to be higher and could well be lower. In any case, the individual risk level remains in the 10-5 range. Relative to the uncertainties in the cancer risk estimates as well as in the emission and exposure aspects of Ethyl's analysis, the magnitude of the claimed change in risk is comparatively quite small.

The accuracy of these estimates also depends very much on the estimates of decreased aromatics use for individual refiners. Very significant changes are taking place in the refining industry to comply with various aspects of programs being implemented pursuant to the 1990 Clean Air Act amendments. Programs such as the introduction of "reformulated gasoline" will dramatically change the overall chemical and physical properties of gasoline. Thus, estimates of aromatics usage associated with refining are even more highly speculative over the next several years as these programs are implemented.

In any case, it is not possible to weigh these predicted changes in cancer incidence or in ozone formation against the concerns which have been explained above in relation to increased manganese emissions. Therefore, the Agency disagrees with Ethyl's claim that it can be shown scientifically that a net public health benefit results from the use of MMT in unleaded gasoline. While the Agency agrees that such risk-benefit comparisons can be important, the present data are inadequate for this purpose. With regard to the potential risks associated with inhalation exposure to manganese, the Agency's Risk Assessment as described above indicates that there are insufficient data to conclude quantitatively whether the increased use of MMT will (or will not) increase public health risk. With regard to the potential reductions in cancer incidence and tropospheric ozone levels associated with MMT use claimed by Ethyl, the above analysis indicates that, while reductions are possible, the data are too sparse to provide reasonable quantitative estimates of the magnitude of such reductions. The estimated cancer reduction is not truly discernible as a quantifiable benefit. This is because relative to the uncertainties in the cancer risk estimates as well as in the emission and exposure aspects of Ethyl's analysis, the estimated magnitude of change in risk is quite small, even when based on the "upper bound" cancer estimates. For ozone, it is not possible in general to quantify the

⁸¹ This effect was calculated by integrating emissions, separately for clear and MMT fuels, over the full range of mileage for which data were available, taking the difference between fuel groups within models to get a model-by-model effect, and then averaging these effects over model groups.

⁸² For a complete description the reader is referred to Air Docket A-93-26, II-A-14, "Evidence of CO and NO_x Emission Decreases Attributable to MMT in Durability Testing Data"

⁸³ For a complete description and response to Ethyl's comments, the reader is referred to Air Docket A-93-26, II-A-15, "ORD's Response to Public Comments on the Reference Concentration for Manganese and on the Draft ORD Risk Assessment of MMT"

degree of reduction associated with the introduction of MMT because many factors, including local volatile organic compound (VOC)/NO_x ratios affect ambient ozone levels. To achieve a quantification, all appropriate individual cities would have to be analyzed.

IX. Decision

As previously discussed, the Agency interprets section 211(f)(4) of the Act as establishing a two-stage process for evaluating waiver applications. The first stage requires that EPA determine whether an applicant has met its burden of demonstrating that a fuel does not cause or contribute to a failure to meet regulated emission standards. Unless EPA finds that the waiver applicant has met this burden, a waiver may not be granted. The second stage of the process reflects the discretionary nature of the waiver authority provided to the EPA Administrator by the statute. In this second stage, the Administrator may consider other factors in determining whether granting a waiver is in the public interest and consistent with the objectives of the Clean Air Act. In this stage, the Administrator has broad discretion in selecting the issues to be examined and in balancing the potential positive and negative impacts of a waiver.

For purposes of the pending waiver application, as remanded to EPA by the D.C. Circuit Court of Appeals and resubmitted by Ethyl, I determined on November 30, 1993 that use of Ethyl's product HiTEC 3000 in unleaded gasoline at the specified concentration will not cause or contribute to a failure to achieve compliance with vehicle emission standards. The data and analysis upon which this determination was based are described in Section IV above. The data submitted by Ethyl in connection with this waiver application satisfy all of the quantitative criteria for determining whether an additive will "cause or contribute" to a failure to meet emission standards previously utilized by EPA. As noted above, EPA has serious reservations concerning the present suitability of these criteria. In light of the intractability of the nation's air pollution problems, EPA is considering adoption of new criteria which would be utilized in assessing future waiver applications. However, for purposes of Ethyl's present application, EPA concluded that it would not be appropriate to make the required determination concerning emission effects by utilizing a new methodology or new criteria concerning which Ethyl was not afforded any prior notice. My decision that Ethyl has met the requisite

statutory burden for purposes of the present waiver application is also based on the Agency's assessment of the newest data provided by Ethyl on newer-technology vehicles which do not, when evaluated separately, indicate any statistically significant increase in regulated vehicle emissions.

The Agency remains concerned about the possible effects of fuels containing MMT on the functioning of onboard diagnostics (OBD) equipment. At the time that EPA completed the assessment of emissions issues underlying my finding concerning emissions on November 30, 1993, the evidence to support the assertions by automakers that MMT would prevent the oxygen sensors in OBD systems from operating properly was quite limited and these assertions had not at that time been tested in any actual vehicles utilizing OBD systems. I expressed concern about the effect of MMT on OBD systems at that time, and indicated that if EPA ultimately concluded that MMT could prevent proper functioning of OBD systems, the Agency would consider appropriate action under Clean Air Act section 211(c). Since that time, the Ford Motor Company has submitted further research involving use of fuel containing MMT in an actual vehicle equipped with an OBD system, which Ford contends demonstrates that manganese oxides resulting from MMT use prevent the oxygen sensors in its OBD systems from functioning properly. EPA intends to fully investigate the significance of these findings. If further investigation supports the concerns expressed by Ford and other automakers, EPA intends to initiate an appropriate rulemaking under section 211(c).

Since I determined that Ethyl had met its burden regarding the "cause or contribute" finding required by the statute, the Agency has been reviewing other issues bearing on the exercise of my discretionary authority to grant or deny Ethyl the requested waiver for use in unleaded gasoline, focusing in particular on the potential effects of manganese emissions resulting from use of MMT on public health and welfare.

The Agency remains concerned regarding the issue of manganese emissions from vehicles utilizing fuels containing MMT. From a hazard identification perspective, manganese can clearly be toxic to the central nervous system, the respiratory system, and the male reproductive system. The level of manganese which may safely be breathed over a lifetime is not known with precision. EPA has assessed potential health risks associated with potential exposures utilizing a

Reference Concentration (RfC), which is defined as an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure level for the human population (including sensitive subpopulations) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime of exposure.

Beginning with existing data on the effects of manganese exposures, the Agency utilized its standard procedure to develop a verified Reference Concentration (RfC) of 0.05 $\mu\text{g}/\text{m}^3$. In response to comments and criticisms by Ethyl and others, the Agency then utilized a variety of additional techniques to consider potential alternative RfC's based on additional data from the occupational exposure study on which the current RfC is based (discussed in detail in Section VI-B-4 above). The techniques judged by EPA scientists to be most appropriate produced alternative candidate RfC's ranging from 0.09 to 0.2 $\mu\text{g}/\text{m}^3$. Since any formal revision of the present verified RfC of 0.05 $\mu\text{g}/\text{m}^3$ based on the ORD reassessment will occur in the future and could not be completed prior to the deadline for this decision, I have evaluated the potential health effects associated with use of MMT in unleaded gasoline based on all of the likely values, focusing in particular on a potential alternative RfC of 0.1 $\mu\text{g}/\text{m}^3$ and the present RfC of 0.05 $\mu\text{g}/\text{m}^3$.

Utilizing the newest and most accurate data available on personal exposures to particulate emissions of manganese from vehicular sources, Agency scientists also prepared an exposure analysis in which they attempted to predict the range of increases in personal exposure to particulate manganese that would occur in Riverside, California urban areas if MMT were to be used in all unleaded gasoline. If MMT were utilized in unleaded gasoline at the specified concentration in urban areas similar to Riverside, California, the Agency's exposure assessment predicts that the exposures of forty to fifty percent of the population in such areas to airborne manganese levels would exceed the present verified RfC of 0.05 $\mu\text{g}/\text{m}^3$, and the exposures of five to ten percent would exceed manganese levels exceeding a potential alternative RfC of 0.1 $\mu\text{g}/\text{m}^3$. Although it is impossible to state whether a health risk would definitely exist at the projected exposure levels, neither can the possibility of such a risk be ruled out.

It is reasonable to anticipate that persons living near major thoroughfares and in inner cities, often among the

most economically disadvantaged Americans, will be disproportionately represented among persons with higher manganese exposure. Moreover, there is reason to believe certain subpopulations such as the young, the elderly, and persons with certain preexisting conditions, such as Parkinson's disease, might be more susceptible to any adverse effects of manganese exposure.

Certain occupational groups who work in proximity to vehicular emissions such as toll takers, parking garage attendants, traffic policemen, taxi dispatchers, and service station attendants, are represented in the Agency's exposure estimates only to the extent of their prevalence in the general population. These occupational groups would likely experience manganese exposures attributable to MMT use near or even exceeding the highest predicted exposures⁸⁴. I realize that if Ethyl is granted the requested waiver, MMT would not be utilized immediately in all congested urban areas. Some of the urban areas with higher vehicular usage are areas which will be required to begin using a cleaner gasoline referred to as "reformulated gasoline" beginning in 1995. If Ethyl were to obtain the waiver under section 211(k)(4) which is the subject of this decision, MMT could not be used in reformulated gasoline unless and until Ethyl obtained an additional waiver under Clean Air Act section 211(k)(2)(D). However, I am nevertheless concerned about the effects of potential MMT use in areas required to utilize reformulated gasoline, both because a waiver under section 211(f)(4) of the Act is a necessary prerequisite to the use of MMT in either conventional or reformulated gasoline and because Ethyl has made it clear that it does not seek the present waiver solely to permit use in conventional gasoline.

I have concluded based on the assessments prepared by EPA scientists that, if I were to approve use of MMT in unleaded gasoline at the specified concentration, a significant number of persons could thereby be exposed to manganese concentrations in the ambient air which approach or exceed the current RfC or the candidate RfCs

⁸⁴The Agency realizes that exposures to manganese deemed acceptable in particular industrial or occupational contexts will often significantly exceed the levels considered by EPA to pose acceptable risks for the general population. The establishment of appropriate limits for occupational exposures to manganese is an entirely separate process from the establishment of an RfC for the general population. Nevertheless, I do not believe it would be appropriate to completely disregard the likelihood of substantial incremental additions to manganese exposure for certain categories of working Americans where such increased exposure would be attributable solely to approval of MMT use.

described in the risk assessment. Although all risk assessments have some degree of uncertainty, in some cases it is reasonable to conclude that the risk of adverse health effects is either very great or very small because estimated exposure levels are either far above or far below a potential health effect level. However, this is not the case with MMT.

Although it is not possible based on the present information to conclude whether specific adverse health effects will be associated with manganese exposures in the vicinity of or exceeding the RfC, neither is it possible to conclude that adverse health effects will not be associated with such exposures. Moreover, it is likely that, if adverse effects do occur as a result of MMT usage, such effects will be subtle and difficult to detect. In these circumstances, I am very reluctant to conduct a massive experiment in which the citizens of numerous American cities are subjected to the additional exposures to particulate manganese associated with MMT use.

I am aware of the proposal by Ethyl that EPA conditionally grant its waiver application for HiTEC 3000, with conditions which would require Ethyl to develop in a specified period the additional health effects and exposure data necessary to address present uncertainties in the risk assessment, require Ethyl to conduct ambient monitoring of particulate manganese levels in certain cities where unleaded gasoline containing MMT would be sold, and provide for prompt withdrawal of HiTEC 3000 from the market in the event that ambient monitoring were to demonstrate airborne manganese levels exceeding a specified level of concern (e.g. 0.1 µg/m³). However, I believe that the additional information on health effects and exposure necessary to provide greater assurance that manganese emissions from MMT use will not jeopardize public health should be provided before I decide whether to expose Americans to such emissions on even a temporary basis. Moreover, Ethyl's proposal to monitor ambient exposure levels would not assure that personal exposures exceeding the specified threshold do not occur. The EPA risk assessment makes it clear that a substantial portion of the population exposed to airborne manganese as a result of MMT use would be expected to experience personal exposures exceeding measured ambient exposure levels.

I recognize that there are some benefits that will be likely to accrue from approval of MMT use. In addition

to the obvious economic benefits associated with reductions in petroleum use and in fuel prices, there might also be some favorable health and environmental effects. It is probable that, if MMT use were to result in reduced NO_x emissions from motor vehicles, this would be accompanied by some site-specific decreases in ozone formation. The small decreases in cancer risks claimed by Ethyl are considerably more speculative and cannot be quantified with existing information. In any case, it is not possible for me to weigh any modest hypothetical decrease in cancer risk or limited site-specific ozone benefit against a risk of effects on the nervous system that could significantly decrease the quality of life for a large number of individuals. In addition, EPA is or will be taking a number of other actions under the Clean Air Act to reduce emissions of carcinogenic air pollutants and to limit ozone formation.⁸⁵

Based on the EPA analyses described in this decision and on the administrative record compiled by EPA as part of this decision, I have concluded that there is a reasonable basis for concern about the effects on public health that could result if EPA were to approve use of MMT in unleaded gasoline pursuant to Ethyl's application. I have also concluded that the actual and hypothetical benefits which could accrue from MMT use are insufficient to outweigh the concerns regarding potential adverse health effects. In circumstances where there is substantial uncertainty regarding the nature of potential health effects which would result if a fuel additive waiver were approved, the burden of resolving such uncertainties should fall on the waiver applicant rather than on the public. This policy is consistent with the general policy established by the recently promulgated health effects

⁸⁵For example, reductions in levels of carcinogenic particulates will accrue due to controls placed on diesel sulfur (55 FR 34120, August 21, 1990). Reductions in carcinogenic toxic emissions (and NO_x emissions after the year 2000) will accrue as a result of regulations requiring the introduction of reformulated gasoline in 1995 promulgated under section 211(k) of the Act as amended in 1990 (59 FR 7716, February 16, 1994) and as a result of the Agency's vehicle-based refueling emissions regulations (59 FR 16262, April 6, 1994). EPA has already issued tighter tailpipe standard for NO_x as required under the new amendments, and future ozone state implementation plans will address other NO_x control strategies. In addition, the recently-promulgated enhanced emission I/M program regulations for the first time establish a performance standard to reduce in-use NO_x emissions in the more serious ozone nonattainment areas. Regarding stationary source control strategies, other provisions of the Act call for a two million ton NO_x reduction from certain utilities.

testing rule, which requires that manufacturers of new fuels or fuel additives complete all necessary testing prior to registration.

Therefore, for the reasons set forth above, utilizing the discretion afforded me under section 211(f)(4) of the Act, I am today denying Ethyl's request for a waiver of the section 211(f)(1) prohibitions against the use of MMT in unleaded gasoline. As previously stated in this decision, should Ethyl wish to undertake research intended to alleviate the present uncertainties concerning the adverse health effects which could be associated with the use of MMT in unleaded gasoline, the Agency will work with Ethyl to resolve the details of the needed research. If Ethyl decides to undertake the research which is needed, and which would likely be required in any case to register MMT for unleaded gasoline under the Agency's recently promulgated fuel and fuel additive health effects testing regulations, EPA will reconsider granting a waiver to Ethyl at that time.

EPA has determined that this action does not meet any of the criteria for classification as a significant regulatory action under Executive Order 12866. Therefore, no regulatory impact analysis is required. This action is not a "rule" as defined in the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., because EPA has not published, and is not required to publish, a Notice of Proposed Rulemaking under the Administrative Procedure Act, 5 U.S.C. 553(b), or any other law. Therefore, EPA has not prepared a supporting regulatory flexibility analysis addressing the impact of this action on small entities.

This is a final Agency action of national applicability. Jurisdiction to review this action lies exclusively in the U.S. Court of Appeals for the District of Columbia Circuit. Under section 307(b)(1) of the Act, judicial review of this action is available only by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of August 17, 1994. Under section 307(b)(2) of the Act, today's action may not be challenged later in a separate judicial proceeding brought by the Agency to enforce the statutory prohibitions.

Dated: July 13, 1994.

Carol M. Browner,
Administrator.

[FR Doc. 94-18941 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-P

[OPP-00359A; FRL-4903-6]

Memorandum of Understanding; Amendment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

SUMMARY: The June 4, 1993 Memorandum of Understanding (MOU) between the Food and Drug Administration, Public Health Service, Department of Health and Human Services and the Environmental Protection Agency regarding the regulation of liquid chemical germicides for use on medical devices was amended on June 20, 1994. The amendment revises the disclaimer statement required on the label of all general purpose disinfectants intended for use on devices other than critical or semi-critical devices. This notice announces the availability of the amended MOU.

FOR FURTHER INFORMATION CONTACT: By mail: Juanita Wills (7505C), Registration Division, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: Rm. 250, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA (703) 305-6661.

SUPPLEMENTARY INFORMATION: **Electronic Availability:** This document, along with the amended Memorandum of Understanding, is available as an electronic file on The Federal Bulletin Board at 9 a.m. on the date of publication in the *Federal Register*. By modem dial (202) 512-1387 or call (202) 512-1530 for disks or paper copies. This file is also available in Postscript, Wordperfect, and ASCII. The Memorandum of Understanding is available in Wordperfect and ASCII.

List of Subjects

Environmental protection.

Dated: July 20, 1994.

Stephen L. Johnson,
Director, Registration Division, Office of
Pesticide Programs.

[FR Doc. 94-19776 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

[OPP-34061; FRL 4902-1]

Notice of Receipt of Requests for Amendments to Delete Uses in Certain Pesticide Registrations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In accordance with section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, EPA is issuing a notice of receipt of request for amendment by registrants to delete uses in certain pesticide registrations.

DATES: Unless a request is withdrawn, the Agency will approve these use deletions and the deletions will become effective on November 15, 1994.

FOR FURTHER INFORMATION CONTACT: By mail: James A. Hollins, Office of Pesticide Programs (7502C), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460. Office location for commercial courier delivery and telephone number: Room 216, Crystal Mall No. 2, 1921 Jefferson Davis Highway, Arlington, VA 22202, (703) 305-5761.

SUPPLEMENTARY INFORMATION:

I. Introduction

Section 6(f)(1) of FIFRA, provides that a registrant of a pesticide product may at any time request that any of its pesticide registrations be amended to delete one or more uses. The Act further provides that, before acting on the request, EPA must publish a notice of receipt of any such request in the *Federal Register*. Thereafter, the Administrator may approve such a request.

II. Intent to Delete Uses

This notice announces receipt by the Agency of applications from registrants to delete uses in the 10 pesticide registrations listed in the following Table 1. These registrations are listed by registration number, product names and the specific uses deleted. Users of these products who desire continued use on crops or sites being deleted should contact the applicable registrant before November 15, 1994 to discuss withdrawal of the applications for amendment. This 90-day period will also permit interested members of the public to intercede with registrants prior to the Agency approval of the deletion.

TABLE 1. — REGISTRATIONS WITH REQUESTS FOR AMENDMENTS TO DELETE USES IN CERTAIN PESTICIDE REGISTRATIONS

EPA Reg Nos.	Product Name	Delete From Label
000352-00354	Benlate Fungicide	Mushrooms
000352-00470	Bladex 4L Herbicide	Sorghum
000352-00495	Bladex 90 DF Herbicide	Sorghum, wheat, fallow cropland
000352-00564	Benlate SP Fungicide	Mushrooms
004581-00116	Kryocide Insecticide	Mustard & collard greens
010163-00041	Prokil Cryolite 96	Apples, beans, cranberries, cucumbers, mustard, pears, radishes, strawberries, turnips
010163-00200	Prefar 4-E Herbicide	Cotton, grass seed crops, tomatoes
028293-00125	Permethrin RTU Spray	Mosquito control use
033560-00021	PRONONE 20G	Aquatic uses
033560-00041	PRONONE Power Pellet	Aquatic uses, leeks, shallots

The following Table 2 includes the names and addresses of record for all registrants of the products in Table 1, in sequence by EPA company number.

TABLE 2. — REGISTRANTS REQUESTING AMENDMENTS TO DELETE USES IN CERTAIN PESTICIDE REGISTRATIONS

Company No.	Company Name and Address
000352	DuPont Agricultural Products, Registration & Regulatory Affairs, Walker's Mill, Barley Mill Plaza, P.O. Box 80038, Wilmington, DE 19880.
004581	Elf Atochem North America, Inc., Agrichemicals Division, 2000 Market Street, Philadelphia, PA 19103.
010163	Gowan Company, P.O. Box 5569, Yuma, AZ 85366.
028293	Unicorn Laboratories, 1000 118th Ave., North, St. Petersburg, FL 33716.
033560	Pro-Serve, Inc., 400 E. Brooks Road, Memphis, TN 38190.

III. Existing Stocks Provisions

The Agency has authorized registrants to sell or distribute product under the previously approved labeling for a period of 18 months after approval of the revision, unless other restrictions have been imposed, as in special review actions.

List of Subjects

Environmental protection, Pesticides and pests, Product registrations.

Dated: July 18, 1994.

Daniel M. Barolo,

Director, Office of Pesticide Programs.

[FR Doc. 94-19778 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

[OPP-34062; FRL 4902-4]

Notice of Receipt of Requests for Amendments to Delete Uses in Certain Pesticide Registrations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In accordance with Section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, EPA is issuing a notice of receipt of request for amendment by registrants to delete uses in certain pesticide registrations.

DATES: Unless a request is withdrawn, the Agency will approve these use deletions and the deletions will become effective on November 15, 1994.

FOR FURTHER INFORMATION CONTACT: By mail: James A. Hollins, Office of Pesticide Programs (7502C), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460. Office location for commercial courier delivery and telephone number: Room 216, Crystal Mall No. 2, 1921 Jefferson Davis Highway, Arlington, VA 22202, (703) 305-5761.

SUPPLEMENTARY INFORMATION:

I. Introduction

Section 6(f)(1) of FIFRA, provides that a registrant of a pesticide product may

at any time request that any of its pesticide registrations be amended to delete one or more uses. The Act further provides that, before acting on the request, EPA must publish a notice of receipt of any such request in the **Federal Register**. Thereafter, the Administrator may approve such a request.

II. Intent to Delete Uses

This notice announces receipt by the Agency of applications from registrants to delete uses in the 14 pesticide registrations listed in the following Table 1. These registrations are listed by registration number, product names and the specific uses deleted. Users of these products who desire continued use on crops or sites being deleted should contact the applicable registrant before November 15, 1994 to discuss withdrawal of the applications for amendment. This 90-day period will also permit interested members of the public to intercede with registrants prior to the Agency approval of the deletion.

TABLE 1. — REGISTRATIONS WITH REQUESTS FOR AMENDMENTS TO DELETE USES IN CERTAIN PESTICIDE REGISTRATIONS

EPA Reg No.	Product Name	Delete From Label
000264-00472	CHIPCO RONSTAR 50WP Herbicide	Blue spruce
000802-00544	Simazine 4G	Non-crop areas
003125-00117	MORESTAN 25% Wettable Powder	Macadamia nuts
003125-00183	DI-SYSTON Technical	Alfalfa, clover
003125-00302	MORESTAN SOLUPAK 25% Wettable Powder	Macadamia nuts
010163-00166	Imidan 50-WP	Corn, citrus
010163-00169	Imidan 50-WP	Corn, citrus
010163-00175	Imidan 50-WSB	Corn, citrus
010163-00184	Imidan 70-WSB	Corn, citrus
041014-00002	Marlate 50 Insecticide Wettable Powder	Cranberries, elevator tunnels, farm buildings, freight cars, grain storage bins, grain trucks, mushroom houses, peanut warehouses, pet bedding, ships' holds, forage crops, field crops, alfalfa, clover, cowpea, forage grasses, peanut, soybeans, all references to acreage & aerial uses
041014-00005	Marlate Technical Grade Methoxychlor	Beaches, cranberries, dumps, elevator tunnels, farm buildings, freight cars, grain storage bins, grain trucks, mushroom houses, non agricultural land, peanut warehouses, pet bedding, public parks, ships' holds, standing water, all references to acreage & aerial uses
041014-00009	Marlate 400 Insecticide Flowable Concentrate	Mosquito control on beaches, dumps, non agricultural land, public parks, standing water, cranberries, forage crops, field crops, alfalfa, clover, cowpea, forage grasses, peanut, soybean, pet bedding, elevator tunnels, farm buildings, freight cars, grain storage bins, grain trucks, mushroom houses, ships' holds, all references to acreage & aerial uses
041014-00011	Marlate 300 Methoxychlor Flowable	Mosquito control on beaches, dumps, non agricultural land, public parks, standing water, cranberries, forage crops, field crops, alfalfa, clover, cowpea, forage grasses, peanut, soybean, pet bedding, elevator tunnels, farm buildings, freight cars, grain storage bins, grain trucks, mushroom houses, ships' holds, all references to acreage & aerial uses
041014-00012	Marlate 70% Methoxychlor Dust Base	Beaches, dumps, non agricultural land, public parks, standing water, cranberries, pet bedding, elevator tunnels, farm buildings, freight cars, grain storage bins, grain trucks, mushroom houses, ships' holds

The following Table 2 includes the names and addresses of record for all registrants of the products in Table 1, in sequence by EPA company number.

TABLE 2. — REGISTRANTS REQUESTING AMENDMENTS TO DELETE USES IN CERTAIN PESTICIDE REGISTRATIONS

Company No.	Company Name and Address
000264	Rhone-Poulenc AG Company, P.O. Box 12014, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709.
000802	The Chas. H. Lilly Co., 7737 N.E. Killingsworth, Portland, OR 97218.
003125	Miles Inc., P.O. Box 4913, 8400 Hawthorn Road, Kansas City, MO 64120.
010163	Gowan Company, P.O. Box 5569, Yuma, AZ 85366.
041014	Kincade Enterprises, Inc., P.O. Box 549, Nitro, WV 25143.

III. Existing Stocks Provisions

The Agency has authorized registrants to sell or distribute product under the previously approved labeling for a period of 18 months after approval of the revision, unless other restrictions have been imposed, as in special review actions.

List of Subjects

Environmental protection, Pesticides and pests, Product registrations

Dated: July 26, 1994.

Daniel M. Barolo,

Director, Office of Pesticide Programs

[FR Doc. 94-19779 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

[OPP-66198; FRL 4903-3]

Notice of Receipt of Requests to Voluntarily Cancel Certain Pesticide Registrations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In accordance with Section 6(f)(1) of the Federal Insecticide,

Fungicide, and Rodenticide Act (FIFRA), as amended, EPA is issuing a notice of receipt of requests by registrants to voluntarily cancel certain pesticide registrations.

DATES: Unless a request is withdrawn by November 15, 1994, orders will be issued cancelling all of these registrations.

FOR FURTHER INFORMATION CONTACT: By mail: James A. Hollins, Office of Pesticide Programs (7502C), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460.

Office location for commercial courier delivery and telephone number: Room 216, Crystal Mall No. 2, 1921 Jefferson Davis Highway, Arlington, VA 22202, 703-305-5761.

SUPPLEMENTARY INFORMATION:

I. Introduction

Section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, provides that a pesticide registrant may, at any time, request that any of its pesticide registrations be cancelled. The Act

further provides that EPA must publish a notice of receipt of any such request in the **Federal Register** before acting on the request.

II. Intent to Cancel

This Notice announces receipt by the Agency of requests to cancel some 147 pesticide products registered under section 3 or 24(c) of FIFRA. These registrations are listed in sequence by registration number (or company number and 24(c) number) in the following Table 1.

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION

Registration No.	Product Name	Chemical Name
000070-00117	Kill-Ko New Improved Roach and Ant Killer	<i>o</i> -Isopropoxyphenyl methylcarbamate 2,2-Dichlorovinyl dimethyl phosphate
000303-00061	Sani-Tate Bowl Cleaner	Hydrogen chloride
000352-00421	1% Hexazinone Liquid Weed Killer	3-Cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1 <i>H</i> ,3 <i>H</i>)-dione
000352-00422	1.25% Hexazinone Liquid Weed Killer	3-Cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1 <i>H</i> ,3 <i>H</i>)-dione
000432-00455	SBP-1382 Pressurized Spray Insecticide 0.25%	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00483	SBP-1382 Concentrate 40 f VI	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00495	SBP-1382 Concentrate 5 for Manufacturing Use Only	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00583	SBP-1382 Insecticide Solvent Dilutable Concentrate 40	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00608	SBP-1382 Insecticide Aerosol 1% Formula III	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00686	SBP-1382/esbiothrin/p.b.o Insec. Aerosol 0.2%+ 0.3%+	2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl- <i>trans</i> -2,2-dimethyl-(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% (5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000432-00749	SBP-1382 1% for Timed Dispenser.	(5-Benzyl-3-furyl)methyl-2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
000499-00157	Whitmire Pt 250 Baygon	<i>o</i> -Isopropoxyphenyl methylcarbamate
000499-00236	Whitmire Pt 252	<i>o</i> -Isopropoxyphenyl methylcarbamate
000499-00242	Whitmire Pt 253 Baygon	<i>o</i> -Isopropoxyphenyl methylcarbamate
000499-00335	P/p Baygon Insect Residual Spray with Synergized Pyrethrin	<i>o</i> -Isopropoxyphenyl methylcarbamate <i>N</i> -Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
000572-00333	Hormo-Root "B"	Indole-3-butyric acid Tetramethyl thiuramdisulfide
000572-00334	Hormo-Root "C"	Indole-3-butyric acid Tetramethyl thiuramdisulfide
000572-00335	Hormo-Root "A"	Indole-3-butyric acid Tetramethyl thiuramdisulfide
000675-00008	Barrage Industrial Strength Bowl Cleanse	Hydrogen chloride

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
000777-00050	Lysol Disinfectant Toilet Bowl Cleaner Crystals	Alkyl* dimethyl benzyl ammonium chloride *(50%C ₁₄ , 40%C ₁₂ , 10%C ₁₆)
000802-00500	Millers Wipe Out Slug & Snail Bait	Sodium bisulfate
000802-00566	Lilly/miller Wipe Out Slug and Snail Bait for the Home	4-(Methylthio)-3,5-xylyl methylcarbamate
000875-00088	Accord Iodine Detergent Germicide	4-(Methylthio)-3,5-xylyl methylcarbamate Hydrogen chloride
000875-00112	Crouch's Id-125	Alkyl* poly(oxypropylene)poly(oxyethylene) iodine complex *(43%C ₁₀ , 30%C ₁₄) Phosphoric acid
000875-00115	Crouch's Id-05-r	Nonylphenoxypolyethoxyethanol - iodine complex Phosphoric acid
000875-00156	Oxford Ix-91 Iodophor Concentrate	Nonylphenoxypolyethoxyethanol - iodine complex Phosphoric acid
000875-00157	Oxford Bowl-Bright	Potassium iodide Phosphoric acid
000875-00168	Oxford 919 Iodophor Concentrate	Hydrogen chloride Phosphoric acid
001022-00552	Chapman CCA-50	Potassium iodide Phosphoric acid
001744-00001	Sunny Sol Bleach	Arsenic pentoxide
001744-00005	Sunny Sol 100	Chromic acid
001965-00019	Vancide 51Z	Cupric oxide
002344-00004	Skoal Last Tank Sanitizer	Sodium hypochlorite
002829-00102	Vinyzene BP-5 DIDP	Sodium hypochlorite
002829-00104	Vinyzene BP-5 Dop	Zinc dimethyldithiocarbamate
003125-00214	Baygon 1.5 Emulsifiable Insecticide	2-Mercaptobenzothiazole, zinc salt
003282-00067	D-Con Four/gone Automatic Room Fogger Formula IV	Phosphoric acid Dodecylbenzenesulfonic acid
003282-00075	D-Con Four/gone Automatic Room Fogger XII	10,10'-Oxybisphenoxarsine 10,10'-Oxybisphenoxarsine <i>o</i> -Isopropoxyphenyl methylcarbamate
003640-00066	Mark-10 Dairy Cleaner-Sanitizer	2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl- <i>trans</i> -2,2-dimethyl-(3-Phenoxyphenyl)methyl <i>trans</i> and <i>cis</i> 2,2-dimethyl-3-(2-methylpropenyl)cyclopropane 2,2-Dichlorovinyl dimethyl phosphate
004462-00009	Beaver Iocide Detergent-Sanitizer	<i>O,O</i> -Diethyl <i>O</i> -(3,5,6-trichloro-2-pyridyl)phosphorothioate 2,2-Dichlorovinyl dimethyl phosphate 4-Chloro- α -(1-methylethyl)benzeneacetic acid,cyano(3-phenoxyphenyl)methyl
004584-00053	Prestige Spray Disinfectant	Alkyl* dimethyl benzyl ammonium chloride *(60%C ₁₄ ,30%C ₁₆ , 5%C ₁₈ , 5%C ₁₂) Alkyl* dimethyl ethylbenzyl ammonium chloride*(68%C ₁₂ , 32%C ₁₄) Phosphoric acid
		Nonylphenoxypolyethoxyethanol - iodine complex Octylphenoxypolyethoxyethanol - iodine complex Phosphoric acid
		Isopropanol 2-Benzyl-4-chlorophenol <i>o</i> -Phenylphenol

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
004816-00125	BPR-Plant Spray Concentrate No. 2	4-Chloro-3,5-xyleneol (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins Rotenone Cube Resins other than rotenone
004816-00323	Niagara Intermediate Concentrate 20-5 Insecticide	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00332	Pyrenone House and Garden Insect Spray	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00334	Roach & Ant Spray Pressurized contains Diazinon	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00337	Wasp & Hornet Killer No. 1	1-Naphthyl-N-methylcarbamate (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00342	Pyrenone Food Plant Aerosol Insecticide	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00360	Pyrenone House and Garden Insect Spray (water Based)	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00362	Pyrenone One Shot Hi-Pressure Fogger	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00371	Roach & Ant Spray Pressurized contains Propoxur	o-Isopropoxyphenyl methylcarbamate (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00374	Synthrin Pressurized Spray Insecticide 0.35	(5-Benzyl-3-furyl)methyl methylpropenyl)cyclopropanecarboxylate 2,2-dimethyl-3-(2-
004816-00384	Synthrin Pressurized Insecticide Spray 0.25	(5-Benzyl-3-furyl)methyl methylpropenyl)cyclopropanecarboxylate 2,2-dimethyl-3-(2-
004816-00386	Flea and Tick Killer for Cats and Dogs contains Allethr	2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl α -trans-2,2-dimethyl-Butoxypolypropylene glycol (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00404	Synthrin Industrial Pressurized Spray 0.50	(5-Benzyl-3-furyl)methyl methylpropenyl)cyclopropanecarboxylate 2,2-dimethyl-3-(2-
004816-00415	Industrial Pressurized Spray 2.0-0.4	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00421	Kenel & Canine Insecticide	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
004816-00429	Pressurized Spray Multi-Use Insecticide	(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
004816-00452	Pyrenone Special 12-1.5 Insecticide Aerosol Concentrate	Pyrethrins (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00455	Feline Insect Spray	Pyrethrins (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00458	Equine Fly Spray	Pyrethrins Butoxypolypropylene glycol (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00469	Bpr W-B 1.33-0.25-1.068	Pyrethrins (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00508	Tetralate General Purpose Pressurized Spray Insect Kill	Pyrethrins Rotenone Cube Resins other than rotenone
004816-00517	Pyrenone Diazinon E.C.	(1-Cyclohexene-1,2-dicarboximido)methyl methylpropenyl)cycloprop. 2,2-dimethyl-3-(2-methylpropenyl)methyl cyclopropanecarboxylate 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00519	Pyrenone Dursban 0.25 Roach & Ant Pressurized Spray	Pyrethrins O,O-Diethyl O-(3,5,6-trichloro-2-pyridyl)phosphorothioate (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00533	BPR Aerosol Concentrate	Pyrethrins (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00565	Pyrenone Total Release	Pyrethrins Rotenone Cube Resins other than rotenone (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
004816-00597	Diazinon 12.5% Emulsifiable Concentrate	Pyrethrins O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
004822-00054	Johnson Go-Getter the Working Foam Bowl Cleaner	Hydrogen chloride
004822-00096	New Formula Raid Liquid Ant & Roach Killer	o-Isopropoxyphenyl methylcarbamate 2,2-Dichlorovinyl dimethyl phosphate
004822-00110	Raid Liquid Ant & Roach Killer	o-Isopropoxyphenyl methylcarbamate 2,2-Dichlorovinyl dimethyl phosphate
004822-00408	Vanish Toilet Bowl Cleaner	Sodium bisulfate
004822-00409	Crystal Vanish Toilet Bowl Cleaner	Sodium bisulfate
005905-00165	Helena Brand Bromo-Clean	Sodium metaborate (NaBO ₂) 5-Bromo-3-sec-butyl-6-methyluracil
005905-00166	Helena Brand Veg-Clean	Sodium chlorate Sodium metaborate (NaBO ₂) 5-Bromo-3-sec-butyl-6-methyluracil Sodium chlorate

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
006836-00039	Lonza Formulation 217	Hydrogen chloride Didecyl dimethyl ammonium chloride Octyl decyl dimethyl ammonium chloride Dioctyl dimethyl ammonium chloride
006836-00042	Lonza Formulation 223	Hydrogen chloride Didecyl dimethyl ammonium chloride Octyl decyl dimethyl ammonium chloride Dioctyl dimethyl ammonium chloride
006931-00002	Iodibac Formula S-30	Nonylphenoxypolyethoxyethanol - iodine complex Phosphoric acid
006931-00004	Mer-O-San Formula S-40 Acid Sanitizer	Phosphoric acid
007546-00005	De-Germ Formula No. 14	Alkyl* dimethyl benzyl ammonium chloride *(60%C ₁₄ , 30%C ₁₆ , 5%C ₁₈ , 5%C ₁₂) Phosphoric acid
007616-00065	Kem Tek Spa Kem Liquid Bromide	Sodium bromide
008325-00027	Bullen Industrial Germicidal Bowl Cleaner	Hydrogen chloride Alkyl* dimethyl benzyl ammonium chloride *(60%C ₁₄ , 30%C ₁₆ , 5%C ₁₈ , 5%C ₁₂) Alkyl* dimethyl ethylbenzyl ammonium chloride *(68%C ₁₂ , 32%C ₁₄)
008590-00570	Livestock Spray II	Dipropyl isocinchomeronate N-Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins 2,2-Dichlorovinyl dimethyl phosphate
008781-00004	Metz Iodine Detergent Germicide	Nonylphenoxypolyethoxyethanol - iodine complex Phosphoric acid
010370-00033	Foam spray Products 57% Malathion	O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate
010370-00034	Foam spray Products Diazinon Super 12	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
010370-00041	Ford's Diazinon Plus Roach Spray	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
010370-00067	Algaecide Concentrate NF	Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride)
010370-00068	57% Malathion	O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate
010370-00070	Terraclor 2E	Pentachloronitrobenzene
010370-00074	Ford's Diazinon 45	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
010370-00114	Staffel's 56% Malathion (premium Grade)	O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate
010370-00119	Staffel's Rats-N-Mice Killer	3-(alpha-Acetylbenzyl)-4-hydroxycoumarin
010370-00120	Staffel's Rats-N-Mice Bait	3-(alpha-Acetylbenzyl)-4-hydroxycoumarin
010370-00128	Fords 5% Malathion Dust	O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate
010370-00146	Liquid Edger Ready To Use	Ammonium sulfamate
010370-00166	Broadleaf Spot Weeder	Dimethylamine 3,6-dichloro-o-anisate Dimethylamine 2,4-dichlorophenoxyacetate
010370-00170	PCNB 10-G Soil Fungicide	Pentachloronitrobenzene
010370-00180	Ford's Broadleaf Spot Weed Killer	Dimethylamine 3,6-dichloro-o-anisate Dimethylamine 2,4-dichlorophenoxyacetate
010370-00188	Diathrin Ant & Roach Powder	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate Pyrethrins
010370-00206	FPC Pro Algaecide	Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride)
010370-00273	Roberts Malathion 57% Premium Grade	O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate
010370-00275	Clean Crop Diazinon 4% Garden Dust	O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
010370-00276	Clean Crop Diazinon 25 Lawn & Garden	<i>O,O</i> -Diethyl <i>O</i> -(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
010370-00279	Clean Crop Malathion 50 Lawn and Garden Spray	<i>O,O</i> -Dimethyl phosphorodithioate of diethylmercaptosuccinate
010370-00287	Clean Crop Diazinon 25 Lawn Insecticide	<i>O,O</i> -Diethyl <i>O</i> -(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
010370-00292	25% Diazinon Garden Insect Spray	<i>O,O</i> -Diethyl <i>O</i> -(2-isopropyl-6-methyl-4-pyrimidinyl)phosphorothioate
015567-00001	No. 23 Emulsion Bowl Cleaner and Disinfectant	Hydrogen chloride
015567-00005	Clout Emulsion Bowl and Porcelain Cleaner Disinfectant	Hydrogen chloride
015567-00008	16 Bowl Cleaner Scale Solvent & Disinfectant	Hydrogen chloride
028293-00117	Unicorn Now Flea & Tick Spray	Butoxypolypropylene glycol (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
033176-00002	Airysol Brand Insect Killer	<i>d</i> -trans-Chrysanthemum monocarboxylic acid ester of <i>d</i> -2-allyl-4-hydroxy-3-(Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
033176-00028	Airysol Brand Professional Strength Flying & Crawling I	2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl <i>d</i> -trans-2,2-dimethyl- <i>N</i> -Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
038664-00022	Wah Wasp & Hornet Killer	<i>o</i> -Isopropoxyphenyl methylcarbamate <i>N</i> -Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20% Pyrethrins
039272-00002	White Emulsion Bowl Cleaner	Hydrogen chloride
042177-00024	Olympic Chlor-O-Rings 100	Diisobutylphenoxyethoxyethyl dimethyl benzyl ammoniumchloride
042177-00036	Olympic Chlorinator Sticks	Trichloro- <i>s</i> -triazinetriene
042177-00057	York's Roman Springs	Trichloro- <i>s</i> -triazinetriene
042177-00068	Olympic Shock Tabs	Sodium dichloro- <i>s</i> -triazinetriene
049547-00003	Aidex Pine Oil	Trichloro- <i>s</i> -triazinetriene
051793-00046	Elite Insect Spray Permethrin	Pine oil
051793-00064	Elite Aerosol Insect Spray with Permethrin	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, <i>N</i> -Octyl bicycloheptene dicarboximide Pyrethrins
051793-00078	Elite Aerosol Insect Spray with Permethrin II	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, <i>N</i> -Octyl bicycloheptene dicarboximide
051793-00093	Elite Aqueous Room Fogger	Pyrethrins
051793-00104	Elite Permethrin 13.3% EC for Plants	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, 2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl <i>d</i> -trans-2,2-dimethyl- Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-,
051793-00106	Elite Aerosol Insect Spray with Permethrin Plus	
051793-00129	Elite Aerosol Insect Spray with Permethrin Plus II	2-Methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl <i>d</i> -trans-2,2-dimethyl- <i>N</i> -Octyl bicycloheptene dicarboximide
051793-00153	Elite Flea & Tick Shampoo #9	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, Dipropyl isocinchmeronate <i>N</i> -Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%

TABLE 1. — REGISTRATIONS WITH PENDING REQUESTS FOR CANCELLATION—Continued

Registration No.	Product Name	Chemical Name
051793-00155	Elite Flea & Tick Spray #9	Pyrethrins Dipropyl isocinchomeronate N-Octyl bicycloheptene dicarboximide (Butylcarbityl)(6-propylpiperonyl) ether 80% and related compounds 20%
051793-00159	Elite Indoor Houseplant Spray	Pyrethrins Pyrethrins
051793-00160	Elite Aerosol Indoor Houseplant Spray	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, Pyrethrins
052252-00002	Sterx Cold Sterilant for Reprocessing Catheters	Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, Hydrogen peroxide
052252-00003	Actril Cold Sterilant for Dialysis Use	Peroxyacetic acid Hydrogen peroxide
055146-00047	2% Liquid Gib	Peroxyacetic acid Gibberellic acid
055146-00052	Gibgro 4 1	Gibberellic acid
055146-00058	Gibgro K 21	Gibberellic acid, monopotassium salt
055947-00039	Marksman Herbicide	2-Chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine Potassium 3,6-dichloro- <i>o</i> -anisate
056644-00048	Security Blot-Out Systemic Weed & Grass Killer	Isopropylamine glyphosate (<i>N</i> -(phosphonomethyl)glycine)

Unless a request is withdrawn by the registrant within 90 days of publication of this notice, orders will be issued cancelling all of these registrations. Users of these pesticides or anyone else desiring the retention of a registration should contact the applicable registrant directly during this 90-day period. The following Table 2 includes the names and addresses of record for all registrants of the products in Table 1, in sequence by EPA Company Number.

TABLE 2. — REGISTRANTS REQUESTING VOLUNTARY CANCELLATION

EPA Company No.	Company Name and Address
000070	Wilbur-Ellis Co., Box 16458, Fresno, CA 93755.
000303	Huntington Laboratories, Inc., 968-970 E. Tipton St., Huntington, IN 46750.
000352	E. I. Du Pont De Nemours & Co, Inc., Barley Mill Plaza, Walker's Mill, Wilmington, DE 19880.
000432	Roussel Uclaf Corp., 95 Chestnut Ridge Rd, Montvale, NJ 07645.
000499	Whitmire Research Laboratories, Inc., 3568 Tree Ct Industrial Blvd, St Louis, MO 63122.
000572	Rockland Corp., 686 Passaic Ave., Box 809, West Caldwell, NJ 07007.
000675	National Laboratories, L & F Products, 225 Summit Ave, Montvale, NJ 07645.
000777	L & F Products, 225 Summit Ave., Montvale, NJ 07645.
000802	Chas H. Lilly Co., 7737 N.E. Killingsworth, Portland, OR 97218.
000875	Diversey Corp., 12025 Tech Center Dr, Livonia, MI 48150.
001022	IBC Mfg. Co, c/o Sangeeta V. Khattar, 5966 Heisley Rd., Mentor, OH 44060.
001744	Jones Chemicals, Inc., 80 Munson Street, Leroy, NY 14482.
001965	R.T. Vanderbilt Co., Inc., 30 Winfield St, Norwalk, CT 06856.
002344	Riesen Chem Corp., 419 W. Vliet St., Milwaukee, WI 53212.
002829	Morton International, Inc., Specialty Chemicals Group, 333 W. Wacker Drive, Chicago, IL 60606.
003125	Miles Inc., Agriculture Division, 8400 Hawthorn Rd., Box 4913, Kansas City, MO 64120.
003282	D-Con Co. Inc., 225 Summit Ave., Montvale, NJ 07645.
003640	Stearns Packaging Corp., Box 3216, Madison, WI 53704.
004462	U. S. Chemical, A Division of Hydrite Chemical Co, 300 N Patrick Blvd (53045), Drawer #0948, Brookfield, WI 53008.
004584	E.D. Smith-Gem Inc., #1 Gem Blvd, Byhalia, MS 38611.
004816	Roussel Uclaf Corp., 95 Chestnut Ridge Rd, Montvale, NJ 07645.

TABLE 2. — REGISTRANTS REQUESTING VOLUNTARY CANCELLATION—Continued

EPA Company No.	Company Name and Address
004822	S.C. Johnson & Son Inc., 1525 Howe Street, Racine, WI 53403.
005905	Helena Chemical Co, 6075 Poplar Ave., Suite 500, Memphis, TN 38119.
006836	Lonza Inc., 17-17 Rte 208, Fair Lawn, NJ 07410.
006931	Merit Chemical Inc., Box 513, Sharon, WI 53585.
007546	U. S. Chemical, A Division of Hydrite Chemical Co, 300 N Patrick Blvd (53045), Drawer #0948, Brookfield, WI 53008.
007616	Chem Lab Products Inc., 5160 E. Airport Dr., Ontario, CA 91761.
008325	Misco Products Corp., R.D. 9, Box 9155, Reading, PA 19605.
008590	Agway Inc., c/o Universal Cooperatives Inc., Box 460, Minneapolis, MN 55440.
008781	Metz Sales, Inc., 522 W. First Street, Williamsburg, PA 16693.
010370	Roussel Uclaf Corp., 95 Chestnut Ridge Rd, Montvale, NJ 07645.
015567	Creative Chemicals Inc., 3 Church Street, Palmer, MA 01069.
028293	Unicorn Labs & Phaeton Corp., 1000 118th Ave N, St. Petersburg, FL 33716.
033176	Amrep, Inc., Regulatory Affairs, 990 Industrial Park Dr, Marietta, GA 30062.
038664	Archem, Inc., Box 1490, Conway, AR 72032.
039272	Wepak Corp., Box 36803, Charlotte, NC 28236.
042177	York Chemical Corp., 3309 E. John W. Carpenter Freeway, Irving, TX 75062.
049547	Sintesis Quimica S.A., c/o Pazianos Assoc., 1338 G St., SE, Washington, DC 20003.
051793	RSR Laboratories, Inc., 501 Fifth St., Bristol, TN 37620.
052252	Minntech Corp., Renal Systems, Div of Minntech Corp., 14605 28th Ave N, Minneapolis, MN 55447.
055146	Agrol Chemical Products, 7322 Southwest Freeway, Suite 1400, Houston, TX 77074.
055947	Sandoz Agro Inc., 1300 E. Touhy Ave, Des Plaines, IL 60018.
056644	Security Products Co. of Delaware, Inc., Box 59084, Minneapolis, MN 55459.

III. Loss of Active Ingredients

Unless these requests for cancellation, one pesticide active ingredient will no longer appear in any registered products. Those who are concerned about the potential loss of this active ingredient for pesticidal use are encouraged to work directly with the registrant to explore the possibility of their withdrawing the request for cancellation. This active ingredient is listed in the following Table 3, with the EPA Company Number.

TABLE 3. — ACTIVE INGREDIENTS WHICH WOULD DISAPPEAR AS A RESULT OF REGISTRANTS' REQUESTS TO CANCEL

Cas No.	Chemical Name	EPA Company No.
	Alkyl *poly(oxyprophlene)poly (oxyethylene) - iodine complex * (43%C ₁₀ , 30%C ₁₄ , 12%C ₁₂ , 10%C ₁₆ , 45%C ₁₈)	000875

IV. Procedures for Withdrawal of Request

Registrants who choose to withdraw a request for cancellation must submit such withdrawal in writing to James A. Hollins, at the address given above, postmarked before November 15, 1994. This written withdrawal of the request for cancellation will apply only to the applicable 6(f)(1) request listed in this notice. If the product(s) have been subject to a previous cancellation action, the effective date of cancellation and all other provisions of any earlier cancellation action are controlling. The withdrawal request must also include a commitment to pay any reregistration

fees due, and to fulfill any applicable unsatisfied data requirements.

V. Provisions for Disposition of Existing Stocks

The effective date of cancellation will be the date of the cancellation order. The orders effecting these requested cancellations will generally permit a registrant to sell or distribute existing stocks for 1-year after the date the cancellation request was received. This policy is in accordance with the Agency's statement of policy as prescribed in **Federal Register** No. 123, Vol. 56, dated June 26, 1991. Exceptions to this general rule will be made if a product poses a risk concern, or is in

noncompliance with reregistration requirements, or is subject to a data call-in. In all cases, product-specific disposition dates will be given in the cancellation orders.

Existing stocks are those stocks of registered pesticide products which are currently in the United States and which have been packaged, labeled, and released for shipment prior to the effective date of the cancellation action. Unless the provisions of an earlier order apply, existing stocks already in the hands of dealers or users can be distributed, sold or used legally until they are exhausted, provided that such further sale and use comply with the EPA-approved label and labeling of the

affected product(s). Exceptions to these general rules will be made in specific cases when more stringent restrictions on sale, distribution, or use of the products or their ingredients have already been imposed, as in Special Review actions, or where the Agency has identified significant potential risk concerns associated with a particular chemical.

List of Subjects

Environmental protection, Pesticides and pests, Product registrations.

Dated: July 26, 1994.

Daniel M. Barolo,
Director, Office of Pesticide Programs.

[FR Doc. 94-19780 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-F

[OPP-34060; FRL-4866-6]

Reregistration Eligibility Decision Documents; Completion of Comment Period

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This Notice, pursuant to section 4(g)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), concludes the comment period for the reregistration eligibility decision documents (REDS) for several chemical cases.

ADDRESSES: Copies of these REDS are available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, ATTN: Order Desk; telephone no. (703)487-4650. To obtain copies you must provide the publication number that has been assigned to the RED listed in the table below.

FOR FURTHER INFORMATION CONTACT: Technical questions on the RED documents listed below should be directed to the appropriate Chemical Review Managers:

Chemical Name	Chemical Review Manager	Telephone No.
Barium Metaborate	Brigid Lowery	(703) 308-8053
Boric Acid	Maria Fiol	(703) 308-8049
Butylate	Judy Loranger	(703) 308-8056
Daminozide	Andrew Ertman	(703) 308-8063
Heptachlor	Judy Loranger	(703) 308-8056
Methiocarb	Karen Jones	(703) 308-8047
OBPA	Venus Eagle	(703) 308-8045
Oxytetracycline	Mario Fiol	(703) 308-8049
Sulfuryl Fluoride	Robert Richards	(703) 308-8057
Warfarin	Judy Loranger	(703) 308-8056

SUPPLEMENTARY INFORMATION: During fiscal years 1991, 1993 and 1994, EPA published notices in the Federal Register announcing the availability of reregistration eligibility decision documents for the listed pesticide active

ingredients. These REDS were issued as final documents, with a 60-day comment period. In these REDS, EPA provided its regulatory position on the current registered uses of these pesticides and set forth certain requirements for product reregistration eligibility. There were no comments for the following REDS: Barium Metaborate, Boric Acid, Butylate, Daminozide, Methiocarb, OBPA, Oxytetracycline, Warfarin and Sulfuryl Fluoride. Comments were received for Heptachlor but did not result in any amendments to the RED.

The NTIS publication number for REDS subject to this notice are presented below:

Chemical Name	Case Number	RED Date	RED NTIS NUMBER
Barium Metaborate	0632	01/25/94	PB94-154317
Boric Acid	0024	02/16/94	PB94-160017
Butylate	0071	11/26/93	PB94-125945
Daminozide	0032	10/26/93	PB94-126083
Heptachlor	0175	03/31/92	PB92-191105
Methiocarb	0577	03/30/94	PB94-166394
OBPA	0044	08/01/93	PB93-294755
Oxytetracycline	0655	03/30/93	PB93-234763
Sulfuryl Fluoride	0176	09/30/93	PB94-140134
Warfarin	0011	06/06/91	PB92-126739

List of Subjects

Environmental protection.

Dated: August 5, 1994.

Louis P. True,
Acting Director, Special Review and Reregistration Division, Office of Pesticide Programs.

[FR Doc. 94-19883 Filed 8-16-94; 8:45 am]
BILLING CODE 6560-50-F

[OPP-00383; FRL-4874-2]

Testing Guidelines for Developmental and Reproductive Toxicity

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

SUMMARY: This Notice announces the availability of the proposed Health Effects Test Guidelines for developmental toxicity and for reproductive and fertility effects and the start of a 60-day comment period. The documents were developed to amend and replace specific Agency guideline documents currently used for testing pesticides and toxic substances under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA), respectively.

DATES: Written comments, identified by the document control number OPP-00383, must be received on or before October 17, 1994.

ADDRESSES: Copies of the proposed guidelines are available at the address listed below for the Public Response and Program Resources Branch.

By mail, submit three copies of written comments, identified with the docket control number "OPP-00383" to Public Response and Program Resources Branch, Field Operations Division (7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, deliver comments to: Rm. 1132, CM#2, 1921 Jefferson Davis Highway, Arlington, VA 22202.

Information submitted as a comment concerning this document may be claimed confidential by marking any part or all of that information as "Confidential Business Information" (CBI). Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments will be available for public inspection in Rm. 1132 at the Virginia address given above, from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Susan L. Makris, Health Effects Division (7509C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW, Washington, DC 20460. Office location and telephone number: Rm. 816F, CM#2, 1921 Jefferson Davis Highway, Arlington, VA 22202. Telephone: 703-305-5222.

SUPPLEMENTARY INFORMATION: The OPPTS Health Effects Test Guidelines for developmental toxicity (OPPTS 870.3700) will replace the Subdivision F Pesticide Assessment Guideline Section 83-3 (FIFRA) and 40 CFR 798.4900 (TSCA). The guideline for reproductive and fertility effects (OPPTS 870.3800) will replace the Subdivision F Pesticide Assessment Guideline Section 83-4, under FIFRA, and 40 CFR 798.4700, under TSCA. These revised guidelines were drafted by an inter-agency work group comprised of experts in the areas of developmental and reproductive toxicity. The proposed testing requirements incorporated into these developmental toxicity and reproductive and fertility effects guidelines were reviewed at a joint meeting of the FIFRA Scientific Advisory Panel (SAP) and the Science Advisory Board (SAB) in December, 1993.

The revised guidelines will significantly improve the Agency's ability to identify and characterize potential effects on the reproductive system and/or the developing fetus from exposure to chemicals. Availability of these revised guidelines will enhance the ability of pesticide registrants and industrial chemical manufacturers to plan, estimate costs of, and design studies that EPA currently requires for pesticides under 40 CFR Part 158 or may require by test rule or consent agreement for industrial chemicals.

All interested parties are encouraged to submit comments on the proposed draft guidelines for developmental and reproductive toxicity studies. Specific comments should reference the document title, section number, and paragraph or subparagraph of the proposed guideline. Recommended technical or scientific changes/modifications should be supported by current scientific/technical knowledge and include supporting references.

Comments on the proposed guidelines will be considered by the Agency and such modifications of the guidelines as are considered to be of scientific and technical merit will be considered for inclusion before the guidelines are published in a final form.

List of Subjects

Environmental protection.

Dated: August 1, 1994.

Daniel M. Barolo,

Director, Office of Pesticide Programs.

[FR Doc. 94-19777 Filed 8-16-94; 8:45 am]

BILLING CODE 6560-50-F

FEDERAL EMERGENCY MANAGEMENT AGENCY

Public Information Collection Requirements Submitted to OMB for Review

ACTION: Notice.

SUMMARY: The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following public information collection requirements for review and clearance in accordance with the Paperwork Reduction Act of 1980, 44 U.S.C. chapter 35.

DATES: Comments on this information collection must be submitted on or before October 17, 1994.

ADDRESSES: Direct comments regarding the burden estimate or any aspect of this information collection, including suggestions for reducing this burden, to: the FEMA Information Collections

clearance Officer at the address below; and to Donald Arbuckle, Office of Management and Budget, 3235 New Executive Office Building, Washington, DC 20503, (202) 395-7340, within 60 days of this notice.

FOR FURTHER INFORMATION CONTACT: Copies of the above information collection request and supporting documentation can be obtained by calling or writing Muriel B. Anderson, FEMA Information Collections clearance Officer, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646-2624.

Type: Extension of 3067-0196.

Title: National Flood Insurance Program Erosion Benefits.

Abstract: FEMA regulations 44 CFR 63, Subpart B, sets forth procedures to be followed by State authorities for certification of structures subject to imminent collapse as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclinical levels.

When a claim for flood insurance benefits is filed by an insured, the State is asked to collect data at the site of the threatened structure demonstrating that the condition of the structure meets criteria for certification that it is subject to imminent collapse. Such a certification is necessary for insured property owners to file claims for relocation or demolition benefits established under P.L. 100-242.

Type of Respondents: State or local governments.

Estimate of Total Annual Reporting and Recordkeeping

Burden: 360 hours.

Number of Respondents: 60.

Estimated Average Burden Time per Response: 6 hours.

Frequency of Response: One-Time.

Dated: August 8, 1994.

Linda S. Borrer,

Acting Director, Office of Administrative Support.

[FR Doc. 94-20186 Filed 8-16-94; 8:45 am]

BILLING CODE 6718-01-M

[FEMA-1033-DR]

Georgia; Amendment to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster for the State of Georgia, (FEMA-1033-DR), dated July 7, 1994, and related determinations.

EFFECTIVE DATE: August 11, 1994.

FOR FURTHER INFORMATION CONTACT:

Pauline C. Campbell, Response and Recovery Directorate, Federal Emergency Management Agency, Washington, DC 20472, (202) 646-3606.

SUPPLEMENTARY INFORMATION: The notice of a major disaster for the State of Georgia dated July 7, 1994, is hereby amended to include the following area among those areas determined to have been adversely affected by the catastrophe declared a major disaster by the President in his declaration of July 7, 1994: Dodge County for Individual Assistance.

(Catalog of Federal Domestic Assistance No. 83.516, Disaster Assistance)

Richard W. Krimm,

Associate Director, Response and Recovery Directorate.

[FR Doc. 94-20187 Filed 8-16-94; 8:45 am]

BILLING CODE 6718-02-M

FEDERAL MARITIME COMMISSION

Ocean Freight Forwarder License; Applicants

Notice is hereby given that the following applicants have filed with the Federal Maritime Commission applications for licenses as ocean freight forwarders pursuant to section 19 of the Shipping Act of 1984 (46 U.S.C. app. 1718 and 46 CFR 510).

Persons knowing of any reason why any of the following applicants should not receive a license are requested to contact the Office of Freight Forwarders, Federal Maritime Commission, Washington, D.C. 20573.

SCR International Freight Forwarding, Inc., 130 Minorca Avenue, Coral Gables, FL 33134, Officers: Alvaro G. Smith, President Jose E. Smith, Treasurer

New Jas International, Inc., 20,435 South Western Avenue, Torrance, CA 90501, Officers: Toru Hiraki, President; Sakuo Kikuchi, Vice President; Fredroc A. Moede, Vice President; Etsuko Emmy Nakamura, Vice President; Makoto Niuro, Treasurer

Blue Sky, Blue Sea Company, dba International Shipping Company (USA), 169 Frelinghuysen Avenue, Newark, NJ 07114, Officers: Asad Ferasat, President; Ali Aelaei, Vice President; Jalal Bolorchi, Treasurer ITG International Transports, Inc., 140 Eastern Ave., Chelsea, MA 02150, Officers: Guenther Jocher, President; Guido Voss, Vice President M.A.X. International, 10,518 73rd Ave., East, Puyallup, WA 98373, Janise Kae Disbrow, Sole Proprietor Savino del Bene International Freight Forwarders, Incorporated, 151 Everett

Ave., #105, Chelsea, MA 02150,
 Officer: Melvin Cariofiles, President
 Ikaros Transport Corp., 500 Ocean Ave.,
 East Rockaway, NY 11518, Officers:
 Pandelis Zografakis, President; George
 Zografakis, Vice President; Dean
 Zografakis, Treasurer
 Steven Thomas Benefield, 2358
 Roseberry Lane, Grayson, GA 30221,
 Sole Proprietor
 Shippers, Inc., 10626 S.W. 148th
 Avenue-Drive, Miami, FL 33196,
 Officer: Pablo R. Vinent, President
 Maverick Distribution Services, Inc.,
 100 Oceangate, Suite 620, Long
 Beach, CA 90802, Officers: Timothy J.
 Noonan, President; Pao-Tong Liu,
 Vice President
 Ocean Trade International, Inc., 8562
 NW 70th Street, Miami, FL 33166,
 Ana M. Blanco, Sole Proprietor
 Latin American Imports and Exports,
 Inc., dba Latimex, Inc., 39 Flamingo
 Street, New Orleans, LA 70124,
 Officers: Victor M. Arroyo, President;
 Marco A. Arroyo, Vice President
 Welsch's International, Inc., 4872 S.W.
 74th Court, Miami, FL 33155, Officer:
 Paul Ernest Welsch, President.

Dated: August 11, 1994.

By the Federal Maritime Commission.

Joseph C. Polking,

Secretary.

[FR Doc. 94-20091 Filed 8-16-94; 8:45 am]

BILLING CODE 8730-01-M

FEDERAL RESERVE SYSTEM

KeyCorp, et al.; Formations of; Acquisitions by; and Mergers of Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. 1842) and § 225.14 of the Board's Regulation Y (12 CFR 225.14) to become a bank holding company or to acquire a bank or bank holding company. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank or to the offices of the Board of Governors. Any comment on an application that requests a hearing must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying

specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at a hearing.

Unless otherwise noted, comments regarding each of these applications must be received not later than September 9, 1994.

A. Federal Reserve Bank of Cleveland (John J. Wixted, Jr., Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101:

1. *Keycorp*, Cleveland, Ohio; and *Key Bancshares of Maine, Inc.*, Portland, Maine, to acquire 100 percent of the voting shares of *Casco Northern Bank*, National Association, Portland, Maine.

2. *KeyCorp*, Cleveland, Ohio; and *Key Bancshares of Maine, Inc.*, Portland, Maine, to acquire 100 percent of the voting shares of *BANKVERMONT Corporation*, Burlington, Vermont, and thereby indirectly acquire *Bank of Vermont*, Burlington, Vermont.

B. Federal Reserve Bank of St. Louis (Randall C. Sumner, Vice President) 411 Locust Street, St. Louis, Missouri 63166:

1. *GAB Bancorp*, Jasper, Indiana; to acquire 100 percent of the voting shares of *First State Bank Southwest Indiana*, Tell City, Indiana.

C. Federal Reserve Bank of Kansas City (John E. Yorke, Senior Vice President) 925 Grand Avenue, Kansas City, Missouri 64198:

1. *Commerce Bancshares, Inc.*, Kansas City, Missouri; to acquire 100 percent of the voting shares of *Twin City Corporation*, which will be the surviving corporation after a merger with *CBI-Twin City Corporation*, Kansas City, Kansas, a wholly owned subsidiary of *Commerce Bancshares, Inc.*, will indirectly acquire 90 percent of the voting shares of *Twin City State Bank*, Kansas City, Kansas. In a second step to the transaction *Twin City Corporation* will merge with another wholly owned subsidiary of *Commerce Bancshares, Inc.*, *CBI-Kansas, Inc.*, Kansas City, Missouri, and thereby indirectly acquire 100 percent of the voting shares of *Commerce Bank, N.A.*, Lenexa, Kansas, and *Commerce Bank, Lawrence, Kansas*.

2. *Peoples Trust of 1987*, Ottawa, Kansas; and its subsidiary *Peoples, Inc.*, Ottawa, Kansas, to acquire 46.875 percent of the voting shares of *Johnson County Bank*, Overland Park, Kansas.

Board of Governors of the Federal Reserve System, August 11, 1994.

Jennifer J. Johnson,

Deputy Secretary of the Board.

[FR Doc. 94-20154 Filed 8-16-94; 8:45 am]

BILLING CODE 6210-01-F

NationsBank Corporation; Notice of Application to Engage De Novo in Nonbanking Activities

NationsBank Corporation, Charlotte, North Carolina ("Applicant"), has applied, pursuant to section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. § 1843(c)(8)) (the "BHC Act") and § 225.23 of the Board's Regulation Y (12 CFR 225.23), to engage *de novo* through its wholly owned subsidiaries, NationsBanc-CRT Services, Incorporated, Chicago, Illinois, and NationsBanc-CRT Energy (U.K.) Limited, London, England (collectively, "Companies"), in the following activities:

(1) providing futures commission merchant ("FCM") execution, clearance and advisory services to affiliated and unaffiliated customers with respect to futures and options on futures contracts on financial instruments and financial commodities on stock and bond indexes that have been previously approved by the Board, and on exchanges previously approved by the Board, pursuant to §§ 225.25(b)(18) and (b)(19) of the Board's Regulation Y and SR Letter No. 93027 (FIS) (May 21, 1993);

(2) providing FCM execution, clearance, and advisory services to affiliated and unaffiliated customers with respect to futures and options on futures contracts on non-financial commodities that have been previously approved by the Board, and on exchanges previously approved by the Board, as well as futures and options on futures contracts on certain non-financial contracts on an exchange that the Board has not previously approved for bank holding companies, in accordance with *J.P. Morgan & Co., Inc.*, 80 Federal Reserve Bulletin 151 (1994), *Caisse Nationale de Credit Agricole*, 80 Federal Reserve Bulletin 552 (1994); and *Bank of Montreal*, 79 Federal Reserve Bulletin 1049 (1993); and

(3) providing discount and full service brokerage services and related securities credit services, and conducting incidental activities thereto, to institutional customers, and conducting incidental activities thereto, pursuant to § 225.25(b)(15) of the Board's Regulation Y.

The exchange and futures and options on futures contracts with respect to which Applicant proposes to provide FCM services, which the Board has not previously approved, include the International Petroleum Exchange, London, England, and the following contracts traded thereon: Brent crude oil futures, Options on Brent crude oil futures, gas oil futures, options on gas oil futures, and unleaded gasoline

futures. These activities will be conducted on a worldwide basis.

Any comments or requests for a hearing should be submitted in writing and received by William W. Wiles, Secretary, Board of Governors of the Federal Reserve System, Washington, DC 20551, not later than August 31, 1994. Any request for a hearing on this application must, as required by § 262.3(e) of the Board's Rules of Procedure (12 CFR 262.3(e)), be accompanied by a statement of the reasons why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

This application may be inspected at the offices of the Board of Governors or the Federal Reserve Bank of Richmond.

Board of Governors of the Federal Reserve System, August 11, 1994.

Jennifer J. Johnson,

Deputy Secretary of the Board.

[FR Doc. 94-20155 Filed 8-16-94; 8:45 am]

BILLING CODE 6210-01-F

GENERAL SERVICE ADMINISTRATION

United States Border Station, Highgate Springs, VT; Environmental Assessment/FONSI

This notice serves to inform the public of the availability of the Environmental Assessment (EA) and draft Finding of No Significant Impact (FONSI) prepared by the U.S. General Services Administration for the proposed construction of a new United States Border Station in Highgate Springs, Vermont. Comments on the proposed action may be submitted in writing during the 30-day public comment period, which starts on August 19, 1994, and ends on September 19, 1994. The Finding of No Significant Impact will be signed and become final after completion of the public comment period, provided that no information leading to a contrary finding is received or comes to light during the 30-day comment period.

For further information, please contact Mr. Peter A. Sneed, Director of Planning Staff, Public Buildings Service, General Services Administration, 26 Federal Plaza, Room 1609, New York New York 10278. Telephone: (212) 264-3581.

Issued in New York, NY on August 11, 1994.

Robert W. Martin,

Acting Regional Administrator, General Services Administration.

[FR Doc. 94-20173 Filed 8-16-94; 8:45 am]

BILLING CODE 6820-23-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[CDC-489]

National Institute for Occupational Safety and Health; Health and Exposure Surveillance of Siberian Asbestos Miners Cooperative Agreement

Summary

The Centers for Disease Control and Prevention (CDC) announces the availability of fiscal year (FY) 1994 funds for a cooperative agreement with the Finnish Institute of Occupational Health (FIOH) to evaluate workplace exposures and conduct health assessments of workers exposed to asbestos in a large mining, milling, and production center located in Asbest, Russia. Approximately \$150,000 will be available in FY 1994 to fund the cooperative agreement. The award will begin on or about September 30, 1994, for a 12-month budget period within a project period of up to 3 years. Funding estimates may vary and are subject to change. Continuation award(s) within the project period will be made on the basis of satisfactory progress and the availability of funds.

The purpose of this cooperative agreement is to assist the FIOH in further developing and strengthening epidemiologic research, surveillance and monitoring, and training in order to promote the further understanding of the prevention of occupational respiratory disease.

The CDC will provide scientific, epidemiologic, engineering, environmental, and clinical technical assistance to the recipient, as needed, for successful completion of this project; collaborate with the recipient on the methods for the collection, tabulation analysis, and publication of the data related to the project; assist in the development of the overall plan or study design for this project; assist in the design and implementation of the evaluation plan for the project; coordinate the training of the appropriate grantee staff in technical and scientific procedures necessary for

the successful completion of the project; and assist in the development of a series of symposia to present findings, provide training, and provide for the dissemination of information relevant to the prevention of occupational lung disease due to asbestos exposure.

The Public Health Service (PHS) is committed to achieving the health promotion and disease prevention objectives of *Healthy People 2000*, a PHS-led national activity to reduce morbidity and mortality and improve the quality of life. This announcement is related to the priority area of Occupational Lung Disease. (For ordering *Healthy People 2000*, see the section entitled **Where to Obtain Additional Information.**)

Authority

This program is authorized under Section 22(e)(7) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 671(e)(7)).

Smoke-Free Workplace

The Public Health Service strongly encourages all grant recipients to provide a smoke-free workplace and promote the non-use of all tobacco products. This is consistent with the PHS mission of promoting the protection and advancement of an individual's physical and mental health.

Eligible Applicant

Assistance will be provided only to the Finnish Institute of Occupational Health (FIOH) for conducting this evaluation. No other applications will be solicited. The program announcement and application kit have been sent to FIOH. The FIOH is the only appropriate and qualified institution to provide the services specified under this cooperative agreement for the following reasons:

There is a large asbestos mining, milling, and production activity in Asbest, Siberia, which produces in excess of 1,100,000 tons of asbestos and 300,000,000 tons of crushed stone annually. This mine supplies all of Russia's asbestos and is one of its major exporting resources. There is an existing medical surveillance program in effect for the more than 10,000 employees which could be reviewed for major health effects of asbestos. Russia does not have the expertise or resources to conduct this review and analysis. However, it has expressed a desire to collaborate with others to accomplish this effort.

Finland has an existing working relationship with Russia and has the expertise and ability to initiate and coordinate a study of this magnitude.

FIOH, NIOSH, and the Institute of Industrial Hygiene and Occupational Diseases of the Academy of Medical Sciences, Moscow, Russia, all serve as members of the World Health Organization (WHO) Workers' Health Program which has as one of its top priorities the prevention of occupational respiratory diseases. This shared focus has enabled FIOH to develop a unique collaborative relationship with the Institute of Industrial Hygiene and Occupational Diseases of the Academy of Medical Sciences, Moscow, Russia. As a result of this relationship, FIOH will be granted access to the Asbest mining region and will be given support from the requisite Russian agencies so that they can successfully accomplish the work required under this cooperative agreement. No one in the United States or its territories has this unique capability.

Executive Order 12372 Review

The applicant is not subject to review under Executive Order 12372.

Public Health System Reporting Requirements

This program is not subject to the Public Health System Reporting Requirements.

Catalog of Federal Domestic Assistance Number

The Catalog of Federal Domestic Assistance Number for this program is 93.957.

Other Requirements

Human Subjects

If the proposed project involves research on human subjects, the applicant must comply with the Department of Health and Human Services Regulations, 45 CFR Part 46, regarding the protection of human subjects. Assurance must be provided to demonstrate that the project will be subject to initial and continuing review by an appropriate institutional review committee. The applicant will be responsible for providing assurance in accordance with the appropriate guidelines and forms provided in the application kit.

Where To Obtain Additional Information

If you are interested in obtaining additional information regarding this project, please refer to Announcement 489 and contact Oppie M. Byrd, Grants Management Specialist, Grants Management Branch, Procurement and Grants Office, Centers for Disease Control and Prevention (CDC), 255 East Paces Ferry Road, NE., Room 300,

Mailstop E-13, Atlanta, GA 30305, telephone (404) 842-6630. A copy of *Healthy People 2000* (Full Report, Stock No. 017-001-00474-0) or *Healthy People 2000* (Summary Report, Stock No. 017-001-00473-1) referenced in the Summary may be obtained through the Superintendent of Documents, Government Printing Office, Washington, DC 20402-9325, telephone (202) 783-3238.

Dated: August 9, 1994.

Linda Rosenstock, M.D., M.P.H.,
Director, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention (CDC).

[FR Doc. 94-20139 Filed 8-16-94; 8:45 am]

BILLING CODE 4163-19-P

[Announcement Number 494]

State Grants To Support Development of Nutrition Intervention Programs; Amendment

A notice announcing the availability of Fiscal Year 1994 funds for grants for 1994 State Grants to Support Development of Nutrition Intervention Programs was published in the **Federal Register** on July 21, 1994, [59 FR 37236]. The notice is amended as follows:

On page 37237, first column, under the heading "Availability of Funds," the first sentence should read: "Approximately \$1,190,000 is available in FY 1994 to fund approximately 49 awards."

On page 37237, first column, under the heading "Availability of Funds," paragraph A. Nutrition Intervention Assistance: the first two sentences should read: "Approximately \$900,000 is available to fund approximately 45 awards. It is expected that the average award will be \$20,000, ranging from \$10,000 to \$45,000."

All other information and requirements of the July 21, 1994, **Federal Register** notice remain the same.

Dated: August 10, 1994.

Joseph R. Carter,
Acting Associate Director for Management and Operations, Centers for Disease Control and Prevention (CDC).

[FR Doc. 94-20140 Filed 8-16-94; 8:45 am]

BILLING CODE 4163-18-P

Food and Drug Administration

[Docket No. 94P-0091]

Asparagus Deviating From Identity Standard; Temporary Permit for Market Testing

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that a temporary permit has been issued to The Pillsbury Co. to market test experimental packs of canned asparagus containing zinc chloride. The purpose of the temporary permit is to allow the applicant to measure consumer acceptance of the food.

DATES: This permit is effective for 15 months, beginning on the date the test product is introduced or caused to be introduced into interstate commerce, but no later than November 15, 1994.

FOR FURTHER INFORMATION CONTACT: Nannie H. Rainey, Center for Food Safety and Applied Nutrition (HFS-158), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-205-5099.

SUPPLEMENTARY INFORMATION: In accordance with 21 CFR 130.17 concerning temporary permits to facilitate market testing of foods deviating from the requirements of the standards of identity promulgated under section 401 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 341), FDA is giving notice that a temporary permit has been issued to The Pillsbury Co., Technology Center, 330 University Ave. SE., Minneapolis, MN 55414-2198.

The permit covers limited interstate marketing tests of experimental packs of canned asparagus. The test product deviates from the U.S. standard of identity for canned asparagus (21 CFR 155.200) in that the test product will contain added zinc chloride in an amount necessary to retain the green color of the product (at a maximum level of 75 parts per million of zinc in the finished food). The test product meets all requirements of the standard, with the exception of the variation.

This permit provides for the temporary marketing of 10 thousand cases, each containing 12 425-gram (15-ounce) cans, of the test product. The product will be manufactured at Green Giant Co., 711 East Main St., Dayton, WA 99328-0026. The product will be distributed in Alabama, Florida, Georgia, Louisiana, and Mississippi.

For the purpose of this permit, the name of the product is "canned asparagus." Each of the ingredients used in the food must be declared on the label as required by the applicable sections of 21 CFR parts 101 and 130. This permit is effective for 15 months, beginning on the date the test product is introduced or caused to be introduced into interstate commerce, but no later than November 15, 1994.

Dated: August 8, 1994.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 94-20130 Filed 8-16-94; 8:45 am]

BILLING CODE 4160-01-F

[Docket No. 94F-0246]

Kuraray Co.; Filing of Food Additive Petition

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Kuraray Co. has filed a petition proposing that the food additive regulations be amended to provide for the safe use of ethylene-vinyl acetate-vinyl alcohol copolymers with broadened specifications that include a decreased minimum acceptable ethylene content and an increased maximum permitted level of migration of ethylene-vinyl acetate-vinyl alcohol oligomers.

DATES: Written comments on petitioner's environmental assessment by September 16, 1994

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Diane E. Robertson, Center for Food Safety and Applied Nutrition (HFS-216), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-254-9511.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5) (21 U.S.C. 348(b)(5))), notice is given that a food additive petition (FAP 4B4421) has been filed by Kuraray Co., 1001 G St., NW., suite 500 West, Washington, DC 20001. The petition proposes to amend § 177.1360 *Ethylene-vinyl acetate-vinyl alcohol copolymers* (21 CFR 177.1360) of the food additive regulations to provide for the safe use of ethylene-vinyl acetate-vinyl alcohol copolymers with broadened specifications that include a decreased minimum acceptable ethylene content and an increased maximum permitted level of migration of ethylene-vinyl acetate-vinyl alcohol oligomers.

The potential environmental impact of this action is being reviewed. To encourage public participation consistent with regulations promulgated under the National Environmental Policy Act, (40 CFR 1501.4 (b)), the

agency is placing the environmental assessment submitted with the petition that is the subject of this notice on public display at the Dockets Management Branch (address above) for public review and comment. Interested persons may, on or before September 16, 1994, submit to the Dockets Management Branch (address above) written comments. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday. FDA will also place on public display any amendments to, or comments on, the petitioner's environmental assessment without further announcement in the Federal Register. If, based on its review, the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the Federal Register in accordance with 21 CFR 25.40(c).

Dated: August 5, 1994.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 94-20131 Filed 8-16-94; 8:45 am]

BILLING CODE 4160-01-F

[Docket No. 94G-0272]

Aplin & Barrett Ltd.; Papetti's Hygrade Egg Products, Inc.; Filing of Petition for Affirmation of GRAS Status

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Aplin & Barrett Ltd., and Papetti's Hygrade Egg Products, Inc., as copetitioners, have filed a petition (GRASP 4G0408) proposing to affirm that nisin preparation is generally recognized as safe (GRAS) as an antimicrobial agent in various standardized and nonstandardized liquid egg products.

DATES: Written comments by October 17, 1994.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857.

FOR FURTHER INFORMATION CONTACT: Mary E. LaVecchia, Center for Food Safety and Applied Nutrition (HFS-217), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-418-3072.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (secs. 201(s) and 409(b)(5) (21 U.S.C. 321(s) and 348(b)(5))) and the regulations for affirmation of GRAS status in § 170.35 (21 CFR 170.35), notice is given that Aplin & Barrett Ltd., c/o 1001 G St. NW., suite 500 West, Washington, DC 20001; and Papetti's Hygrade Egg Products Inc., c/o 424 S. Washington St., Alexandria, VA 22314, have filed a petition (GRASP 4G0408) proposing that nisin preparation be affirmed as GRAS for use as an antimicrobial agent in standardized and nonstandardized liquid egg, egg whites, egg yolks, and blends of these egg products.

The petition has been placed on display at the Dockets Management Branch (address above).

Any petition that meets the requirements outlined in § 170.30 (21 CFR 170.30) and § 170.35 is filed by the agency. There is no pre-filing review of the adequacy of data to support a GRAS conclusion. Thus, the filing of a petition for GRAS affirmation should not be interpreted as a preliminary indication of suitability for GRAS affirmation.

The potential environmental impact of this action is being reviewed. If the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the Federal Register in accordance with 21 CFR 25.40(c).

Interested persons may, on or before October 17, 1994, review the petition and file comments with the Dockets Management Branch (address above). Two copies of any comments should be filed and should be identified with the docket number found in brackets in the heading of this document. Comments should include any available information that would be helpful in determining whether the substance is, or is not, GRAS for the proposed use. In addition, consistent with the regulations promulgated under the National Environmental Policy Act (40 CFR 1501.4(b)), the agency encourages public participation by review of and comment on the environmental assessment submitted with the petition that is the subject of this notice. A copy of the petition (including the environmental assessment) and received comments

may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated: August 8, 1994.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 94-20132 Filed 8-16-94; 8:45 am]

BILLING CODE 4160-01-F

[Docket No. 94G-0267]

Fuji Oil Co., Ltd.; Filing of Petition for Affirmation of GRAS Status

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing that Fuji Oil Co., Ltd., has filed a petition (GRASP 4G0407), proposing that a triglyceride containing behenic and oleic acids be affirmed as generally recognized as safe (GRAS) for use as a tempering aid and as an antibloom agent in chocolate and chocolate coatings. The petitioner proposes that behenin be the common or usual name for this triglyceride.

DATES: Written comments by October 17, 1994.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857

FOR FURTHER INFORMATION CONTACT:

Lawrence J. Lin, Center for Food Safety and Applied Nutrition (HFS-206), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202-418-3103.

SUPPLEMENTARY INFORMATION: Under the Federal Food, Drug, and Cosmetic Act (sec. 201(s) and 409(b)(5)) (21 U.S.C. 321(s) and 348(b)(5)) and the regulations for affirmation of GRAS status in § 170.35 (21 CFR 170.35), notice is given that Fuji Oil Co., Ltd., Osaka, Japan, has filed a petition (GRASP 4G0407), proposing that a triglyceride containing behenic and oleic acids be affirmed as GRAS for use as a tempering aid and as an antibloom agent in chocolate and chocolate coatings. The petitioner proposes that behenin be the common or usual name for this triglyceride.

The petition has been placed on display at the Dockets Management Branch (address above).

Any petition that meets the requirements outlined in § 170.30 (21 CFR 170.30) and § 170.35 is filed by the agency. There is no pre-filing review of the adequacy of data to support a GRAS conclusion. Thus, the filing of a petition

for GRAS affirmation should not be interpreted as a preliminary indication of suitability for GRAS affirmation.

The potential environmental impact of this action is being reviewed. If the agency finds that an environmental impact statement is not required and this petition results in a regulation, the notice of availability of the agency's finding of no significant impact and the evidence supporting that finding will be published with the regulation in the Federal Register in accordance with 21 CFR 25.40(c).

Interested persons may, on or before October 17, 1994, review the petition and file comments with the Dockets Management Branch (address above). Two copies of any comments should be filed and should be identified with the docket number found in brackets in the heading of this document. Comments should include any available information that would be helpful in determining whether the substance is, or is not, GRAS for the proposed use. In addition, consistent with the regulations promulgated under the National Environmental Policy Act (40 CFR 1501.4(b)), the agency encourages public participation by review of and comment on the environmental assessment submitted with the petition that is the subject of this notice. A copy of the petition (including the environmental assessment) and received comments may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

Dated: August 5, 1994.

Fred R. Shank,

Director, Center for Food Safety and Applied Nutrition.

[FR Doc. 94-20129 Filed 8-16-94; 8:45 am]

BILLING CODE 4160-01-F

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of Administration

[Docket No. 94-3805; FR-3736-N-02]

Notice of Submission of Proposed Information Collection to OMB

AGENCY: Office of Administration, HUD.
ACTION: Notice.

SUMMARY: The proposed information collection requirement described below has been submitted to the Office of Management and Budget (OMB) for review, as required by the Paperwork Reduction Act. The Department is soliciting public comments on the subject proposal.

DATES: Comments due: September 16, 1994.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Comments must be received within thirty (30) days from the date of this Notice. Comments should refer to the proposal by name and should be sent to: Joseph F. Lackey, Jr., OMB Desk Officer, Office of Management and Budget, New Executive Office Building, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Kay F. Weaver, Reports Management Officer, Department of Housing and Urban Development, 451 7th Street, Southwest, Washington, DC 20410, telephone (202) 708-0050. This is not a toll-free number. Copies of the proposed forms and other available documents submitted to OMB may be obtained from Ms. Weaver.

SUPPLEMENTARY INFORMATION: The Department has submitted the proposal for the collection of information, as described below, to OMB for review, as required by the Paperwork Reduction Act (44 U.S.C. Chapter 35).

The notice lists the following information: (1) The title of the information collection proposal; (2) the office of the agency to collect the information; (3) the description of the need for the information and its proposed use; (4) the agency form number, if applicable; (5) what members of the public will be affected by the proposal; (6) how frequently information submissions will be required; (7) an estimate of the total number of hours needed to prepare the information submission including number of respondents, frequency of response, and hours of response; (8) whether the proposal is new or an extension, reinstatement, or revision of an information collection requirement; and (9) the names and telephone numbers of an agency official familiar with the proposal and of the OMB Desk Officer for the Department.

Authority: Section 3507 of the Paperwork Reduction Act, 44 U.S.C. 3507; Section 7(d) of the Department of Housing and Urban Development Act, 42 U.S.C. 3535(d).

Dated: July 26, 1994.

John T. Murphy,

Director, IRM Policy and Management Division.

Notice of Submission of Proposed Information Collection to OMB

Proposal: Request for Family Self Sufficiency (FSS) Coordinator Funds Under the Notice of Funding Availability (FR-3736)
Office: Public and Indian Housing
Description of the Need for the Information and its Proposed Use:

Eligible housing agencies must submit an application for FSS program coordinator funds to enable the Department to determine the need for the requested funds. The application

is also used to determine if the amount requested is reasonable. The Department will use the information as the basis for providing funds under the Notice of Funding Availability.

Form Number: None
Respondents: State or Local Governments
Frequency of Submission: On Occasion
Reporting Burden:

Application	Number of respondents	×	Frequency of response	×	Hours per response	=	Burden hours
.....	600		1		4		2,400

Total Estimated Burden Hours: 2,400
Status: New

Contact: Susan Loritz, HUD, (202) 708-0477; Joseph F. Lackey, Jr., OMB, (202) 395-7316.

Dated: July 26, 1994.

[FR Doc. 94-20086 Filed 8-16-94; 8:45 am]

BILLING CODE 4210-01-M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[MT-921-04-4120-03-P; NDM 83356]

North Dakota; Coal Leases, Exploration Licenses, Etc.

AGENCY: Bureau of Land Management, Montana State Office.

ACTION: Notice of invitation, Coal Exploration License Application NDM 83356.

Members of the public are hereby invited to participate with The Coteau Properties Company in a program for the exploration of coal deposits owned by the United States of America in the following-described lands located in Mercer County, North Dakota:

- T. 145 N., R. 87 W., 5th P.M.
Sec. 2: Lot 3, SE¼NW¼
 - T. 146 N., R. 87 W., 5th P.M.
Sec. 30: Lots 1, 2, E¼NW¼
 - T. 146 N., R. 88 W., 5th P.M.
Sec. 14: S½SW¼
 - Sec. 22: N½NE¼, SW¼NE¼, W½, NW¼SE¼
 - Sec. 26: SE¼SE¼
 - Sec. 34: E½
- 1157.06 acres.

Any party electing to participate in this exploration program shall notify, in writing, both the State Director, Bureau of Land Management, P.O. Box 36800, Billings, Montana 59107-6800; and The Coteau Properties Company, HC 3 Box 49, Beulah, North Dakota 58523. Such written notice must refer to serial number NDM 83356 and be received no later than 30 calendar days after publication of this Notice in the *Federal Register* or 10 calendar days after the last publication of this Notice in the Beulah Beacon, whichever is later. This Notice will be published once a week

for 2 consecutive weeks in the Beulah Beacon.

The proposed exploration program is fully described and will be conducted pursuant to an exploration plan to be approved by the Bureau of Land Management. The exploration plan, as submitted by The Coteau Properties Company, is available for public inspection at the Bureau of Land Management, Montana State Office, Granite Tower Building, 222 North 32nd Street, Billings, Montana, during regular business hours (9 a.m. to 4 p.m.) Monday through Friday.

Dated: August 4, 1994.

Francis R. Cherry, Jr.,

Acting State Director.

[FR Doc. 94-20079 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-DN-P

[ID-060-311A-02]

Idaho; Closure of Public Lands

AGENCY: Bureau of Land Management, Coeur d'Alene District, Idaho.

ACTION: Notice of Restriction Order for Mica Bay Boater Park, Order No. ID060-11.

SUMMARY: By order, the following closures and restrictions apply to Mica Bay Boater Park, described as all public land located in section 16, T.49N., R.4W., B.M.

(1) Entrance to the park is prohibited between the hours of 9 p.m. and 6 a.m. Persons entering prior to the designated night closure period may remain and occupy the site for camping purposes.

(2) The consumption or possession of alcoholic beverages is prohibited.

(3) The possession of firearms is prohibited except for the portion of the above described area that is south of Loff's Bay Road.

(4) Camping in the designated beach area is prohibited.

(5) The collection of firewood is restricted to dead and down woody vegetation. The cutting, removal or use of live or standing dead woody vegetation is prohibited.

The authority for establishing these closures and restrictions is Title 43, Code of Federal Regulations, 8364.1.

The closures and restrictions become effective immediately and shall remain in effect until revoked and/or replaced with supplemental rules.

The closures and restrictions do not apply to:

(1) Any federal, state or local official or member of an organized rescue or fire fighting force while in the performance of an official duty.

(2) Any Bureau of Land Management employee, agent, contractor, cooperater or volunteer while in the performance of an official duty.

(3) Public use of Loff's Bay Road.

The closures and restrictions are necessary to protect persons, property and public lands and resources. Persons abusing alcohol and accessing the site at night cause a public disturbance and create a risk to other persons on public lands.

Violation of this order is punishable by a fine not to exceed \$1,000 and/or imprisonment not to exceed 12 months.

FOR FURTHER INFORMATION CONTACT: Jack O'Brien, Area Manager, Bureau of Land Management, 1808 North Third St., Coeur d'Alene, ID 83814.

Signed at Coeur d'Alene, Idaho this 2nd day of August 1994.

Dated: August 4, 1994.

Ted Graf,

Acting District Manager, Coeur d'Alene District, Bureau of Land Management.

[FR Doc. 94-20141 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-GG-M

[CA-060-5440-10 B021]

Availability of Final Environmental Impact Report/Environmental Impact Statement for Rail-Cycle Bolo Station Landfill, San Bernardino County

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of availability.

SUMMARY: Notice is hereby given that a joint final Environmental Impact Report/Impact Statement (EIR/EIS) has been prepared by the Bureau of Land Management and the County of San Bernardino for the proposed Bolo Station Class III landfill. The proposed

Federal action comprises a land exchange involving 2.5 sections of public land, 2 rights-of-ways for access and utilities, and a plan amendment to the California Desert Conservation Area (CDCA) Plan.

DATES: Written comments will be accepted if received on or before September 12, 1994, and comments received after that date may not be considered in the Record of Decision. The address for written comments is given below.

ADDRESSES: Bureau of Land Management, California Desert District Office, Attn: Rail-Cycle, 6221 Box Springs Blvd., Riverside, CA 92507.

FOR FURTHER INFORMATION CONTACT: Douglas Romoli, (909) 697-5237.

SUPPLEMENTARY INFORMATION: The proposed land exchange involves 2.5 sections of public land of which 1.5 sections are designated Multiple Use Class L (Limited Use) under the CDCA Plan. The proposed use as landfill is not consistent with the guidelines for Class L, and the proposed amendment would designate the 1.5 sections as Class M (Moderate Use). The guidelines for Class M allow disposal of public lands for potential landfill purposes. The proposed 3 sections of private land to be acquired contain tortoise habitat, including critical habitat, recreational value and land in the proposed East Mojave National Park.

The proposed landfill site is located between Amboy and Cadiz, south of Highway 66 and about 35 miles northeast of the City of Twentynine Palms. The proposed landfill consists of 4800 acres of which 2100 acres would be used for the landfill. Solid waste would be sorted and processed for recyclables at a Materials Recovery Facility in Southern California. The residue would be packed into containers and transported by train to the Bolo Station site. At full operation, approximately 21,000 tons per day of solid waste would be transported, and the facility would be operated between 60-years and 100-years.

Besides the proposed action, two alternatives and a no-action alternative are analyzed. The EIR/EIS analyzes the affects of the proposed action on such

environmental issues as ground water, air quality, geology, visual resources and wildlife among other resources. Copies of the Final EIR/EIS are located in the California Desert District Office, Riverside, California and in the Needles Resource Area Office, 101 W. Spikes Rd., Needles, CA.

Dated: August 8, 1994.

Henri R. Bisson,
District Manager.

[FR Doc. 94-20212 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-40-M

[NM-940-64-4730-12]

Filing of Plats of Survey; New Mexico

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The plats of survey described below are scheduled to be officially filed in the New Mexico State Office, Bureau of Land Management, Santa Fe, New Mexico, on September 14, 1994.

New Mexico Principal Meridian, New Mexico

T. 24 N., 8 E., Accepted July 15, 1994, for Group 901 NM.

T. 20 N., 10 E., Accepted July 19, 1994, for Group 914 NM.

T. 24 N., 9 E., Accepted July 15, 1994, for Group 901 NM.

T. 15 N., 10 E., Accepted July 15, 1994, for Group 916 NM.

If a protest against a survey, as shown on any of the above plats is received prior to the date of official filing, the filing will be stayed pending consideration of the protest. A plat will not be officially filed until the day after all protests have been dismissed and become final or appeals from the dismissal affirmed.

A person or party who wishes to protest against a survey must file with the State Director, Bureau of Land Management, a notice that they wish to protest prior to the proposed official filing date given above.

A statement of reasons for a protest may be filed with the notice of protest to the State Director, or the statement of reasons must be filed with the State

Director within (30) days after the protest is filed.

The above-listed plats represent dependent resurveys, survey and subdivision.

These plats will be in the open files of the New Mexico State Office, Bureau of Land Management, P.O. Box 27115, Santa Fe, New Mexico 87502-0115. Copies may be obtained from this office upon payment of \$2.50 per sheet.

Dated: August 9, 1994.

John P. Bennett,
Chief, Branch of Cadastral Survey/Geo Science.

[FR Doc. 94-20215 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-FB-M

[NM-017-4210-05-RGRP]

Sale of Public Land in Bernalillo County, NM

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: The Bureau of Land Management (BLM) announces that the following described parcels of public land have been examined and identified as suitable for disposal by sale under section 203 of the Federal Land Policy and Management Act (FLPMA) of 1976 (90 Stat. 2750; 43 U.S.C. 1713) at no less than the appraised fair market value shown. The parcels are isolated, difficult and uneconomical to manage as part of the public land, and are suitable for management by another Federal department or agency. The sale is consistent with the BLM's planning efforts, and the public interest will be served by offering this land for sale.

Sale Method

Parcels 1 and 7 will be offered for sale using competitive bidding procedures (43 CFR 2711.3-1). On parcel 3, the bidding will be modified to allow bids from designated bidders only (43 CFR 2711.3-2). Parcels 2, 4, 5, and 6 will be offered to the listed parties through Direct sale procedures not less than 60 days from publication of this notice (43 CFR 2711.3-3). --

PARCEL INFORMATION

Parcel No.	Serial No.	Legal description, NMPM					Appraised value	Method of sale
		TWP	RGE	SEC	Lot	Acres		
1.	NMNM 68534	11 N.	5 E.	36	15	1.08	\$4,400	Competitive.
2.	NMNM 68528	11 N.	5 E.	36	16	1.69	7,800	Direct to William J. and Mary J. Denison.
3.	NMNM 91330	11 N.	6 E.	20	34	0.829	1,300	Modified.
4.	NMNM 91331	11 N.	6 E.	20	33	1.206	2,000	Direct to Orvel J. and Deborah Fletcher.
5.	NMNM 91332	11 N.	6 E.	20	32	1.164	1,900	Direct to Perry and Dawna Anderson.

PARCEL INFORMATION—Continued

Parcel No.	Serial No.	Legal description, NMPM					Appraised value	Method of sale
		TWP	RGE	SEC	Lot	Acres		
6.	NMNM 91333	11 N	6 E.	20	31	0.214	200	Director to B.F. and Edith M. Bailey.
7.	NMNM 88815	11 N	6 E.	34	2	2.12	4,200	Competitive.

Sales Procedures

The sale of parcels 1 and 7 will be by competitive sealed bids followed by oral bidding. However, on parcel 3 competitive bids will only be accepted from the designated bidders named below.

Modified Competitive Sale Designated Bidders:

Parcel No. 3

- Gary L. McAllister and Linda M. McAllister
- Gregorio Davis and Dora R. Davis

Sealed bids will be considered only if received in the Rio Puerco Resource Area Office, 435 Montano Rd., NE., Albuquerque, New Mexico 87107, before 10 a.m. on November 15, 1994, the day of the sale. Oral bids will be accepted commencing at 10:30 a.m., following the opening of all sealed bids, at the same place on the same sale date. Sealed bids of less than the appraised fair market value will be rejected. The apparent highest qualified sealed bid will be publicly declared by the Authorized Officer. The apparent highest qualified sealed bid will then become the starting point for the oral bidding. If no apparent qualified sealed are received, the oral bidding will start at the appraised fair market value. In the absence of oral bids, the apparent highest qualified sealed bid will establish the sale price for that parcel. In the event that two or more sealed bids are received containing valid bids of the same amount for the same parcel, and no higher oral bid is received for that parcel, the determination of which is to be considered the highest designated bid will be by supplemental bidding. In such a case, the high bidders will be allowed to submit oral or sealed bids as designated by the Authorized Officer. After oral bids, if any, are received, the highest qualifying bid, whether sealed or oral, shall be declared by the Authorized Officer.

Bidders must be 18 years of age or over and United States citizens, and corporations must be subject to the laws of any State or of the United States. Apparent high bidders must submit proof of these requirements within 15 days after the sale date.

Bids must be made by the principal or his duly qualified agent. Each sealed bid must be written or typed and accompanied by postal money order, bank draft, or cashier's check made payable to the Department of the Interior, Bureau of Land Management, for not less than 10 percent or more than 30 percent of the amount of the bid. The sealed bid envelope containing the bid and the required amount must be marked in the lower left-hand corner as follows:

Public Sale Bid Parcel No. _____
 Serial No. _____
 Sale Held _____
 (Date)

Each successful oral bidder will be required to pay not less than 20 percent of the amount of the bid immediately following the close of the sale. Payment must be by cash, personal check, bank draft, money order, or any combination of these. Successful bidders, whether such bid is oral or sealed, will be required to pay the remainder of the full bid price prior to the expiration of 180 days from the date of the sale. Failure to submit the full bid price within the above specified time limit will result in cancellation of the sale of the specific parcel and the deposit will be forfeited and disposed of as other receipts of sale.

All sealed bids will be either returned, accepted, or rejected within 30 days of the sale date. Competitive and Modified Sale Parcels not sold on the day of the sale, will be reoffered for sale every first Tuesday of each month, same time and place, by the same procedures described above until sold or until February 10, 1995 at close of business.

On parcels 2, 4, 5, and 6, should any of the listed parties decline to purchase an offered parcel within the time allotted, the unsold parcel will then be reoffered by open competitive bidding procedures described above every first Tuesday of each month, same time and place, until sold or until February 10, 1995 at close of business.

In the event that the Authorized Officers rejects the highest qualified bid for any of the above parcels, or releases the Bidder from it, the Authorized Officer shall determine whether the public land shall be withdrawn from the market or reoffered.

Terms and Conditions

The patents, when and if issued, will contain the following reservations to the United States:

1. A right-of-way thereon for ditches or canals constructed by the United States pursuant to the Act of August 30, 1890 (43 U.S.C. 945).

2. All minerals will be reserved to the United States together with the right to prospect for, mine, and remove the minerals. A more detailed description of this reservation, which will be incorporated in the patent document, is available for review at this office.

3. All patents will be issued subject to existing rights-of-way and easements.

The purchaser of parcel 7 acquires the property realizing that public access to the property is lacking.

DATES: Interested parties may submit comments regarding the proposed action to the Rio Puerco Resource Area Manager by October 3, 1994.

ADDRESSES: Comments should be sent to the Bureau of Land Management, Rio Puerco Resource Area Office, 435 Montano Rd., NE., Albuquerque, New Mexico 87107.

FOR FURTHER INFORMATION CONTACT: Additional information concerning the land, terms and conditions of sale, and bidding instructions may be obtained from Rio Puerco Resource Area Office at the above address. Telephone calls may be directed to Joseph Maramillo at (505) 761-8779.

SUPPLEMENTARY INFORMATION: Comments must reference specific parcel numbers. Adverse comments received on specific parcels will not affect the sale of any other parcel. Objections will be reviewed by the State Director who may sustain, vacate or modify this realty action. In the absence of any objections, this realty action will become the final determination of the Department of Interior.

Upon publication in the Federal Register, the lands described above will be segregated from appropriation under the public land laws, including the mining laws. The segregative effect of this Notice of Realty Action shall terminate upon issuance of patent or other document of conveyance to such land, upon publication in the Federal Register of a termination of the

segregation or 270 days from the date of publication, whichever occurs first.

The BLM may accept or reject any offer to purchase or withdraw any tract from sale if the Authorized Officer determines that consummation of the sale would not be fully consistent with FLPMA or another applicable law.

Dated: August 9, 1994.

Sue E. Richardson,

Acting District Manager.

[FR Doc. 94-20213 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-FB-M

Fish and Wildlife Service

Notice of Receipt of Application for Permit

The public is invited to comment on the following application for a permit to conduct certain activities with marine mammals. The application was submitted to satisfy requirements of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*) and the regulations governing marine mammals (50 CFR 18).

Applicant: Daesaeng Corporation, Seoul, Korea, PRT-792768. The U.S. agent for this aquarium is: International Animal Exchange, Ferndale, Michigan.
Type of Permit: Take for public display

Name and Number of Animals: Northern sea otter (*Enhydra lutris lutris*), 5

Summary of Activity to be Authorized: The applicant requests to take (permanently remove) from the wild and export one male and four female northern sea otters and inadvertently harass others during capture. The sea otters will be on permanent public display at Daesaeng Corporation's 63 Aquarium where educational information will be provided to the public. As required under the 1994 amendments to the Act, the applicant has submitted professionally recognized standards on which the educational information is based. These standards are available as part of the application for public comment.

Source of Marine Mammals for Research/Public Display: The applicant document that currently there are no sea otters in captivity available for their acquisition; therefore, the applicant is requesting removal of 5 sea otters from the waters surrounding Kodiak Island, Alaska.

Period of Activity: September through October, 1994.

Concurrent with the publication of this notice in the *Federal Register*, the Office of Management Authority is

forwarding copies of this application to the Marine Mammal Commission and the Committee of Scientific Advisors for their review.

Written data or comments, requests for copies of the complete application, or requests for a public hearing on this application should be sent to the U.S. Fish and Wildlife Service, Office of Management Authority, 4401 N. Fairfax Drive, Room 420(c), Arlington, Virginia 22203, telephone 703/358-2104 or fax 703/358-2281 and must be received within 30 days of the date of publication of this notice. Anyone requesting a hearing should give specific reasons why a hearing would be appropriate. The holding of such hearing is at the discretion of the Director.

Documents and other information submitted with these applications are available for review, *subject to the requirements of the Privacy Act and Freedom of Information Act*, by any party who submits a written request for a copy of such documents within 30 days of the date of publication of this notice at the above address.

Dated: August 12, 1994.

Margaret Tieger,

Acting Chief Branch of Permits, Office of Management Authority.

[FR Doc. 94-20166 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-65-P

Notice of Availability of the Draft Environmental Assessment and Land Protection Plan Proposed Establishment of Big Branch Marsh National Wildlife Refuge St. Tammany Parish, LA

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of Availability of the Draft Environmental Assessment and Land Protection Plan for the Proposed Establishment of Big Branch Marsh National Wildlife Refuge.

SUMMARY: This notice advises the public that the U.S. Fish and Wildlife Service, Southeast Region, proposes to establish a national wildlife refuge in the vicinity of St. Tammany Parish, Louisiana. The purpose of the proposed refuge is to protect, enhance, and manage a valuable wetland area known as the Big Branch Marsh, which is threatened by urban expansion from the city of New Orleans. A Draft Environmental Assessment and Land Protection Plan for the proposed refuge has been developed by Service biologists in coordination with the State of Louisiana, the Northshore Coast Watch, the Coalition to Restore Louisiana, the Lake Pontchartrain Basin Foundation, the St. Tammany

Sportsmen's League, and the St. Tammany Police Jury. The assessment considers the biological, environmental, and socioeconomic effects of establishing the refuge. The assessment also evaluates three alternative actions and their potential impacts on the environment. Written comments or recommendations concerning the proposal are welcomed and should be sent to the address below.

DATES: Land acquisition planning for the project is currently underway. The draft environmental assessment and land protection plan will be available to the public for review and comment on August 15, 1994. Written comments must be received no later than September 13, 1994, to be considered.

ADDRESSES: Comments and requests for copies of the assessment and for further information on the project should be addressed to Mr. Charles R. Danner, Chief, Branch of Project Development, Office of Refuges and Wildlife, U.S. Fish and Wildlife Service, 1875 Century Boulevard, Atlanta, Georgia 30345.

SUPPLEMENTARY INFORMATION: The primary objectives of the proposed Big Branch Marsh National Wildlife Refuge are to provide: (1) Habitat for a natural diversity of wildlife associated with the Big Branch Marsh, (2) wintering habitat for migratory waterfowl, (3) nesting habitat for wood ducks, (4) habitat for non-game migratory birds, and (5) opportunities for compatible public outdoor recreation, such as hunting, fishing, hiking, birdwatching, and environmental education and interpretation.

The proposed refuge area is located along the north shore of Lake Pontchartrain in St. Tammany Parish, Louisiana, just south of the town of Lacombe. It is bordered by Cane Bayou on the west, Lake Pontchartrain on the south, and the Southern Railway trestle on the east. The northern boundary runs along several parish roads and bayous which separate the marsh from residential development south of U.S. Highway 190, an east-west highway that runs from Slidell to Mandeville, Louisiana.

The proposed refuge would consist of up to 12,000 acres of land acquired in fee title from willing sellers.

The major wildlife values are the numerous species of shorebirds, wading birds, neotropical migratory birds, and wintering waterfowl. Raptors include the osprey, northern harrier, peregrine falcon, and bald eagle. White-tailed deer, mink, raccoon, and river otter are among the many species of mammals dependent on the area.

The entire area serves as an important nursery for fish, shrimp, and crabs and represents one of the better fish production areas on Lake Pontchartrain. The estuaries, ponds, and bayous provide a diverse mix of brackish and freshwater habitats for many species of saltwater and freshwater fish of both recreational and commercial importance.

Dated: August 2, 1994.

James W. Pulliam, Jr.,

Regional Director.

[FR Doc. 94-20373 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-55-M

National Park Service

Draft General Management Plan/ Implementation Plan Alternatives/ Environmental Impact Statement for Lake Chelan National Recreation Area, WA

ACTION: Notice of availability.

SUMMARY: This notice announces the availability of a draft general management plan/environmental impact statement (GMP/EIS) and five implementation plans for Lake Chelan National Recreation Area (NRA). This notice also announces public hearings for the purpose of receiving public comments on the draft documents.

DATES: Comments on the draft GMP/EIS should be received no later than November 1, 1994. Public hearings will be held in Seattle, Washington on October 3, 1994, beginning at 7 p.m. in Chelan, Washington on October 5, 1994, at 7 p.m. and in Stehekin, Washington on October 7, 1994, at 7 p.m. Further details about hearing locations will be announced in the future.

ADDRESSES: Comments on the draft GMP/EIS should be submitted to: Superintendent, North Cascades National Park Complex, National Park Service, 2105 Highway 20, Sedro Woolley WA 98284-9314, telephone: (206) 856-5700.

Public reading copies of the draft EIS will be available for review at the following locations:

Office of Public Affairs, National Park Service, Department of the Interior, 18th and C Streets NW., Washington, DC 20240, telephone: (202) 208-6843.
Stehekin Ranger Station, Lake Chelan NRA, National Park Service, Stehekin, WA 98852, telephone: (206) 856-6055.

Government Publications, Suzzallo Library, University of Washington, Seattle, WA 98195, telephone: (206) 543-1937.

Pacific Northwest Regional Office, National Park Service, Regional Office Library, rm. 650, 909 First Ave., Seattle, WA 98104-1060, telephone: (206) 220-4070.

Chelan Public Library, Chelan, WA 98816, telephone: (206) 682-5131.

Government Documents, Main Public Library, 1000-4th Ave., Seattle, WA 98104-1193, telephone: (206) 386-4686.

Reference Section, Wenatchee Public Library, 310 Douglas, Wenatchee, WA 98801, telephone: (509) 662-5021.

Documents Section, Washington State Library, 16th and Walker, Olympia, WA 98504-2478, telephone: (206) 753-4027.

A limited number of copies of the GMP/EIS are available on request from the Superintendent, North Cascades National Park Service Complex, at the above address and telephone number.

SUPPLEMENTARY INFORMATION: The Draft General Management Plan/Implementation Plan Alternatives/Environmental Impact Statement describes and analyzes a proposed action and four alternatives for future management and use of Lake Chelan National Recreation Area as required by the consent decree that was approved and entered on April 22, 1991, in the United States District Court for the Western District of Washington (Civil Case No. C-89-1342D). Under the proposed action, the National Park Service would not manipulate the Stehekin River or remove or manipulate woody debris except to protect public roads and bridges. The active sand, rock, and gravel borrow pit would be maintained at less than or equal to its current size. Fire suppression, prescribed natural fire, management-ignited prescribed fire, and selective manual fuel reductions would be used to restore or replicate the natural role of fire. Firewood would be provided at fair market value instead of a set permit fee and there would be no guaranteed cordage per year. The airstrip would remain open. Land protection would emphasize high flood influence areas, wetlands, riparian areas, and high visual sensitivity areas. Under the no-action/minimum requirements alternative, river erosion and flooding would be controlled only to protect life, health, public roads, and bridges. Where feasible, federal lands would be treated with prescribed fire to reduce fuels. Firewood would be obtained from harvesting 1-acre woodlots. The airstrip would remain open. Land protection would emphasize wetlands, shoreline characteristics, high scenic quality, water quality, visitor access, restriction

of unsightly development, and development on areas with gradients greater than 20%. Under alternative A, new river shoreline or bank protection structures would be prohibited. The mining of sand, rock, and gravel would be prohibited within the valley. Natural ignitions would be suppressed on the valley floor for the protection of human life and property. Woodlot cutting of firewood would stop immediately. The airstrip would be closed and restored to natural conditions. The Stehekin Valley road between the Landing and Cottonwood Camp would be converted to a trail. All NPS and concession housing and maintenance facilities would be substantially reduced and located at the Landing. Land protection would involve acquisition, on a willing seller/willing buyer basis, or by eminent domain authority, of all private lands within the recreation area. Under alternative B, riverbank protection structures would be allowed if no adverse environmental impacts would result. Mining of sand, rock, and gravel in the valley would be prohibited. Fire and forest fuels would be managed to restore or replicate the natural role of fire. Firewood would be provided at fair market value instead of a set permit fee. There would be no guarantee of firewood cordage per year. The airstrip would be closed. Land protection would emphasize high flood influence areas, wetlands, riparian areas, and high visual sensitivity areas. Under alternative C, protection of public or private improvements threatened by river erosion and flooding would be allowed. The size of the borrow pit would remain constant. Selective manual forest fuel reduction techniques would be used to reduce hazard forest fuel loadings. Firewood would be supplied from administrative wood and natural selection ecoforestry selective cutting from a designated area. The airstrip would be managed by the National Park Service for emergency use only. Land protection would emphasize high flood influence areas, wetlands, and high visual sensitivity areas. Major impact topics assessed for the proposed action and alternatives include natural and cultural resources and the socioeconomic environment, including the local and regional economy.

Dated: August 9, 1994.

Charles H. Odegaard,

Regional Director, Pacific Northwest Region,
National Park Service.

[FR Doc. 94-20093 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-70-M

National Register of Historic Places; Notification of Pending Nominations

Nominations for the following properties being considered for listing in the National Register were received by the National Park Service before August 6, 1994. Pursuant to section 60.13 of 36 CFR Part 60 written comments concerning the significance of these properties under the National Register criteria for evaluation may be forwarded to the National Register, National Park Service, P.O. Box 37127, Washington, DC 20013-7127. Written comments should be submitted by September 1, 1994.

Jan Townsend,

Acting Chief of Registration, National Register.

ALASKA

Aleutian Islands Borough-Census Area

S.S. NORTHWESTERN Shipwreck Site,
Address Restricted, Unalaska vicinity,
94001065

ARIZONA

Pima County

El Montevideo Historic District, 3700 and
3800 blocks of streets between Broadway &
5th St., Tucson, 94001070

DELAWARE

New Castle County

Hickman Blacksmith Shop and House, 1201
and 1203 Greenbank Rd., Marshallton,
94001078

GEORGIA

Bartow County

North Erwin Street Historic District, Jct. of N.
Erwin and Cherokee Sts., Cartersville,
94001071

MARYLAND

Worcester County

Chanceford, 209 W. Federal St., Snow Hill,
94001077

MINNESOTA

Lake Of The Woods County

Norris Camp (Federal Relief Construction in
Minnesota MPS), Off Norris-Roosevelt
Forest Rd., Red Lake Wildlife Management
Area, Roosevelt vicinity, 94001080

MONTANA

Rosebud County

Bookman, J.A., General Store, Main St.,
Ingomar, 94001067
Ingomar Public School, Second Ave.,
Ingomar, 94001068
Wiley, Clark & Greening Bank, Main St.,
Ingomar, 94001069

NEW YORK

Monroe County

Clarkson Corners Historic District, Jct. of
Ridge and Lake Rds. and E and W along

Ridge and S along Lake, Clarkson Corners,
94001076

NORTH CAROLINA

Vance County

Parham, Maria, Hospital, 406 S. Chestnut St.,
Henderson, 94001066

NORTH DAKOTA

Benson County

Grace Episcopal Church (Episcopal Churches
of North Dakota MPS), 210 C. Ave. S.,
Minnewaukan, 94001072

Cass County

Lindemann, Robert, House, 1.5 mi. E and
2.75 mi. N of Enderlin, Enderlin vicinity,
94001073

Grand Forks County

House at 1648 Riverside Drive, 1648
Riverside Dr., Grand Forks, 94001074

Pembina County

Grace Episcopal Church (Episcopal Churches
of North Dakota MPS), 152 Ramsey St. W.,
Pembina, 94001075

TEXAS

Travis County

Moore—Hancock Farmstead, 4811 Sinclair
Ave., Austin, 94001079

WISCONSIN

La Crosse County

LaCrosse Commercial Historic District,
Roughly bounded by Jay St., Second St. S.,
State St. and Fifth Ave. S., LaCrosse,
94001064

[FR Doc. 94-20094 Filed 8-16-94; 8:45 am]

BILLING CODE 4310-70-M

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 751-TA-16

Ceiling Fans From the People's Republic of China

AGENCY: United States International
Trade Commission.

ACTION: Institution and scheduling of a
review investigation concerning the
Commission's affirmative determination
in investigation No. 731-TA-473
(Final), Certain Electric Fans from the
People's Republic of China (China).

SUMMARY: The Commission hereby gives
notice that it has initiated an
investigation pursuant to section 751(b)
of the Tariff Act of 1930 (19 U.S.C.
§ 1675(b)) (the Act) to review its
determination in investigation No. 731-
TA-473 (Final). The purpose of the
investigation is to determine whether an
industry in the United States would be
materially injured, or would be
threatened with material injury, or the
establishment of an industry in the

United States would be materially
retarded, by reason of imports of ceiling
fans from China if the antidumping
order regarding such merchandise were
to be modified or revoked.¹ Ceiling fans
are provided for in subheading
8414.51.00 of the Harmonized Tariff
Schedule of the United States.

For further information concerning
the conduct of this investigation,
hearing procedures, and rules of general
application, consult the Commission's
Rules of Practice and Procedure, part
201, subparts A through E (19 CFR part
201), and part 207, subparts A and E (19
CFR part 207).

EFFECTIVE DATE: August 10, 1994.

FOR FURTHER INFORMATION CONTACT:
Tedford Briggs (202-205-3181), Office
of Investigations, U.S. International
Trade Commission, 500 E Street SW.,
Washington, DC 20436. Hearing-
impaired persons can obtain
information on this matter by contacting
the Commission's TDD terminal on 202-
205-1810. Persons with mobility
impairments who will need special
assistance in gaining access to the
Commission should contact the Office
of the Secretary at 202-205-2000.
Information can also be obtained by
calling the Office of Investigations'
remote bulletin board system for
personal computers at 202-205-1895
(N,8,1).

SUPPLEMENTARY INFORMATION:

Background.—On October 25, 1991,
the Department of Commerce
determined that imports of ceiling fans
from China are being sold in the United
States at less than fair value (LTFV)
within the meaning of section 731 of the
Act (19 U.S.C. § 1673) (56 F.R. 55271,
October 25, 1991) (an amendment to its
determination, modifying the margins
according to specific companies, was
published in the Federal Register on
December 9, 1991 (56 F.R. 64240)); and
on December 2, 1991, the Commission
determined, pursuant to section
735(b)(1) of the Act (19 U.S.C.
§ 1673d(b)(1)), that an industry in the
United States was materially injured by
reason by imports of such LTFV
merchandise. Accordingly, Commerce
ordered that dumping duties be
imposed on such imports (December 9,
1991, 56 F.R. 64240).² On March 2,
1994, however, Commerce published in
the Federal Register a revision of its

¹ Although the scope of Commerce's investigation
included both ceiling fans and oscillating fans, the
Commission found these fans to be separate like
products of separate industries and determined
accordingly on the question of injury.

² Following review in the U.S. Court of
International Trade, Commerce revoked the
antidumping duty order applicable to oscillating
fans (58 F.R. 30026, May 25, 1993).

original dumping determination, effectively excluding one of the Chinese producers from the order and reducing the margin for non-specified firms (59 F.R. 9956, March 2, 1994).

On May 4, 1994, the Commission received a request to review its affirmative determination in investigation No. 731-TA-473 (Final) pursuant to section 751(b) of the Act (19 U.S.C. § 1675(b)). The request was filed by Encon Industries, Inc., Fort Worth, TX. On June 10, 1994, the Commission requested written comments in the *Federal Register* (59 F.R. 30036) as to whether the changed circumstances alleged by the petition were sufficient to warrant a review investigation. On August 10, 1994, after reviewing comments received in response to that request, the Commission determined that the alleged changed circumstances were sufficient to warrant a review investigation.

Participation in the investigation and public service list.—Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the *Federal Register*. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report in this investigation will be placed in the nonpublic record on October 14, 1994, and a public version will be issued thereafter, pursuant to section 207.21 of the Commission's rules.

Hearing.—The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on October 27, 1994, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with

the Secretary to the Commission on or before October 20, 1994. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on October 24, 1994, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules. Parties are strongly encouraged to submit as early in the investigation as possible any requests to present a portion of their hearing testimony *in camera*.

Written submissions.—Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.22 of the Commission's rules; the deadline for filing is October 21, 1994. Parties may also file written testimony in connection with their presentation at the hearing, as provided in section 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of section 207.24 of the Commission's rules. The deadline for filing posthearing briefs is November 4, 1994; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before November 4, 1994. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.45 of the Commission's rules.

Issued: August 11, 1994.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 94-20174 Filed 8-16-94; 8:45 am]

BILLING CODE 7020-02-P

Investigation No. 731-TA-659 (Final)

Grain-Oriented Silicon Electrical Steel From Italy

Determination

On the basis of the record¹ developed in the subject investigation, the Commission determines,² pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is materially injured by reason of imports from Italy of grain-oriented silicon electrical steel, provided for in subheadings 7225.10.00, 7226.10.10, and 7226.10.50 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

Background

The Commission instituted this investigation effective January 28, 1994, following a preliminary determination by the Department of Commerce that imports of grain-oriented silicon electrical steel from Italy were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the institution of the Commission's investigation and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of February 23, 1994 (59 F.R. 8658). The hearing was held in Washington, DC, on April 12, 1994, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission transmitted its determination in this investigation to the Secretary of Commerce on August 8, 1994. The views of the Commission are contained in USITC Publication 2800 (August 1994), entitled "Grain-Oriented Silicon Electrical Steel from Italy: Investigation No. 731-TA-659 (Final)."

Issued: August 10, 1994.

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

² Commissioner Crawford dissenting; Chairman Watson not participating and Commissioner Bragg not participating in the determination in this investigation.

By order of the Commission
[FR Doc. 94-20175 Filed 8-16-94; 8:45 am]
BILLING CODE 7020-02-P

Investigations Nos. 701-TA-362 and 731-TA-707-710 (Preliminary)

Certain Seamless Carbon and Alloy Standard, Line, and Pressure Steel Pipe From Argentina, Brazil, Germany, and Italy

Determinations

On the basis of the record¹ developed in the subject investigations, the Commission unanimously determines,² pursuant to sections 703(a) and 733(a) of the Tariff Act of 1930, (19 U.S.C. § 1671b(a)) and (19 U.S.C. § 1673b(a)), respectively, that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Italy of certain seamless carbon and alloy standard, line, and pressure steel pipe³ that are alleged to be subsidized by the Government of Italy and by reason of imports from Argentina, Brazil, Italy, and Germany of certain seamless carbon and alloy standard, line, and pressure steel pipe that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On June 23, 1994, a petition was filed with the Commission and the Department of Commerce by the Gulf States Tube Division of Quanex Corp., Rosenberg, TX, alleging that an industry in the United States is materially injured or threatened with material injury by reason of imports from Italy of certain seamless carbon and alloy standard, line, and pressure steel pipe that are alleged to be subsidized by the Government of Italy and by reason of LTFV imports from Argentina, Brazil, Germany, and Italy of such pipe. Accordingly, effective June 23, 1994, the Commission instituted countervailing duty investigation No. 701-TA-362 (Preliminary) and antidumping

investigations Nos. 731-TA-707-710 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of June 30, 1994 (59 FR 33780). The conference was held in Washington, DC, on July 14, 1994, and all persons who requested the opportunity were permitted to appear in person or by counsel.

The Commission transmitted its determinations in these investigations to the Secretary of Commerce on August 8, 1994. The views of the Commission are contained in USITC Publication 2801 (August 1994), entitled "Certain Seamless Carbon and Alloy Standard, Line, and Pressure Steel Pipe from Argentina, Brazil, Germany, and Italy: Investigations Nos. 701-TA-362 and 731-TA-707 through 710 (Preliminary)."

Issued: August 10, 1994.

By order of the Commission.

Donna R. Koehnke,
Secretary.

[FR Doc. 94-20176 Filed 8-16-94; 8:45 am]
BILLING CODE 7020-02-M

Investigations Nos. 731-TA-671-674 (Final)

Silicomanganese From Brazil, the People's Republic of China, Ukraine, and Venezuela

AGENCY: United States International Trade Commission.

ACTION: Revised schedule for the subject investigations.

EFFECTIVE DATE: August 5, 1994.

FOR FURTHER INFORMATION CONTACT: Douglas Corkran (202-205-3177), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. Information can also be obtained by calling the Office of Investigations' remote bulletin board system for personal computers at 202-205-1895 (N, 8, 1).

SUPPLEMENTARY INFORMATION: Effective June 16, 1994, the Commission instituted the subject investigations and

established a schedule for their conduct (59 FR 36212, July 15, 1994). Subsequently, the Department of Commerce extended the date for its final determination in the investigation of silicomanganese from the People's Republic of China to October 31, 1994 (59 FR 40008, August 5, 1994). The Commission, therefore, is revising its schedule in the silicomanganese investigations to conform with Commerce's new schedule.

The Commission's new schedule for these investigations is as follows: the prehearing staff report will be placed in the nonpublic record on October 21, 1994; requests to appear at the hearing must be filed with the Secretary to the Commission not later than October 28; the deadline for filing prehearing briefs is also October 28; the prehearing conference will be held at the U.S. International Trade Commission Building at 9:30 a.m. on November 2; the hearing will be held at the U.S. International Trade Commission Building at 9:30 a.m. on November 3; and the deadline for filing posthearing briefs is November 14.

For further information concerning these investigations see the Commission's notice of institution cited above and the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.20 of the Commission's rules.

Issued: August 10, 1994.

By order of the Commission.

Donna R. Koehnke,
Secretary.

[FR Doc. 94-20177 Filed 8-16-94; 8:45 am]
BILLING CODE 7020-02-M

INTERSTATE COMMERCE COMMISSION

[Finance Docket No. 32478]

Joel T. Williams, III, Roy C. Coffee, Jr., Rafael Fernandez-MacGregor, and Bristol Investment Co., Inc.—Continuance in Control Exemption—Cen-Tex Rail Link, Ltd. and South Orient Railroad Company, Ltd.

The Commission, under 49 U.S.C. 10505, exempts from the prior approval requirements of 49 U.S.C. 11343, *et seq.*, the continuance in control by Joel T. Williams, III, Roy C. Coffee, Jr., Rafael Fernandez-MacGregor, and Bristol Investment Co., Inc., of Cen-Tex Rail

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR 207.2(f)).

² Due to a communications systems failure just prior to the Commission meeting on August 3, 1994, Commissioner Newquist was not able to participate in this investigation. Had he participated, Commissioner Newquist would have made an affirmative determination.

³ Imports are currently classified under Harmonized Tariff Schedule item numbers 7304.10.1020, 7304.10.5020, 7304.31.6050, 7304.39.0016, 7304.39.0020, 7304.39.0024, 7304.39.0028, 7304.39.0032, 7304.51.5005, 7304.51.5060, 7304.59.6000, 7304.59.8010, 7304.59.8015, 7304.59.8020, and 7304.59.8025.

Link, Ltd. and South Orient Railroad Company, Ltd., upon Cen-Tex becoming a carrier through its acquisition from The Atchison, Topeka and Santa Fe Railway Company of certain rail lines between Fort Worth and Ricker TX, and between Cresson and Cleburne, TX, and certain incidental overhead trackage rights. *Cen-Tex Rail Link, Ltd.*—

Acquisition and Operation Exemption—Certain Lines of The Atchison, Topeka, and Santa Fe Railway Company, Finance Docket No. 32507 (ICC served June 10, 1994). The exemption is granted subject to standard labor protective conditions.

Any comments must be filed with the Commission and served on: Robert H. Wheeler, Oppenheimer Wolff & Donnelly, 1020 19th St., NW., Suite 400, Washington, DC 20036. This exemption is effective on September 16, 1994. Petitions to stay must be filed by August 29, 1994. Petitions to reopen must be filed by September 6, 1994. For further information, contact Joseph H. Dettmar, (202) 927-5660.

Additional information is contained in the Commission's decision. To purchase a copy of the full decision, write, call, or pick up in person from: Dynamic Concepts, Inc., Room 2229, Interstate Commerce Commission Building, Washington, DC 20423. Telephone: (202) 289-4357/4359. [Assistance for the hearing impaired is available through TDD service (202) 927-5721.]

Decided: August 5, 1994.

By the Commission, Chairman McDonald, Vice Chairman Phillips, and Commissioners Simmons and Morgan.

Vernon A. Williams,

Acting Secretary.

[FR Doc. 94-20164 Filed 8-16-94; 8:45 am]

BILLING CODE 7035-01-P

DEPARTMENT OF JUSTICE

Information Collections Under Review

The Office of Management and Budget (OMB) has been sent the following collection(s) of information proposals for review under the provisions of the Paperwork Reduction Act (44 USC Chapter 35) and the Paperwork Reduction Reauthorization Act since the last list was published. Entries are grouped into submission categories, with each entry containing the following information:

- (1) the title of the form/collection;
- (2) the agency form number, if any, and the applicable component of the Department sponsoring the collection;
- (3) how often the form must be filled out or the information is collected;

(4) who will be asked or required to respond, as well as a brief abstract;

(5) an estimate of the total number of respondents and the amount of time estimated for an average respondent to respond;

(6) an estimate of the total public burden (in hours) associated with the collection; and

(7) an indication as to whether Section 3504(h) of Public Law 96-511 applies.

Comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the OMB reviewer, Mr. Jeff Hill on (202) 395-7340 and to the Department of Justice's Clearance Officer, Mr. Robert B. Briggs, on (202) 514-4319. If you anticipate commenting on a form/collection, but find that time to prepare such comments will prevent you from prompt submission, you should notify the OMB reviewer and the Department of Justice Clearance Officer of your intent as soon as possible. Written comments regarding the burden estimate or any other aspect of the collection may be submitted to Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, and to Mr. Robert B. Briggs, Department of Justice Clearance Officer, Systems Policy Staff/Information Resources Management/Justice Management Division Suite 850, WCTR, Washington, DC 20530.

Extension of the expiration date of a currently approved collection without any change in the substance or in the method of collection.

(1) Application for Waiver of Passport and/or Visa I-193.

(2) Form I-193. Immigration and Naturalization Service.

(3) On Occasion.

(4) Individuals or households. This information is needed to determine whether applicant is eligible for entry into the U.S. under Section 211.1(B)(3)—Waiver of Visas and Section 212.1(g)—Unforeseen Emergency of the 8 CFR.

(5) 25,000 annual respondents at .166 hours per response.

(6) 4,150 annual burden hours.

(7) Not applicable under Section 3504(h) of Public Law 96-511.

Public comment on this item is encouraged.

Dated: April 11, 1994.

Robert B. Briggs,

Department Clearance Officer, United States Department of Justice.

[FR Doc. 94-20089 Filed 8-16-94; 8:45 am]

BILLING CODE 4410-10-M

Information Collections Under Review

The Office of Management and Budget (OMB) has been sent the following

collection(s) of information proposals for review under the provisions of the Paperwork Reduction Act (44 USC Chapter 35) and the Paperwork Reduction Reauthorization Act since the last list was published. Entries are grouped into submission categories, with each entry containing the following information:

(1) the title of the form/collection;

(2) the agency form number, if any, and the applicable component of the Department sponsoring the collection;

(3) how often the form must be filled out or the information is collected;

(4) who will be asked or required to respond, as well as a brief abstract;

(5) an estimate of the total number of respondents and the amount of time estimated for an average respondent to respond;

(6) an estimate of the total public burden (in hours) associated with the collection; and

(7) an indication as to whether Section 3504(h) of Public Law 96-511 applies.

Comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, should be directed to the OMB reviewer, Mr. Jeff Hill on (202) 395-7340 AND to the Department of Justice's Clearance Officer, Mr. Robert B. Briggs, on (202) 514-4319. If you anticipate commenting on a form/collection, but find that time to prepare such comments will prevent you from prompt submission, you should notify the OMB reviewer AND the Department of Justice Clearance Officer of your intent as soon as possible. Written comments regarding the burden estimate or any other aspect of the collection may be submitted to Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, AND to Mr. Robert B. Briggs, Department of Justice Clearance Officer, Systems Policy Staff/Information Resources Management/Justice Management Division Suite 850, WCTR, Washington, DC 20530.

Extension of the expiration date of a currently approved collection without any change in the substance or in the method of collection.

(1) Arrival Information (Form N-14A)

(2) Form N-14A. Immigration and Naturalization Service.

(3) On Occasion.

(4) Individuals or households. Used by the Immigration and Naturalization Service to identify arrival records of aliens applying for benefits. Needed primarily to identify arrival information for arrivals prior to 1924.

(5) 1,000 annual respondents at .250 hours per response.

(6) 250 annual burden hours.

(7) Not applicable under Section 3504(h) of Public Law 96-511.

Public comment on this item is encouraged.

Dated: August 11, 1994.

Robert B. Briggs,

Department Clearance Officer, United States Department of Justice.

[FR Doc. 94-20690 Filed 8-16-94; 8:45 am]

BILLING CODE 4410-10-M

Drug Enforcement Administration

Anthony L. Cappelli, M.D.; Revocation of Registration

On April 25, 1994, the Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration (DEA), issued an Order to Show Cause to Anthony L. Cappelli, M.D. (Respondent), of Los Angeles, California, proposing to revoke Respondent's DEA Certificate of Registration, BC2901230, as a practitioner. The Order to Show Cause alleged that Respondent's registration would be inconsistent with the public interest as that term is used in 21 U.S.C. 823(f). Specifically, the Order to Show Cause alleged that between January 1992 and February 1993, Respondent allowed an unauthorized person to order controlled substances by permitting this person to use Respondent's DEA number; this person also used Respondent's DEA number to issue unauthorized prescriptions during this time period in question; this person used the controlled substances obtained in this manner to perform unlawful abortions, one of which resulted in the death of one of the patients; and Respondent dispensed controlled substances at an unregistered location during the time period in question.

The Order to Show Cause was sent to Respondent by registered mail. More than thirty days have passed since the Order to Show Cause was received by Respondent and the DEA has received no response thereto. Pursuant to 21 CFR 1301.54(d) and 1301.54(e), Respondent is deemed to have waived his opportunity for a hearing. Accordingly, the Deputy Administrator now enters his final order in this matter without a hearing and based upon the investigative file. 21 CFR 1301.57.

In January of 1993, the Santa Ana Police Department discovered the body of a female in an alley, at or near a medical clinic, the Clinica Femenina (clinic). Subsequent investigation revealed that the death of the female was caused by a failed abortion attempt performed at the clinic by the owner who was not authorized to practice

medicine (and thus not licensed to perform abortions) in the State of California. An autopsy revealed that diazepam, a Schedule IV controlled substance, was in the deceased's system.

A search warrant was served on the clinic by the Santa Ana Police Department on January 21, 1993. The search revealed that the owner had ordered over 8,000 dosage units of controlled substances using Respondent's DEA number. The search also revealed that the owner issued prescriptions for various controlled substances using Respondent's DEA number. The clinic was not Respondent's DEA registered location and, in fact, did not have a DEA registration. The owner was subsequently arrested by the Santa Ana police and charged with manslaughter and the matter is pending trial at this time.

Shortly after the search warrant was served, Respondent was interviewed by the Santa Ana police and an investigator of the California Medical Board. Respondent admitted to them that he allowed the clinic to use his DEA registration number to order controlled substances to obtain drugs used in conjunction with abortions. Respondent explained that he was hired to perform abortions on an as needed basis and was paid \$80 for each abortion. He performed an abortion about once a week or every other week. He was aware that the owner was not a licensed physician. He was not aware that the owner had issued controlled substance prescriptions using his DEA number. Respondent also noted that there were occasions that the owner called him to perform an abortion on short notice but that Respondent was unable to make the appointment. When Respondent inquired of the owner how the operation had been performed, she simply explained that the patient "had been taken care of". Respondent also explained that the owner had witnessed him perform abortions on numerous occasions and that she could probably perform the operation, barring any unforeseen complications.

In evaluating whether Respondent's registration by the Drug Enforcement Administration would be inconsistent with the public interest, the Deputy Administrator considers the factors enumerated in 21 U.S.C. 823(f). They are as follows:

- (1) The recommendation of the appropriate State licensing board or professional disciplinary authority.
- (2) The applicant's experience in dispensing, or conducting research with respect to controlled substances.

(3) The applicant's conviction record under Federal or State laws relating to the manufacture, distribution, or dispensing of controlled substances.

(4) Compliance with applicable State, Federal, or local laws relating to controlled substances.

(5) Such other conduct which may threaten the public health and safety.

In determining whether a registration would be inconsistent with the public interest, the Deputy Administrator is not required to make findings with respect to each of the factors listed above. Instead, he has the discretion to give each factor the weight he deems appropriate, depending upon the facts and circumstances of each case. See *David E. Trowick, D.D.S.*, Docket No. 88-69, 53 FR 5326 (1988).

In this proceeding factors, two, four and five apply. Respondent allowed an unauthorized person to use his DEA number to order controlled substances for dispensing and administering controlled substances at an unregistered location. Respondent allowed the clinic's owner to acquire and dispense controlled substances through the use of Respondent's DEA registration number. Under the circumstances, Respondent knew or should have known that the clinic's owner would use his DEA number, not only for ordering, dispensing and issuing prescriptions for controlled substances, but also for administering during unauthorized abortions.

By allowing an unregistered and unauthorized person to use his DEA number, Respondent was responsible for any use and misuse of that number. Moreover, such a violation is aggravated by the fact that Respondent allowed a non-practitioner to use his DEA number at an unregistered location.

Accordingly, the Deputy Administrator of the Drug Enforcement Administration, pursuant to the authority vested in him by 21 U.S.C. 823 and 824 and 28 CFR 0.100(b) and 0.104 (59 FR 23637), hereby orders that DEA Certificate of Registration, BC2901230, previously issued to Anthony L. Cappelli, M.D., be, and it hereby is, revoked, and any pending applications for the renewal of such registration, be, and they are, denied. This order is effective September 16, 1994.

Dated: August 11, 1994.

Stephen H. Greene,

Deputy Administrator.

[FR Doc. 94-20178 Filed 8-16-94; 8:45 am]

BILLING CODE 4410-99-26

DEPARTMENT OF LABOR

Office of the Secretary

Glass Ceiling Commission; Open Site Hearing

SUMMARY: Pursuant to Title II of the Civil Rights Act of 1991 (Pub. L. 102-166) and section 9 of the Federal Advisory Committee (FACA) (Pub. L. 92-462), 5 U.S.C. app. II a Notice of establishment of the Glass Ceiling Commission was published the Federal Register on March 30, 1992 (57 FR 10776). Pursuant to section 10(a) of FACA, this is to announce a public hearing of the Commission which is to take place on Monday, September 26, 1994. The purpose of the Commission is to, among other things, focus greater attention on the importance of eliminating artificial barriers to the advancement of minorities and women to management and decisionmaking positions in business. The Commission has the practical task of: (a) Conducting basic research into practices, policies, and manner in which management and decisionmaking positions in business are filled; (b) conducting comparative research of businesses and industries in which minorities and women are promoted or are not promoted to management and decisionmaking positions; and (c) recommending measures designed to enhance opportunities for and the elimination of artificial barriers to the advancement of minorities and women to management and decisionmaking positions.

TIME AND PLACE: The hearing will be held on Monday, September 26, 1994 from 9:00 a.m. until 5:00 p.m. at the Association of The Bar of The City Of New York, 42 West 44th Street, New York, NY 10036.

AGENDA: The agenda for the hearing is as follows:

- 9:00 a.m.—Opening Remarks By Secretary Reich
- 9:15—Welcoming Remarks by Elected Officials
- 9:30—12:30—Testimony
- 12:30—1:30—Lunch break
- 1:30—5:00—Testimony
- 5:00 p.m.—Hearing Adjourns

PUBLIC PARTICIPATION: The hearing will be open to the public. Seating will be available on a first-come, first-serve basis. Seats will be reserved for the media. Disabled individuals should contact the Commission no later than Monday, September 12, 1994, if special accommodations are needed.

Individuals or organizations wishing to testify orally must provide written testimony in advance of the hearing. Oral comments are limited to 10

minutes, written testimony may be longer. Send twenty-five (25) copies of testimony, postmarked on or before Monday, September 12, 1994, to: Ms. René Redwood, Executive Director, Glass Ceiling Commission, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room C-2313, Washington, D.C. 20210.

The written testimony must contain the following information:

- (1) The name, address, and telephone number of each person to appear;
- (2) The capacity in which the person will appear;
- (3) The issues that will be addressed.

This information is needed to properly develop a hearing schedule. As many people as time allows will be permitted to testify.

ISSUES: Testimony should highlight successful initiatives and/or recommendations for addressing the areas discussed below. The Commission is especially interested in hearing about procedures, practices and systems that have been put in place to make sure that goals are achieved in work force diversity.

Recruitment: What systems are in place to ensure that external recruiting for decisionmaking positions will produce a pool of applicants which includes minorities and women? Similarly, does the process for considering promotion of current employees to decisionmaking positions ensure consideration of minorities and women?

Developmental practices and credential building experiences: How are minorities and women ensured that they will be given the kinds of experiences that will make them competitive for decisionmaking position? Include management training, mentoring, job rotation, education, assignments to corporate committees and task forces, special projects, relocation, etc.

Compensation and appraisal systems: How is the total compensation package including bonuses, stock options and other incentives evaluated for fairness for minorities and women? Do executive management and supervisory compensation systems depend upon or reward managers' achieving work force diversity goals, and, if so, how does that work? Is the appraisal system and or performance rating system protected from subjective decisions which impact advancement?

Testimony on successful initiatives may include discussion of the elements above and how other factors are combined to create a complete initiative resulting in the advancement of minorities and women.

A videotape may be made of the hearing. A transcript of the hearing will be made.

Materials submitted at this hearing should not have been submitted at any previous Glass Ceiling Commission hearings.

Those individuals or organizations wishing to submit written statements, but not testify orally, should send twenty-five (25) copies to Ms. René Redwood, Executive Director, Glass Ceiling Commission, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room C-2113, Washington, D.C. 20210. Written statements should be postmarked on or before Monday, September 12, 1994.

FOR FURTHER INFORMATION CONTACT: Ms. René Redwood, Executive Director, Glass Ceiling Commission, U.S. Department of Labor, 200 Constitution Avenue, N.W., Room C-2113, Washington, D.C. 20210, (202) 219-7342.

Signed at Washington, D.C. this 12th day of August, 1994.

Robert B. Reich,
Secretary of Labor.

[FR Doc. 94-20195 Filed 8-16-94; 8:45 am]
BILLING CODE 4510-23-M

Pension and Welfare Benefits Administration

[Application No. D-9240, et al.]

Proposed Exemptions; The Bank of California

AGENCY: Pension and Welfare Benefits Administration, Labor.

ACTION: Notice of Proposed Exemptions.

SUMMARY: This document contains notices of pendency before the Department of Labor (the Department) of proposed exemptions from certain of the prohibited transaction restriction of the Employee Retirement Income Security Act of 1974 (the Act) and/or the Internal Revenue Code of 1986 (the Code).

Written Comments and Hearing Requests

Unless otherwise stated in the Notice of Proposed Exemption, all interested persons are invited to submit written comments, and with respect to exemptions involving the fiduciary prohibitions of section 406(b) of the Act, requests for hearing within 45 days from the date of publication of this Federal Register Notice. Comments and request for a hearing should state: (1) the name, address, and telephone number of the person making the comment or request, and (2) the nature of the person's

interest in the exemption and the manner in which the person would be adversely affected by the exemption. A request for a hearing must also state the issues to be addressed and include a general description of the evidence to be presented at the hearing. A request for a hearing must also state the issues to be addressed and include a general description of the evidence to be presented at the hearing.

ADDRESSES: All written comments and request for a hearing (at least three copies) should be sent to the Pension and Welfare Benefits Administration, Office of Exemption Determinations, Room N-5649, U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, D.C. 20210. Attention: Application No. stated in each Notice of Proposed Exemption. The applications for exemption and the comments received will be available for public inspection in the Public Documents Room of Pension and Welfare Benefits Administration, U.S. Department of Labor, Room N-5507, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

Notice to Interested Persons

Notice of the proposed exemptions will be provided to all interested persons in the manner agreed upon by the applicant and the Department within 15 days of the date of publication in the *Federal Register*. Such notice shall include a copy of the notice of proposed exemption as published in the *Federal Register* and shall inform interested persons of their right to comment and to request a hearing (where appropriate).

SUPPLEMENTARY INFORMATION: The proposed exemptions were requested in applications filed pursuant to section 408(a) of the Act and/or section 4975(c)(2) of the Code, and in accordance with procedures set forth in 29 CFR Part 2570, Subpart B (55 FR 32836, 32847, August 10, 1990). Effective December 31, 1978, section 102 of Reorganization Plan No. 4 of 1978 (43 FR 47713, October 17, 1978) transferred the authority of the Secretary of the Treasury to issue exemptions of the type requested to the Secretary of Labor. Therefore, these notices of proposed exemption are issued solely by the Department.

The applications contain representations with regard to the proposed exemptions which are summarized below. Interested persons are referred to the applications on file with the Department for a complete statement of the facts and representations.

The Bank of California, N.A., Located in San Francisco, California; Proposed Exemption

[Application No. D-9240]

Based on the facts and representations set forth in the application, the Department is considering granting an exemption under the authority of section 408(a) of the Act and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 C.F.R. Part 2570, Subpart B (55 FR 32836, 32847, August 10, 1990).¹

Section I—Exemption for In-Kind Transfer of Assets

If the exemption is granted the restrictions of section 406(a) and section 406(b) of the Act and the sanctions resulting from the application of section 4975 of the Code by reason of section 4975(c)(1)(A) through (F) shall not apply, effective November 12, 1993, to the in-kind transfer to any diversified open-end investment company (the Fund or Funds) registered under the Investment Company Act of 1940 to which the Bank of California, N.A. or any of its affiliates (collectively, the Bank) serves as investment adviser and may provide other services of the assets of various employee benefit plans (the Plan or Plans) that are either held in certain collective investment funds (the CIF or CIFs) maintained by the Bank or otherwise held by the Bank as trustee, investment manager, or in any other capacity as fiduciary on behalf of the Plans, in exchange for shares of such Funds; provided that the following conditions are met:

(a) A fiduciary (the Second Fiduciary) who is acting on behalf of each affected Plan and who is independent of and unrelated to the Bank, as defined in paragraph (g) of section III below, receives advance written notice of the in-kind transfer of assets of the Plans or the CIFs in exchange for shares of the Fund and the disclosures described in paragraph (g) of section II below;

(b) On the basis of the information described in paragraph (g) of section II below, the Second Fiduciary authorizes in writing the in-kind transfer of assets of the Plans in exchange for shares of the Funds, the investment of such assets in corresponding portfolios of the Funds, and the fees received by the Bank in connection with its services to the Fund. Such authorization by the Second Fiduciary to be consistent with the responsibilities, obligations, and

¹ For purposes of this exemption reference to specific provisions of title I of the Act, unless otherwise specified, refer also to the corresponding provisions of the Code.

duties imposed on fiduciaries by Part 4 of Title I of the Act;

(c) No sales commissions are paid by the Plans in connection with the in-kind transfers of asset of the Plans or the CIFs in exchange for shares of the Funds;

(d) All or a *pro rata* portion of the assets of the Plans held in the CIFs or all or a *pro rata* portion of the assets of the Plans held by the Bank in any capacities as fiduciary on behalf of such Plans are transferred in-kind to the Funds in exchange for shares of such Funds.

(e) The Plans or the CIFs receive shares of the Funds that are equal in value to the assets of the Plans or the CIFs exchanged for such shares;

(f) The value of the assets of the Plans or the CIFs to be transferred in-kind and the net asset value of the Funds receiving those assets in exchange for shares is determined in a single valuation performed in the same manner and at the close of business on the same day, in accordance with the procedures set forth in Rule 17a-7(b) (Rule 17a-7) under the Investment Company Act of 1940, as amended from time to time or any successor rule, regulation, or similar pronouncement;

(g) Not later than thirty (30) days after completion of each in-kind transfer of assets of the Plans or the CIFs in exchange for shares of the Funds, the Bank sends by regular mail to the Second Fiduciary, who is acting on behalf of each affected Plan and who is independent of and unrelated to the Bank, as defined in paragraph (g) of section III below, a written confirmation that contains the following information:

(1) the identity of each of the assets that was valued for purposes of the transaction in accordance with Rule 17a-7(b)(4) under the Investment Company Act of 1940;

(2) the price of each of the assets involved in the transaction; and

(3) the identity of each pricing service or market maker consulted in determining the value of such assets; and

(h) For all conversion transactions that occur after the date of this proposed exemption, the Bank, no later than ninety (90) days after completion of each in-kind transfer of assets of the Plans or the CIFs in exchange for shares of the Funds, will send by regular mail to the Second Fiduciary, who is acting on behalf of each affected Plan and who is independent of and unrelated to the Bank, as defined in paragraph (g) of section III below, a written confirmation that contains the following information:

(1) the number of CIF units held by each affected Plan immediately before the conversion (and the related per unit

value or the aggregate dollar value of the units transferred); and

(2) the number of shares in the Funds that are held by each affected Plan following the conversion (and the related per share net asset value or the aggregate dollar value of the shares received).

(i) The conditions set forth in paragraphs (d), (e), (f), (o), (p), (q) and (r) of section II below are satisfied;

Section II—Exemption for Receipt of Fees From Funds

If the exemption is granted, effective November 12, 1993, the restrictions of section 406(a) and section 406(b) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1)(D) through (F) of the Code shall not apply to the receipt of fees by the Bank from the Funds for acting as the investment adviser, custodian, sub-administrator, and other service provider for the Funds in connection with the investment in the Funds by the Plans for which the Bank acts as a fiduciary provided that:

(a) No sales commissions are paid by the Plans in connection with purchases or sales of shares of the Funds and no redemption fees are paid in connection with the sale of such shares by the Plans to the Funds;

(b) The price paid or received by the Plans for shares in the Funds is the net asset value per share, as defined in paragraph (e) of section III, at the time of the transaction and is the same price which would have been paid or received for the shares by any other investor at that time;

(c) The Bank, its affiliates, and officers or directors have not and will not purchase from or sell to any of the Plans shares of any of the Funds;

(d) The combined total of all fees received by the Bank for the provision of services to the Plans, and in connection with the provision of services to any of the Funds in which the Plans may invest, are not in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act;

(e) The Bank does not receive any fees payable, pursuant to Rule 12b-1 under the Investment Company Act of 1940 (the 12b-1 Fees) in connection with the transactions;

(f) The Plans are not sponsored by the Bank;

(g) A Second Fiduciary who is acting on behalf of a Plan and who is independent of and unrelated to the Bank, as defined in paragraph (g) of section III below, receives in advance of the investment by a Plan in any of the Funds a full and detailed written

disclosure of information concerning such Fund including, but not limited to:

(1) a current prospectus for each portfolio of each of the Funds in which such Plan is considering investing,

(2) a statement describing the fees for investment management, investment advisory, or other similar services, any fees for secondary services (Secondary Services), as defined in paragraph (h) of section III below, and all other fees to be charged to or paid by the Plan and by such Funds to the Bank, including the nature and extent of any differential between the rates of such fees,

(3) the reasons why the Bank may consider such investment to be appropriate for the Plan,

(4) a statement describing whether there are any limitations applicable to the Bank with respect to which assets of a Plan may be invested in the Funds, and, if so, the nature of such limitations; and

(5) upon request of the Second Fiduciary, a copy of the proposed exemption and/or a copy of the final exemption, if granted.

(h) On the basis of the information described in paragraph (g) of this section II, the Second Fiduciary authorizes in writing: (1) the investment of assets of the Plans in shares of the Fund, in connection with the transaction set forth in section II; (2) the investment portfolios of the Funds in which the assets of the Plans may be invested; and (3) the fees received by the Bank in connection with its services to the Funds; such authorization by the Second Fiduciary to be consistent with the responsibilities obligations, and duties imposed on fiduciaries by Part 4 of Title I of the Act;

(i) The authorization, described in paragraph (h) of this section II, is terminable at will by the Second Fiduciary of a Plan, without penalty to such Plan. Such termination will be effected by the Bank selling the shares of the Fund held by the affected Plan within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of the termination form (the Termination Form), as defined in paragraph (i) of section III below, or any other written notice of termination; provided that if, due to circumstances beyond the control of the Bank, the sale cannot be executed within one business day, the Bank shall have one additional business day to complete such sale;

(j) Plans do not pay any plan-level investment management fees, investment advisory fees, or similar fees to the Bank with respect to any of the assets of such Plans which are invested

in shares of any of the Funds. This condition does not preclude the payment of investment advisory fees or similar fees by the Funds to the Bank under the terms of an investment advisory agreement adopted in accordance with section 15 of the Investment Company Act of 1940 or other agreement between the Bank and the Funds;

(k) In the event of an increase in the rate of any fees paid by the Funds to the Bank regarding any investment management services, investment advisory services, or fees for similar services that the Bank provides to the Funds over an existing rate for such services that had been authorized by a Second Fiduciary, in accordance with paragraph (h) of this section II, the Bank will, at least thirty (30) days in advance of the implementation of such increase, provide a written notice (which may take the form of a proxy statement, letter, or similar communication that is separate from the prospectus of the Fund and which explains the nature and amount of the increase in fees) to the Second Fiduciary of each of the Plans invested in a Fund which is increasing such fees. Such notice shall be accompanied by the Termination Form, as defined in paragraph (i) of section III below;

(l) In the event of an addition of a Secondary Service, as defined in paragraph (h) of section III below, provided by the Bank to the Fund for which a fee is charged or an increase in the rate of any fee paid by the Funds to the Bank for any Secondary Service, as defined in paragraph (h) of section III below, that results either from an increase in the rate of such fee or from the decrease in the number or kind of services performed by the Bank for such fee over an existing rate for such Secondary Service which had been authorized by the Second Fiduciary of a Plan, in accordance with paragraph (h) of this section II, the Bank will at least thirty (30) days in advance of the implementation of such additional service for which a fee is charged or fee increase, provide a written notice (which may take the form of a proxy statement, letter, or similar communication that is separate from the prospectus of the Fund and which explains the nature and amount of the additional service for which a fee is charged or the nature and amount of the increase in fees) to the Second Fiduciary of each of the Plans invested in a Fund which is adding a service or increasing fees. Such notice shall be accompanied by the Termination Form, as defined in paragraph (i) of section III below.

(m) The Second Fiduciary is supplied with a Termination Form at the times specified in paragraphs (k), (l), and (n) of this section II, which expressly provides an election to terminate the authorization, described above in paragraph (h) of this section II, with instructions regarding the use of such Termination Form including statements that:

(1) the authorization is terminable at will by any of the Plans, without penalty to such Plans. Such termination will be effected by the Bank selling the shares of the Fund held by the Plans requesting termination within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of the Termination Form or any other written notice of termination; provided that if, due to circumstances beyond the control of the Bank, the sale of shares of such Plans cannot be executed within one business day, the Bank shall have one additional business day to complete such sale; and

(2) failure by the Second Fiduciary to return the Termination Form on behalf of a Plan will be deemed to be an approval of the additional Secondary Service for which a fee is charged or increase in the rate of any fees, if such Termination Form is supplied pursuant to paragraphs (k) and (l) of this section II, and will result in the continuation of the authorization, as described in paragraph (h) of this section II, of the Bank to engage in the transactions on behalf of such Plan;

(n) The Second Fiduciary is supplied with a Termination Form, annually during the first quarter of each calendar year, beginning with the first quarter of the calendar year that begins after the date the grant of this proposed exemption is published in the **Federal Register** and continuing for each calendar year thereafter; provided that the Termination Form need not be supplied to the Second Fiduciary, pursuant to paragraph (n) of this section II, sooner than six months after such Termination Form is supplied pursuant to paragraphs (k) and (l) of this section II, except to the extent required by said paragraphs (k) and (l) of this section II to disclose an additional Secondary Service for which a fee is charged or an increase in fees;

(o)(1) With respect to each of the Funds in which a Plan invests, the Bank will provide the Second Fiduciary of such Plan:

(A) at least annually with a copy of an updated prospectus of such Fund;

(B) upon the request of such Second Fiduciary, with a report or statement

(which may take the form of the most recent financial report, the current statement of additional information, or some other written statement) which contains a description of all fees paid by the Fund to the Bank; and

(2) With respect to each of the Funds in which a Plan invests, in the event such Fund places brokerage transactions with the Bank, the Bank will provide the Second Fiduciary of such Plan at least annually with a statement specifying:

(A) the total, expressed in dollars, brokerage commissions of each Fund's investment portfolio that are paid to the Bank by such Fund;

(B) the total, expressed in dollars, of brokerage commissions of each Fund's investment portfolio that are paid by such Fund to brokerage firms unrelated to the Bank;

(C) the average brokerage commissions per share, expressed as cents per share, paid to the Bank by each portfolio of a Fund; and

(D) the average brokerage commissions per share, expressed as cents per share, paid by each portfolio of a Fund to brokerage firms unrelated to the Bank;

(p) All dealings between the Plans and any of the Funds are on a basis no less favorable to such Plans than dealings between the Funds and other shareholders holding the same class of shares as the Plans;

(q) The Bank maintains for a period of six (6) years the records necessary to enable the persons, as described in paragraph (r) of section II below, to determine whether the conditions of this proposed exemption have been met, except that:

(1) a prohibited transaction will not be considered to have occurred if, due to circumstances beyond the control of the Bank, the records are lost or destroyed prior to the end of the six (6) year period, and

(2) no party in interest, other than the Bank, shall be subject to the civil penalty that may be assessed under section 502(i) of the Act, or to the taxes imposed by section 4975 (a) and (b) of the Code, if the records are not maintained, or are not available for examination as required by paragraph (r) of section II below;

(r)(1) Except as provided in paragraph (r)(2) of this section II and notwithstanding any provisions of subsection (a)(2) and (b) of section 504 of the Act, the records referred to in paragraph (q) of section II above are unconditionally available at their customary location for examination during normal business hours by—

(i) Any duly authorized employee or representative of the Department or the Internal Revenue Service;

(ii) Any fiduciary of each of the Plans who has authority to acquire or dispose of shares of any of the Funds owned by such a Plan, or any duly authorized employee or representative of such fiduciary; and

(iii) Any participant or beneficiary of the Plans or duly authorized employee or representative of such participant or beneficiary;

(2) None of the persons described in paragraph (r)(1)(ii) and (r)(1)(iii) of section II shall be authorized to examine trade secrets of the Bank, or commercial or financial information which is privileged or confidential.

Section III—Definitions

For purposes of this proposed exemption,

(a) The term "Bank" means The Bank of California, N.A. and any affiliate of the Bank, as defined in paragraph (b) of this section III.

(b) An "affiliate" of a person includes:

(1) Any person directly or indirectly through one or more intermediaries, controlling, controlled by, or under common control with the person;

(2) any officer, director, employee, relative, or partner in any such person; and

(3) Any corporation or partnership of which such person is an officer, director, partner, or employee.

(c) The term "control" means the power to exercise a controlling influence over the management or policies of a person other than an individual;

(d) The term "Fund or Funds" means any diversified open-end investment company or companies registered under the Investment Company Act of 1940 for which the Bank serves as investment adviser, and may also provide custodial or other services as approved by such Funds;

(e) The term, "net asset value" means the amount for purposes of pricing all purchases and sales calculated by dividing the value of all securities, determined by a method as set forth in a Fund's prospectus and statement of additional information, and other assets belonging to each of the portfolios in such Fund, less the liabilities charged to each portfolio, by the number of outstanding shares.

(f) The term, "relative," means a "relative" as that term is defined in section 3(15) of the Act (or a "member of the family" as that term is defined in section 4975(e)(6) of the Code), or a brother, a sister, or a spouse of a brother or a sister.

(g) The term, "Second Fiduciary," means a fiduciary of a plan who is independent of and unrelated to the Bank. For purposes of this exemption, the Second Fiduciary will not be deemed to be independent of and unrelated to the Bank if:

(1) Such Second Fiduciary directly or indirectly controls, is controlled by, or is under common control with the Bank;

(2) Such Second Fiduciary, or any officer, director, partner, employee, or relative of such Second Fiduciary is an officer, director, partner, or employee of the Bank (or is a relative of such persons);

(3) Such Second Fiduciary directly or indirectly receives any compensation or other consideration for his or her own personal account in connection with any transaction described in this proposed exemption.

If an officer, director, partner, or employee of the Bank (or a relative of such persons), is a director of such Second Fiduciary, and if he or she abstains from participation in (i) the choice of the Plan's investment manager/advisor, (ii) the approval of any purchase or sale by the Plan of shares of the Funds, and (iii) the approval of any change of fees charged to or paid by the Plan, in connection with any of the transactions described in sections I and II above, then paragraph (g)(2) of section III above, shall not apply.

(h) The term, "Secondary Service," means a service, other than an investment management, investment advisory, or similar service, which is provided by the Bank to the Funds, including but not limited to custodial, accounting, brokerage, administrative, or any other service.

(i) The term, "Termination Form," means the form supplied to the Second Fiduciary, at the times specified in paragraphs (k), (l), and (n) of section II above, which expressly provides an election to the Second Fiduciary to terminate on behalf of the Plans the authorization, described in paragraph (h) of section II. Such Termination Form may be used at will by the Second Fiduciary to terminate such authorization without penalty to the Plans and to notify the Bank in writing to effect such termination by selling the shares of the Fund held by the Plans requesting termination within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of written notice of such request for termination; provided that if, due to circumstances beyond the control of the Bank, the sale cannot be executed

within one business day, the Bank shall have one additional business day to complete such sale.

EFFECTIVE DATE: If the proposed exemption is granted, the exemption will be effective retroactively, as of November 12, 1993.

Summary of Facts and Representations

1. The Bank is a national banking association having its principal office at 400 California Street, San Francisco, California. The Bank offers a wide range of banking services to its clients in California, Oregon, Washington, and around the world. The Mitsubishi Bank Limited, a Japanese bank with principal offices in Tokyo, owns either directly or indirectly through its wholly owned subsidiary, BanCal Tri-State Corporation, all of the outstanding stock of the Bank. The Bank has total trust and non-trust assets of approximately \$19.5 billion and \$8.4 billion, respectively. Merus Capital Management (MERUS), a division of the Bank, belongs to the Bank's Trust and Investment Management Group which manages approximately \$5.5 billion of the assets held in trust by the Bank.

2. The Plans involved in the transactions for which the Bank requests exemptive relief are numerous Plans for which the Bank has acted or will act as fiduciary and has exercised or will exercise investment discretion with respect to all or a portion of the assets of such Plans.² For this reason, certain specific information relating to each individual involved Plan does not appear in the application. However, it is anticipated that the Plans include or will include various employee benefit plans, as defined by section 3(3) of the Act, and certain plans or trusts, as described in section 4975(e)(1) of the Code. These Plans are sponsored or maintained by parties unrelated to the Bank.³ Such Plans include, among others: (1) pension, profit sharing, stock bonus, and other retirement plans which are qualified for tax purposes under section 401(a) of the Code, (2) voluntary employees' beneficiary associations and other welfare benefit plans, and (3) individual retirement accounts and simplified employee pension plans, as described in section 408 of the Code. The Bank serves as fiduciary to these Plans through the management of the CIFs in which the Plans invest or through providing

² The Department herein is not proposing relief for transactions afforded relief by Section 404(c) of the Act.

³ The Department herein is not proposing relief for transactions involving any plan sponsored by the Bank or its affiliates.

individual management or advice to the Plans.

It is represented that the Bank, as of October 23, 1992, had under management approximately \$760 million in assets from approximately 400 Plans. The Bank receives compensation for serving as fiduciary with respect to these Plans in accordance with standard published fee schedules or as otherwise agreed upon by the Bank and the sponsors of such Plans.⁴

3. The Bank or its affiliates also provide services to numerous Funds. The Funds are open-end investment companies registered under the Investment Company Act of 1940. Because the Bank would like the exemption to apply prospectively to any Fund to which the Bank or any of its affiliates may provide services, the Bank represents that it cannot supply detailed information on each such future Fund. However, the Bank has provided a detailed description with respect to a certain Fund, the HighMark Group (HighMark), which is currently operating and to which it provides services. The Bank represents that all future Funds will assume similar structures and Plan investments therein will be subject to the terms and conditions of this exemption. The structure of HighMark is summarized in paragraph 4 below. To the extent Plans for which the Bank serves as fiduciary are currently invested in HighMark, the Bank represents that such investments were made in compliance with Prohibited Transaction Class Exemption 77-4 (PTCE 77-4).⁵

4. HighMark, a Massachusetts business trust organized on March 10, 1987, is registered under the Investment Company Act of 1940 as a diversified, open-end, management investment company. HighMark is governed by a board of trustees (the HighMark Trustees), all of whom are independent of the Bank. MERUS, a division of the Bank, acts as investment adviser to HighMark. In the context of registered investment companies, the term "investment adviser" generally refers to the entity that has investment management authority with respect to

⁴ The Department expresses no opinion as to whether the provision of services by the Bank or its affiliates to the Plans satisfies the requirements for statutory exemption, as set forth in section 408(b)(2) of the Act and 29 CFR 2550.408(b)(2) of the Department's regulation. To the extent that such provision of services to the Plan by the Bank or its affiliates does not satisfy the requirements of section 408(b)(2) of the Act, the Department, herein, is offering no relief.

⁵ PTCE 77-4 was granted April 8, 1977, at 42 FR 732 and was proposed November 16, 1976, at 41 FR 50516.

the assets of the investment company. In this regard, subject to the general supervision of the HighMark Trustees, MERUS manages each of the separate investment portfolios within HighMark in accordance with the investment objectives, and policies of each portfolio, makes decisions with respect to and places orders for all purchases and sales of securities, and maintains records with respect thereto. In addition, the Bank serves as custodian, sub-administrator, sub-transfer agent, and sub-accountant to HighMark. It is represented that the Bank may in the future seek to serve in additional capacities for and to provide additional services to HighMark.

HighMark consists of separate investment portfolios with combined total net assets of approximately \$1 billion. It is represented that currently there are eight (8) portfolios in HighMark. Three of these portfolios are invested in money market instruments (the Money Market Portfolios), and three are invested primarily in non-money market debt or equity securities (the Non-Money Market Portfolios). The remaining two portfolios of HighMark are the California Tax-Free Fund, and the Tax-Free Fund.⁶ In addition to these portfolios, HighMark is in the process of establishing two additional portfolios, the Balanced Fund and the Growth Fund, and may establish other portfolios.

In the future HighMark may modify, reorganize, or terminate any or all of its portfolios. All existing portfolios and any portfolios established or modified in the future will be available for investment by the Plans, if deemed appropriate under the circumstances, as authorized by the Second Fiduciary, and if based on criteria set forth in section 404 of the Act. However, it is represented that the Bank does not

⁶ It is represented that the Tax-Free Fund has been the subject of an inquiry by the Securities and Exchange Commission (SEC) concerning a municipal bond backed by Mutual Benefit Life Insurance Company held in the Tax-Free Fund. In July 1991, when Mutual Benefit Life Insurance Company was seized by its regulator, the Bank was serving as accountant for the Tax-Free Fund. It is represented that due to a clerical data entry error and the failure of an employee to follow established procedures, the impact of the seizure on the value of the bond was not brought to the attention of the management of the Bank until August 1991. At that time, the Bank represents that it informed the SEC, purchased the bond from the Tax-Free Fund at par plus accrued interest, and informed shareholders by mailing to them a special prospectus, dated September 5, 1991. As the situation was corrected promptly, the Bank believes that this should not affect the merits of the application or the availability of the Tax-Free Fund for investment by the Plan, if deemed appropriate under the circumstances as authorized by the Second Fiduciary, and if based on criteria set forth in section 404 of the Act.

expect the Plans ordinarily to be invested in tax-free funds.

Winsbury Company (Winsbury), located in Columbus, Ohio, serves as the general manager, administrator, and principal underwriter of HighMark. For these administrative services, Winsbury receives fees computed daily at .20% of the average net assets of each portfolio of HighMark. Winsbury also receives fees from HighMark for serving as the distributor of shares in HighMark. Pursuant to a plan of distribution implemented only with respect to the Class A shares for the Money Market Portfolios, HighMark pays out of the assets attributable to such shares monthly fees to Winsbury in accordance with Rule 12b-1 of the Investment Company Act of 1940 (the 12b-1 Fees) equal to .25% of the average daily net assets attributable to such shares.⁷ An affiliate of Winsbury, the Winsbury Service Corporation (Winsbury Service), is the transfer agent, accountant, and shareholder servicing agent of HighMark. Winsbury and Winsbury Service are unrelated to the Bank.

5. Because the Bank recognizes that (1) in-kind transfers to Funds that the Bank services or advises of all or a *pro rata* portion of Plan assets in the CIFs or all or a *pro rata* portion of Plan assets that the Bank otherwise manages, and (2) the approval process for additional services for which a fee is charged and fee increases by the Bank for these services may be outside the scope of PTCE 77-4, the Bank has requested relief for the transactions described in section I and II. Each of these transactions is discussed more fully in paragraphs 6, 7, 8, and 9 below. The exemption for each of the transactions involving HighMark is conditioned on the satisfaction of certain requirements and compliance with various general conditions which are also discussed below. It is the Bank's expressed intention that the description of these transactions and the conditions of the requested exemption with respect to such transactions were and will be applicable uniformly to HighMark and to any of the other Funds for which the Bank serves as the investment advisor and in which the Plans invest.

In-Kind Transfers to Funds

6. It is represented that the Bank has maintained CIFs in which the Plans

⁷ It is represented that the Plans currently are invested only in shares of HighMark that are not subject to 12b-1 Fees and that there is no present intention to change this arrangement. The Department notes that proposed relief is limited to the transactions described herein, and no relief has been provided in connection with the payment of distribution expenses, pursuant to Rule 12b-1 under the Investment Company Act.

have invested in accordance with Regulation 9 promulgated by the Comptroller of the Currency and the Internal Revenue Service. The Bank has decided to terminate certain CIFs and to offer to the Plans participating in such CIFs appropriate interests in certain Funds as alternative investments. Because interests in CIFs generally must be liquidated or withdrawn to effect distributions, the Bank believes that the interests of the Plans invested in CIFs would be better served by investment in shares of the Funds which can be distributed in-kind. Also, the Bank believes that the Funds offer the Plans numerous advantages as pooled investment vehicles. In this regard, the Plans, as shareholders of a Fund, have the opportunity to exercise voting and other shareholder rights.

The Plans, as shareholders of the Funds, as mandated by the SEC, periodically receive certain disclosures concerning the Funds: (1) a copy of the prospectus which is updated annually; (2) an annual report containing audited financial statements of the Funds and information regarding such Funds performance (unless such performance information is included in the prospectus of such Funds); (3) a semi-annual report containing unaudited financial statements; and (4) at the option of the Funds other pertinent information. With respect to the Plans, the Bank reports all transactions in shares of the Funds in periodic account statements provided the Second Fiduciary of each of the Plans. Further, the Bank maintains that the investment performance of the portfolios of the Funds can be monitored daily from information available in newspapers of general circulation.

In order to avoid the potentially large brokerage expenses that would otherwise be incurred, the Bank proposes that from time to time assets of the CIFs be transferred in-kind to corresponding portfolios of the Funds in exchange for shares of such Funds. In this regard, some Funds may, as in the case of HighMark, be in existence and operating at the time of the in-kind transfer of such assets. Some Funds may be created to assume the assets of the terminating CIF. Similarly, the Bank proposes that from time to time it may be appropriate for an individual Plan for which the Bank serves as fiduciary to transfer all or a *pro rata* share of its assets in-kind to any of the Funds in exchange for shares of such Funds. In this regard, for example, in the case of an in-kind exchange between an individual Plan whose portfolio consists of common stock, money market securities, and real estate, and a Fund

that, under its investment policy, invests only in common stock and money market securities, the exchange would involve all or a *pro rata* share of the common stock and money market securities held by the Plan, if such stock and securities are eligible for purchase by the Fund,⁹ and would not involve the transfer or exchange of the real estate holdings of such Plan. No brokerage commission or other fees or expenses (other than customary transfer charges paid to parties other than the Bank or its affiliates) have been or will be charged to the Plans or the CIFs in connection with the in-kind transfers of assets into the Funds and the acquisition of shares of the Funds by the Plans or the CIFs. Thus, in addition to retroactive relief, the Bank has requested prospective relief for transactions which would involve: (1) the in-kind transfer by the CIFs of all or a *pro rata* portion of the assets of any of the Plans held in such CIFs to the Funds in exchange for shares of the Fund which subsequently are distributed to the Plans; or (2) the in-kind transfer of all or a *pro rata* portion of the assets of any of the Plans held by the Bank in any capacity as fiduciary on behalf of such Plans to the Funds in exchange for shares of such Funds; provided that conditions described in section I above are satisfied.

The Bank maintains that the transfers in-kind of assets in exchange for shares of the Funds are ministerial transactions performed in accordance with pre-established objective procedures which are approved by the board of trustees of each Fund. Such procedures require that assets transferred to a Fund: (1) are consistent with the investment objectives, policies, and restrictions of the corresponding portfolios of such Fund, (2) satisfy the applicable requirements of the Investment Company Act of 1940 and the Code, (3) have a readily ascertainable market, (4) are liquid, and (5) are not subject to restrictions on resale. It is represented that assets which do not meet these requirements will be sold in the open market through an unaffiliated brokerage firm prior to any transfer in-kind. Further, as described in section I, prior to entering into an in-kind transfer each affected Plan receives certain disclosures from the Bank and approves such transaction in writing.

The Bank represents that valuation of assets transferred in-kind to the Funds will be established by reference to independent sources. In this regard, for

purposes of the transaction, it is represented that all assets transferred in-kind are valued in accordance with the valuation procedures described in Rule 17a-7(b) under the Investment Company Act of 1940, as amended from time to time or any successor rule, regulation, or similar pronouncement. Further, the Bank represents that within thirty (30) days of the completion of a transfer in-kind, it will provide to Plans written confirmation of the identity of each security valued under Rule 17a-7(b)(4), the price of each security, and the identity of each pricing service or market maker consulted in determining the value of the assets transferred. The securities subject to valuation under Rule 17(a)-7(b)(4) include all securities other than "reported securities," as the term is defined in Rule 11Aa3-1 under the Securities Exchange Act of 1934 (the 1934 Act), or those quoted on the NASDAQ system or for which the principal market is an exchange.

It is represented that the value of the assets transferred in-kind will be equal to the aggregate value of the corresponding portfolios shares of the Fund at the close of business on the date of the transaction. In this regard, it is represented that for all conversion transactions that occur after the date of this proposed exemption, the Bank, no later than ninety (90) days after completion of each in-kind transfer of assets of the Plans or the CIFs in exchange for shares of the Funds, will mail to the Second Fiduciary a written confirmation of the number of CIF units held by each affected Plan immediately before the conversion (and the related per unit value or the aggregate dollar value of the units transferred), and the number of shares in the Funds that are held by each affected Plan following the conversion (and the related per share net asset value or the aggregate dollar value of the shares received).

7. The Bank has requested retroactive relief, for the in-kind transfer to HighMark that occurred over the weekend of November 12, 1993. It is represented that on the weekend of November 12, 1993, all of the assets of five CIFs⁹, which were maintained by the Bank and in which the Plans held interests, were transferred to HighMark in exchange for an appropriate number of shares of certain portfolios of HighMark which have investment objectives and policies substantially identical to those of the CIFs. At the

same time, the five CIFs were terminated and the assets of each, then consisting of shares in portfolios of HighMark, were distributed in-kind to the Plans participating in such CIFs based on each Plan's *pro rata* share of the assets of the CIFs on the date of the transaction.

The Bank provided to the Second Fiduciary for each affected Plan disclosures that announced the termination of the CIFs, summarized the transaction, and otherwise complied with provisions of Section I. It is represented that based on these disclosures, the Second Fiduciary from each affected Plan approved in writing the transfer of the CIFs assets to the corresponding portfolios of HighMark, the investment of the assets of the Plans in shares of HighMark, and the receipt by the Bank of fees for services to HighMark and to the Plans. It is represented that the assets of Plans that did not approve investment in HighMark were withdrawn from the CIFs and held or invested in appropriate alternative investments in accordance with the terms of such Plans.

Prior to the transaction, the assets of the five CIFs were reviewed to confirm that such were appropriate investments for the corresponding portfolios of HighMark into which such assets were transferred. If any of the assets of the five CIFs were not appropriate for HighMark, it is represented that the Bank sold such assets in the open market through an unaffiliated brokerage firm prior to the transfer.

It is represented that the assets transferred by the five CIFs to HighMark consisted entirely of cash and marketable securities. For purposes of the transfer in-kind, the value of the securities in each of the five CIFs were determined based on market values as of the close of business on November 12, 1993, the last business date prior to the transfer. It is represented that the values were determined in a single valuation using the valuation procedures described in Rule 17a-7 under the Investment Company Act of 1940. In this regard, it is represented that the "current market price" for specific types of CIF securities involved in the transaction was determined as follows:

(1) If the security was a "reported security" as the term is defined in Rule 11Aa3-1 under the 1934 Act, the last sale price with respect to such security reported in the consolidated transaction reporting system (the Consolidated System) for November 12, 1993; or if there were no reported transactions in the Consolidated System that day, the average of the highest independent bid and the lowest independent offer for

⁹ It is represented that the CIFs maintained by the Bank which engaged in the transfer in-kind on November 12, 1993, were the Balanced Fund, the Flexible Bond Fund A, the Government Fund, the Income and Growth Equity Fund, and the Income Equity Fund A.

⁸ It is represented that a Fund's eligible investments are described under "Investment Policies and Fund Portfolio" of its prospectus

such security (reported pursuant to Rule 11Ac1-1 under the 1934 Act), as of the close of business on November 12, 1993; or

(2) If the security was not a reported security, and the principal market for such security was an exchange, then the last sale on such exchange on November 12, 1993; or if there were no reported transactions on such exchange that day, the average of the highest independent bid and lowest independent offer on such exchange as of the close of business on November 12, 1993; or

(3) If the security was not a reported security and was quoted in the NASDAQ system, then the average of the highest independent bid and lowest independent offer reported on Level 1 of NASDAQ as of the close of business on November 12, 1993; or

(4) For all other securities, the average of the highest independent bid and lowest independent offer as of the close of business on November 12, 1993, determined on the basis of reasonable inquiry. For securities in this category, the Bank represents that it obtained quotations from at least three sources that were either broker-dealers or pricing services independent of and unrelated to the Bank and, where more than one valid quotation was available, used the average of the quotations to value the securities, in conformance with interpretations by the SEC and practice under Rule 17a-7.

It is represented that the securities received by the corresponding portfolio of HighMark were valued by such portfolio for purposes of the transfer in the same manner and on the same day as such securities were valued by the CIFs. The per share value of the shares of each portfolio of HighMark issued to the CIFs were based on the corresponding portfolio's then current net asset value. It is represented that the aggregate value of the shares of the corresponding portfolio of HighMark issued to the CIFs were equal to the value of the assets (cash and marketable securities) transferred to such portfolio as of the close of business on November 12, 1993. It is also represented that the value of a Plan's investment in shares of a corresponding portfolio of HighMark as of the opening of business on the first business day after the transaction (November 15, 1993) was equal to the value of such Plan's investment in the CIF as of the close of business on the last business day prior to the transaction (November 12, 1993).

It is represented that not later than thirty (30) days after completion of the transaction (December 15, 1993), the Bank sent by regular mail a written confirmation of the transaction to each

affected Plan. Such confirmation contained: (1) the identity of each security that was valued in accordance with Rule 17a7(b)(4), as described in the paragraph 7(4) above; (2) the price of each such security for purposes of the transaction; and (3) the identity of each pricing service or market maker consulted in determining the value of such securities. To reiterate the above discussion, and in accordance with the conditions under section I, similar procedures will occur upon any future in-kind exchanges between CIFs maintained by the Bank, Plans, and the Funds.

Receipt of Fees From Funds

8. It is represented that the Bank currently invests assets of the Plans it manages in shares of the Funds in accordance with the conditions set forth in PTCE 77-4. Under certain conditions, PTCE 77-4 permits the Bank to receive fees from the Funds under either of two circumstances: (a) where a Plan does not pay any investment management, investment advisory, or similar fees with respect to the assets of such Plan invested in shares of a Fund for the entire period of such investment; or (b) where a Plan pays investment management, investment advisory, or similar fees to the Bank based on the total assets of such Plan from which a credit has been subtracted representing such Plan's *pro rata* share of such investment advisory fees paid to the Bank by the Fund. As such, it is represented that there are two levels of fees—those fees which the Bank charges to the Plans for serving as trustee with investment discretion or as investment manager (the Plan-level fees); and those fees the Bank charges to the Funds (the Fund-level fees) for serving as investment advisor, custodian, or service provider.

It is represented that at present the vast majority of Plans for which the Bank acts as a fiduciary do not pay any separate Plan-level investment management, investment advisory, or similar fees with respect to the assets of such Plans invested in shares of the Funds. A few Plans, however, continue to pay Plan-level investment management, investment advisory, and similar fees and receive credits which represent each of the Plans *pro rata* share of investment advisory fees paid to the Bank by the Funds. The Bank represents that Plan-level fees currently charged are paid monthly and are calculated as a percentage of the market value of the assets of a Plan with respect to which the Bank provides services. It is represented that Plan-level investment management, investment

advisory or similar fees for all of the services provided by the Bank, including services in connection with the automated cash "sweep" arrangement, are charged in the form of a single asset-based fee. It is represented that Plan-level fees are subject to annual minimums for administration and management expressed as flat dollar amounts and are subject to the application of certain "break points." In addition to the Plan-level fees for investment management, investment advisory, or similar services, a one-time fee (also a flat dollar amount) may be charged in connection with the establishment of an account for a Plan, and separate transaction fees may be charged for various administrative transactions, such as for example, a participant loan. It is represented that depending on the terms of the governing documents of the Plan, Plan-level fees are paid to the Bank either by the sponsor of the Plan or from the assets of the Plan.

As mentioned above, the Bank also receives Fund-level fees. Such Fund-level fees can be divided into: (1) fees paid to the Bank by a Fund for investment management, investment advisory, or similar services provided to such Fund, and (2) fees paid to the Bank for administrative, custodial, transfer, accounting, and other Secondary Services provided either to such Fund or to the distributor of shares of such Funds and its affiliates. For example, with respect to investment management/advisory services and Secondary Services, the current fee arrangements between the Bank and HighMark provide for: (1) MERUS, a division of the Bank, to receive fees from HighMark for acting as investment advisor, (2) the Bank to receive custodian fees from HighMark, (3) the Bank to receive fees from Winsbury for serving as sub-administrator to HighMark, and (4) the Bank to receive fees from Winsbury Services for services as sub-accountant and sub-transfer agent provided to HighMark. It is represented that this compensation paid to the Bank for investment advisory services and Secondary Services is in accordance with various agreements between Winsbury, Winsbury Service, HighMark, and the Bank. In this regard, it is represented that the HighMark Trustees and the shareholders of HighMark approve the compensation that the Bank receives from HighMark. Also, the HighMark Trustees approve any changes in the compensation paid to the Bank for services rendered to HighMark.

It is represented that the Fund-level fees from HighMark are computed daily and billed monthly. The Bank

represents that at the end of each month and promptly upon receipt of the Fund-level fees from HighMark, for those Plans which pay to the Bank Plan-level investment management, investment advisory, or similar fees, the Bank currently credits to each Plan its *pro rata* share of all investment management, investment advisory, or similar fees charged by the Bank to HighMark.

9. Under the fee structure proposed in this exemption, it is represented that the arrangement for Plan-level fees where assets of the Plans managed by the Bank are invested in the Funds is different in several respects from that described in paragraph 8 above. In this regard, a separate Plan-level fee will be charged to the Plans for basic administrative services not including investment management.¹⁰ Such administrative services would include, among others, the Bank's acting as custodian of the assets of a Plan, maintaining the records of a Plan, preparing periodic reports concerning the status of the Plan and its assets, and accounting for contributions, benefit distributions, and other receipts and disbursements. It is represented that these functions performed by the Bank on the Plan-level are separate and distinct from those performed on the Fund-level by the Bank, by Winsbury, and by Winsbury Services.

It is represented that the Bank will continue to receive compensation from the Plans for investment management services provided with respect to assets of the Plans *not* invested in shares of any of the Funds. However, under the proposed fee structure, the Bank will no longer credit to any of the Plans their *pro rata* share of the investment advisory fees, as described in paragraph 8 above, because the Plans will no longer pay Plan-level fees to the Bank for investment advisory services with respect to any of the assets of the Plans invested in shares of any of the Funds. Instead, the compensation received by

the Bank for investment advisory services will be that which is paid by the Funds to the Bank for such services rendered to such Funds. In addition, the Bank will continue to retain fees for providing Secondary Services to the Funds.

The applicant maintains that this proposed fee arrangement complies with PTCE 77-4. However, there is one difference from PTCE 77-4 requested by the Bank for which an exemption is required. In this regard, one of the requirements of PTCE 77-4 has been that any change in any of the rates of fees would require prior written approval by the Second Fiduciary of the Plans participating in the Funds. The applicant maintains that where many Plans participate in a Fund, the addition of a service or any good faith increase in fees could not be implemented until written approval of such change is obtained from every Second Fiduciary. The applicant proposes an alternative which the Bank maintains provides the basic safeguards for the Plans and is more efficient, cost effective, and administratively feasible than those contained in PTCE 77-4.

It is represented that in the event of an increase in the rate of any investment management fees, investment advisory fees, or similar fees, the addition of a Secondary Service for which a fee is charged, or an increase in the fees for Secondary Services paid by the Funds to the Bank over an existing rate that had been authorized by the Second Fiduciary, the Bank will provide, at least thirty (30) days in advance of the implementation of such additional service or fee increase, to the Second Fiduciary of all the Plans invested in such Fund a written notice of such additional service or fee increase, (which may take the form of a proxy statement, letter, or similar communication that is separate from the prospectus of the Fund and which explains the nature and amount of the additional service or the nature and amount of the increase in fees). In this regard, such increase in fees for Secondary Services can result either from an increase in the rate of such fee or from the decrease in the number or kind of services performed by the Bank for such fee over that which had been authorized by the Second Fiduciary of a Plan. It is represented that providing notice in this way will give the Second Fiduciary of each of the Plans adequate opportunity to decide whether or not to continue the authorization of a Plan's investment in any of the portfolios of the Funds in light of the increase in investment management fees, investment advisory fees, or similar

fees, the additional Secondary Service for which a fee is charged, or the increase in fees for any Secondary Services. In addition, the Bank represents that such fee increase will be disclosed to the Secondary Fiduciaries in a supplement to the Fund's prospectus in the case of an increase in fees for investment management, investment advisory, or similar services and in the Fund's Statement of Additional Information in the case of an additional Secondary Service for which a fee is charged or an increase in the fees for Secondary Services.

10. It is represented that the written notice of an additional service for which a fee is charged or a fee increase, as described in paragraph 9 above, will be accompanied by a Termination Form, as defined in paragraph (i) of section III, and by instructions on the use of such form, as described in paragraph (m) of section II, which expressly provide an election to the Second Fiduciaries to terminate at will any prior authorizations without penalty to the Plans. In addition, it is represented that the Second Fiduciary will be supplied with a Termination Form annually during the first quarter of each calendar year, beginning with the first quarter of the calendar year that begins after the date the grant of this proposed exemption is published in the **Federal Register** and continuing for each calendar year thereafter, regardless of whether there have been any changes in the fees payable to the Bank or changes in other matters in connection with services rendered to the Funds. However, if the Termination Form has been provided to the Second Fiduciary in the event of an increase in the rate of any investment management fees, investment advisory fees, or similar fees, an addition of a Secondary Service for which a fee is charged, or an increase in any fees for Secondary Services paid by the Fund to the Bank, then such Termination Form need not be provided again to the Second Fiduciary until at least six months have elapsed, unless such Termination Form is required to be sent sooner as a result of another increase in any investment management fees, investment advisory fees, or similar fees, the addition of a Secondary Service for which a fee is charged, or an increase in any fees for Secondary Services.

The Termination Form will contain instructions regarding its use which will state expressly that the authorization is terminable at will by a Second Fiduciary, without penalty to any Plan, and that failure to return the form will be deemed to be an approval of the additional Secondary Service or the

¹⁰ The fact that certain transactions and fee arrangements are the subject of an administrative exemption does not relieve the fiduciaries of the Plans from the general fiduciary responsibility provisions of section 404 of the Act. Thus, the Department cautions the fiduciaries of the Plans investing in the Funds that they have an ongoing duty under section 404 of the Act to monitor the services provided to the Plans to assure that the fees paid by the Plans for such services are reasonable in relation to the value of the services provided. Such responsibilities would include determinations that the services provided are not duplicative and that the fees are reasonable in light of the level of services provided.

In addition, the Department notes that the combined total of all fees received by the Bank directly or indirectly from the Plan for the provision of services to the Plan and/or to the Fund should not be in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act.

increase in the rate of any fees and will result in the continuation of all authorizations previously given by such Second Fiduciary. It is represented that termination by any Plan of authorization to invest in the Funds will be effected by the Bank selling the shares of the Fund held by the affected Plan within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of the Termination Form or any other written notice of termination. If, due to circumstances beyond the control of the Bank, the sale cannot be executed within one business day, the Bank shall have one additional business day to complete such sale.

11. It is represented that the rates paid by each of the portfolios of the Funds to the Bank for services rendered may differ depending on the fee schedule for each portfolio and on the daily net assets in each portfolio. The investment advisory fees paid to the Bank by the Funds will be based on the different fee rates of each of the portfolios into which the assets of the Plans are allocated. For example, for services provided to the Money Market Portfolios, the California Tax Free Fund, and the Tax Free Fund, the Bank receives the following fees from HighMark based on each portfolio's average daily net assets: (a) .40% of the first \$500 million; (b) .35% of the next \$500 million; and (c) .30% of the remaining average daily net assets. For services provided to the Non-Money Market Portfolios, the Bank receives the following fees from HighMark based on each portfolio's average daily net assets: (a) 1.00% of the first \$40 million; and (b) .60% on the remaining average daily net assets. It is represented that the Bank currently allocates investments by the Plans among the portfolios offered by HighMark, and proposes to continue to allocate the assets of the Plans among the portfolios of HighMark and/or any of the Funds under the terms of this proposed exemption.

It is represented that the impact of the change in fee structures, described in paragraph 9 above, on aggregate fees received by the Bank is difficult to determine, because various factors and variables are unique to each Plan. These factors include the size of the Plan, the extent to which Plan assets are invested in the Funds, and the application of certain "break points" in the schedule of Plan-level fees. Further, Fund size and the application of certain "break points" in the rate schedule of Fund-level fees, the identity of the particular investment portfolio of the Fund into which the Plan assets are allocated, and

voluntary waivers by the Bank of Fund-level fees are likely to be different in each situation and may affect the aggregate amount of fees received by the Bank. In this regard, it is represented that the combined total of all Plan-level and Fund-level fees received by the Bank for the provision of services to the Plans and to the Funds, respectively, are not in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act.

12. The exemption is subject to satisfaction of certain general conditions. Chief among such conditions is the requirement that the proposed transactions are subject to the prior authorization of a Second Fiduciary, acting on behalf of each of the Plans, who has been provided with full written disclosure by the Bank. It is represented that the Second Fiduciary will generally be the administrator, sponsor, or a committee appointed by the sponsor to act as a named fiduciary for a Plan.

With respect to disclosure, the Second Fiduciary of such Plan will receive in writing in advance of the investment by a Plan in any of the Funds: (1) a current prospectus for each portfolio of each of the Funds in which such Plan may invest, (2) a statement describing the investment management fees, investment advisory fees, or similar fees, any fees for Secondary Services, and all other fees to be charged to or paid by the Plan and by such Funds to the Bank, including the nature and extent of any differential between the rates of such fees, (3) the reasons why the Bank may consider such investment(s) to be appropriate for the Plan, (4) a statement describing whether there are any limitations applicable to the Bank with respect to which assets of a Plan may be invested in the Funds, and, if so, the nature of such limitations, and (5) upon request of the Second Fiduciary a copy of the proposed exemption and/or the final exemption, if granted.

In addition to the disclosures provided to the Plan prior to investment in any of the Funds, the Bank represents that it will routinely provide at least annually to the Second Fiduciary updated prospectuses of the Funds in accordance with the requirements of the Investment Company Act of 1940 and the SEC rules promulgated thereunder. Further, the Second Fiduciary will be supplied, upon request, with a report or statement (which may take the form of the most recent financial report of such Funds, the current statement of additional information, or some other written statement) which contains a description of all fees paid by the Fund.

It is represented that the Bank does not now execute nor in the future intend to execute securities brokerage transactions for the investment portfolios of any of the Funds, except as and to the extent permitted by the Investment Company Act of 1940 and applicable rules of the Securities and Exchange Commission. In the event the Bank ever performs brokerage services for which a fee is paid to the Bank by the investment portfolio of any of the Funds, the Bank represents that it will at least thirty (30) days in advance of the implementation of such additional service provide a written notice which explains the nature of such additional brokerage service and the amount of the fees. Further, the Bank represents that it will provide at least annually to the Second fiduciary of any Plan that invests in such Funds with a written disclosure indicating (a) the total, expressed in dollars, of brokerage commissions of each Fund's investment portfolio that are paid to the Bank by such Fund; (b) the total, expressed in dollars, of brokerage commissions of each Fund's investment portfolio that are paid by such Fund to brokerage firms unrelated to the Bank; (c) the average brokerage commissions per share, expressed as cents per share, paid to the Bank by each portfolio of a Fund, and (d) the average brokerage commissions per share, expressed as cents per share, paid by each portfolio of a Fund to brokerage firms unrelated to the Bank.

On the basis of the information disclosed, it is represented that the Second Fiduciary will authorize in writing (i) the investment of assets of the Plans in shares of the Fund in connection with the transactions set forth herein; (ii) the investment portfolios of the Funds in which the assets of the Plans may be invested; and (iii) the compensation received by the Bank in connection with its services to the Funds. It is represented that written authorization will extend to only those investment portfolios of the Funds with respect to which the Second Fiduciary has received the written disclosures referred to above and which are specifically mentioned in such authorization. Having obtained the authorization of the Second Fiduciary, the Bank will be permitted to invest the assets of a Plan among the portfolios and in the manner covered by the authorization, subject to satisfaction of the other terms and conditions of this proposed exemption. However, the Bank will not be permitted to invest assets of a Plan in any portfolio not specifically mentioned in the written

authorization. For example, if the written authorization of the Second Fiduciary covered only three of six portfolios then existing, the Bank could only invest the assets of such Plans in those three portfolios specifically authorized. Further, if a new portfolio were established under any of the Funds, the Bank could invest assets of a Plan in such new portfolio only after providing the required disclosures and obtaining from the Second Fiduciary a separate written authorization which specifically mentions the new portfolio.

13. The receipt of fees, as described above, are generated in connection with the investment in the Funds by the Plans. These investments are the result of purchases of shares in the Funds and exchanges of assets of the Plans, including those in CIFs, for shares in the Funds.

It is represented: (1) that Plans and other investors will purchase or sell shares in the Funds in accordance with standard procedures described in the prospectus for each portfolio of the Funds; (2) that the Plans will pay no sales commissions or redemption fees in connection with purchase or sales of shares in the Funds by the Plans; (3) that the Bank will not purchase from or sell to any of the Plans shares of any of the Funds; and (4) the price paid or received by the Plans for shares of the Funds will be the net asset value per share at the time of such purchase or sale and will be the same price as any other investor would have paid or received at that time.¹¹

14. Purchases and sales of shares in any of the Funds by the Plans may also occur in connection with daily automated cash "sweep" arrangements. However, agreement to such arrangement is not a condition for the Plan otherwise choosing to invest in shares of the Fund, nor will the reverse be required.

It is represented that at the time the application was filed, all of the Plans served by the Bank had elected to

participate in automated cash "sweep" arrangements with HighMark. Further, it is represented that the "sweep" procedures, as described below with respect to HighMark, will remain in effect under the proposed exemption for any of the Funds.

Under the automated cash "sweep" arrangement, a Plan may participate in the "sweep" program only with the initial written approval of the Second Fiduciary and only after certain disclosures have been provided by the Bank. If such approval is given, cash balances of the Plan held from time to time thereafter pending other investment or distribution are invested automatically in shares of one or more of HighMark's Money Market Portfolios selected by the Second Fiduciary on behalf of a Plan at the time of the initial authorization. It is represented that the automated cash "sweep" arrangement would not involve shares of HighMark's Non-Money Market Portfolios.

After the Money Market Portfolios have been selected by the Second Fiduciary on behalf of the Plan, otherwise uninvested cash down to the last \$1.00 balance of the Plans may be invested automatically on a nightly basis. It is represented that the Bank has no discretion with respect to the timing of the "sweep" either into or out of HighMark. Under the automated cash "sweep" arrangement, the Bank's computerized cash management system automatically scans the accounts of the Plans, as of the end of each business day to determine whether such accounts have positive or negative net cash balances. Based on this information the system automatically invests the cash of the Plans having positive balances in shares of the selected Money Market Portfolios. In the case of a Plan having a negative cash balance, the system automatically liquidates HighMark shares as necessary to eliminate such negative balance.

It is represented that Plans may terminate their participation in the automated cash "sweep" arrangement and withdraw at any time by notifying the Bank. Such termination will be affected by the Bank selling the shares of HighMark held by the Plan requesting termination within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of the Termination Form or any other written notice of termination. However, if due to circumstances beyond the control of the Bank, the sale of shares of such Plan cannot be executed within one business day, the Bank shall have one additional business day to complete such sale.

It is represented that no fee, charge, or penalty of any kind is charged in connections with a termination by a Plan of participation in the automated cash "sweep arrangement" in HighMark or in any of the Funds. It is further represented that the Bank does not charge separate or additional fees to Plans in order to participate in the daily automated cash "sweep" arrangement, nor is such additional compensation contemplated by the proposed exemption.¹²

15. In summary, the Bank represents that the proposed transactions meet the statutory criteria of section 408(a) of the Act because:

(a) Neither the Plans nor the CIFs have paid or will pay sales commissions or redemption fees in connection with the in-kind transfer of assets to the Funds or in connection with purchases or sales by the Plans of shares of the Funds, including purchases and sales handled through daily automated cash "sweep" arrangements;

(b) The Plans or the CIFs have received and will receive shares of the Funds that are equal in value to the assets of the Plans or the CIFs exchanged for such shares, as determined in a single valuation performed in the same manner and at the close of business on the same day in accordance with the procedures set forth in Rule 17a-7 under the Investment Company Act of 1940, as amended from time to time or any successor rule, regulation, or similar pronouncement;

¹² The Department in a letter, dated August 1, 1996, to Robert S. Plotkin, Assistant Director, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, addressed the application of section 408(b)(2) of the Act to arrangements involving "sweep services." In that letter the Department set forth several examples to illustrate various circumstances under which violations of section 408(b) of the Act would arise with respect to such arrangements. Conversely, the letter provided that, if a bank provides "sweep" services without the receipt of additional compensation or other consideration (other than reimbursement of direct expenses properly and actually incurred in the performance of such services), then the provision of "sweep" services by the bank would not, in itself, constitute a violation of section 408(b) of the Act. Moreover, including "sweep" services under a single fee arrangement for investment management services which is calculated as a percentage of the market value of the total assets under management would not, in itself, constitute an act described in section 406(b)(1), because the bank would not be exercising its fiduciary authority or control to cause a plan to pay an additional fee.

In addition, the letter also discusses the applicability of the statutory exemptions under section 408(b)(6) fees for "ancillary services" and under section 408(b)(8) for collective trust funds maintained by such bank of the Act to such "sweep" service arrangements.

¹¹ In this regard, it is represented that the value of HighMark's shares and the value of each of HighMark's portfolios are determined on a daily basis. In the case of the Non-Money Market Portfolios, assets are valued at fair or market value, as required by Rule 2a-4 under the Investment Company Act. In the case of the Money Market Portfolios, the assets are valued based on the amortized cost method authorized by SEC Rule 2a-7, in order to maintain net asset value at \$1.00 per share. Both the Money Market Portfolios and the Non-Money Market Portfolios determine the net asset value per share for purposes of pricing purchases and sales by dividing the value of all securities, determined by a method as set forth in the prospectus for each HighMark portfolio, and other assets belonging to each of the portfolios, less the liabilities charged to each portfolio, by the number of each portfolio's outstanding shares.

(c) Not later than thirty (30) days after completion of each in-kind transfer of assets in exchange for share of the Funds, the Second Fiduciaries for affected Plans have received and will receive written confirmation of the assets involved in the exchange, the price of such assets, and the identity of the pricing service or market maker consulted;

(d) For all conversion transactions that occur after the date of this proposed exemption, the Bank, no later than ninety (90) days after completion of each in-kind transfer of assets of the Plans or the CIFs in exchange for shares of the Funds, will mail to the Second Fiduciary a written confirmation of the number of CIF units held by each affected Plan immediately before the conversion (and the related per unit value or the aggregate dollar value of the units transferred), and the number of shares in the Funds that are held by each affected Plan following the conversion (and the related per share net asset value or the aggregate dollar value of the shares received);

(e) The price that has been or will be paid or received by the Plans for shares in the Funds is the net asset value per share at the time of the transaction and is the same price for the shares which would have been paid or received by any other investor at that time;

(f) The Bank, its affiliates, and officers or directors have not and will not purchase from or sell to any of the Plans shares of any of the Funds;

(g) The combined total of all fees received by the Bank for the provision of services to the Plans, and in connection with the provision of services to any of the Funds in which the Plans may invest, has not been and will not be in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act;

(h) The Bank has not and will not receive any 12b-1 Fees in connection with the transactions;

(i) Prior to investment by a Plan in any of the Funds, in connection with transactions, the Second Fiduciary has received and will receive a full and detailed written disclosure of information concerning such Fund;

(j) subsequent to the investment by a Plan in any of the Funds, the Bank will provide the Second Fiduciary of such Plan, among other information, at least annually with an updated copy of the prospectus for each of the Funds in which the Plan invests;

(k) in the event such Fund places brokerage transactions with the Bank, the Bank will provide the Second Fiduciary of such Plan at least annually with a statement specifying the total,

expressed in dollars, of brokerage commissions of each Fund's investment portfolio that are paid by such Fund to the Bank and to unrelated brokerage firms and the average brokerage commissions per share, expressed as cents per share, by each portfolio of a Fund paid to the Bank and to brokerage firms unrelated to the Bank;

(l) On the basis of the disclosures, the Second Fiduciary has authorized and will authorize the transactions;

(m) The authorization by the Second Fiduciary has been and will be terminable at will without penalty to such Plans, and has been and will be effected within one business day following receipt by the Bank, either by mail, hand delivery, facsimile, or other available means at the option of the Second Fiduciary, of the Termination Form or any other written notice of termination, unless circumstances beyond the control of the Bank delay execution for no more than one additional business day;

(n) The Plans do not pay any investment management, investment advisory, or similar fees to the Bank with respect to any of the assets of such Plans which are invested in shares of any of the Funds;

(o) the Second Fiduciary has received and will receive a written notice accompanied by a Termination Form with instructions regarding the use of such form, at least thirty (30) days in advance of the implementation of any increase in the rate of any fees for investment management, investment advisory, or similar fees, any additional Secondary Service for which a fee is charged, or any increase in fees for Secondary Services that the Bank provides to the Funds; and

(p) All dealings between the Plans and any of the Funds have been and will on a basis no less favorable to such Plans than dealings between the Funds and other shareholders holding the same class of shares as the Plans.

Notice to Interested Persons

Those persons who may be interested in the pendency of the requested exemption include the fiduciaries of Plans which have invested, as of the effective date of this exemption, in HighMark and/or in any of the Funds, where the Bank served as investment adviser to such Funds and also served in any capacity as fiduciary for such Plans. In addition, it is represented that many other Plans for which the Bank serves in any capacity as a fiduciary may from time to time invest in HighMark and/or in any of the Funds to which the Bank may serve as investment adviser in the future. For

this reason, the Bank does not know the number of Plans which may therefore be affected by this proposed exemption. Accordingly, the Department has determined that the only practical form of providing notice to interested persons is the distribution by the Bank by first class mail of a copy of the notice of pendency of this proposed exemption (the Notice) within thirty (30) days of the date of the publication of such Notice in the Federal Register to the fiduciaries of any of the Plans which are invested, on the date of the publication of the Notice in the Federal Register, in HighMark and/or any the Funds to which the Bank serves as investment adviser. Such distribution to interested persons shall include a copy of the Notice, as published in the Federal Register, plus a copy of the supplemental statement, as required, pursuant to 29 CFR 2570.43(b)(2), which shall inform such interested persons of their right to comment and to request a hearing. The Bank also represents that it will provide a copy of the proposed exemption and/or a copy of the final exemption, if granted, to any Second Fiduciary of a Plan upon request.

FOR FURTHER INFORMATION CONTACT:
Angelena C. Le Blanc of the Department, telephone (202) 219-8883 (this is not a toll-free number.)

Marshall & Ilsley Trust Company Located in Milwaukee, Wisconsin; Proposed Exemption

[Application No. D-9257]

The Department is considering granting an exemption under the authority of section 408(a) of the Act and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 CFR Part 2570, Subpart B (55 FR 32836, 32847, August 10, 1990).

Section I—Exemption for In-Kind Transfer of CIF Assets

If the exemption is granted, the restrictions of section 406(a) and 406(b) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1)(A) through (F) of the Code, shall not apply, as of November 20, 1992, to the in-kind transfer of assets of plans for which Marshall & Ilsley Trust Company or an affiliate (collectively, M&I) serves as a fiduciary (the Client Plans), other than plans established and maintained by M&I, that are held in certain collective investment funds maintained by M&I (the CIFs), in exchange for shares of the Marshall Funds, Inc. (the Funds), an open-end investment company registered under the Investment Company Act of 1940

(the 1940 Act), for which M&I acts as investment adviser, custodian, and/or shareholder servicing agent, in connection with the termination of such CIFs, provided that the following conditions and the general conditions of Section III below are met:

(a) No sales commissions or other fees are paid by the Client Plans in connection with the purchase of Fund shares through the in-kind transfer of CIF assets and no redemption fees are paid in connection with the sale of such shares by the Client Plans to the Funds.

(b) Each Client Plan receives shares of a Fund which have a total net asset value that is equal to the value of the Client Plan's pro rata share of the assets of the CIF on the date of the transfer, based on the current market value of the CIF's assets, as determined in a single valuation performed in the same manner at the close of the same business day, using independent sources in accordance with Rule 17a-7(b) of the Securities and Exchange Commission under the 1940 Act and the procedures established by the Funds for the valuation of such assets. Such procedures must require that all securities for which a current market price cannot be obtained by reference to the last sale price for transactions reported on a recognized securities exchange or NASDAQ be valued based on an average of the highest current independent bid and lowest current independent offer, as of the close of business on the Friday preceding the weekend of the CIF transfers, determined on the basis of reasonable inquiry from at least three sources that are broker-dealers or pricing services independent of M&I.

(c) A second fiduciary who is independent of and unrelated to M&I (the Second Fiduciary) receives advance written notice of the in-kind transfer of assets of the CIFs and full written disclosure of information concerning the Funds (including a current prospectus for each of the Funds and a statement describing the fee structure) and, on the basis of such information, authorizes in writing the in-kind transfer of the Client Plan's CIF assets to a corresponding Fund in exchange for shares of the Fund.

(d) For all subsequent transfers of CIF assets to a Fund following the publication of this proposed exemption in the *Federal Register*, M&I sends by regular mail to each affected Client Plan a written confirmation, not later than 30 days after completion of the transaction, containing the following information:

(1) The identity of each security that was valued for purposes of the

transaction in accordance with Rule 17a-7(b)(4);

(2) The price of each such security involved in the transaction; and

(3) The identity of each pricing service or market maker consulted in determining the value of such securities.

(e) For all subsequent transfers of CIF assets to a Fund following the publication of this proposed exemption in the *Federal Register*, M&I sends by regular mail to the Second Fiduciary no later than 90 days after completion of each transfer a written confirmation that contains the following information:

(1) The number of CIF units held by the Client Plan immediately before the transfer, the related per unit value, and the total dollar amount of such CIF units; and

(2) The number of shares in the Funds that are held by the Client Plan following the transfer, the related per share net asset value, and the total dollar amount of such shares.

(f) The conditions set forth in paragraphs (e), (f) and (i) of Section II below are satisfied.

Section II—Exemption for Receipt of Fees

If the exemption is granted, the restrictions of sections 406(a) and 406(b) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1) (A) through (F) of the Code, shall not apply as of November 20, 1992, to: (1) The receipt of fees by M&I from the Funds for acting as an investment adviser to the Funds in connection with the investment by the Client Plans in shares of the Funds; and (2) the receipt and proposed retention of fees by M&I from the Funds for acting as custodian and shareholder servicing agent to the Funds as well as for any other services to the Funds which are not investment advisory services (i.e. "secondary services") in connection with the investment by the Client Plans in shares of the Funds, provided that the following conditions and the general conditions of Section III are met:

(a) No sales commissions are paid by the Client Plans in connection with the purchase or sale of shares of the Funds and no redemption fees are paid in connection with the sale of shares by the Client Plans to the Funds.

(b) The price paid or received by a Client Plan for shares in a Fund is the net asset value per share at the time of the transaction, as defined in Section IV(e), and is the same price which would have been paid or received for the shares by any other investor at that time.

(c) Neither M&I nor an affiliate, including any officer or director of M&I, purchases or sells shares of the Funds to any Client Plan.

(d) Each Client Plan receives a credit, either through cash or the purchase of additional shares of the Funds pursuant to an annual election made by the Client Plan, of such Plan's proportionate share of all fees charged to the Funds by M&I for investment advisory services, within no more than one business day of the receipt of such fees by M&I.

(e) The combined total of all fees received by M&I for the provision of services to a Client Plan, and in connection with the provision of services to the Funds in which the Client Plan may invest, are not in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act.

(f) M&I does not receive any fees payable pursuant to Rule 12b-1 under the 1940 Act in connection with the transactions.

(g) The Client Plans are not employee benefit plans sponsored or maintained by M&I.

(h) The Second Fiduciary receives full and detailed written disclosure of information concerning the Funds (including a current prospectus for each of the Funds and statement describing the fee structure) in advance of any investment by the Client Plan in a Fund.

(i) On the basis of the information described above in paragraph (h), the Second Fiduciary authorizes in writing the investment of assets of the Client Plan in each particular Fund, the fees to be paid by such Funds to M&I, and the purchase of additional shares of a Fund by the Client Plan with the fees credited to the Client Plan by M&I.

(j) All authorizations made by a Second Fiduciary regarding investments in a Fund and the fees paid to M&I are subject to an annual reauthorization wherein any such prior authorization referred to in paragraph (i) shall be terminable at will by the Client Plan, without penalty to the Client Plan, upon receipt by M&I of written notice of termination. A form expressly providing an election to terminate the authorization described in paragraph (i) above (the Termination Form) with instructions on the use of the form must be supplied to the Second Fiduciary no less than annually. The instructions for the Termination Form must include the following information:

(1) The authorization is terminable at will by the Client Plan, without penalty to the Client Plan, upon receipt by M&I of written notice from the Second Fiduciary; and

(2) Failure to return the Termination Form will result in continued authorization of M&I to engage in the transactions described in paragraph (i) on behalf of the Client Plan.

(k) The Second Fiduciary of each Client Plan invested in a particular Fund receives full written disclosure, in a statement separate from the Fund prospectus, of any proposed increases in the rates of fees charged by M&I to the Funds for secondary services (as defined in Section IV(h) below) at least 30 days prior to the effective date of such increase, accompanied by a copy of the Termination Form, and receives full written disclosure in a Fund prospectus or otherwise of any increases in the rates of fees charged by M&I to the Funds for investment advisory services even though such fees will be credited as required by paragraph (d) above.

(l) All dealings between the Client Plans and the Funds are on a basis no less favorable to the Client Plans than dealings with other shareholders of the Funds.

Section III—General Conditions

(a) M&I maintains for a period of six years the records necessary to enable the persons described below in paragraph (b) to determine whether the conditions of this exemption have been met, except that: (1) a prohibited transaction will not be considered to have occurred if, due to circumstances beyond the control of M&I, the records are lost or destroyed prior to the end of the six-year period, and (2) no party in interest other than M&I shall be subject to the civil penalty that may be assessed under section 502(i) of the Act or to the taxes imposed by section 4975 (a) and (b) of the Code if the records are not maintained or are not available for examination as required by paragraph (b) below.

(b) (1) Except as provided in paragraph (b)(2) and notwithstanding any provisions of section 504 (a)(2) and (b) of the Act, the records referred to in paragraph (a) are unconditionally available at their customary location for examination during normal business hours by—

(i) Any duly authorized employee or representative of the Department or the Internal Revenue Service.

(ii) Any fiduciary of the Client Plans who has authority to acquire or dispose of shares of the Funds owned by the Client Plans, or any duly authorized employee or representative of such fiduciary, and

(iii) Any participant or beneficiary of the Client Plans or duly authorized employee or representative of such participant or beneficiary;

(2) None of the persons described in paragraph (b)(1)(ii) and (iii) shall be authorized to examine trade secrets of M&I, or commercial or financial information which is privileged or confidential.

Section IV—Definitions

For purposes of this proposed exemption:

(a) The term "M&I" means the Marshall & Ilsley Trust Company and any affiliate thereof as defined below in paragraph (b) of this section.

(b) An "affiliate" of a person includes:

(1) Any person directly or indirectly through one or more intermediaries, controlling, controlled by, or under common control with the person;

(2) Any officer, director, employee, relative, or partner in any such person; and

(3) Any corporation or partnership of which such person is an officer, director, partner, or employee.

(c) The term "control" means the power to exercise a controlling influence over the management or policies of a person other than an individual.

(d) The term "Fund" or "Funds" shall include the Marshall Funds, Inc., or any other diversified open-end investment company or companies registered under the 1940 Act for which M&I serves as an investment adviser and may also serve as a custodian, shareholder servicing agent, transfer agent or provide some other "secondary service" (as defined below in paragraph (h) of this Section) which has been approved by such Funds.

(e) The term "net asset value" means the amount for purposes of pricing all purchases and sales calculated by dividing the value of all securities, determined by a method as set forth in the Fund's prospectus and statement of additional information, and other assets belonging to the Fund or portfolio of the Fund, less the liabilities charged to each such portfolio or Fund, by the number of outstanding shares.

(f) The term "relative" means a "relative" as that term is defined in section 3(15) of the Act (or a "member of the family" as that term is defined in section 4975(e)(6) of the Code), or a brother, a sister, or a spouse of a brother or a sister.

(g) The term "Second Fiduciary" means a fiduciary of a Client Plan who is independent of and unrelated to M&I. For purposes of this exemption, the Second Fiduciary will not be deemed to be independent of and unrelated to M&I if:

(1) Such fiduciary directly or indirectly controls, is controlled by, or is under common control with M&I;

(2) Such fiduciary, or any officer, director, partner, employee, or relative of the fiduciary is an officer, director, partner or employee of M&I (or is a relative of such persons);

(3) Such fiduciary directly or indirectly receives any compensation or other consideration for his or her own personal account in connection with any transaction described in this exemption.

If an officer, director, partner or employee of M&I (or relative of such persons), is a director of such Second Fiduciary, and if her or she abstains from participation in: (i) The choice of the Client Plan's investment adviser, (ii) the approval of any such purchase or sale between the Client Plan and the Funds, and (iii) the approval of any change in fees charged to or paid by the Client Plan in connection with any of the transactions described in Sections I and II above, then paragraph (g)(2) of this section shall not apply.

(h) The term "secondary service" means a service other than an investment management, investment advisory, or similar service, which is provided by M&I to the Funds. However, for purposes of this exemption, the term "secondary service" will not include any brokerage services provided to the Funds by M&I for the execution of securities transactions engaged in by the Funds.

(i) The term "Termination Form" means the form supplied to the Second Fiduciary which expressly provides an election to the Second Fiduciary to terminate on behalf of a Client Plan the authorization described in paragraph (j) of Section II. Such Termination Form may be used at will by the Second Fiduciary to terminate an authorization without penalty to the Client Plan and to notify M&I in writing to effect a termination by selling the shares of the Funds held by the Client Plan requesting such termination within one business day following receipt by M&I of the form; provided that if, due to circumstances beyond the control of M&I, the sale cannot be executed within one business day, M&I shall have one additional business day to complete such sale.

EFFECTIVE DATE: If the proposed exemption is granted, the exemption will be effective November 20, 1992.

Summary of Facts and Representations

1. Marshall & Ilsley Trust Company (M&I Trust) is a Wisconsin corporation with its principal offices located at 770 North Water Street, Milwaukee,

Wisconsin, and is a subsidiary of Marshall & Ilsley Corporation (M&I Corp.), a bank holding company. M&I Corp. and various affiliates (referred to herein as "M&I"), serve as trustee, directed trustee, investment manager, or custodian for approximately 1,163 employee benefit plans. As of September 30, 1992, M&I had total assets of approximately \$25.3 million and total assets under management of approximately \$4.86 billion.

M&I represents that its status as a fiduciary with investment discretion for a Client Plan arises out of its relationship as a trustee or investment manager for such Plan, but does not result from the rendering of any investment advice to a Plan fiduciary that has investment discretion for the Client Plan. As a custodian or directed trustee of a Client Plan, M&I has custody of Plan assets, collects all income, performs bookkeeping and accounting services, generates periodic statements of account activity and other reports, and makes payments or distributions from the account as directed. However, M&I has no duty as custodian or directed trustee to review investments or make recommendations, acting only as directed by an authorized Second Fiduciary.

The Client Plans include various pension, profit sharing, and stock bonus plans as well as voluntary employees' beneficiary associations, supplemental unemployment benefit plans, simplified employee benefit plans, retirement plans for self-employed individuals (i.e., Keogh plans), and individual retirement accounts (IRAs).¹³ M&I, in its capacity as a fiduciary of the Client Plans, may exercise investment discretion for all or a portion of the assets of such Client Plans.

2. M&I requests an exemption for investments in a Fund which occur through an in-kind transfer of a Client Plan's pro rata share of assets from a terminating CIF to a corresponding Fund in exchange for shares of such Fund.¹⁴ M&I also requests an exemption

¹³ M&I states that only pension, profit sharing and Keogh plans were invested in the CIFs at the time of the transfers of assets from the CIFs to the Funds.

¹⁴ M&I is not requesting an exemption for any investment in the Funds by the M&I Plans. M&I represents that the M&I Plans may acquire or sell shares of the Funds pursuant to Prohibited Transaction Exemption 77-3 (PTE 77-3, 42 FR 18734, April 8, 1977). PTE 77-3 permits the acquisition or sale of shares of a registered, open-end investment company by an employee benefit plan covering only employees of such investment company, employees of the investment adviser or principal underwriter for such investment company, or employees of any affiliated person (as defined therein) of such investment adviser or principal underwriter, provided certain conditions are met. The Department is expressing no opinion

for the receipt of fees from the Funds in connection with the investment of assets of a Client Plan (including any assets of a Client Plan which were held in a terminating CIF) for which it acts as a trustee, directed trustee, investment manager, or custodian, in shares of the Funds in instances where M&I is an investment adviser, custodian, and shareholder servicing agent for the Funds. The exemption would include Client Plans for which M&I exercises investment discretion as well as Client Plans where investment decisions are directed by a Second Fiduciary.

The Client Plans' pro rata share of fees paid by the Funds to M&I for investment advisory services are credited to the Client Plans, in accordance with the conditions of the proposed exemption (as discussed in Item 7 below), with respect to the assets of the Client Plans involved in Fund investments. Any amounts received by M&I for serving as a custodian and shareholder servicing agent of the Funds are also currently credited to the Client Plans to the extent that such amounts exceed M&I's direct expenses for providing the service to the Funds. However, M&I proposes to retain such fees in the future. All investments in the Funds are made by M&I pursuant to an initial written authorization and an annual reauthorization of the investment by the Second Fiduciary. M&I invests assets of a Client Plan in any of the Funds for which it has received prior written authorization for such investment from the Second Fiduciary during the period that the authorization is effective.

3. The Funds are a Wisconsin corporation organized as an open-end investment company registered under the 1940 Act. The Funds currently consist of five Funds or "portfolios", each having a separate prospectus and representing a distinct investment vehicle. The shares of each Fund represent a proportionate interest in the assets of that Fund. The existing Funds include the Marshall Money Market Fund, the Marshall Government Income Fund, the Marshall Intermediate Bond Fund, the Marshall Short-Term Income Fund, and the Marshall Stock Fund. M&I states that additional Funds may be established in the future. Shares of the Funds are offered and sold to eligible investors. Certain shares, identified by each prospectus as Trust Shares, are offered to trust accounts of M&I as a means of acquiring an interest in a diversified portfolio of investments. M&I states that the Trust Shares are offered

in this proposed exemption regarding whether any transactions with the Funds by the M&I Plans would be covered by PTE 77-3.

to M&I's trust customers, including the Client Plans, under terms and conditions which are at least as favorable to such customers as the terms and conditions involved in any other class of Fund shares. If the proposed exemption is granted, the exemption would cover only investments by Client Plans in Trust Shares. Thus, all references herein to the transactions involving the Client Plans refer only to the Trust Shares described by the prospectus for each Fund.

Investments of Client Plan assets in the Funds occur either through a transfer of assets from a terminating CIF, the direct purchase of shares of the Funds for a Client Plan by M&I, the transfer by M&I of Client Plan assets from one Fund to another Fund, or a daily automated sweep of uninvested cash of a Client Plan by M&I into one or more Funds previously designated by the Client Plan for sweeping such cash.¹⁵ All such investments for the Client Plans are made pursuant to the Second Fiduciary's prior written authorization and annual reauthorization to M&I (as described in Item 8 below).

4. Federated Securities Corporation (FSC) is the principal distributor for all shares of the Funds including Trust Shares which are sold to the Client Plans.¹⁶ There are no fees for distribution expenses, pursuant to Rule 12b-1 under the 1940 Act, paid to FSC with respect to the Trust Shares. In addition, M&I does not and will not receive fees payable pursuant to Rule 12b-1 in connection with transactions involving any shares of the Funds. The Trust Shares are charged for certain

¹⁵ M&I states that an automated sweep of uninvested cash is currently available as a means of investment by the Client Plans into either the Marshall Money Market Fund, the Marshall Government Income Fund, and the Marshall Short-Term Income Fund.

¹⁶ According to the Fund prospectuses, investors may purchase shares of the Funds through M&I Brokerage Services, Inc. (M&I Brokerage Services), an affiliate of M&I Corp. However, the involvement of M&I Brokerage Services in selling Fund shares is limited to transactions through M&I "retail" accounts—i.e., accounts other than those accounts handled by M&I Trust or other M&I affiliated trust companies. M&I represents that purchases and sales of Fund shares for all M&I trust accounts, including the Client Plans, are handled by M&I trust officers dealing directly with Federated, the Funds' distributor.

In addition, M&I Brokerage Services does not provide portfolio execution services for the Funds. M&I states that securities transactions for a Fund's portfolio are executed by broker-dealers unrelated to M&I and do not generate commissions or other fees to M&I Brokerage Services or any affiliate. The Department notes that for purposes of this exemption the term "secondary service" does not include any brokerage services provided to the Funds by M&I for the execution of securities transactions engaged in by the Funds (see Section IV(h) above).

administrative expenses of the Funds. FSC is a subsidiary of Federated Investors (Federated) which, through other subsidiaries, acts as the transfer and dividend disbursing agent for the Funds and provides certain personnel and administrative services for the Funds. Federated and its subsidiaries are unrelated to M&I. However, M&I Trust is the custodian for the securities and cash of the Funds and Marshall Funds Investor Services (MFIS), another affiliate of M&I Corp., is the shareholder servicing agent for the Funds.

5. M&I Investment Management Corp. (M&I Management), a wholly-owned subsidiary of M&I Corp., serves as the investment adviser for the Funds pursuant to investment advisory agreements with the Funds (the Agreements) which allow M&I Management to receive monthly investment advisory fees based on a percentage of the average daily net assets of each of the Funds. The Agreements and the fees received by M&I Management are approved by the Board of Directors of the Funds (the Funds' Directors), in accordance with the applicable provisions of the 1940 Act. Any changes in the fees are approved by the Funds' Directors. All of the Funds' Directors are independent of M&I.

6. Prior to November 20, 1992, M&I generally invested assets of Client Plans for which it acted as a trustee with investment discretion in a series of CIFs. In addition, certain Client Plans where investment decisions are directed by a Second Fiduciary generally used an M&I CIF as an investment option for individual accounts in the Client Plans. However, on Friday, November 20, 1992, M&I terminated three of its CIFs—the M&I Employee Benefit Money Market Fund, the M&I Employee Benefit Bond Fund, and the M&I Employee Benefit Stock Fund. The assets in these CIFs were transferred to the Marshall Money Market Fund, the Marshall Intermediate Bond Fund, and the Marshall Stock Fund, respectively. Each CIF transferred its assets to the corresponding Fund in exchange for Trust Shares of that Fund at the then current market value of the CIF assets, in accordance with Rule 17a-7 under the 1940 Act (as discussed below).¹⁷ The

CIFs were liquidated and the Trust Shares were distributed to the Client Plans, subject to the prior written consent of the Second Fiduciary for the Client Plan. Any Client Plan that had not provided prior written approval for the transfer of its CIF assets to the Funds, by the deadline set for such approvals, received a cash distribution of its pro rata share of the CIF assets no later than Friday, November 20, 1992, preceding the transfers.

The assets of the CIFs were reviewed by M&I Management as investment adviser to the Funds, in coordination with Federated Administrative Services (FAS), the Funds' third party administrator, to determine that the assets were appropriate investments for the corresponding Funds. FAS created a portfolio accounting system to track the securities to be acquired by the Funds. Prior to the transfer of CIF assets to the Funds, the Funds did not hold any securities or other assets except cash or, as in the case of the Marshall Money Market Fund, U.S. Treasury Bills.

The transfer transactions occurred using market values as of the close of business on Friday, November 20, 1992. The securities transferred from the CIFs were the same as the securities received by the Funds. The applicant states that the value of the securities was determined in a single valuation by M&I as investment adviser for the Funds, in accordance with the requirement of Rule 17a-7(b) that transactions be effected at the "independent current market price" of the securities. The valuation of the securities was performed in the same manner for both the CIF and the corresponding Fund at the close of the same business day. Specifically, as required by the Rule, securities listed on exchanges were valued at their closing prices on Friday, November 20, and unlisted securities were valued based on the average of bid and ask quotations at the close of the market on Friday, November 20, obtained from three brokers independent of M&I. Any fees charged by the independent brokers for the bid and ask prices were paid by M&I.

Each Client Plan that approved the CIF asset transfers to the Funds received account statements describing the asset transfers either in mid-December 1992, if such Plans were on a monthly account statement schedule, or mid-January 1993, if such Plans were on a quarterly account statement schedule. The statements showed the disposition of the CIF units from the Client Plan account and the acquisition by the

investment company to ensure that all requirements of the Rule are satisfied.

account of Fund shares, both posted as of Monday, November 23, 1992.¹⁸ This information provided the affected Client Plans with written confirmation of the number of CIF units held by the Client Plan immediately before the transfer, the related per unit value and the total dollar amount of such CIF units as well as the number of shares of the Funds held by the Client Plan following the transfer, the related per share net asset value, and the total dollar amount of such shares.

Thus, the applicant represents that as of November 23, 1992, Client Plans that were formerly invested in the terminated CIFs held Trust Shares of the corresponding Funds which were of the same value, based on the Client Plans' pro rata share of the underlying market value of the securities transferred to the Funds, as their assets in the CIF as of the close of business on Friday, November 20, 1992. M&I represents that the other CIFs may be terminated in the future and that all such terminations and subsequent transfers of CIF assets for Trust Shares of the Funds will comply with Rule 17a-7 as described above and the conditions of this proposed exemption.¹⁹

M&I states that for all subsequent transfers of CIF assets to a Fund following the publication of this proposed exemption in the Federal Register, M&I will send by regular mail to each affected Client Plan a written confirmation, not later than 30 days after completion of the transaction, containing the following information:

- (1) The identity of each security that was valued for purposes of the transaction in accordance with Rule 17a-7(b)(4);
- (2) The price of each such security involved in the transaction; and
- (3) The identity of each pricing service or market maker consulted in determining the value of such securities. Securities which are valued in accordance with Rule 17a-7(b)(4) are

¹⁷The applicant has provided the following example: Assume a Client Plan held 12,506 units of the M&I Employee Benefit Stock Fund prior to the asset transfers. The account statement showed a disposition of 12,506 units of M&I Employee Benefit Stock Fund, at a value of \$72.08 per unit, on November 23, 1992, with total proceeds of \$901,432.18. The statement also showed a purchase on that same date of 90,143.218 shares of the Marshall Stock Fund, the Fund corresponding to the M&I Employee Benefit Stock Fund, at \$10 per share, at a total cost of \$901,432.18, the same amount as the proceeds of the disposition from the M&I Employee Benefit Stock Fund.

¹⁹On Friday, October 1, 1993, M&I terminated the M&I Dividend Fund and transferred its assets upon written approval from the investors to a new Marshall Fund, the Marshall Equity Income Fund. The transfer of assets occurred in the same manner as the asset transfers which occurred on November 20, 1992.

¹⁷ Rule 17a-7 permits transactions between investment funds that use the same investment adviser, subject to certain conditions. Rule 17a-7 requires, among other things, that such transactions be effected at the "independent current market price" for each security, involve only securities for which market quotations are readily available, involve no brokerage commissions or other remuneration, and comply with valuation procedures adopted by the board of directors of the

securities for which the current market price cannot be obtained by reference to the last sale price for transactions reported on a recognized securities exchange or the NASDAQ system. M&I states that such securities are valued based on an average of the highest current independent bid and lowest current independent offer, as of the close of business on the Friday preceding the weekend of the CIF transfers, determined on the basis of reasonable inquiry from at least three sources that are broker-dealers or pricing services independent of M&I.

In addition, for all in-kind transfers of CIF assets to a Fund that occur after the date this proposed exemption is published in the *Federal Register*, M&I will send by regular mail to the Second Fiduciary no later than 90 days after completion of each transfer a written confirmation that contains the following information:

(1) The number of CIF units held by the Client Plan immediately before the transfer, the related per unit value, and the total dollar amount of such CIF units; and

(2) The number of shares in the Funds that are held by the Client Plan following the transfer, the related per share net asset value, and the total dollar amount of such shares.

M&I believes that the interests of the Client Plans are better served by the collective investment of assets of the Client Plans in the Funds rather than in the CIFs. The Funds are valued on a daily basis, whereas the majority of the CIFs are valued monthly. The daily valuation permits: (i) Immediate investment of Client Plan contributions in various types of investments; (ii) greater flexibility in transferring assets from one type of investment to another; and (iii) daily redemption of investments for purposes of making distributions. In addition, information concerning the investment performance of the Funds will be available in newspapers of general circulation which will allow Client Plan fiduciaries to monitor the performance of investments on a daily basis and make more informed investment decisions.

7. For investments in the Funds on behalf of Client Plans subsequent to the transfer of the CIF assets to the Funds where the assets involved were not previously invested in any CIFs, M&I currently offsets its investment management or advisory fees for assets invested in the Funds in accordance with one of the methods for offsetting double investment advisory fees described in Prohibited Transaction Exemption 77-4 (PTE 77-4, 42 FR

18732, April 8, 1977).²⁰ Consequently, the applicant represents that the fee structure for these investments complies with the fee structure under PTE 77-4, and that the other conditions of PTE 77-4 are met.²¹ However, for Client Plan investments in the Funds with respect to assets that were previously held in the CIFs prior to the investment of such assets in the Funds, M&I uses the fee structure (the Fee Structure) described below. M&I anticipates using the Fee Structure for future Client Plan investments in the Funds where the assets involved were not previously invested in the CIFs if the Second Fiduciary for the Client Plan elects to use the Fee Structure in lieu of the offset or credit methods prescribed by PTE 77-4. M&I states that the Fee Structure preserves a Client Plan's existing fee rates for investment management services by M&I when such Plan invests in the Funds or when such Plan's assets are transferred from the CIFs to the Funds. The Fee Structure is described as follows:

(a) M&I charges its standard fees to all the Client Plans for serving as a trustee, directed trustee, investment manager, or custodian for the Client Plans.²² All fees are billed on a quarterly basis. The annual charges for a Client Plan account are based on fee schedules negotiated with M&I. For example, if the fee is unbundled, the standard charge by M&I to a Client Plan for serving as a trustee with solely custodial responsibilities

²⁰ PTE 77-4, in pertinent part, permits the purchase and sale by an employee benefit plan of shares of a registered, open-end investment company when a fiduciary with respect to the plan is also the investment adviser for the investment company, provided that, among other things, the plan does not pay an investment management, investment advisory or similar fee with respect to the plan assets invested in such shares for the entire period of such investment. Section II(c) of PTE 77-4 states that this condition does not preclude the payment of investment advisory fees by the investment company under the terms of an investment advisory agreement adopted in accordance with section 15 of the Investment Company Act of 1940. Section II(c) states further that this condition does not preclude payment of an investment advisory fee by the plan based on total plan assets from which a credit has been subtracted representing the plan's pro rata share of investment advisory fees paid by the investment company.

²¹ The Department is expressing no opinion in this proposed exemption regarding whether any transactions with the Funds under the circumstances described herein would be covered by PTE 77-4.

²² The applicant represents that all fees paid by Client Plans directly to M&I for services performed by M&I are exempt from the prohibited transaction provisions of the Act by reason of section 408(b)(2) of the Act and the regulations thereunder (see 29 CFR 2550.408b-2). The Department notes that to the extent there are prohibited transactions under the Act as a result of services provided by M&I directly to the Client Plans which are not covered by section 408(b)(2), no relief is being proposed herein for such transactions.

varies from 17.5 basis points for account assets under \$5 million to 5 basis points for account assets over \$75 million, subject to a base annual charge of \$1,500 and additional charges for specific services. Where M&I serves as investment manager to a Client Plan account, depending on the type of portfolio, the charge may vary from 30 basis points up to 80 basis points. This charge is separate from, and would be in addition to, the fee for custodial services described above. M&I provides services to the Client Plans for which it acts as a trustee with investment discretion, including sweep services for uninvested cash balances in such Plans, under a bundled or single fee arrangement which is calculated as a percentage of the market value of the Plan assets under management. Thus, in such instances, there are no separate charges for the provision of particular services to the Client Plans. However, for Client Plans where investment decisions are directed by a Second Fiduciary, a separate charge is assessed for particular services, including sweep services, where the Second Fiduciary specifically agrees to have M&I provide such services to the Client Plan.²³ M&I states that in many cases fees charged by M&I to a Client Plan are paid by the Client Plan sponsor rather than by the Client Plan.

(b) M&I Management charges the Funds for its services to the Funds as investment adviser, in accordance with the Agreements between M&I and the Funds. Under the Agreements, M&I Management charges fees at a different rate for each Fund, computed based on the average daily net assets for the respective Fund. The fee differentials among the Funds result from the particular level of services rendered by M&I Management to the Funds.

(c) The investment advisory and other fees paid by each of the existing Funds are accrued on a daily basis and billed by M&I Management to the Funds at the beginning of the month following the month in which the fees accrued. The applicant states that any additional Funds will follow the same monthly billing arrangement.

(d) At the beginning of each month (pursuant to the terms of the applicable Agreements) and essentially simultaneously with the billing

²³ See DOL Letter dated August 1, 1986 to Robert S. Plotkin, Assistant Director, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, stating the Department's views regarding the application of the prohibited transaction provisions of the Act to sweep services provided to plans by fiduciary banks and the potential applicability of certain statutory exemptions as described therein.

described in (c) above, but in no event more than one business day following the receipt of such fees by M&I Management, M&I credits to each Client Plan directly with cash such Plan's pro rata share of all investment advisory fees charged by M&I Management to the Funds (the Credit Program). In addition, M&I currently credits to each Client Plan any amounts it is paid for providing custody and shareholder services to the Funds in the same manner as the investment advisory fees but only to the extent that these amounts exceed M&I's direct expenses for providing such services. However, M&I proposes in the future to retain any fees received by M&I from the Funds for custody and shareholder services or other secondary services.²⁴

M&I represents that the credited fees are currently paid to the Client Plan only in cash, but that the credits may be effectuated in the future through the purchase of additional shares of the Funds pursuant to an annual election made by the Second Fiduciary for the Client Plan. The purchase of the shares will occur in lieu of a cash credit on the same day that such credit would have been paid to the Client Plan. M&I states

²⁴ M&I states that such secondary services are distinct from the services provided by M&I as trustee to a Client Plan. Trustee services rendered at the Plan-level include maintaining custody of the assets of the Client Plan (including the Fund shares, but not the assets underlying the Fund shares), processing benefit payments, maintaining participant accounts, valuing plan assets, conducting non-discrimination testing, preparing Forms 5500 and other required filings, and producing statements and reports regarding overall plan and individual participant holdings. These trustee services are necessary regardless of whether the Client Plan's assets are invested in the Funds. Thus, M&I represents that its proposed receipt of fees for both secondary services at the Fund-level and trustee services at the Plan-level would not involve the receipt of "double fees" for duplicative services to the Client Plans because a Fund is charged for custody and other services relative to the individual securities owned by the Fund, while a Client Plan is charged for the maintenance of Plan accounts reflecting ownership of the Fund shares and other assets.

In this regard, the Department notes that the combined total of all fees received by M&I directly and indirectly from the Client Plans for the provision of services to the Plans and/or to the Funds should not be in excess of "reasonable compensation" within the meaning of section 408(b)(2) of the Act.

In addition, the fact that certain transactions and fee arrangements are the subject of an administrative exemption does not relieve a Client Plan fiduciary from the general fiduciary responsibility provisions of section 404 of the Act. Thus, the Department cautions the fiduciaries of the Client Plans investing in the Funds that they have an ongoing duty under section 404 of the Act to monitor the services provided to the Client Plans to assure that the fees paid by the Client Plans for such services are reasonable in relation to the value of the services provided. Such responsibilities would include determinations that the services provided are not duplicative and that the fees are reasonable in light of the level of services provided.

that the fee credits were initially made in cash to the Client Plans so that no authorizations for crediting fees in the form of additional shares of the Funds would be involved at the time of the transfers of the CIF assets to the Funds. All decisions regarding the use of the credited fees to purchase additional shares of the Funds, including annual reauthorizations for such credits, will be made by a Second Fiduciary for the Client Plan.

The Credit Program ensures that M&I does not receive any additional investment management, advisory or similar fees from the Funds as a result of investments in the Funds by the Client Plans. Thus, M&I represents that the Fee Structure is at least as advantageous to the Client Plans as an arrangement pursuant to the conditions of PTE 77-4 whereby investment advisory fees paid by the Funds to M&I Management would be offset or credited against investment management fees charged directly by M&I to the Client Plans. In this regard, M&I states that the Credit Program essentially has the same effect in offsetting M&I Management's investment advisory fees as an arrangement under PTE 77-4, section II(c), allowing for a credit by subtracting the amount of such fees from the investment management fees charged directly by M&I to the Client Plans (the Subtraction Method). M&I states further that in many instances the Credit Program is more advantageous to a Client Plan than an arrangement using the Subtraction Method because under the Credit Program a Client Plan receives a credit in either cash or shares on the same day (or within one business day after) the fees are received by M&I Management from the Funds. However, under the Subtraction Method, a Client Plan would not receive a credit on the same day (or within one business day after) the fees are paid to M&I Management from the Funds if the billing period for services to the Funds is different than the billing period for M&I's fiduciary services to the Client Plan. The Fee Structure with the Credit Program allows M&I to maintain a fixed fiduciary fee schedule for services to the Client Plans without any adjustments in billing for such services, as required under the Subtraction Method. M&I notes that the Fee Structure also allows the Client Plan sponsor the option to pay the Client Plan's fees to M&I for serving as a trustee, directed trustee, investment manager, or custodian and have the Client Plan receive a credit of

the Plan's pro rata share of the investment advisory fees paid to M&I.²⁵

M&I is responsible for establishing and maintaining a system of internal accounting controls for the Credit Program. In addition, M&I has retained the services of Arthur Anderson & Co. of Milwaukee, Wisconsin (the Auditor), an independent accounting firm, to audit annually the crediting of fees to the Client Plans under the Credit Program. M&I states that such audits provide independent verification of the proper crediting to the Client Plans of fees charged by M&I to the Funds. M&I states further that information obtained from the audits is used in the preparation of required financial disclosure reports to the Client Plans' fiduciaries.

By letter dated November 6, 1992, the Auditor describes the procedures that are used in the annual audit of the Credit Program. The Auditor obtains: (i) A calculation of the daily actual balances for all the Funds and for the total Client Plan shareholders of such Funds; (ii) a detailed list of the expenses charged to the Funds' shareholders by type of expense; and (iii) calculations of the total expenses charged by M&I to each Fund which are reimbursable to the Client Plans. On the basis of such information, the Auditor: (i) Reviews and tests compliance with the Credit Program's operational controls and procedures established by M&I; (ii) verifies the daily credit factors transmitted to M&I from the Funds, including the proper assignment of identification numbers to all Client Plan shareholders; and (iii) verifies the credits paid in total to the sum of all credits paid to each Client Plan. The Auditor recomputes, in total, the cash received in connection with the credit of each Client Plan's expenses to ensure that the proper amount of cash was issued to the Client Plan. Finally, the Auditor recomputes on a test basis the amount of credits received by selected Client Plan shareholders of the Funds to verify that such credits were properly made. In this regard, the Auditor obtains a listing of the credits paid to each Client Plan regarding its shares in each of the Funds to determine that the total credit paid to the Client Plan by M&I equals the total amount that was required to be credited. At such time as M&I offers Client Plans the option to have the fees credited as additional

²⁵ To the extent that the Department of the Treasury determines that this arrangement should be deemed a contribution by an employer to a Client Plan of the credited fees, the transaction must be examined under the applicable provisions of the Internal Revenue Code, including sections 401(a)(4), 404 and 415.

Fund shares, the Auditor will also recompute the number of Fund shares issued to the Client Plans to ensure that each Client Plan received the proper number of shares.

In the event either the internal audit by M&I or the independent audit by the Auditor identifies that an error has been made in the crediting of fees to the Client Plans, M&I will correct the error. With respect to any shortfall in credited fees to a Client Plan involving cash credits, M&I will make a cash payment to the Client Plan equal to the amount of the error plus interest paid at money market rates offered by M&I for the period involved. With respect to a shortfall in credited fees involving a Client Plan where the Second Fiduciary's election is to have credited fees invested in shares of a particular Fund, M&I will make a cash payment equal to at least the amount of the error plus interest based on the greater of either: (i) The money market rates offered by M&I for the period involved, or (ii) the total rate of return for shares of the Fund that would have been acquired during such period. Any excess credits made to a Client Plan will be corrected by an appropriate deduction and reallocation of cash during the next payment period to reflect accurately the amount of total credits due to the Client Plan for the period involved.

8. With respect to any transfer of a Client Plan's CIF assets to a Fund, M&I states that a Second Fiduciary for the Client Plan receives advance written notice of the in-kind transfer of assets of the CIFs and full written disclosure of information concerning the Fund. On the basis of such information, the Second Fiduciary authorizes in writing the in-kind transfer of the Client Plan's CIF assets to a Fund in exchange for shares of the Fund. With respect to the receipt of fees by M&I from a Fund in connection with any Client Plan's investment in the Fund, M&I states that a Second Fiduciary receives full and detailed written disclosure of information concerning the Fund in advance of any investment by the Client Plan in the Fund. On the basis of such information, the Second Fiduciary authorizes in writing the investment of assets of the Client Plan in the Fund and the fees to be paid by the Fund to M&I. Such authorization will include in the future an election for the Second Fiduciary to purchase additional shares of the Fund with the fees credited to the Client Plan by M&I. In addition, M&I represents that the Second Fiduciary of each Client Plan invested in a particular Fund will receive full written disclosure, in a statement separate from

the Fund prospectus, of any proposed increases in the rates of fees charged by M&I to the Funds for secondary services which are above the rate reflected in the prospectus for the Fund, at least 30 days prior to the effective date of such increase. The Second Fiduciary will also receive full written disclosure in a Fund prospectus or otherwise of any increases in the rate of fees charged by M&I to the Funds for investment advisory services even though such fees will be credited, as required by Section II(d) above.

Any authorizations by a Second Fiduciary regarding the investment of a Client Plan's assets in a Fund and the fees to be paid to M&I, including any future increases in rates of fees for secondary services, are or will be terminable at will by the Second Fiduciary, without penalty to the Client Plan, upon receipt by M&I of written notice of termination. A Termination Form expressly providing an election to terminate the authorization with instructions on the use of the form is supplied to the Second Fiduciary no less than annually. The instructions for the Termination Form include the following information:

(a) The authorization is terminable at will by the Client Plan, without penalty to the Client Plan, upon receipt by M&I of written notice from the Second Fiduciary; and

(b) Failure to return the form will result in continued authorization of M&I to engage in the subject transactions on behalf of the Client Plan.

M&I states that the Termination Form may be used at will by the Second Fiduciary to terminate an authorization without penalty to the Client Plan and to notify M&I in writing to effect a termination by selling the shares of the Funds held by the Client Plan requesting such termination within one business day following receipt by M&I of the form; provided that if, due to circumstances beyond the control of M&I, the sale cannot be executed within one business day, M&I shall have one additional business day to complete such sale.

Any disclosure of information regarding a proposed increase in the rate of any fees for secondary services will be accompanied by an additional Termination Form with instructions on the use of the form as described above. Therefore, the Second Fiduciary will have prior notice of the proposed increase and an opportunity to withdraw from the Funds in advance of the date the increase becomes effective. Although the Second Fiduciary will also have notice of any increase in the rates of fees charged by M&I to the Funds for

investment advisory services, through an updated prospectus or otherwise, such notice will not be accompanied by an additional Termination Form since all increases in investment advisory fees will be credited by M&I to the Client Plans and will be subject to an annual reauthorization as described above.

M&I states that the Second Fiduciary always receives a current prospectus for each Fund and a written statement giving full disclosure of the Fee Structure prior to any investment in the Funds. The disclosure statement explains why M&I believes that the investment of assets of the Client Plan in the Funds is appropriate. The disclosure statement also describes whether there are any limitations on M&I with respect to which Client Plan assets may be invested in shares of the Funds and, if so, the nature of such limitations.²⁶

M&I states further that the Second Fiduciary receives an updated prospectus for each Fund at least annually and either annual or semi-annual reports for each Fund. M&I provides monthly reports to the Second Fiduciary of all transactions engaged in by the Client Plan, including purchases and sales of Fund shares.

9. No sales commissions are paid by the Client Plans in connection with the purchase or sale of shares of the Funds. In addition, no redemption fees are paid in connection with the sale of shares by the Client Plans to the Funds. The applicant states that all other dealings between the Client Plans and the Funds, M&I Management or any affiliate, are on a basis no less favorable to the Client Plans than such dealings are with the other shareholders of the Funds.

10. In summary, M&I represents that the transactions described herein satisfy the statutory criteria of section 408(a) of the Act because: (a) The Funds provide the Client Plans with a more effective investment vehicle than the CIFs maintained by M&I without any increase in investment management, advisory or similar fees paid to M&I; (b) with respect to the transfer of a Client Plan's CIF assets into a Fund in exchange for Fund shares, a Second Fiduciary authorizes in writing such transfer prior to the transaction only after full written disclosure of

²⁶ See section II(d) of PFE 77-4 which requires, in pertinent part, that an independent plan fiduciary receive a current prospectus issued by the investment company and a full and detailed written disclosure of the investment advisory and other fees charged to or paid by the plan and the investment company, including a discussion of whether there are any limitations on the fiduciary/investment adviser with respect to which plan assets may be invested in shares of the investment company and, if so, the nature of such limitations.

information concerning the Fund; (c) each Client Plan receives shares of a Fund in connection with the transfer of assets of a terminating CIF which have a net asset value that is equal to the value of the Client Plan's pro rata share of the CIF assets on the date of the transfer, based on the current market value of such assets as determined in a single valuation at the close of the same business day using independent sources in accordance with procedures established by the Fund which comply with Rule 17a-7 of the 1940 Act; (d) with respect to any investments in a Fund by the Client Plans and the payment of any fees by the Fund to M&I, a Second Fiduciary receives full written disclosure of information concerning the Fund, including a current prospectus and a statement describing the Fee Structure, and authorizes in writing the investment of the Client Plan's assets in the particular Fund and the fees paid by such Fund to M&I; (e) any authorizations made by a Client Plan regarding investments in a Fund and fees paid to M&I, or any increases in the rates of fees for secondary services which are retained by M&I, are or will be terminable at will by the Client Plan, without penalty to the Client Plan, upon receipt by M&I of written notice of termination from the Second Fiduciary; (f) M&I requires annual audits by an independent accounting firm to verify the proper crediting to the Client Plans of fees charged by M&I to the Funds; (g) no commissions or redemption fees are paid by the Client Plan in connection with either the acquisition of Fund shares, through either a direct purchase of the shares or a transfer of CIF assets in exchange for the shares, or the sale of Fund shares; and (h) all dealings between the Client Plans, the Funds and M&I, are on a basis which is at least as favorable to the Client Plans as such dealings are with other shareholders of the Funds.

Notice to Interested Persons

Notice of the proposed exemption shall be given to all Second Fiduciaries of Client Plans described herein that had investments in a terminating CIF and from whom approval was sought, or will be sought prior to the granting of this proposed exemption, for a transfer of a Client Plan's CIF assets to a Fund. In addition, interested persons shall include the Second Fiduciaries of all Client Plans which have invested in the Funds, from the effective date of the proposed exemption (November 20, 1992) until the date the notice of the proposed exemption is published in the *Federal Register*, where M&I has

provided services to the Funds and received fees which would be covered by the exemption, if granted. Notice to interested persons shall be provided by first class mail within fifteen (15) days following the publication of the proposed exemption in the *Federal Register*. Such notice shall include a copy of the notice of proposed exemption as published in the *Federal Register* and a supplemental statement (see 29 CFR 2570.43(b)(2)) which informs all interested persons of their right to comment on and/or request a hearing with respect to the proposed exemption. Comments and requests for a public hearing are due within forty-five (45) days following the publication of the proposed exemption in the *Federal Register*.

FOR FURTHER INFORMATION CONTACT: Mr. E. F. Williams of the Department, telephone (202) 219-8194. (This is not a toll-free number.)

New Standard Corporation Pension Plan (the Plan) Located in Mt. Joy, Pennsylvania; Proposed Exemption

[Application No. D-9698]

The Department is considering granting an exemption under the authority of section 408(a) of the Act and section 4975(c)(2) of the Code and in accordance with the procedures set forth in 29 CFR Part 2570, Subpart B (55 FR 32836, 32847, August 10, 1990). If the exemption is granted, the restrictions of sections 406(a) and 406(b) (1) and (2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1) (A) through (E) of the Code, shall not apply to the sale of a certain parcel of real property (the Property) from the Plan to New Standard Corporation (the Employer), a party in interest with respect to the Plan, provided that the following conditions are met:

1. The fair market value of the Property is established by a real estate appraiser independent of the Plan and the Employer;

2. The Employer pays the greater of \$115,000 or the current fair market value of the Property (excluding site improvements) with the enhancement value for an adjoining owner as of the date of sale;

3. The sale is a one-time transaction for cash;

4. The Plan pays no fees or commissions in regard to the sale; and

5. The Employer pays any applicable excise taxes to the Internal Revenue Service under section 4975(a) of the Code resulting from its use of the Property since October 1993.

Summary of Facts and Representations

1. The Employer is a metal stampings manufacturing concern with offices in Mt. Joy and Hellam Township, Pennsylvania. The Plan is a defined benefit plan which had approximately 66 participants and total assets of approximately \$1,083,139 as of the time of filing of the exemption application.

2. The Plan purchased the Property in April 1978 from unrelated parties for a purchase price of \$22,689 in cash. The Property is a vacant lot of about 2.51 acres located in Hellam Township adjacent to property of the Employer. The adjacent property includes a one-story manufacturing and warehouse complex utilized by the Employer.

The total cost to the Plan of acquiring and holding the Property since the time of purchase has been only the original purchase price. All taxes and other costs related to the holding of the Property by the Plan have been paid by the Employer. A small portion of the lot was recently paved at the expense of the Employer to provide an additional parking opportunity to the Employer, and certain other improvements to the Property (including storm sewer installation and driveway access) have been financed by the Employer. The Employer has expended a total of \$72,260, including taxes, on the Property since the time it was acquired by the Plan.

3. The applicant obtained an appraisal on the Property dated April 14, 1994, from B. Daniel Wagner, MAI (Wagner) of Associated Appraisers in York, Pennsylvania. The applicant represents that Wagner is independent of the Plan and the Employer. Wagner states that he is aware that the Employer is the owner of contiguous property and is the prospective buyer of the Property. In Wagner's opinion, the fair market value of the Property (excluding site improvements which were constructed at the expense of the Employer) to an adjoining owner and including the enhancement value for such adjoining owner was \$115,000 as of the date of the appraisal.

4. The Plan now proposes to sell the Property to the Employer. The Employer will pay the greater of the current fair market value of the Property (excluding site improvements) for an adjoining owner, based on an updated independent appraisal, or the total amount the Plan has expended on the Property as of the date of sale. The sale of the Property will be entirely for cash, and the Plan will pay no fees or commissions in regard to the transaction.

The applicant represents that portion of the Property which was paved for parking has been utilized by employees of the Employer. This parking area contains 48 spaces and was completed in October 1993. A supplement to the above described appraisal, prepared by Wagner on June 20, 1994, estimates the total fair market rental for such usage to be approximately \$350 per month. The Employer will compensate the Plan in that amount for the period of time the Employer has utilized the parking area from October 1993 to the date of sale of the Property.²⁷

5. In summary, the applicant represents that the proposed transaction will satisfy the statutory criteria of section 408(a) of the Act because: (1) The fair market value of the Property will be established by a real estate appraiser independent of the Plan and the Employer; (2) the Employer will pay the greater of the current fair market value of the Property (excluding site improvements) for an adjoining owner or the total amount the Plan has expended on the Property; (3) the Plan will pay no fees or commissions in connection with the sale; and (4) the sale of the Property will be an all cash transaction.

FOR FURTHER INFORMATION CONTACT: Paul Kelly of the Department, telephone (202) 219-8833. (This is not a toll-free number.)

General Information

The attention of interested persons is directed to the following:

(1) The fact that a transaction is the subject of an exemption under section 408(a) of the Act and/or section 4975(c)(2) of the Code does not relieve a fiduciary or other party in interest of disqualified person from certain other provisions of the Act and/or the Code, including any prohibited transaction provisions to which the exemption does not apply and the general fiduciary responsibility provisions of section 404 of the Act, which among other things require a fiduciary to discharge his duties respecting the plan solely in the interest of the participants and beneficiaries of the plan and in a prudent fashion in accordance with section 404(a)(1)(b) of the act; nor does it affect the requirement of section

401(a) of the Code that the plan must operate for the exclusive benefit of the employees of the employer maintaining the plan and their beneficiaries;

(2) Before an exemption may be granted under section 408(a) of the Act and/or section 4975(c)(2) of the Code, the Department must find that the exemption is administratively feasible, in the interests of the plan and of its participants and beneficiaries and protective of the rights of participants and beneficiaries of the plan;

(3) The proposed exemptions, if granted, will be supplemental to, and not in derogation of, any other provisions of the Act and/or the Code, including statutory or administrative exemptions and transitional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction; and

(4) The proposed exemptions, if granted, will be subject to the express condition that the material facts and representations contained in each application are true and complete and accurately describe all material terms of the transaction which is the subject of the exemption. In the case of continuing exemption transactions, if any of the material facts or representations described in the application change after the exemption is granted, the exemption will cease to apply as of the date of such change. In the event of any such change, application for a new exemption may be made to the Department.

Signed at Washington, DC, this 11th day of August, 1994.

Ivan Strasfeld,

Director of Exemption Determinations,
Pension and Welfare Benefits Administration,
U.S. Department of Labor.

[FR Doc. 94-20010 Filed 8-16-94; 8:45 am]

BILLING CODE 4510-29-P

[Prohibited Transaction Exemption 94-61;
Exemption Application No. D-9230, et al.]

**Grant of Individual Exemptions;
Batterymarch Financial Management,
et al.**

AGENCY: Pension and Welfare Benefits
Administration, Labor.

ACTION: Grant of Individual Exemptions.

SUMMARY: This document contains exemptions issued by the Department of Labor (the Department) from certain of the prohibited transaction restrictions of the Employee Retirement Income Security Act of 1974 (the Act) and/or the Internal Revenue Code of 1986 (the Code).

Notices were published in the Federal Register of the pendency before the Department of proposals to grant such exemptions. The notices set forth a summary of facts and representations contained in each application for exemption and referred interested persons to the respective applications for a complete statement of the facts and representations. The applications have been available for public inspection at the Department in Washington, D.C. The notices also invited interested persons to submit comments on the requested exemptions to the Department. In addition the notices stated that any interested person might submit a written request that a public hearing be held (where appropriate). The applicants have represented that they have complied with the requirements of the notification to interested persons. No public comments and no requests for a hearing, unless otherwise stated, were received by the Department.

The notices of proposed exemption were issued and the exemptions are being granted solely by the Department because, effective December 31, 1978, section 102 of Reorganization Plan No. 4 of 1978 (43 FR 47713, October 17, 1978) transferred the authority of the Secretary of the Treasury to issue exemptions of the type proposed to the Secretary of Labor.

Statutory Findings

In accordance with section 408(a) of the Act and/or section 4975(c)(2) of the Code and the procedures set forth in 29 CFR Part 2570, Subpart B (55 FR 32836, 32847, August 10, 1990) and based upon the entire record, the Department makes the following findings:

(a) The exemptions are administratively feasible;

(b) They are in the interests of the plans and their participants and beneficiaries; and

(c) They are protective of the rights of the participants and beneficiaries of the plans.

**Batterymarch Financial Management
(BFM) Located in Boston,
Massachusetts; Exemption**

[Prohibited Transaction Exemption 94-61;
Application No. D-9230]

The restrictions of section 406(b)(2) of the Act shall not apply to the proposed cross-trading of equity securities between various accounts managed by BFM (the Accounts) where at least one Account involved in any cross-trade is an employee benefit plan account (Plan Account) for which BFM acts as a fiduciary.

²⁷ The applicant recognizes that the use of a portion of the Property for parking purposes of the Employer may have constituted prohibited transactions under section 406 of the Act and section 4975 of the Code. Accordingly, the Employer will pay the Internal Revenue Service any excise taxes that are applicable under section 4975(a) of the Code within 90 days of the publication in the Federal Register of the grant of this proposed exemption.

Conditions and Definitions

This exemption is subject to the following conditions:

1. (a) Each Plan Account's participation in the cross-trade program is subject to BFM's receipt of a written authorization executed in advance by a qualified Plan fiduciary, which is independent of BFM and its Affiliates (the Independent Fiduciary).

(b) The authorization referred to in paragraph (a) is terminable at will, without penalty to the Plan Account, upon receipt by BFM of written notice of termination.

(c) Before an authorization is made for any Account, an independent account representative, which must be an Independent Fiduciary in the case of a Plan Account (collectively, an Independent Account Representative) must be furnished with any reasonable available information necessary for the Independent Account Representative to determine whether the authorization should be made, including (but not limited to) a copy of the proposed and final exemption issued by the Department, an explanation of how the authorization may be terminated, a description of BFM's cross-trade practices, and any other information requested by the Independent Account Representative.

2. Each cross-trade transaction must satisfy the following:

(a) The cross-trade opportunity must be triggered as a result of an Account participating in the program experiencing a need to sell equity securities arising from one of the following three circumstances:

(i) the Independent Account Representative specifically directs that all of the assets in the Account be liquidated;

(ii) the Independent Account Representative specifically directs that a portion of the Account be liquidated and the selection of the particular equity securities to be sold is made either by the Independent Account Representative or by an optimization program used by BFM (the Optimization Program) which operates, pursuant to certain prescribed objective criteria, to automatically generate an optimal portfolio for such Accounts; or

(iii) the application of the Optimization Program to the specific investment objectives and restrictions established by the Independent Account Representative requires the sale of a security which is otherwise ranked by BFM as a buy or a hold for all relevant Accounts under the Stock Evaluation Process.

(b) With respect to each cross-trade opportunity triggered under paragraph

2(a), the Optimization Program used by BFM must determine, in the ordinary course of its considering all available equity securities in the applicable universe, that another Account or Accounts participating in the program should purchase some or all of the available equity securities.

(c) The cross-trade transaction must take place within three business days of the "triggering event" giving rise to the cross-trade opportunity described in paragraph 2(a) above.

(d) The cross-trade transaction must be effected through a broker which is unaffiliated with BFM and its Affiliates.

(e) The Independent Account Representative of each Account engaging in a cross-trade transaction must be provided with a written confirmation of the cross-trade transaction within 10 days after the completion of the transaction. The confirmation must set forth:

(i) the particular equity securities involved;

(ii) the number of shares involved;

(iii) the price at which the transaction was executed; and

(iv) the specific triggering event, identified above in paragraph 2(a), which caused the cross-trade transaction to occur.

3. (a) Each cross-trade must be effected at the closing price for the equity securities involved on the date of the transaction, as quoted by the exchange on which such securities are principally traded or by the NASDAQ National Market System (NASDAQ). In the case of domestic equity securities traded over-the-counter, other than those traded on NASDAQ, the price must be the mean between the closing daily "bid" and "asked" prices on the date of the transactions, obtained from recognized independent sources, unless such securities have actually traded within 24 hours of the cross-trade transaction in which case the price must be the last sale price for the securities. If more than one source is used by BFM to price a particular domestic equity security traded over-the-counter, then the price must be equal to the average of the highest current independent bid and lowest current independent offer obtained from such sources. No foreign equity securities, other than those traded on a recognized foreign securities exchange for which market quotations are readily available, shall be cross-traded by the Accounts.

(b) The equity securities involved in the cross-trade are those for which there is a generally recognized market with adequate pricing information to enable BFM to use the Optimization Program for the Accounts in the transaction.

(c) The cross-trade must involve less than 5 percent of the aggregate average daily trading volume of the equity securities which are the subject of the transaction for the week immediately preceding the completion of the transaction.

4. For any cross-trade opportunity where equity securities available for sale from a Selling Account may be sold to more than one Buying Account, each cross-trade opportunity shall be allocated first to the Buying Account which is ranked by the Optimization Program as being furthest from optimality, measured on a numerical basis at the time of the transaction, until such Account is brought up to par with the Account which is next furthest from optimality. Such Accounts shall then be allocated cross-trade opportunities on a pro rata basis until the Accounts are brought up to the level of the next Account which is furthest from optimality. This allocation process shall continue until all cross-trade opportunities involving the equity securities in question are exhausted.

5. (a) BFM furnishes the Independent Fiduciary for each Plan Account participating in the cross-trade program at least once every three months, and not later than 45 days following the period to which it related, a report disclosing:

(i) a list of all cross-trade transactions engaged in on behalf of the Plan Account during the period; and

(ii) with respect to each cross-trade transaction, the actual price used to effect the transaction and the identity of the pricing source, as well as the highest and lowest reported prices at which the equity securities involved in the transaction were traded on the date of such transaction.

(b) The authorizing Independent Fiduciary for each Plan Account participating in the program is furnished with a summary report at least once per year. The summary must be furnished within 45 days after the end of the period to which it relates, and must contain the following:

(i) a description of the total amount of the Plan Account's assets, by type of equity security, involved in cross-trade transactions during the period;

(ii) a description of BFM's cross-trade practices, if such practices have changed materially during the period covered by the summary;

(iii) a statement that the Independent Fiduciary's authorization of cross-trade transactions may be terminated upon receipt by BFM of the Independent Fiduciary's written notice to that effect; and

(iv) a statement that the Independent Fiduciary's authorization of the Plan Account's participation in the cross-trade program will continue in effect unless it is terminated.

6. The cross-trade transaction does not involve assets of any employee benefit plan established or maintained by BFM or any of its Affiliates (Batterymarch Plan).

7. Each employee benefit plan comprising a Plan Account that participates in the cross-trading program must have total assets equal to at least \$25 million. In the case of multiple employee benefit plans maintained by a single employer or controlled group of employers, the \$25 million requirement may be met by aggregating the assets of such plans if the assets are commingled for investment purposes in a single master trust.

8. BFM receives no fee or other compensation (other than its agreed investment management fee) with respect to any cross-trade transaction.

9. BFM is a discretionary investment manager with respect to Plan Accounts participating in the cross-trade program and does not cause any Plan Account to purchase or sell equity securities with another Account in order to merely track or replicate the portfolio of an independently maintained third party index.

10. For purposes of this exemption:

(a) "Account" means a Plan Account or a Non-Plan Account;

(b) "Affiliate" means any person directly or indirectly through one or more intermediaries, controlling, controlled by, or under common control with Batterymarch;

(c) "Buying Account" means the Account which seeks to purchase equity securities in a cross-trade transaction;

(d) "Cross-trade transaction" means a purchase and sale of equity securities between Accounts for which BFM or an Affiliate is acting as a trustee or investment manager;

(e) "Plan Account" means an Account managed by BFM consisting of assets of one or more employee benefit plans which are subject to the Act;

(f) "Independent Account Representative" means the authorized representative of the Account. In the case of a Plan Account, the Independent Account Representative must be an Independent Fiduciary authorized to act for the Plan Account;

(g) "Non-Plan Account" means an Account managed by BFM consisting of assets of clients which are not employee benefit plans subject to the Act;

(h) "Selling Account" means the Account which seeks to sell its equity

securities in a cross-trade transaction; and

(i) The "Optimization Program" means a computer program developed by a third party, independent of BFM and its Affiliates, which BFM uses pursuant to a license agreement and which utilizes objective mathematical formulas to construct "optimal" portfolios for each Account.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the notice of proposed exemption published on May 25, 1994 at 59 FR 27042.

For Further Information Contact: Mr. E.F. Williams of the Department, telephone (202) 219-8194. (This is not a toll-free number.)

[Prohibited Transaction Exemption 94-62; Exemption Application No. D-9613] Abbott Pension Plan (the Plan) Located in Lynn, MA; Exemption

The restrictions of sections 406(a), 406 (b)(1) and (b)(2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1) (A) through (E) of the Code, shall not apply to the proposed transfer by the Plan, of certain limited partnership interests (the Interests) to Abbott House Nursing Home, Inc. (Abbott); Winthrop Nursing Home, Inc. (which does business as the Bay View Nursing Home and is referred to herein as Winthrop/Bay View); Devereux House Nursing Home, Inc. (Devereux); and the Greenview House Nursing Home, Inc. (Greenview), in satisfaction of certain cash advances made to the Plan by these entities. (Abbott, Winthrop/Bay View, Devereux and Greenview, which are parties in interest with respect to the Plan, are collectively referred to herein as the Nursing Facilities.)

This exemption is conditioned upon the following requirements: (1) the transfer represents a one-time transaction and satisfies certain cash advances made by the Nursing Facilities to the Plan; (2) the Interests are transferred for the greater of their historical cost to the Plan, their fair market value or the total amount of cash advanced to the Plan; (3) for purposes of the transfer, the fair market value the Interests has been established by a qualified, independent appraiser; and (4) the Plan does not pay any fees or commissions in connection with the transfer.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the notice of proposed exemption published on June 21, 1994 at 59 FR 32017.

For Further Information Contact: Ms. Jan D. Broady of the Department, telephone (202) 219-8881. (This is not a toll-free number.)

AT&T Management Pension Plan and AT&T Pension Plan (the AT&T Plans), and BellSouth Management Pension Plan and BellSouth Pension Plan (the BellSouth Plans; Collectively, the Plans) Located in Morristown, New Jersey; Exemption

[Prohibited Transaction Exemption 94-63; Exemption Application Nos. D-9607, D-9608, D-9609, D-9610]

The restrictions of sections 406(a), 406(b)(1) and (b)(2) of the Act and the sanctions resulting from the application of section 4975 of the Code, by reason of section 4975(c)(1) (A) through (E) of the Code, shall not apply, effective June 3, 1993, to the past and proposed lease (the Lease) by the Plans, through the Telephone Real Estate Equity Trust (TREET), of office space in Southpark C, a commercial office building in Austin, Texas, to American Telephone and Telegraph Co. (AT&T), one of the sponsors of the Plans; provided that the following conditions are satisfied:

(A) The interests of TREET for all purposes under the Lease are represented by Hill Partners, which is independent of and unrelated to AT&T, serving as a fiduciary under the Act;

(B) At all times under the Lease, AT&T pays TREET rent of no less than the fair market rental value of the Property; and

(C) All terms and conditions of the Lease are at least as favorable to TREET as those which TREET could obtain in arm's-length transactions with unrelated parties.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the notice of proposed exemption published on June 21, 1994 at 59 FR 32018.

Effective Date: This exemption is effective as of June 3, 1993.

Written Comments: The Department received one written comment and no requests for a hearing. The comment was submitted on behalf of AT&T (the Applicant) in supplementation of the Summary of Facts and Representations (the Summary) in the notice of proposed exemption. The points addressed by the Applicant in the comment are summarized as follows:

(A) Paragraph (1) of the Summary indicates that the BellSouth Master Trust hold assets of the BellSouth Plans, which are sponsored by BellSouth. The Applicant states that it has become aware that one additional plan participates in the BellSouth Master

Trust: the Retirement Plan of Stevens Graphics, Inc., sponsored by Stevens Graphics, Inc., an affiliate of BellSouth Corporation.

(B) In paragraph (6) of the Summary, it is stated that with the addition of the Southpark assets, Karsten commenced to hold under management over 20 percent of the assets of TREET. The Applicant represents that this statement does not accurately describe Karsten's position with respect to management of TREET assets. The Applicant represents that with the addition of the Southpark assets, the TREET assets under management by Karsten constituted over twenty percent of all assets managed by Karsten on behalf of all its clients.

After consideration of the entire record, including the comment, the Department has determined to grant the exemption.

For Further Information Contact: Ronald Willett of the Department, telephone (202) 219-8881. (This is not a toll-free number.)

NatWest Securities Corporation, Inc. (NatWest) Located in New York, New York; Exemption

[Prohibited Transaction Exemption 94-64; Exemption Application No. D-9681]

I. Transactions

A. Effective December 22, 1993, the restrictions of sections 406(a) and 407(a) of the Act and the taxes imposed by section 4975 (a) and (b) of the Code by reason of section 4975(c)(1) (A) through (D) of the Code shall not apply to the following transactions involving trusts and certificates evidencing interests therein:

(1) The direct or indirect sale, exchange or transfer of certificates in the initial issuance of certificates between the sponsor or underwriter and an employee benefit plan when the sponsor, servicer, trustee or insurer of a trust, the underwriter of the certificates representing an interest in the trust, or an obligor is a party in interest with respect to such plan;

(2) The direct or indirect acquisition or disposition of certificates by a plan in the secondary market for such certificates; and

(3) The continued holding of certificates acquired by a plan pursuant to subsection I.A. (1) or (2).

Notwithstanding the foregoing, section I.A. does not provide an exemption from the restrictions of sections 406(a)(1)(E), 406(a)(2) and 407 for the acquisition or holding of a certificate on behalf of an Excluded Plan by any person who has discretionary authority or renders investment advice

with respect to the assets of that Excluded Plan.¹

B. Effective December 22, 1993, the restrictions of sections 406(b)(1) and 406(b)(2) of the Act and the taxes imposed by section 4975 (a) and (b) of the Code by reason of section 4975(c)(1)(E) of the Code shall not apply to:

(1) The direct or indirect sale, exchange or transfer of certificates in the initial issuance of certificates between the sponsor or underwriter and a plan when the person who has discretionary authority or renders investment advice with respect to the investment of plan assets in the certificates is (a) an obligor with respect to 5 percent or less of the fair market value of obligations or receivables contained in the trust, or (b) an affiliate of a person described in (a); if:

(i) The plan is not an Excluded Plan;

(ii) solely in the case of an acquisition of certificates in connection with the initial issuance of the certificates, at least 50 percent of each class of certificates in which plans have invested is acquired by persons independent of the members of the Restricted Group and at least 50 percent of the aggregate interest in the trust is acquired by persons independent of the Restricted Group;

(iii) a plan's investment in each class of certificates does not exceed 25 percent of all of the certificates of that class outstanding at the time of the acquisition; and

(iv) immediately after the acquisition of the certificates, no more than 25 percent of the assets of a plan with respect to which the person has discretionary authority or renders investment advice are invested in certificates representing an interest in a trust containing assets sold or serviced by the same entity.² For purposes of this paragraph B.(1)(iv) only, an entity will not be considered to service assets contained in a trust if it is merely a subservicer of that trust;

(2) The direct or indirect acquisition or disposition of certificates by a plan in the secondary market for such certificates, provided that the conditions

¹ Section I.A. provides no relief from sections 406(a)(1)(E), 406(a)(2) and 407 for any person rendering investment advice to an Excluded Plan within the meaning of section 3(21)(A)(ii) and regulation 29 CFR 2510.3-21(c).

² For purposes of this exemption, each plan participating in a commingled fund (such as a bank collective trust fund or insurance company pooled separate account) shall be considered to own the same proportionate undivided interest in each asset of the commingled fund as its proportionate interest in the total assets of the commingled fund as calculated on the most recent preceding valuation date of the fund.

set forth in paragraphs B.(1) (i), (iii), and (iv) are met; and

(3) The continued holding of certificates acquired by a plan pursuant to subsection I.B. (1) or (2).

C. Effective December 22, 1993, the restrictions of sections 406(a), 406(b) and 407(a) of the Act, and the taxes imposed by section 4975 (a) and (b) of the Code by reason of section 4975(c) of the Code, shall not apply to transactions in connection with the servicing, management and operation of a trust; provided:

(1) such transactions are carried out in accordance with the terms of a binding pooling and servicing arrangement; and

(2) the pooling and servicing agreement is provided to, or described in all material respects in the prospectus or private placement memorandum provided to, investing plans before they purchase certificates issued by the trust.³

Notwithstanding the foregoing, section I.C. does not provide an exemption from the restrictions of section 406(b) of the Act or from the taxes imposed by reason of section 4975(c) of the Code for the receipt of a fee by a servicer of the trust from a person other than the trustee or sponsor, unless such fee constitutes a "qualified administrative fee" as defined in section III.S.

D. Effective December 22, 1993, the restrictions of sections 406(a) and 407(a) of the Act, and the taxes imposed by sections 4975 (a) and (b) of the Code by reason of sections 4975(c)(1) (A) through (D) of the Code, shall not apply to any transactions to which those restrictions or taxes would otherwise apply merely because a person is deemed to be a party in interest or disqualified person (including a fiduciary) with respect to a plan by virtue of providing services to the plan (or by virtue of having a relationship to such service provider described in section 3(14) (F), (G), (H), or (I) of the Act or section 4975(e)(2) (F), (G), (H), or (I) of the Code), solely because of the plan's ownership of certificates.

II. General Conditions

A. The relief provided under Part I is available only if the following conditions are met:

(1) The acquisition of certificates by a plan is on terms (including the

³ In the case of a private placement memorandum, such memorandum must contain substantially the same information that would be disclosed in a prospectus if the offering of the certificates were made in a registered public offering under the Securities Act of 1933. In the Department's view, the private placement memorandum must contain sufficient information to permit plan fiduciaries to make informed investment decisions.

certificate price) that are at least as favorable to the plan as they would be in an arm's length transaction with an unrelated party;

(2) The rights and interests evidenced by the certificates are not subordinated to the rights and interests evidenced by other certificates of the same trust;

(3) The certificates acquired by the plan have received a rating at the time of such acquisition that is in one of the three highest generic rating categories from either Standard & Poor's Corporation (S&P's), Moody's Investors Service, Inc. (Moody's), Duff & Phelps Inc. (D&P) or Fitch Investors Service, Inc. (Fitch);

(4) The trustee is not an affiliate of any member of the Restricted Group. However, the trustee shall not be considered to be an affiliate of a servicer solely because the trustee has succeeded to the rights and responsibilities of the servicer pursuant to the terms of a pooling and servicing agreement providing for such succession upon the occurrence of one or more events of default by the servicer;

(5) The sum of all payments made to and retained by the underwriters in connection with the distribution or placement of certificates represents not more than reasonable compensation for underwriting or placing the certificates; the sum of all payments made to and retained by the sponsor pursuant to the assignment of obligations (or interests therein) to the trust represents not more than the fair market value of such obligations (or interests); and the sum of all payments made to and retained by the servicer represents not more than reasonable compensation for the servicer's services under the pooling and servicing agreement and reimbursement of the servicer's reasonable expenses in connection therewith; and

(6) The plan investing in such certificates is an "accredited investor" as defined in Rule 501(a)(1) of Regulation D of the Securities and Exchange Commission under the Securities Act of 1933.

B. Neither any underwriter, placement agent, sponsor, trustee, servicer, insurer, or any obligor, unless it or any of its affiliates has discretionary authority or renders investment advice with respect to the plan assets used by a plan to acquire certificates, shall be denied the relief provided under Part I, if the provision of subsection II.A.(6) above is not satisfied with respect to acquisition or holding by a plan of such certificates, provided that (1) such condition is disclosed in the prospectus or private placement memorandum; and (2) in the

case of a private placement of certificates, the trustee obtains a representation from each initial purchaser which is a plan that it is in compliance with such condition, and obtains a covenant from each initial purchaser to the effect that, so long as such initial purchaser (or any transferee of such initial purchaser's certificates) is required to obtain from its transferee a representation regarding compliance with the Securities Act of 1933, any such transferees will be required to make a written representation regarding compliance with the condition set forth in subsection II.A.(6) above.

III. Definitions

For purposes of this exemption:

A. "Certificate" means:

(1) a certificate

(a) that represents a beneficial ownership interest in the assets of a trust; and

(b) that entitles the holder to pass-through payments of principal, interest, and/or other payments made with respect to the assets of such trust; or

(2) a certificate denominated as a debt instrument—

(a) that represents an interest in a Real Estate Mortgage Investment Conduit (REMIC) within the meaning of section 860D(a) of the Internal Revenue Code of 1986; and

(b) that is issued by and is an obligation of a trust; with respect to certificates defined in (1) and (2) for which NatWest or any of its affiliates which is subject to the jurisdiction of the United States courts is either (i) the sole underwriter or the manager or co-manager of the underwriting syndicate, or (ii) a selling or placement agent. For purposes of this exemption, references to "certificates representing an interest in a trust" include certificates denominated as debt which are issued by a trust.

B. "Trust" means an investment pool, the corpus of which is held in trust in the United States and consists solely of:

(1) either

(a) secured consumer receivables that bear interest or are purchased at a discount (including, but not limited to, home equity loans and obligations secured by shares issued by a cooperative housing association);

(b) secured credit instruments that bear interest or are purchased at a discount in transactions by or between business entities (including, but not limited to, qualified equipment notes secured by leases, as defined in section III.T);

(c) obligations that bear interest or are purchased at a discount and which are secured by single-family residential,

multi-family residential and commercial real property, (including obligations secured by leasehold interests on commercial real property);

(d) obligations that bear interest or are purchased at a discount and which are secured by motor vehicles or equipment, or qualified motor vehicle leases (as defined in section III.U);

(e) "guaranteed governmental mortgage pool certificates," as defined in 29 CFR section 2510.3-101(i)(2);

(f) fractional undivided interests in any of the obligations described in clauses (a)-(e) of this section B.(1);

(2) property which had secured any of the obligations described in subsection B.(1);

(3) undistributed cash or temporary investments made therewith maturing no later than the next date on which distributions are to be made to certificateholders; and

(4) rights of the trustee under the pooling and servicing agreement, and rights under any insurance policies, third-party guarantees, contracts of suretyship and other credit support arrangements with respect to any obligations described in subsection B.(1).

Notwithstanding the foregoing, the term "trust" does not include any investment pool unless: (i) the investment pool consists only of assets of the type which have been included in other investment pools, (ii) certificates evidencing interests in such other investment pools have been rated in one of the three highest generic rating categories by S&P's, Moody's, D&P, or Fitch for at least one year prior to the plan's acquisition of certificates pursuant to this exemption, and (iii) certificates evidencing interests in such other investment pools have been purchased by investors other than plans for at least one year prior to the plan's acquisition of certificates pursuant to this exemption.

C. "Underwriter" means:

(1) NatWest;

(2) any person directly or indirectly, through one or more intermediaries, controlling, controlled by or under common control with NatWest; or

(3) any member of an underwriting syndicate or selling group of which NatWest or a person described in (2) is a manager or co-manager with respect to the certificates.

D. "Sponsor" means the entity that organizes a trust by depositing obligations therein in exchange for certificates.

E. "Master Servicer" means the entity that is a party to the pooling and servicing agreement relating to trust assets and is fully responsible for

servicing, directly or through subservicers, the assets of the trust.

F. "Subservicer" means an entity which, under the supervision of and on behalf of the master servicer, services receivables contained in the trust, but is not a party to the pooling and servicing agreement.

G. "Servicer" means any entity which services receivables contained in the trust, including the master servicer and any subservicer.

H. "Trustee" means the trustee of the trust, and in the case of certificates which are denominated as debt instruments, also means the trustee of the indenture trust.

I. "Insurer" means the insurer or guarantor of, or provider of other credit support for, a trust.

Notwithstanding the foregoing, a person is not an insurer solely because it holds securities representing an interest in a trust which are of a class subordinated to certificates representing an interest in the same trust.

J. "Obligor" means any person, other than the insurer, that is obligated to make payments with respect to any obligation or receivable included in the trust. Where a trust contains qualified motor vehicle leases or qualified equipment notes secured by leases, "obligor" shall also include any owner of property subject to any lease included in the trust, or subject to any lease securing an obligation included in the trust.

K. "Excluded Plan" means any plan with respect to which any member of the Restricted Group is a "plan sponsor" within the meaning of section 3(16)(B) of the Act.

L. "Restricted Group" with respect to a class of certificates means:

- (1) each underwriter;
- (2) each insurer;
- (3) the sponsor;
- (4) the trustee;
- (5) each servicer;

(6) any obligor with respect to obligations or receivables included in the trust constituting more than 5 percent of the aggregate unamortized principal balance of the assets in the trust, determined on the date of the initial issuance of certificates by the trust; or

(7) any affiliate of a person described in (1)-(6) above.

M. "Affiliate" of another person includes:

(1) Any person directly or indirectly, through one or more intermediaries, controlling, controlled by, or under common control with such other person;

(2) Any officer, director, partner, employee, relative (as defined in section

3(15) of the Act), a brother, a sister, or a spouse of a brother or sister of such other person; and

(3) Any corporation or partnership of which such other person is an officer, director or partner.

N. "Control" means the power to exercise a controlling influence over the management or policies of a person other than an individual.

O. A person will be "independent" of another person only if:

(1) such person is not an affiliate of that other person; and

(2) the other person, or an affiliate thereof, is not a fiduciary who has investment management authority or renders investment advice with respect to any assets of such person.

P. "Sale" includes the entrance into a forward delivery commitment (as defined in section Q below), provided:

(1) The terms of the forward delivery commitment (including any fee paid to the investing plan) are no less favorable to the plan than they would be in an arm's length transaction with an unrelated party;

(2) The prospectus or private placement memorandum is provided to an investing plan prior to the time the plan enters into the forward delivery commitment; and

(3) At the time of the delivery, all conditions of this exemption applicable to sales are met.

Q. "Forward delivery commitment" means a contract for the purchase or sale of one or more certificates to be delivered at an agreed future settlement date. The term includes both mandatory contracts (which contemplate obligatory delivery and acceptance of the certificates) and optional contracts (which give one party the right but not the obligation to deliver certificates to, or demand delivery of certificates from, the other party).

R. "Reasonable compensation" has the same meaning as that term is defined in 29 CFR section 2550.408c-2.

S. "Qualified Administrative Fee" means a fee which meets the following criteria:

(1) the fee is triggered by an act or failure to act by the obligor other than the normal timely payment of amounts owing in respect of the obligations;

(2) the servicer may not charge the fee absent the act or failure to act referred to in (1);

(3) the ability to charge the fee, the circumstances in which the fee may be charged, and an explanation of how the fee is calculated are set forth in the pooling and servicing agreement; and

(4) the amount paid to investors in the trust will not be reduced by the amount of any such fee waived by the servicer.

T. "Qualified Equipment Note Secured By A Lease" means an equipment note:

(a) which is secured by equipment which is leased;

(b) which is secured by the obligation of the lessee to pay rent under the equipment lease; and

(c) with respect to which the trust's security interest in the equipment is at least as protective of the rights of the trust as the trust would have if the equipment note were secured only by the equipment and not the lease.

U. "Qualified Motor Vehicle Lease" means a lease of a motor vehicle where:

(a) the trust holds a security interest in the lease;

(b) the trust holds a security interest in the leased motor vehicle; and

(c) the trust's security interest in the leased motor vehicle is at least as protective of the trust's rights as the trust would receive under a motor vehicle installment loan contract.

V. "Pooling and Servicing Agreement" means the agreement or agreements among a sponsor, a servicer and the trustee establishing a trust. In the case of certificates which are denominated as debt instruments, "Pooling and Servicing Agreement" also includes the indenture entered into by the trustee of the trust issuing such certificates and the indenture trustee.

For a more complete statement of the facts and representations supporting the Department's decision to grant this exemption, refer to the notice of proposed exemption published on June 10, 1994, at 59 FR 30049.

Effective Date: This exemption is effective for transactions occurring on or after December 22, 1993.

For Further Information Contact: Gary H. Lefkowitz of the Department, telephone (202) 219-8881. (This is not a toll-free number.)

General Information

The attention of interested persons is directed to the following:

(1) The fact that a transaction is the subject of an exemption under section 408(a) of the Act and/or section 4975(c)(2) of the Code does not relieve a fiduciary or other party in interest or disqualified person from certain other provisions to which the exemptions does not apply and the general fiduciary responsibility provisions of section 404 of the Act, which among other things require a fiduciary to discharge his duties respecting the plan solely in the interest of the participants and beneficiaries of the plan and in a prudent fashion in accordance with section 404(a)(1)(B) of the Act; nor does it affect the requirement of section

401(a) of the Code that the plan must operate for the exclusive benefit of the employees of the employer maintaining the plan and their beneficiaries;

(2) These exemptions are supplemental to and not in derogation of, any other provisions of the Act and/or the Code, including statutory or administrative exemptions and transactional rules. Furthermore, the fact that a transaction is subject to an administrative or statutory exemption is not dispositive of whether the transaction is in fact a prohibited transaction; and

(3) The availability of these exemptions is subject to the express condition that the material facts and representations contained in each application are true and complete and accurately describe all material terms of the transaction which is the subject of the exemption. In the case of continuing exemption transactions, if any of the material facts or representations described in the application change after the exemption is granted, the exemption will cease to apply as of the date of such change. In the event of any such change, application for a new exemption may be made to the Department.

Signed at Washington, D.C., this 11th day of August 1994.

Ivan Strasfeld,

Director of Exemption Determinations,
Pension and Welfare Benefits Administration,
U.S. Department of Labor.

[FR Doc. 94-20009 Filed 8-16-94; 8:45 am]

BILLING CODE 4510-29-P

ADDRESSES: Written comments on the amended routine uses may be submitted to the Executive Secretary, National Labor Relations Board, 1099 Fourteenth Street, NW., Washington, DC 20570-0001. Copies of all comments received will be available for inspection between 8:30 and 5 pm in room 11600.

FOR FURTHER INFORMATION CONTACT:

John C. Truesdale, Executive Secretary, National Labor Relations Board, room 11600, 1099 Fourteenth Street NW., Washington, DC 20570-0001.

SUPPLEMENTARY INFORMATION: Pursuant to subsection (e)(11) of the Privacy Act of 1974, 5 U.S.C. 552a, the National Labor Relations Board is publishing a notice revising existing routine uses Nos. 1, 3, and 8 in its system of records NLRB-19, Telephone Call Detail Records. The system notice of NLRB-19 was last published in its entirety in 58 FR 50957 on September 29, 1993.

As amended, routine use No. 1 will specify that on disclosure to an inquiring congressional office, the subject individual must be the constituent about whom the records are maintained. The other two amended routine uses Nos. 3 and 8 respectively will narrow the existing routine uses to specify more exactly the information that may be disclosed to a court or an adjudicative body in the course of presenting evidence or argument, including disclosure to opposing counsel or witnesses in the course of civil discovery, and to an inquiring Federal authority for hiring or retention of an employee.

A report of this notice to amend the three routine uses in NLRB-19, Telephone Call Detail Records was filed pursuant to 5 U.S.C. 552a(r) with the Office of Management and Budget and with Congress. The specific changes to the notice being amended (58 FR 50957, September 29, 1993) are set forth below.

By direction of the Board.

Dated: Washington, DC, August 11, 1994.

John C. Truesdale,
Executive Secretary.

NLRB-19

System name:

Telephone Call Detail Records.

* * * * *

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

1. A Member of Congress or to a Congressional staff member in response to an inquiry of the Congressional office made at the written request of the

constituent about whom the record is maintained.

* * * * *

3. A court, a magistrate, administrative tribunal, or other adjudicatory body in the course of presenting evidence or argument, including disclosure to opposing counsel or witnesses in the course of civil discovery, litigation, or settlement negotiations, or in connection with criminal law proceedings, when: (a) The NLRB or any component thereof; or (b) any employee of the NLRB in his or her official capacity; or (c) any employee of the NLRB in his or her individual capacity where the NLRB has agreed to represent the employee; or (d) the United States Government, is a party to litigation and has interest in such litigation, and determines that such disclosure is relevant and necessary to the litigation and that the use of such records is therefore deemed by the NLRB to be for a purpose that is compatible with the purpose for which the records were collected.

* * * * *

8. A Federal authority, in response to its request, that this system of records contains information relevant to the hiring or retention of an employee, the issuance or retention of a security clearance, the letting of a contract, or the issuance or retention of a license, grant, or other benefit. The other agency or licensing organization, however, may then make a request supported by the written consent of the individual for the entire record if it so chooses. No disclosure will be made unless the information has been determined to be sufficiently reliable to support a referral to another office within the NLRB or to another Federal agency for criminal, civil, administrative, personnel, or regulatory action.

* * * * *

[FR Doc. 94-20217 Filed 8-16-94; 8:45 am]

BILLING CODE 7545-01-M

NATIONAL LABOR RELATIONS BOARD

Privacy Act of 1974; System of Records

AGENCY: National Labor Relations Board (NLRB).

ACTION: Notice of amended routine uses for NLRB system of records NLRB-19, Telephone Call Detail Records.

SUMMARY: This notice amends the language of three routine uses in the NLRB Privacy Act system of records NLRB-19, Telephone Call Detail Records. The three amended routine uses narrow the existing routine uses to specify more exactly the information that may be disclosed.

EFFECTIVE DATE: The amended routine uses will become effective without further notice 30 days from the date of this publication (September 16, 1994), unless comments are received on or before that date which result in a contrary determination.

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards Subcommittee Meeting on Containment Systems; Meeting

The ACRS Subcommittee on Containment Systems will hold a meeting on September 7, 1994, Room T-2B3, 11545 Rockville Pike, Rockville, Maryland.

The entire meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Wednesday, September 7, 1994—8:30 a.m.
Until the Conclusion of Business

The Subcommittee will review proposed changes to Appendix J to 10 CFR Part 50, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors". The purpose of this meeting is to gather information, analyze relevant issues and facts, and to formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Electronic recordings will be permitted only during those portions of the meeting that are open to the public, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the cognizant ACRS staff engineer named below five days prior to the meeting, if possible, so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittee, along with any of its consultants who may be present, may exchange preliminary views regarding matters to be considered during the balance of the meeting.

The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC staff, nuclear industry, their consultants, and other interested persons regarding this review.

Further information regarding topics to be discussed, the scheduling of sessions open to the public, 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 contacting the cognizant ACRS staff engineer, Mr. M. Dean Houston, (telephone 301/415-6899) between 7:30 a.m. and 4:15 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individual five days before the scheduled meeting to be advised of any changes in schedule, etc., that may have occurred.

Dated: August 10, 1994.

Sam Duraiswamy,

Chief, Nuclear Reactors Branch.

[FR Doc. 94-20137 Filed 8-16-94; 8:45 am]

BILLING CODE 7590-01-M

Advisory Committee on Reactor Safeguards Subcommittee Meeting on Planning and Procedures; Meeting

The ACRS Subcommittee on Planning and Procedures will hold a meeting on September 7, 1994, Room T-2E13, 11545 Rockville Pike, Rockville, Maryland.

The entire meeting will be open to public attendance, with the exception of a portion that may be closed pursuant to 5 U.S.C. 552b(c) (2) and (6) to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of ACRS, and matters the release of which would represent a clearly unwarranted invasion of personal privacy.

The agenda for the subject meeting shall be as follows:

Wednesday, September 7, 1994—2:00 p.m.
Until the Conclusion of Business

The Subcommittee will discuss proposed ACRS activities and related matters. Also, it will discuss qualifications of candidates nominated for appointment to the ACRS. The purpose of this meeting is to gather information, analyze relevant issues and facts, and to formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Electronic recordings will be permitted only during those portions of the meeting that are open to the public, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the cognizant ACRS staff person named below five days prior to the meeting, if possible, so that appropriate arrangements can be made.

Further information regarding topics to be discussed, the scheduling of sessions open to the public, 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 contacting the cognizant ACRS staff person, Dr. John T. Larkins (telephone: 301/415-7360) between 7:30 a.m. and 4:15 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individual five days before the scheduled meeting to be advised of any changes in schedule, etc., that may have occurred.

Dated: August 11, 1994.

Sam Duraiswamy,

Chief, Nuclear Reactors Branch.

[FR Doc. 94-20136 Filed 8-16-94; 8:45 am]

BILLING CODE 7590-01-M

SECURITIES AND EXCHANGE COMMISSION

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Notice and Opportunity for Hearing; Boston Stock Exchange, Incorporated

August 11, 1994.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

Carmike Cinemas, Inc.
Class A Common Stock, \$.03 Par Value
(File No. 7-12799)
Collins & Aikman Corp.
Common Stock, \$.01 Par Value (File No. 7-12800)
Oasis Residential, Inc.
Common Stock, \$.01 Par Value (File No. 7-12801)
Paul Revere Corp.
Common Stock, \$1.00 Par Value (File No. 7-12802)

These securities are listed and registered on one or more other national securities exchanges and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 1, 1994, written data, views and arguments concerning the above-referenced application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 5th Street NW., Washington, DC 20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such applications are consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 94-20117 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-M

**Self-Regulatory Organizations;
Applications for Unlisted Trading
Privileges; Notice and Opportunity for
Hearing; Chicago Stock Exchange,
Incorporated**

August 11, 1994.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

- Embotelladora Andina S.A.
American Depository Shares (each Rep. 6 Shrs. of Common Stock) No Par Value (File No. 7-12782)
- Banpais S.A. Institucion De Banca Multiple Grupo Financiero. Asemex Banpais (Rep 6 Series L Limited Voting Shares) \$1.00 Par Value (File No. 7-12783)
- Collins & Aikman Corporation
Common Stock \$.01 Par Value (File No. 7-12784)
- Instituto Nazionale Delle Assicurazioni SPA
American Depository Shares (rep 10 ord Shrs LIT) \$1.00 Par Value (File No. 7-12785)
- Morgan Stanley Pacific Asia Fund, Inc.
Common Stock \$.01 Par Value (File No. 7-12786)
- Apartment Investment and Management Company
Common Stock \$.01 Par Value (File No. 7-12787)
- Desc S.A. De C.V.
American Depository Shares, No Par Value (File No. 7-12788)
- Greenbrier Companies, Inc.
Common Stock \$.01 Par Value (File No. 7-12789)
- Grupo Industrial Durango SA De C.V.
American Depository Shares (each Rep 2 Ord Participation Cert.) No Par Value (File No. 7-12790)
- Paragon Group, Inc.
Common Stock \$.01 Par Value (File No. 7-12791)
- Taiwan Equity Fund, Inc.
Common Stock \$.01 Par Value (File No. 7-12792)
- WCI Steel, Inc.
Common Stock No Par Value (File No. 7-12793)
- WHX-Corporation (Holding Company)
Common Stock No Par Value (File No. 7-12794)
- Empresa Nacional De Electricidad S.A. Chile
American Depository Shares (Rep 30 shrs of Common Stock) No Par Value (File No. 7-12795)
- Home Properties of New York
Common Stock \$.01 Par Value (File No. 7-12796)
- Partial National Corporation
Common Stock No Par Value (File No. 7-12797)
- Freeport McMoran Copper and Gold
Dep Shrs. (each rep. approx. 2.941 Shrs of a 7% Conv. Exch. Special Pref. Stock) No Par Value (File No. 7-12798)

These securities are listed and registered on one or more other national securities exchanges and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 1, 1994, written data, views and arguments concerning the above-referred application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such application is consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,
Secretary.

[FR Doc. 94-20116 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 34-34516; File No. SR-CHX-94-12]

**Self-Regulatory Organizations;
Chicago Stock Exchange, Inc.; Order
Approving Proposed Rule Change
Relating To Disclosure of Pending
Formal Exchange Disciplinary
Proceedings to the Central
Registration Depository**

August 10, 1994.

I. Introduction

On May 6, 1994, the Chicago Stock Exchange, Inc. ("CHX" or "Exchange") submitted to the Securities and Exchange Commission ("Commission" or "SEC"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ and Rule 19b-4 thereunder,² a proposed rule change to authorize the Exchange to provide information to the Central Registration Depository ("CDR") concerning pending formal, Exchange disciplinary proceedings for disclosure to the public.

The proposed rule change was noticed in Securities Exchange Act Release No. 34268 (June 28, 1994), 59 FR 34459 (July 5, 1994). No comments were received on the proposal. This order approves the proposed rule change.

¹ 15 U.S.C. 78s(b)(1) (1988).

² 17 CFR 240.19b-4 (1994).

II. Description of the Proposal

The CHX is adopting Rule 9 to Article XII of the Exchange's Rules to authorize the CHX to provide information to the CRD³ concerning pending formal Exchange disciplinary proceedings for disclosure to the public. According to the Exchange, a formal disciplinary proceeding is considered to be pending from the time charges are issued⁴ until the proceeding is completed.⁵ Currently, the Exchange discloses information only on final Exchange disciplinary actions to the CRD.⁶

Information on pending formal SRO disciplinary proceedings, among other events, is currently in the CRD, but only to the extent that reports are made by members, member organizations and associated persons pursuant to their reporting obligations on the Uniform Application for Securities Industry Registration or Transfer (Form U-1) and Form BD, the uniform application form for broker-dealer registration. The proposal would expand the information available on pending disciplinary actions by requiring the Exchange to report such cases to the CRD.⁷

³ The CRD is an automated industry database containing employment and disciplinary history of members and associated persons registered with self-regulatory organizations ("SROs") and state securities agencies. The CRD is operated by the National Association of Securities Dealers, Inc. ("NASD") with input on policy and other matters from federal and state agencies and other SROs, including the Exchange.

⁴ CHX Article XII, Rule 1(b) provides, in part, that if in the judgment of the President it shall appear that an accused has committed a default or other offense in violation of the Constitution or Rules of the Exchange the President shall, except as hereinafter provided, direct the staff to prefer written charges against the accused. A copy of such charges shall be served upon the accused. The accused shall also be served with written notice of when and where the charges will be heard.

⁵ See CHX Article XII, Rule 7.

⁶ Information concerning final disciplinary actions taken by the Exchange, the NASD and other self-regulatory and regulatory organizations, as well as information concerning certain criminal convictions contained in the CRD, has been disclosed to the public pursuant to the NASD's 800 number service since October 1991. The Commission subsequently approved the NASD's procedures for operating its 800 number service in Securities Exchange Act Release No. 30629 (April 23, 1992), 57 FR 18535 (April 30, 1992) (File No. SR-NASD-91-39) ("800 Number Service Plan Approved Order"). On July 1, 1993, the SEC approved a NASD rule change to make more information available to the general public regarding pending disciplinary proceedings or actions taken by federal or state securities agencies and SROs that relate to securities or commodities transactions, and regarding criminal indictments and information. See Securities Exchange Act Release No. 32568 (July 1, 1993), 58 FR 36723 (July 8, 1993) (File No. SR-NASD-93-26) ("Pending Event Disclosure Approval Order").

⁷ On March 31, 1994, the Commission approved a similar proposal by the New York Stock Exchange, Inc. ("NYSE") which authorized the

Continued

The Exchange believes that the proposed rule change is consistent with Section 6(b)(5) of the Act in that it is designed to promote just and equitable principles of trade, to remove impediments and to perfect the mechanisms of a free and open market and a national market system, and in general, to protect investors and the public interest.

III. Discussion

The Commission finds that the proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange, and, in particular, with the requirements of Section 6(b).⁸ In particular, the Commission believes the proposal is consistent with the Section 6(b)(5)⁹ requirements that the rules of an exchange be designed to promote just and equitable principles of trade, to prevent fraudulent and manipulative acts and, in general, to protect investors and the public interest.

In the Securities Enforcement Remedies and Penny Stock Reform Act of 1990 ("Penny Stock Reform Act"), Congress mandated that the NASD establish a toll-free telephone number ("800 number service") for the purpose of receiving and responding to inquiries from the public regarding the background of NASD members and their associated persons. The NASD began operating its 800 number service on October 1, 1991. Upon the request of a caller, the NASD may disclose, in the form of a written report, the following information contained in the CRD:¹⁰ past and present employment history of NASD members and their associated persons; all final disciplinary actions,¹¹ taken by federal and state regulatory agencies and SROs, that relate to securities or commodities transactions;

NYSE to provide information to the CRD concerning pending formal NYSE disciplinary proceedings, for disclosure to the public. See Securities Exchange Act Release No. 33844 (March 31, 1994), 59 FR 16669 (April 7, 1994) (order approving File No. SR-NYSE-94-11).

⁸ 15 U.S.C. 78f (1988).

⁹ 25 U.S.C. 78f(b)(5) (1988).

¹⁰ Under NASD procedures, the 800 number service operator does not provide any information over the telephone. Instead, a written copy of the information requested is sent to the caller and to the NASD member and/or associated person who is the subject of the inquiry. The identity of the caller remains confidential. See 800 Number Service Plan Approval Order, *supra*, note 6.

¹¹ The NASD's 800 number service plan does not define the term "disciplinary action." According to the NASD, however, the term includes, but is not limited to, information provided in response to question 7 on Form BD and question 22 on Form U-4. See Pending Event Disclosure Approval Order, *supra*, note 6.

and all criminal convictions reported on Form BD or Form U-4.

In 1993, the Commission approved a rule change by the NASD to expand the scope of information that is reportable through its 800 number service.¹² Thus, in addition to the information set forth above, the NASD may disclose to the public such events as pending formal disciplinary actions initiated by federal and state regulatory agencies and SROs; criminal indictments or informations; civil judgments; and certain arbitration awards in securities and commodities disputes involving public customers. Currently, the NASD relies on members and associated persons to report these events to the CRD on Form BD or Form U-4, respectively. Because this represents the only means by which the NASD can obtain data about pending disciplinary actions (other than its own), the quality of the CRD database, and thus of the 800 number service, depends on complete and timely reporting by members and associated persons.

In the Commission's opinion, Rule 9 to Article XII should help fill a potential gap in the NASD's 800 number service, by authorizing the Exchange to report the initiation of a formal CHX disciplinary proceeding¹³ involving an Exchange member, member organization or associated person, and significant changes in the status thereof,¹⁴ directly to the CRD. As a result, that information will be available to the public whether or not it is voluntarily reported by the member or associated person. The Commission therefore finds that the proposed rule change should enhance the fairness and accuracy of the CRD database and, accordingly, of

¹² See Pending Event Disclosure Approval Order, *supra*, note 6. The Commission notes that, in 1992, Congress requested that the General Accounting Office ("GAO") conduct a review of various aspects of the Penny Stock Reform Act, including the NASD's 800 number service. Among other things, the GAO recommended that information about final arbitration awards be reported. Accordingly, the NASD submitted, and the Commission approved, a rule change authorizing the NASD to disclose certain arbitration awards, as well as pending formal disciplinary actions, through its 800 number service. In this context, the Commission notes that it has requested all SROs to coordinate with the NASD the transfer of information about awards rendered in each exchange's arbitration program.

¹³ For purposes of reporting to the CRD, the CHX considers a formal disciplinary proceeding to be pending from the time charges are issued until completion of the proceeding. See *supra*, notes 4 and 5.

¹⁴ CHX Rule 9 provides the following examples of significant changes in the status of a pending formal disciplinary proceeding which would require disclosure: the issuance of a decision by the President; and the filing of an appeal to and/or the issuance of a decision by a Judiciary Committee, the Exchange's Executive Committee or Board of Governors.

information released to the public through the 800 number service.

The Commission has long believed that investors need access to reliable information in order to protect themselves against potential fraud and abuse. In this respect, Rule 9 to Article XII should help customers make an informed decision about whether they should conduct or continue to conduct business with particular securities professionals. In sum, the Commission has concluded that the rule change should increase the flow of information to the public and thus should ultimately strengthen investor protection.

It is therefore ordered, pursuant to Section 19(b)(2)¹⁵ that the proposed rule change (SR-CHX-94-12) is hereby approved.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.¹⁶

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94-20122 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-M

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Notice and Opportunity for Hearing; Cincinnati Stock Exchange, Incorporated

August 11, 1994.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

- Amway Japan Ltd.
- American Depositary Shares (rep. 1/2 sh. Com. stk. without Par Value (File No. 7-12823)
- Capstone Capital Corp. Common Stock, \$0.01 Par Value (File No. 7-12824)
- Case Equipment Corp. Common Stock, \$0.01 Par Value (File No. 7-12825)
- Cole National Corp. Class A Common Stock, \$0.01 Par Value (File No. 7-12826)
- Collins & Aikman Corp. Common Stock, \$0.01 Par Value (File No. 7-12827)
- Ferrellgas Partners Common Units, (rep. L.P. Units), No Par Value (File No. 7-12828)
- First Industrial Realty Trust, Inc. Common Stock, \$0.01 Par Value (File No. 7-12829)
- Franchise Finance Corp. of America

¹⁵ 15 U.S.C. 78s(b)(2) (1988).

¹⁶ 17 CFR 200.30-3(a)(12) (1994).

Common Stock, \$.01 Par Value (File No. 7-12830)

Franklin Electronic Publishers, Inc.
Common Stock, No Par Value (File No. 7-12831)

HS Resources, Inc.
Common Stock, \$.001 Par Value (File No. 7-12832)

Kaydon Corp.
Common Shares, \$.10 Par Value (File No. 7-12833)

MFS Intermediate Income Trust
Shares of Beneficial Interest, No Par Value (File No. 7-12834)

Nations Balanced Target Maturity Fund, Inc.
Common Stock, \$.001 Par Value (File No. 7-12835)

Smith (Charles E.) Residential Realty, Inc.
Common Stock, \$.01 Par Value (File No. 7-12836)

Texaco Capital LLC
Cm. Adj. Rate "MIPS" Ser. B (File No. 7-12837)

United Wisconsin Services, Inc.
Common Stock, No Par Value (File No. 7-12838)

Viking Star Shipping, Inc.
Common Stock, No Par Value (File No. 7-12839)

WCI Steel, Inc.
Common Stock, No Par Value (File No. 7-12840)

Cira Pharmaceuticals, Inc.
Common Stock, \$.01 Par Value (File No. 7-12841)

Interdigital Communications
Common Stock, \$.01 Par Value (File No. 7-12842)

Intermagnetics General Corp.
Common Stock, \$.10 Par Value (File No. 7-12843)

Rotronics Manufacturing
Common Stock, No Par Value (File No. 7-12844)

Texas Meridian Resources Corp.
Common Stock, \$.01 Par Value (File No. 7-12845)

Top Source Technologies, Inc.
Common Stock, \$.001 Par Value (File No. 7-12846)

Voyageur Minnesota Municipal Income III
Common Stock, \$.01 Par Value (File No. 7-12847)

XCL, Ltd.
Common Stock, \$.01 Par Value (File No. 7-12848)

CKE Restaurants, Inc.
Common Stock, \$.01 Par Value (File No. 7-12849)

Dominion Resources Black Warrior Trust
Trust Units (File No. 7-12850)

These securities are listed and registered on one or more other national securities exchanges and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 1, 1994, written data, views and arguments concerning the above-referenced applications. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 Fifth Street, NW Washington, DC

20549. Following this opportunity for hearing, the Commission will approve the applications if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such applications are consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,

Secretary.

[FR Doc. 94-20119 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 34-34511; File No. SR-GSCC-94-06]

Self-Regulatory Organizations; Government Securities Clearing Corporation; Notice of Filing of Proposed Rule Change Modifying the Trade Reporting Requirements for Category 2 Inter-Dealer Broker Netting Members

August 10, 1994.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),¹ notice is hereby given that on July 5, 1994, the Government Securities Clearing Corporation ("GSCC") filed with the Securities and Exchange Commission ("Commission") the proposed rule change (File No. SR-GSCC-94-06) as described in Items I, II, and III below, which Items have been prepared primarily by the self-regulatory organization. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The proposed rule change will modify GSCC's rules concerning the trade reporting requirements for category 2 inter-dealer broker netting members ("IDBs").

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below.

¹ 15 U.S.C. 78s(b)(1) (1988).

The self-regulatory organization has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

The classification of category 2 IDBs was established by GSCC in 1993 in order to permit qualifying IDBs to engage in up to ten percent of their trading activity in eligible securities with non-netting members.² Each category 2 IDB must act exclusively as a broker and at least ninety percent of its business, measured based on the overall dollar volume of next day and forward settlement activity in eligible netting securities over the most recent twenty day period, must be with netting members.³ In addition, Category 2 IDBs have clearing fund and margin requirements essentially the same as those of a category 1 dealer netting members.

In order to monitor compliance with their scope of business requirements, each category 2 IDB is obligated to provide GSCC in writing with a list of all of the legal entities that it acts on behalf of and must promptly inform GSCC of any change to such list. Each IDB also is required to submit daily to GSCC all of its next day and forward settling trades in eligible netting securities, including trades with non-grandfathered non-members and must indicate the buy and sell side of each transaction.

GSCC's rule do not, however, expressly require that a category 2 IDB provide to GSCC for every trade done involving an eligible netting security the identity of each buy side and sell side counterparty. This information is significant to GSCC for risk monitoring and surveillance purposes. In particular, it is important for GSCC to understand and to be able to assess the volume of and degree of concentration of trading done by a category 2 IDB with one or more specific non-members.

The proposed rule change, therefore, will expressly require each category 2

² The Commission approved category 2 IDBs in Securities Exchange Act Release No. 32722 (August 12, 1993), 58 FR 42993.

³ For a temporary period established by GSCC's Board of Directors, the term netting members is defined to include certain specifically designated grandfathered non-netting members firms that currently have IDB screen access. This will temporarily allow category 2 IDBs to trade with nonmember dealers that historically have had access to the IDBs' screens. An IDB's trading activity with grandfathered dealers will not be included for purposes of determining when an IDB meets the ten percent scope of business limitation.

IDB to disclose to GSCC for every trade done involving an eligible netting security, including trades done with non-members, the identity of each buy side and sell side counterparty.

GSCC believes that because the proposed rule change allows GSCC to ensure that it can appropriately monitor its existing netting members, it is consistent with Section 17A of the Act⁴ and the rules and regulations thereunder applicable to GSCC.

B. Self-Regulatory Organization's Statement on Burden on Competition

GSCC does not believe that the proposed rule change will impose any burden on competition.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Comments on the proposed rule change have not yet been solicited or received. GSCC members will be notified of the rule filing and comments will be solicited by a GSCC Important Notice. GSCC will then notify the Commission of any written comments received by GSCC regarding the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within thirty-five days of the date of publication of this notice in the *Federal Register* or within such longer period (i) as the Commission may designate up to ninety days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve such proposed rule change or
- (B) institute proceedings to determine whether the proposed rule change should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views, and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the

proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. § 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC 20549. Copies of such filing will also be available for inspection and copying at the principal office of GSCC. All submissions should refer to file number SR-GSCC-94-06 and should be submitted by September 7, 1994.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94-20120 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 3434512; File No. SR-MBSC-94-3]

Self-Regulatory Organizations; MBS Clearing Corporation; Notice of Amendments and Order Granting Accelerated Approval of Proposed Rule Change Relating to Corporate Governance Changes

August 10, 1994.

On June 21, 1994, MBS Clearing Corporation ("MBSC") filed with the Securities and Exchange Commission ("Commission") a proposed rule change pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act").¹ The Commission published notice of the proposed rule change in the *Federal Register* on July 18, 1994.² On July 15, July 22, August 4, and August 9, 1994, MBSC filed amendments to the proposed rule change.³ No comments have been received on the filing. As discussed below, the Commission is approving the

¹ 15 U.S.C. 78s(b)(1) (1988).

² Securities Exchange Act Release No. 34337 (July 8, 1994), 59 FR 36457.

³ Amendment No. 1 corrected a typographical error in the filing. Letter from David T. Rusoff, Foley & Lardner, to Jerry Carpenter, Division of Market Regulation ("Division"), Commission (July 14, 1994). Amendment No. 2 clarified certain provisions of the Shareholders Agreement. Letter from Daniel B. Silver, Cleary, Gottlieb, Steen & Hamilton to Jerry Carpenter, Division, Commission (July 21, 1994). Amendment No. 3 clarified the procedure for shareholders to terminate the Shareholders Agreement. Letter from David T. Rusoff, Foley & Lardner, to Jerry Carpenter, Division, Commission (August 3, 1994). Amendment No. 4 provided for a limitation on the voting entitlements of bank holding companies. Letter from David T. Rusoff, Foley & Lardner, to Jerry Carpenter, Division, Commission (August 9, 1994).

proposed rule change, including the amendments, on an accelerated basis.

I. Description

MBSC is currently a wholly owned subsidiary of the Chicago Stock Exchange, Incorporated ("CHX"). CHX has agreed to sell all of CHX's ownership interest in MBSC to MBSC participants and the National Securities Clearing Corporation ("NSCC").⁴ After the transaction is completed, participants of MBSC will own 100% of Class A common shares of MBSC, and NSCC will own 100% of Class B common shares of MBSC.⁵

The proposed rule change adopts corporate governance changes for MBSC consistent with the transaction described above. The proposed rule change amends Article FOURTH of MBSC's Certificate of Incorporation, amends various provisions of MBSC's By-Laws and Rules, and authorizes MBSC to enter into a Shareholders Agreement.

Article FOURTH of MBSC's Certificate of Incorporation is amended to increase the number of shares of stock that MBSC is authorized to issue and to divide the common stock into Class A and Class B shares. The increased number of authorized shares permits MBSC participants to hold MBSC shares in proportion to their usage of MBSC without creating fractional shares. The division of the common stock into Class A and Class B shares provides a mechanism whereby NSCC, which will purchase 100% of Class B shares, is assured one seat on the board of directors of MBSC.

The amendments to the By-Laws and the Shareholders Agreement set forth, among other things, the number of directors, their eligibility, and the manner in which directors will be elected. Specifically, the amendment to Article 3, Section 3.1 of the By-Laws increases the size of the MBSC board to thirteen from its present size of eleven directors.⁶ In addition, Article 3,

⁴ CHX will sell all of its shares to a corporation formed for the sole purpose of acquiring MBSC stock ("MBSC Acquisition Corporation"). MBSC participants will own 90% of MBSC Acquisition Corporation, and NSCC will own 10% of MBSC Acquisition Corporation. After the sale of MBSC stock to MBSC Acquisition Corporation, MBSC Acquisition Corporation will be merged into MBSC with MBSC being the surviving corporation.

⁵ All MBSC participants will have the opportunity to purchase shares in MBSC in proportion to their usage of MBSC. After the initial sale to participants, participants who are not shareholders will be entitled to purchase one share of Class A common stock. All shareholders will be required to sign the Shareholders Agreement described below.

⁶ Pursuant to Article 3, Section 3.2 of the By-Laws and pursuant to the proposed Shareholders

⁴ 15 U.S.C. 78q-1 (1988).

Section 3.1 of the By-Laws and Section 2 of the Shareholders Agreement require that each director, other than the NSCC director and one director that represents the management of MBSCC, must be an officer or general partner of or hold a similar management position with a participant of MBSCC ("Participant Director") and that no more than one officer, partner, director, or employee of a participant may serve as director at any given time.

The proposed rule change also amends provisions of the By-Laws to lower the number of votes required to call a special meeting from 75% to 25% of the outstanding voting power (Article 2, Section 2.3), to provide for waiver of notice of a stockholders' meeting (Article 2, Section 2.4), and to authorize the board of directors to establish the salaries of MBSCC's officers (Article 5, Section 5.2).

Section 2 of the Shareholders Agreement specifies how Participant Directors and members of the nominating committee⁷ are elected. As is currently the practice, the nominating committee will nominate candidates for Participant Directors and members of the following year's nominating committee.⁸ Participants are given the opportunity to petition for additional candidates.⁹ If no petitions are filed, the participant shareholders must elect the candidates nominated by the nominating committee.

If there are competing candidates due to a petition or petitions being filed, ballots will be mailed to all participants. Pursuant to Section 2(A)(iii) of the Shareholders Agreement, each participant of MBSCC is entitled to the number of votes determined by multiplying the number of persons to be elected Participant Directors at the annual meeting by one vote for each \$1,000 of average monthly volume-related fees (rounded down to the nearest one thousand dollars) payable or

paid by the participant to MBSCC during the preceding year ("Voting Entitlement").¹⁰ Every participant shall have at least one vote. Each participant may cast all of its votes for a single nominee or distribute its votes among several nominees. Participants Owners of Class A stock must vote their shares as determined by the vote of all of the participants whether or not the voting participants are shareholders. In the event of a tie vote, the nominating committee selects the person who is to be elected director.

The Shareholders Agreement also contains provisions relating to shareholder votes for other than the election of directors.¹¹ In addition, the Shareholders Agreement contains provisions relating to required transfers of MBSCC's stock¹² and permitted transfers of MBSCC's Class A and Class B stock.¹³ The Shareholders Agreement

¹⁰ The Shareholders Agreement contains special provisions for participants that are bank holding companies ("BHC") (as such term is defined under the Bank Holding Company Act of 1956) and their affiliates. The voting entitlement of a BHC participant and its affiliates is limited to 4.9% of the total voting entitlements. The voting entitlement of all BHC participants and their affiliates is limited to 24.9% of the total voting entitlements. Should the sum of the voting entitlements of all BHC participants exceed 24.9%, each BHC participant's voting entitlement will be reduced pro rata to comply with the 24.9% limitation. The 4.9% limitation will not apply to a BHC participant if that BHC participant provides confirmation from the appropriate bank regulatory agency that the limitation is not applicable to that BHC participant. The 24.9% limitation will not apply to BHC participants if any BHC participant provides confirmation from the appropriate bank regulatory agency that the total voting entitlements of all BHC participants can exceed 24.9% of the total voting entitlements.

¹¹ Participant shareholders may not remove a director of MBSCC, with or without cause but must remove a director for cause if directed to do so by a majority of the directors. A $\frac{2}{3}$ affirmative vote of the MBSCC shares is required to amend the Certificate of Incorporation or the By-Laws of MBSCC, for MBSCC to repurchase or issue any of its securities, or for MBSCC to purchase securities not incident to MBSCC's normal business. In addition, the shareholders must vote as directed by the board of directors for amendments to the Certificate of Incorporation relating to (1) Greater than majority requirements of quorum and voting at board meetings; (2) cumulative voting for the election of directors; (3) classification of directors; (4) shareholder rights to fix consideration for shares, to determine the stated capital and surplus upon issuance, and to authorize a reduction in capital in respect of such shares; (5) shareholder rights to fix compensation of directors; and (6) shareholder rights to elect and remove directors. In addition, the board also has the authority to direct shareholder voting for the amendment of any By-Laws except any By-Law which the board is prohibited from amending by the provisions of the By-Laws.

¹² Upon the insolvency of a participant shareholder, all MBSCC shares held by it will be transferred automatically to all other participant shareholders pro rata.

¹³ A participant may sell its Class A shares only to another participant but only after giving notice

also provides that the provisions governing the voting of shares shall continue in force for ten years and shall be automatically renewed for a subsequent ten year period.¹⁴ Finally, MBSCC is amending Article V, Rule 6, Section 3 of its Rules to delete references to the CHX.

II. Discussion

The Commission believes the proposed rule change is consistent with Section 17A of the Act and, therefore, is approving the proposal. Specifically, the Commission believes the proposal is consistent with Section 17A(b)(3)(C)¹⁵ of the Act in that it assures the fair representation of its shareholders and participants in the selection of its directors and administration of its affairs.

The Act does not define fair representation or set up particular standards of representation. Instead it provides that the Commission must determine whether the rules of the clearing agency assure adequate representation of participants and shareholders in the selection of the board of directors and the administration of the clearing agency's affairs. In its release setting forth the standards for registration of clearing agencies ("Standards Release"), the Commission stated that rather than prescribing a single method for providing fair representation, the Commission would evaluate each clearing agency's procedures on a case-by-case basis.¹⁶ With respect to providing participants with a meaningful opportunity to be represented in the selection of the board of directors and the administration of the clearing agency's affairs, the Standards Release suggests a number of

to MBSCC of the proposed sale. NSCC, the sole owner of Class B stock, may sell its Class B shares only to another participant (which shares will immediately convert into Class A shares) or to a registered clearing agency but only after giving notice to MBSCC of the proposed sale. MBSCC has the option to purchase the Class A or Class B shares for the lower of \$100 per share or the offering price.

¹⁴ The provisions in the Shareholders Agreement governing voting include: (1) The obligation of the shareholders to elect directors selected by all participants; (2) the prohibition against shareholders removing directors with or without cause; (3) $\frac{2}{3}$ majority voting requirements; and (4) requirements that the shareholders vote as directed by the board for certain matters (see *supra* footnote 10). All other provisions of the Shareholders Agreement remain in effect unless the agreement is terminated or amended by the consent of all of the parties to the agreement. If at the end of any calendar year there is no agreement governing the voting of the shares in effect, the shares of MBSCC will be redistributed in proportion to each participant's usage of MBSCC.

¹⁵ 15 U.S.C. 78q-1(b)(3)(C) (1988).

¹⁶ Securities Exchange Act Release No. 16900 (July 1, 1980), 45 FR 41920.

Agreement, one of the newly created slots on the MBSCC board is for NSCC's delegate to the board, and one slot is for an additional representative of participants. NSCC will elect one director of the Class III directors for so long as NSCC owns Class B shares. Section 3.1 of the By-Laws provides for a staggered board of directors with each of the three classes elected once every three years.

⁷ Under Section 2(A)(ii) of the Shareholders Agreement, no person who is a current member of the board or who was a member of the board or nominating committee for the prior year may be elected to the nominating committee. Members of the nominating committee must be officers or general partners of or hold similar management positions with MBSCC participants.

⁸ The nominating committee must submit its list of nominees to the Secretary of MBSCC no later than sixty days before the annual meeting.

⁹ The petition must be signed by a least five participants and filed with the Secretary of MBSCC at least thirty days prior to the annual meeting.

methods can be used to comply with the fair representation standard. Among others, these include the allocation of voting stock to all participants based on their usage of the clearing agency or the selection by participants of a slate of nominees for which the stockholders of the clearing agency will be required to vote their shares.¹⁷

MBSCC's proposal initially allows all participants to purchase voting stock based on their usage of MBSCC. Rather than reallocating the voting shares each year in proportion to participants' usage of MBSCC, the Shareholders Agreement requires the participant shareholders to elect directors selected by all participants. If the voting provisions of the Shareholders Agreement expire, the participants' voting stock will be reallocated each year in accordance with each participant's usage of MBSCC. Both methods of electing directors appear to be consistent with the methods outlined in the Standards Release.

The Shareholders Agreement should ensure that the candidates for the board and the nominating committee represent the entire MBSCC participant base. The nominating committee is directed to select candidates with a view toward providing fair representation for the interests of a cross section of the participants. Other candidates may be nominated if the nominating committee is petitioned by participants.

Other aspects to the proposed rule change serve to enhance the ability of small participants to have a voice in the administration of MBSCC's affairs. By limiting each participant's representation on the board to only one director, MBSCC's board should represent a cross-section of MBSCC's participant base and should not be dominated by one or two large participants. To counter the potential for a few large participants to determine the outcome of a shareholder vote, certain provisions of the Shareholders Agreement limit the shareholders' authority in favor of board power. For example, the shareholders must vote as directed by the board regarding removal of directors and the amendment of certain provisions of the Certificate of Incorporation. In addition, by requiring a 2/3 vote to amend the Certificate of Incorporation or the By-Laws, a greater consensus among shareholders must be

obtained before making substantial changes to MBSCC's administration. The Commission believes that the provisions enhancing the authority of the board of directors, who represent all the participants, are consistent with a clearing agency's obligations of fair representation.

The Commission also believes that the limitation on the voting entitlement of BHC participants is permissible under the fair representation requirements. During 1993, the BHCs' usage of MBSCC was less than 20% of the total usage of MBSCC, and therefore, no reduction in the BHCs' voting entitlement would have been required. MBSCC has agreed to notify the Commission if the BHCs' usage of MBSCC exceeds 24%. However, the Commission believes that even if a reduction of the BHCs' voting entitlement occurs, the fair representation requirements are not violated because the provision was adopted at the request of the BHCs, whose voting entitlements are being reduced, because of the Bank Holding Company Act of 1956.

MBSCC has requested that the Commission find good cause for approving the proposed rule change prior to the thirtieth day after the date of publication of the notice of filing. The parties to the merger have agreed to close the transaction during the first two weeks of August 1994. To permit an efficient transfer of ownership from the CHX to MBSCC participants, it is necessary that the appropriate governance changes are in place. Therefore, the Commission finds sufficient cause to accelerate approval of this proposal.

Interested persons are invited to submit written data, views, and arguments concerning the amendments to the proposed rule change. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to these amendments between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC, 20549. Copies of such filing also will be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization.

All submissions should refer to File No. SR-MBSCC-CC-94-3 and should be submitted by September 7, 1994.

III. Conclusion

For the reasons stated above, the Commission finds that the proposed rule change is consistent with Section 17A of the Act.

It is therefore ordered, pursuant to Section 19(b)(2) of the Act, that the proposed rule change (File No. SR-MBSCC-94-03) be, and hereby is, approved.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 94-20121 Filed 8-16-94; 8:45 am]
BILLING CODE 8016-01-M

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Notice and Opportunity for Hearing; Pacific Stock Exchange, Incorporated

August 11, 1994.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

- Amphenol Corporation,
Class A Common Stock, \$.001 Par Value
(File No. 7-12803).
- Coram Healthcare Corporation,
Common Stock, \$.001 Par Value (File No. 7-12804).
- Potash Corp. of Saskatchewan,
Common Stock, No Par Value (File No. 7-12805).
- United Asset Management Corp.,
Common Stock, \$.01 Par Value (File No. 7-12806).
- Whx Corporation,
Common Stock, \$.01 Par Value (File No. 7-12807).
- Whx Corporation,
Warrants expiring January 3, 1996 (File No. 7-12808).

These securities are listed and registered on one or more other national securities exchange and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 1, 1994, written data, views and arguments concerning the above-referenced application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 5th Street, NW., Washington, DC.

¹⁷ The other suggestions in the Standards Release are: (1) Solicitation of board of director nominations from all participants; (2) selection of candidates for election to the board of directors by a nominating committee which would be composed of and selected by the participants or representatives chosen by participants; or (3) a number of directors chosen by and from the participants.

20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such applications are consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,
Secretary.

[FR Doc. 94-20118 Filed 8-16-94; 8:45 am]
BILLING CODE 8010-01-M

Self-Regulatory Organizations; Applications for Unlisted Trading Privileges; Notice and Opportunity for Hearing; Philadelphia Stock Exchange, Incorporated

August 11, 1994.

The above named national securities exchange has filed applications with the Securities and Exchange Commission ("Commission") pursuant to Section 12(f)(1)(B) of the Securities Exchange Act of 1934 and Rule 12f-1 thereunder for unlisted trading privileges in the following securities:

- Desc S.A. De C.V.,
American Depository Shares (each representing 4 series C Shares, No Par Value (File No. 7-12809).
- Emotelladora Andina S.A.,
American Depository Shares, (each representing 6 Shares of Common Stock, No Par Value (File No. 7-12810).
- Banpais S.A. Institucion de Banca Multiple Grupo Financiero Asemex Banpais,
American Depository Shares, (each representing 6 Shares L Limited Voting Shares NPS 1.00, Par Value (File No. 7-12811).
- Collin & Aikman Corporation,
Common Stock, \$.01 Par Value (File No. 7-12812).
- Coram Healthcare Corporation,
Common Stock, \$.001 Par Value (File No. 7-12813).
- Morgan Stanley Asia Pacific Fund, Inc.,
Common Stock, \$.01 Par Value (File No. 7-12814).
- Freeport McMoran Copper & Gold, Inc.,
Depository Shares, (File No. 7-12815).
- Apartment Investment and Management Company,
Common Stock, \$.01 Par Value (File No. 7-12816).
- Empresa Nacional de Electricidad S.A. Chile,
Common Stock, No Par Value (File No. 7-12817).
- Home Properties of New York, Inc.,
Common Stock, \$.01 Par Value (File No. 7-12818).
- Silverado Foods, Inc.,
Common Stock, \$.01 Par Value (File No. 7-12819).
- Watsco, Inc.

Common Stock, \$.50 Par Value (File No. 7-12820).

Rightchoice Managed Care, Inc.,
Common Stock, \$.01 Par Value (File No. 7-12821).

DIMAC Corporation,
Common Stock, \$.01 Par Value (File No. 7-12822).

These securities are listed and registered on one or more other national securities exchanges and are reported in the consolidated transaction reporting system.

Interested persons are invited to submit on or before September 1, 1994, written data, views and arguments concerning the above-referenced application. Persons desiring to make written comments should file three copies thereof with the Secretary of the Securities and Exchange Commission, 450 5th Street, NW., Washington, DC 20549. Following this opportunity for hearing, the Commission will approve the application if it finds, based upon all the information available to it, that the extensions of unlisted trading privileges pursuant to such applications are consistent with the maintenance of fair and orderly markets and the protection of investors.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Jonathan G. Katz,
Secretary.

[FR Doc. 94-20115 Filed 8-16-94; 8:45 am]
BILLING CODE 8010-01-M

DEPARTMENT OF STATE

[Public Notice No. 2047; Delegation of Authority of Authority No. 213]

**Designation of Administrator
Delegation of Authority**

Pursuant to the powers vested in me as Acting Secretary of State, including by Section 1(a) of the Department of State Basic Authorities Act, as amended by Section 161(a) of the Foreign Relations Authorization Act, Fiscal Years 1994-1995, Public Law 103-236 (April 30, 1994) ("the Act") and by Section 104(b) of the Immigration and Nationality Act of 1952, 66 Stat. 163, as amended by Section 162(h) of the Act, I hereby designate the Assistant Secretary of State for Consular Affairs as Administrator.

I hereby further provide that all delegations that conferred authorities of the Secretary of State upon the Assistant Secretary of State for Consular Affairs as of July 28, 1994, shall continue in force and effect as delegations to the Assistant Secretary of State for Consular Affairs and Administrator. Such delegations

shall include, but not be limited to, Delegation of Authority Number 74, Public Notice 132 (November 27, 1953), and all subsequent amendments thereto. This designation and delegation shall be published in the Federal Register.

Dated: July 29, 1994.

Acting Secretary of State.

Strobe Talbott,

[FR Doc. 94-20084 Filed 8-16-94; 8:45 am]

BILLING CODE 4710-10-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee (ARAC); Engine Harmonization Working Group

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of new task assignments for the Aviation Rulemaking Advisory Committee.

SUMMARY: Notice is given of new task assignments for the Engine Harmonization Working Group of the Aviation Rulemaking Advisory Committee (ARAC). This notice informs the public of the activities of the ARAC.

FOR FURTHER INFORMATION CONTACT: Mr. Michael Borfitz, Assistant Executive Director for Transport Airplane and Engine Issues, Aviation Rulemaking Advisory Committee, FAA Engine & Propeller Directorate, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (617) 238-7110, fax (617) 238-7199.

SUPPLEMENTARY INFORMATION: On January 22, 1991 (56 FR 2190), the Federal Aviation Administration (FAA) established the Aviation Rulemaking Advisory Committee (ARAC). The committee provides advice and recommendations to the FAA Administrator, through the Associate Administrator for Regulation and Certification, on the full range of the FAA's rulemaking activities with respect to aviation-related issues.

In order to develop such advice and recommendations, the ARAC may choose to establish working groups to which specific tasks are assigned. Such working groups are comprised of experts from those organizations having an interest in the assigned tasks. A working group member need not be a representative of a member of the full committee. One of the working groups established by the ARAC is the Engine Harmonization Working Group.

The FAA announced at the Joint Aviation Authorities (JAA)—Federal

Aviation Administration (FAA) Harmonization Conference in Toronto, Canada, (June 2-5, 1992), that it would consolidate within the ARAC structure an ongoing objective to "harmonize" the Joint Aviation Requirements (JAR) and the Federal Aviation Regulations (FAR).

Tasks

The Engine Harmonization Working Group new tasks are as follows:

Task 1, Fire Prevention—Review FAR and JAR requirements and create one set of common requirements (FAR 33.17; JAR-E-530).

Task 2, FAR 35—Conduct a comparison of FAR Part 35 and JAR-P requirements and advisory material and identify significant differences. This comparison should clarify and redefine existing requirements to include new standards to reflect recent advancements in design and construction of composite material propellers, propeller control systems (such as dual acting control systems) and electronic controls.

Reports

For each task listed, the Engine Harmonization Working Group should develop and present to the ARAC:

1. A recommended work plan for completion of the tasks, including the rationale supporting such as a plan, for consideration at the meeting of the ARAC to consider transport airplane and engine issues held following publication of this notice;
2. A detailed conceptual presentation on the proposed recommendation(s), prior to proceeding with the work stated in item 3. below;
3. A draft Notice of Proposed Rulemaking, with supporting economic and other required analyses, and/or any other related guidance material or collateral documents the working group determines to be appropriate; or, if new or revised requirements or compliance methods are not recommended, a draft report stating the rationale for not making such recommendations; and
4. A status report at each meeting of the ARAC held to consider transport airplane and engine issues.

Participation in Working Group Task

An individual who has expertise in the subject matter and wishes to become a member of the working group should write to the person listed under the caption **FOR FURTHER INFORMATION CONTACT** expressing that desire, describing his or her interest in the task(s), and stating the expertise he or she would bring to the working group. The request will be reviewed with the assistant chair and working group chair,

and the individual will be advised whether or not the request can be accommodated.

The Secretary of Transportation has determined that the formation and use of the Aviation Rulemaking Advisory Committee are necessary in the public interest in connection with the performance of duties imposed on the FAA by law.

Meetings of the Aviation Rulemaking Advisory Committee will be open to the public, except as authorized by section 10(d) of the Federal Advisory Committee Act. Meetings of the working group will not be open to the public, except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of working group meetings will be made.

Issued in Washington, DC, on August 10, 1994.

Chris A. Christie,

Executive Director, Aviation Rulemaking Advisory Committee.

[FR Doc. 94-20151 Filed 8-6-94; 8:45 am]

BILLING CODE 4910-13-M

Intent To Rule on Application To Impose and Use the Revenue From a Passenger Facility Charge (PFC) at Quad City Airport, Moline, IL

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of Intent to Rule on Application.

SUMMARY: The FAA proposes to rule and invites public comment on the application to impose and use the revenue from a PFC at Quad City Airport under the provisions of the Aviation Safety and Capacity Expansion Act of 1990 (Title IX of the Omnibus Budget Reconciliation Act of 1990) (Public Law 101-508) and Part 158 of the Federal Aviation Regulations (14 CFR Part 158).

DATES: Comments must be received on or before September 16, 1994.

ADDRESSES: Comments on this application may be mailed or delivered in triplicate to the FAA at the following address: Federal Aviation Administration, Chicago Airports District Office, 2300 East Devon Avenue, Room 258, Des Plaines, IL 60018.

In addition, on copy of any comments submitted to the FAA must be mailed or delivered to Mr. Kent G. George, Director of Aviation of the Metropolitan Airport Authority of Rock Island County, Illinois at the following address: P.O. Box 9009, Moline, IL 61265.

Air carriers and foreign air carriers may submit copies of written comments previously provided to the Metropolitan Airport Authority or Rock Island County, Illinois under section 158.23 of Part 158.

FOR FURTHER INFORMATION CONTACT:

Mr. Louis H. Yates, Manager, Chicago Airports District Office, 2300 East Devon Avenue, Room 258, Des Plaines, IL 60018, (708) 294-7335. This application may be reviewed in person at this same location.

SUPPLEMENTARY INFORMATION: The FAA proposes to rule and invites public comment on the application to impose and use the revenue from a PFC at Quad City Airport under the provisions of the Aviation Safety and Capacity Expansion Act of 1990 (Title IX of the Omnibus Budget Reconciliation Act of 1990) (Public Law 101-508) and Part 158 of the Federal Aviation Regulations (14 CFR Part 158).

On July 15, 1994, the FAA determined that the application to impose and use the revenue from a PFC submitted by Metropolitan Airport Authority of Rock Island County, Illinois was substantially complete within the requirements of section 158.25 of Part 158. The FAA will approve or disapprove the application, in whole or in part, no later than October 18, 1994.

The following is a brief overview of the application.

Level of the proposed PFC: \$3.00

Proposed charge effective date:

November 1, 1994

Proposed charge expiration date:

November 1, 2010

Total estimated PFC revenue:

\$13,355,830

Brief description of proposed project(s):

Extension of Runway 13/31, Environmental Study for Runway 9/27, Reimbursement of Land Acquisition for Noise Abatement and Obstruction Removal, GA Itinerant Ramp Replacement, Extension of Runway 9/27, Expansion of Airfield Maintenance Building, ARFF Equipment Rehab and Purchase, Demolition of Old Terminal Bldg and T-hangars, Concourse "A" Ramp Replacement, Anti-Skid Treatment of Runway 9/27, Extension of Taxiway Bravo, Snow Removal Equipment Purchase, North Ramp Replacement Phase V, and Taxiways D, E, & K Improvements.

Class or classes of air carriers which the public agency has requested not be required to collect PFCs: Air Taxi/Commercial Operators.

Any person may inspect the application in person at the FAA office

listed above under **FOR FURTHER INFORMATION CONTACT.**

In addition, any person may, upon request, inspect the application, notice and other documents germane to the application in person at the Metropolitan Airport Authority of Rock Island County, Illinois.

Issued in Des Plaines, Illinois on August 10, 1994.

Benito DeLeon,

*Manager, Planning/Programming Branch
Airports Division, Great Lakes Region.*

[FR Doc. 94-20150 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-13-M

Research, Engineering and Development Advisory Committee; Subcommittee on Aircraft Safety

Pursuant to Section 10(A)(2) of the Federal Advisory Committee Act (Public Law 92-362; 5 U.S.C. App. I), notice is hereby given of a meeting of the Subcommittee on Aircraft Safety of the Federal Aviation Administration (FAA) Research, Engineering and Development Advisory Committee. The meeting will take place on Tuesday, August 30, 1994, at 10:00 a.m. The meeting will take place at McDonnell Douglas, 1735 Jefferson-Davis Highway, Suite 12, Spirit Room, Crystal City, VA.

The agenda for this meeting will include a review and finalization of the subcommittee report on the FAA's Aircraft Safety Research and Development Program.

Attendance is open to the interested public but limited to space available. With the approval of the committee chairman, members of the public may present oral statements at the meeting. Persons wishing to present oral statements, obtain information, or access the building to attend the meeting should contact the Designated Federal Official, Mr. Dan Salvano, Aircraft Certification Service, AIR-3, 800 Independence Avenue, S.W., Washington, DC 20591, 202-267-9554.

Members of the public may present a written statement to the subcommittee at any time.

Issue in Washington, DC on August 11, 1994.

Martin T. Pozesky,

Executive Director, Research, Engineering and Development Advisory Committee.

[FR Doc. 94-20165 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-13-M

Federal Highway Administration

**Environmental Impact Statement:
Sacramento County, CA**

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 Sacramento County, California.

FOR FURTHER INFORMATION CONTACT:

Dennis A. Scovill, Chief, District Operations—C, Federal Highway Administration, 980 Ninth Street, Suite 400, Sacramento, California, 95814. Telephone (916) 551-1307.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the California Department of Transportation and with the City of Sacramento, will prepare an environmental impact statement (EIS) on a proposal to construct a 4-lane connector roadway between Garden Highway and Arden Way which includes construction of a bridge over the Natomas East Main Drainage Canal (NEMDC). The connector and bridge are needed to meet existing and projected traffic demands. The length of the connector roadway is approximately 1.3 miles including the bridge.

Alternatives to be considered may include (1) Taking no action; (2) widening West El Camino Boulevard; and (3) different alignment crossings of the Natomas East Main Drainage Canal. Variations of grade and alignment may be studied for the various build alternatives.

Letters describing the proposed action and soliciting comments will be sent to appropriate Federal, State, and local agencies, and to private organizations and citizens who have previously expressed or are known to have interest in this proposal. Public and agency scoping meetings will be held as required. A public meeting will be held upon completion of the draft EIS. Public notice will be given of the time and place of the meeting. The draft EIS will be available for public and agency review and comment prior to the public meeting.

To ensure that the full range of issues related to this proposal 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 Chief of District Operations at the address indicated above.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: August 3, 1994.

Jeffery S. Lewis,

Acting Chief, District Operations—C.

[FR Doc. 94-20087 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-22-M

DEPARTMENT OF TRANSPORTATION

Maritime Administration

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Applicable Rate of Interest on Nonqualified Withdrawals From a Capital Construction Fund

Under the authority in Section 607(h)(4)(B) of the Merchant Marine Act, 1936, as amended (46 U.S.C. 1177(h)(4)(B)), we hereby determine and announce that the applicable rate of interest on the amount of additional tax attributable to any nonqualified withdrawals from a Capital Construction Fund established under Section 607 of the Act shall be 5.62 percent, with respect to nonqualified withdrawals made in the taxable year beginning in 1994.

The determination of the applicable rate of interest with respect to nonqualified withdrawals was computed, according to the joint regulations issued under the Act (46 CFR 391.7(e)(2)(ii)), by multiplying eight percent by the ratio which (a) the average yield on 5-year Treasury securities for the calendar year immediately preceding the beginning of such taxable year bears to (b) the average yield on 5-year Treasury securities for the calendar year 1970. The applicable rate so determined was computed to the nearest one-hundredth of one percent.

SO ORDERED BY:

Maritime Administrator, Maritime Administration.
 Administrator, National Oceanic, and Atmospheric Administration.
 Assistant Secretary for Tax Policy, Department of the Treasury.

Dated: August 11, 1994.

A.J. Herberger,

Maritime Administrator.

Douglas K. Hall,

Acting Undersecretary for Oceans and Atmosphere.

Leslie Samuels,

Assistant Secretary for Tax Policy.

[FR Doc. 94-20069 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-81-M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. 93-79; Notice 5]

Child Seating Systems Manufactured by Fisher-Price, Inc.; Cancellation of Public Meeting and Termination of Proceeding

AGENCY: National Highway Traffic Safety Administration (NHTSA).

ACTION: Cancellation of public meeting and termination of proceeding.

SUMMARY: By notice published on August 1, 1994, NHTSA scheduled a public meeting for August 17, 1994 regarding an appeal by Fisher-Price, Inc., of NHTSA's denial of its petition for an exemption from the recall requirements of the National Traffic and Motor Vehicle Safety Act. Fisher-Price recently advised the agency that it is now taking the position that it has not determined that its child safety seats failed to comply with the flammability requirements of Federal Motor Vehicle Safety Standard No. 213. Under the agency's regulations, a manufacturer may not seek an exemption from the recall requirements in the absence of such a determination. Therefore, this proceeding is hereby terminated, and the public meeting is hereby cancelled.

FOR FURTHER INFORMATION CONTACT: Chris Flanigan, Office of Rulemaking, NHTSA (202-366-4918).

SUPPLEMENTARY INFORMATION: On March 11, 1993, a contractor for NHTSA's Office of Vehicle Safety Compliance (OVSC) tested certain child safety seats manufactured by Fisher-Price to ascertain whether those seats complied with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) No. 213, "Child Restraint Systems." The results of those tests indicated that the

seats failed the flammability requirements of that standard, which are incorporated by reference from FMVSS No. 302, "Flammability of Interior Materials," in that the shoulder belt webbing of the seats burned at a rate above the limit established by the standard. Upon receipt of the test results, OVSC opened a noncompliance investigation, NCI 3270.

Although Fisher-Price initially resisted OVSC's suggestion that the company should make a formal determination that the seats failed to comply, on September 16, 1993, Fisher-Price, submitted a letter, pursuant to 49 CFR Part 573, "Defect and Noncompliance Reports," notifying the agency that it had "become aware of information suggesting that the molded shoulder belt webbing on its Model AO9191, DO9101, 9103, 9149, 9173, 9179, and 9180 car seats may not comply with the requirements of FMVSS 302."

Concurrently, Fisher-Price filed a petition asking NHTSA for "an exemption from the notification and remedy requirements * * * based on an inconsequential noncompliance with the requirements * * * as related to motor vehicle safety." This petition was filed pursuant to former section 157 of the Act (now 49 U.S.C. 30118(d) and 30120(h)) and 49 CFR Part 556, "Exemption for Inconsequential Defect or Noncompliance."

Pursuant to 49 CFR 556.4(a), inconsequentiality petitions may only be filed by a manufacturer following a determination that a vehicle or item of equipment produced by the manufacturer contains a defect or fails to comply with an applicable FMVSS. In its September 16, 1993 letter, Fisher-Price stated that "[i]n order to comply with the requirements of 49 CFR 556.4(b)(6) [sic] that a report in accordance with 49 CFR Part 573 be submitted with its Petition for exemption," it was providing the information required by Part 573.

Under the circumstances, including the fact that the results of the compliance tests conducted both by OVSC and by Fisher-Price clearly indicated that the seats in question did not satisfy the flammability requirements of the standard, NHTSA interpreted Fisher-Price's statement as a notification of the company's noncompliance determination. Therefore, the agency accepted the inconsequentiality petition for processing. It published a notice that the petition had been filed on November 9, 1993 (58 FR 59511), and denied the petition on March 22, 1994. Notice of the denial was published on May 5,

1994 (59 FR 23253). On May 6, Fisher-Price appealed the denial and asked for a public meeting. Notice of the appeal was published on June 16, 1994 (59 FR 30957), and the public meeting requested by the company was scheduled for August 17, 1994 (59 FR 39015).

Upon reviewing the documents that Fisher-Price submitted with its appeal, NHTSA noted that Fisher-Price seemed to be taking the position that its child safety seats did not fail to comply with FMVSS No. 213. Therefore, the agency requested Fisher-Price to clarify whether it had in fact made a noncompliance determination. On August 10, 1994, Fisher-Price advised NHTSA that it would not concede that its seats failed to comply with the standard and that its September 16, 1993 letter should not be construed as a determination of noncompliance.

Because 49 CFR 556.4(a) precludes consideration of Fisher-Price's petition for an inconsequentiality exemption in the absence of such a determination, NHTSA is terminating this proceeding (Docket 93-79) and is cancelling the public meeting scheduled for August 17, 1994. The agency plans to take further action with respect to the noncompliance investigation in the near future.

Authority: 49 U.S.C. 30118, 30120; delegations of authority at 49 CFR 1.50(a) and 49 CFR 501.8.

Issued on: August 12, 1994.

Barry Felrice,

Associate Administrator for Rulemaking.

[FR Doc. 94-20231 Filed 8-12-94; 4:59 pm]

BILLING CODE 4910-69-P

Research and Special Programs Administration

Office of Hazardous Materials Safety; Applications for Exemptions

AGENCY: Research and Special Programs Administration, DOT.

ACTION: List of Applicants for Exemptions.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions from the Department of Transportation's Hazardous Materials Regulations (49 CFR Part 107, Subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. Each mode of transportation for which a particular exemption is requested is indicated by a number in the "Nature of Application" portion of the table below as follows: 1—Motor vehicle, 2—Rail

freight, 3—Cargo vessel 4—Cargo aircraft only, 5—Passenger-carrying aircraft.

DATES: Comments must be received on or before September 16, 1994.

ADDRESS COMMENTS TO: Docket Unit, Research and Special Programs

Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-

addressed stamped postcard showing the exemption application number.

FOR FURTHER INFORMATION: Copies of the applications are available for inspection in the Dockets Unit, Room 8426, Nassif Building, 400 7th Street, SW, Washington, DC.

NEW EXEMPTIONS

Application No.	Applicant	Regulation(s) affected	Nature of exemption thereof
11294-N	Northeast Environmental Services of America, Inc., Canastota, NY.	49 CFR 177.848	To load, transport and store combustible materials classed as Division 4.2; poison materials classed as Division 6.1 in Packing Group 1, Zone A packed in "lab-pack" drums on the same transport vehicle carrying packages containing various classes of hazardous materials. (mode 1)
11297-N	Reebok International Ltd., Stoughton, MA.	49 CFR (Parts 171-177) of Subtitle B, 175.10, subchapter C.	This exemption authorizes the transportation of Reebok "instapump" inflators equipped with CO ₂ cartridges, classed in division 2.2, which are presently forbidden either in the passenger cabin of the aircraft, or the cargo compartment. (mode 5)
11299-N	Minnesota Valley, Engineering, Inc., Bloomington, MN.	49 CFR 178.57-10(a)(1), 178.57-21(a).	Authorize the manufacture, marking and sale of non-DOT specification cylinders of ASTM A240 Type 201LN stainless steel for use in transporting non-flammable gases, Division 2.2: (modes 1, 2, 3, 4)
11301-N	ICI Explosives USA Inc., Dallas, TX.	49 CFR 173.51, 173.54, 173.57, 173.62, 177.801.	To authorize the transportation of unclassified explosive material consisting of articles and solid substances classed in Division 1.1, waste substances (or articles); explosives, n.o.s. overpacked in packaging group II containers transported by EPA licensed hazardous waste haulers. (mode 1)
11302-N	Stolt Tank Containers Limited, Hull, North Humberston, EN.	49 CFR 178.245-1(b)	To authorize the manufacture, marking and sale of non-DOT specification cargo tanks built to DOT-51 specification equipped with modified outlets on the bottom side for use in transporting various hazardous materials classed in Division 2.1, 2.2, 2.3, and Class 3. (modes 1, 2, 3)
11304-N	AT&T, Basking Ridge, NJ	49 CFR 173.28(b)(2)(iii)	To be exempt from retesting criteria for up to 5 gallons capacity DOT Specification containers containing gasoline, Class 3, for use in fueling service vehicles. (mode 1)

This notice of receipt of applications for new exemptions is published in accordance with Part 107 of the Hazardous Materials Transportation Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on August 10, 1994.

J. Suzanne Hedgepeth,
Chief, Exemption Programs, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94-20153 Filed 8-16-94; 8:45 am]
BILLING CODE 4910-60-M

Office of Hazardous Materials Safety; Applications for Modification of Exemptions or Applications to Become a Party to an Exemption

AGENCY: Research and Special Program Administration, DOT.

ACTION: List of Applications for Modification of Exemptions or Applications to Become a Party to an Exemption.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions

from the Department of Transportation's Hazardous Materials Regulations (49 CFR Part 107, Subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. This notice is abbreviated to expedite docketing and public notice. Because the sections affected, modes of transportation, and the nature of application have been shown in earlier Federal Register publications, they are not repeated here. Requests for modifications of exemptions (e.g. to provide for additional hazardous materials, packing design changes, additional mode of transportation, etc.) are described in footnotes to the application number. Application numbers with the suffix "X" denote a modification request. Application numbers with the suffix "P" denote a party to request. These applications have been separated from the new applications for exemptions to facilitate processing.

DATES: Comments must be received on or before September 1, 1994.

ADDRESS COMMENTS TO: Dockets Unit, Research and Special Program Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the exemption number.

FOR FURTHER INFORMATION CONTACT: Copies of the applications are available for inspection in the Dockets Unit, Room 8426, Nassif Building, 400 7th Street SW, Washington, DC.

Application No.	Applicant	Renewal of exemption
5022-X	United Technologies Chemical Corp., San Jose, CA (See Footnote 1).	5022
8249-X	LPS Industries, Inc., Newark, NJ (See Footnote 2).	8249
8489-X	FMC Corporation, Carteret, NJ (See Footnote 3).	8489

Application No.	Applicant	Renewal of exemption
8627-X	Petrolite Corporation, Saint Louis, MO (See Footnote 4).	8627
9894-X	International Safety Instruments, Inc., Lawrenceville, GA (See Footnote 5).	9894
10256-X	Comdyne I, Inc., West Liberty, OH (See Footnote 6).	10256
10380-X	Reeled Tubing, Inc., Harvey, LA (See Footnote 7).	10380
10380-X	Reeled Tubing, Inc., Harvey, LA (See Footnote 7).	10380
10705-X	Baker Performance Chemicals, Inc., Houston, TX (See Footnote 8).	10705
11215-X	Orbital Sciences Corporation (OSC) Dulles, VA (See Footnote 9).	11215

(1) To modify the exemption to provide for a single 300 gallon diesel fuel tank instead of two 110-gallon tanks on Titan IV rocket motors, Division 1.3C explosives.

(2) To modify exemption to provide for zipper reclosable barrier bags as inside container for use in transporting limited quantities of various hazardous materials.

(3) To modify exemption to provide for the transportation of hazardous waste solid, n.o.s., Class 9, as an additional commodity to be transported in bulk bags.

(4) To modify exemption to provide for a 2" piping, rearrangement of the "manifold" design to two levels, enlargement of the skid frame to 10' in height for shipment of various hazardous materials classed as Class 3.

(5) To modify this exemption to authorize non-DOT specification cylinders to be used for underwater breathing purposes for transporting various non-flammable compressed gases, Division 2.2.

(6) To modify exemption to provide for additional sizes FRP-1 type, non-DOT specification cylinders for use in transporting Division 2.1 material.

(7) To modify exemption authorizing the manufacture, marking and sale of non-DOT specification cryogenic portable tanks to be reissued to the owner and shipper of the portable tanks.

(8) To modify exemption to authorize the transportation of acrolein, inhibited, PIH, Zone C material, Division 6.1, in non-insulated portable tanks manufactured to DOT Specification 51.

(9) To modify the exemption to provide for an additional Pegasus three

stage winged solid fuel rocket launch vehicle.

Application No.	Application	Parties to exemption
3004-P	BOC Gases, Murray Hill, NJ.	3004
3302-P	BOC Gases, Murray Hill, NJ.	3302
4453-P	W.H. Burt Explosives, Inc., Moab, UT.	4453
4453-P	Florex Explosives, Inc., Cuddy, PA.	4453
4884-P	Balchem Corporation, Slate Hill, NY.	4884
4884-P	MG Industry, Morrisville, PA.	4884
5604-P	BOC Gases, Murray Hill, NJ.	4604
5704-P	Chemical Waste Management, Inc., OAK Brook, IL.	5704
6309-P	Carpenter Co., Richmond, VA.	6309
6349-P	BOC Gases, Murray Hill, NJ.	6349
6530-P	BOC Gases, Murray Hill, NJ.	6530
6765-P	BOC Gases, Murray Hill, NJ.	6765
7835-P	American Welding Supply, San Jose, CA.	7835
8074-P	AGL Welding Supply Co., Inc., Clifton, NJ.	8074
8445-P	Albermarle Corporation, Baton Rouge, LA.	8445
8554-P	W.H. Burt Explosives, Inc., Moab, UT.	8554
8723-P	Florex Explosives, Inc., Cuddy, PA.	8723
9248-P	AB&C Group, Inc., Ranson, WV.	9248
9275-P	Stern Fragrances, Inc., Orange, CT.	9275
9346-P	Consumers Power Co., Essexville, MI.	9346
10094-P	Dyno Nobel, Inc., Salt Lake City, UT.	10094
10441-P	Frank's Vacuum Truck Service, Inc., Niagara Falls, NY.	10441
10441-P	Franklin Environmental Services, Inc., Wrentham, MA.	10441
10575-P	BOC Gases, Murray Hill, NJ.	10575
10692-P	Miller-Leaman, Inc., Port Orange, FL.	10692
10933-P	All Chemical Disposal, Inc., San Jose, CA.	10933
11043-P	Frank's Vacuum Truck Services, Inc., Niagara Falls, NY.	11043
11136-P	Rodney Clark, Anchorage, AK.	11136

Application No.	Application	Parties to exemption
11136-P	Lynn C. Johnson, Anchorage, AK.	11136
11136-P	Alfred R. Lupton, Anchorage, AK.	11136
11136-P	Mark O. Holt, Kodiak, AK.	11136
11136-P	FireArt by Griz, Anchorage, AK.	11136
11156-P	ICF Explosives USA, Inc., Dallas, TX.	11156

This notice of receipt of applications for modification of exemptions and for party to an exemption is published in accordance with Part 107 of the Hazardous Materials Transportations Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on August 11, 1994.

J. Suzanne Hodgepeth,

Chief, Exemption Programs, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94-20152 Filed 8-16-94; 8:45 am] BILLING CODE 4910-60-M

DEPARTMENT OF THE TREASURY

Public Information Collection Requirements Submitted to OMB for Review

August 11, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980, Public Law 96-511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, Room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

Bureau of the Public Debt (BPD)

OMB Number: 1535-0063

Form Number: PD F 4239

Type of Review: Extension

Title: Request by Owner or Person Entitled to Payment or Reissue of United States Savings Bonds/Notes Deposited in Safekeeping When Original Custody Receipts Are Not Available

Description: PD F 4239 is used by owner or persons entitled to request reissue or payment of United States Savings Bonds/Notes deposited in safekeeping when original custody receipts are not available.

Respondents: Individuals or households
Estimated Number of Respondents: 500
Estimated Burden Hours Per Response:
 10 minutes

Frequency of Response: On occasion
Estimated Total Reporting Burden: 84 hours

Clearance Officer: Vicki S. Ott (304)
 480-6553, Bureau of the Public Debt,
 200 Third Street, Parkersburg, West
 VA 26106-1328.

OMB Reviewer: Milo Sunderhauf (202)
 395-7340, Office of Management and
 Budget, Room 10226, New Executive
 Office Building, Washington, DC
 20503.

Dale A. Morgan,

Departmental Reports, Management Officer
 [FR Doc. 94-20146 Filed 8-16-94; 8:45 am]

BILLING CODE: 4810-40-P

Public Information Collection Requirements Submitted to OMB for Review

August 10, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980, Public Law 96-511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, Room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

Bureau of the Public Debt (BPD)

OMB Number: 1535-0102
Form Number: PD F 1071

Type of Review: Extension

Title: Certificate of Ownership of United States Bearer Securities

Description: Person or their legal representative that claims to be the owner of U.S. Bearer Securities. It may also be completed by the official representative of an organization owning U.S. Bearer Securities.

Respondents: Individuals or households, State or local governments, Businesses or other for-profit, Non-profit institutions, Small businesses or organizations

Estimated Number of Respondents:
 1,000

Estimated Burden Hours Per Response:
 30 minutes

Frequency of Response: On occasion

Estimated Total Reporting Burden: 500 hours

Clearance Officer: Vicki S. Ott (304)
 480-6553, Bureau of the Public Debt,
 200 Third Street, Parkersburg, West
 VA 26106-1328.

OMB Reviewer: Milo Sunderhauf (202)
 395-7340, Office of Management and
 Budget, Room 10226, New Executive
 Office Building, Washington, DC
 20503.

Dale A. Morgan,

Departmental Reports Management Officer
 [FR Doc. 94-20145 Filed 8-16-94; 8:45 am]

BILLING CODE 4810-40-P

Public Information Collection Requirements Submitted to OMB for Review

August 10, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980,

Public Law 96-511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, Room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

Bureau of the Public Debt (BPD)

OMB Number: 1535-0012.

Form Number: PD F 1455.

Type of Review: Extension.

Title: Request by Fiduciary for Reissue of United States Savings Bonds/Notes.

Description: PD F 1455 is used by fiduciary to request distribution of United States Savings Bonds/Notes to the person(s) entitled.

Respondents: Individuals or households.

Estimated Number of Respondents:
 72,000.

Estimated Burden Hours Per Response: 30 minutes.

Frequency of Response: On occasion.

Estimated Total Reporting Burden:
 36,000 hours.

Clearance Officer: Vicki S. Ott (304)
 480-6553, Bureau of the Public Debt,
 200 Third Street, Parkersburg, West
 VA 26106-1328

OMB Reviewer: Milo Sunderhauf (202)
 395-7340, Office of Management and
 Budget, Room 10226, New Executive
 Office Building, Washington, DC
 20503

Dale A. Morgan,

Departmental Reports, Management Officer
 [FR Doc. 94-20144 Filed 8-16-94; 8:45 am]

BILLING CODE 4810-40-P

Sunshine Act Meetings

Federal Register

Vol. 59, No. 158

Wednesday, August 17, 1994

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11 a.m., Friday
September 2, 1994.

PLACE: 2033 K St., NW., Washington,
DC, 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance
Matters.

CONTACT PERSON FOR MORE INFORMATION:

Jean A. Webb, 254-6314.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 94-20367 Filed 8-15-94; 3:58 pm]

BILLING CODE 6351-01-M

COMMODITY FUTURES TRADING COMMISSION

TIME AND PLACE: 11:00 a.m., Friday,
September 9, 1994.

PLACE: 2033 K St., N.W., Washington,
D.C., 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance
Matters.

CONTACT PERSON FOR MORE INFORMATION:

Jean A. Webb, 254-6314.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 94-20368 Filed 8-15-94; 3:58 pm]

BILLING CODE 6351-01-M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday,
September 16, 1994.

PLACE: 2033 K St., N.W., Washington,
D.C., 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance
Matters.

CONTACT PERSON FOR MORE INFORMATION:

Jean A. Webb, 254-6314.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 94-20369 Filed 8-15-94; 3:58 pm]

BILLING CODE 6351-01-M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11:00 a.m., Friday,
September 23, 1994.

PLACE: 2033 K St., N.W., Washington,
D.C., 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance
Matters.

CONTACT PERSON FOR MORE INFORMATION:

Jean A. Webb, 254-6314.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 94-20370 Filed 8-15-94; 3:58 pm]

BILLING CODE 6351-01-M

COMMODITY FUTURES TRADING COMMISSION

TIME AND DATE: 11 a.m., Friday,
September 30, 1994.

PLACE: 2033 K St., NW., Washington,
DC, 8th Floor Hearing Room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance
Matters.

CONTACT PERSON FOR MORE INFORMATION:

Jean A. Webb, 254-6314.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 94-20371 Filed 8-15-94; 3:58 pm]

BILLING CODE 6351-01-M

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TIME AND DATE: 11 a.m., Monday, August
22, 1994.

PLACE: Marriner S. Eccles Federal
Reserve Board Building, C Street
entrance between 20th and 21st Streets,
NW., Washington, DC 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Proposed end-user computing strategy within the Federal Reserve System.
2. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
3. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION:

Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204. You may call (202) 452-3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: August 12, 1994.

Jennifer J. Johnson,

Deputy Secretary of the Board.

[FR Doc. 94-20251 Filed 8-15-94; 9:18 am]

BILLING CODE 6210-01-P

UNITED STATES POSTAL SERVICE BOARD OF GOVERNORS

Notice of a Meeting

The Board of Governors of the United States Postal Service, pursuant to its Bylaws (39 CFR Section 7.5) and the Government in the Sunshine Act (5 U.S.C. Section 552b), hereby gives notice that it intends to hold a meeting at 10:30 a.m. on Monday, August 29, 1994, and at 9 a.m. on Tuesday, August 30, 1994, in St. Louis, Missouri. The August 29 meeting, at which the Board will have an informational briefing on funding for Multiline Optical Character Readers (MOCR) is closed to the public [See 59 FR 40415, August 8, 1994].

The August 30 meeting is open to the public and will be held at the Ritz-Carlton Hotel, 100 Carondelet Plaza, St. Louis, in Salon II of the Ballroom. The Board expects to discuss the matters stated in the agenda which is set forth below. Requests for information about the meeting should be addressed to the Secretary for the Board, David F. Harris, at (202) 268-4800.

Agenda

Monday Session

August 29—10:30 a.m. (Closed)

1. Informational Briefing on MOCR Funding. (William J. Dowling, Vice President, Engineering.)

Tuesday Session

August 30—9 a.m. (Open)

1. Minutes of the Previous Meeting, August 1-2, 1994.
2. Remarks of the Postmaster General/Chief Executive Officer. (Marvin Runyon.)
3. Postal Rate Commission FY 1995 Budget. (Chairman Sam Winters.)
4. Fiscal Year 1995 Financing Plan. (Michael J. Riley, Chief Financial Officer, Senior Vice President.)
5. Tentative FY 1996 Appropriation Request. (Mr. Riley.)
6. Status Report on Chicago, New York City and Washington, DC, Mail Service. (William J. Good, John F. Kelly, and Henry A. Pankey Area Vice Presidents.)
7. Report on the Mid-West Area (William J. Brown, Vice President, Mid-West Area Operations.)
8. Tentative Agenda for the October 3-4, 1994, meeting in Seattle, Washington.

David F. Harris,

Secretary.

[FR Doc. 94-20323 Filed 8-15-94; 2:47 pm]

BILLING CODE 7710-12-M

UNITED STATES NUCLEAR REGULATORY COMMISSION

Biweekly Notice

Applications and Amendments to Facility Operating Licenses Involving No Significant Hazards Considerations

I. Background

Pursuant to Public Law 97-415, the U.S. Nuclear Regulatory Commission (the Commission or NRC staff) is publishing this regular biweekly notice. Public Law 97-415 revised section 189 of the Atomic Energy Act of 1954, as amended (the Act), to require the Commission to publish notice of any amendments issued, or proposed to be issued, under a new provision of section 189 of the Act. This provision grants the Commission the authority to issue and make immediately effective any amendment to an operating license upon a determination by the Commission that such amendment involves no significant hazards consideration, notwithstanding the pendency before the Commission of a request for a hearing from any person.

This biweekly notice includes all notices of amendments issued, or proposed to be issued from July 25, 1994, through August 5, 1994. The last biweekly notice was published on August 3, 1994.

Notice Of Consideration Of Issuance Of Amendments To Facility Operating Licenses, Proposed No Significant Hazards Consideration Determination, And Opportunity For A Hearing

The Commission has made a proposed determination that the following amendment requests involve no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The basis for this proposed determination for each amendment request is shown below.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the

expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received before action is taken. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D22, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555. The filing of requests for a hearing and petitions for leave to intervene is discussed below.

By September 16, 1994, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room for the particular facility involved. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board

Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of a hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one

contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington DC 20555, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to (Project Director): petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this Federal Register notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for a hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room for the particular facility involved.

Arizona Public Service Company, et al.,
Docket Nos. STN 50-528, STN 50-529,
and STN 50-530, Palo Verde Nuclear
Generating Station, Unit Nos. 1, 2, and
3, Maricopa County, Arizona

Date of amendment requests: May 4, 1994

Description of amendment requests: These amendment requests would revise Limiting Condition for Operation (LCO) 3.4.8.3 and Surveillance Requirement 4.4.8.3.1, "Overpressure Protection Systems." Specifically, the LCO and surveillance requirements are revised to clarify that both shutdown cooling system (SCS) suction line relief valves shall be OPERABLE and aligned to provide overpressure protection not only during reactor (RCS) cooldown or heatup evolutions, but also during any steady state temperature periods maintained in the course of RCS cooldown or heatup evolutions.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensees have provided their analysis about the issue of no significant hazards consideration, which is presented below:

Standard 1 -- Involve a significant increase in the probability or consequence of an accident previously evaluated.

The proposed amendments provide further clarification of the Technical Specifications and represent an additional operating limitation. Incorporating the noted clarification will not change the bases or assumptions contained in the safety analysis for this system. The most limiting low-temperature overpressure protection (LTOP) transients, the starting of an idle reactor coolant pump (RCP) and the inadvertent actuation of two high pressure safety injection (HPSI) pumps into a solid RCS, are not affected by the proposed clarification. Therefore, the proposed amendments do not involve a significant increase in the probability or consequences of an accident previously evaluated.

Standard 2 -- Create the possibility of a new or different kind of accident from any accident previously evaluated.

Clarifying the applicability of the LCO's and surveillance for steady state periods achieved and maintained during either a heatup or cooldown evolution does not modify the design or operation of plant equipment. No new or different failure modes will be introduced by incorporating this clarification into the LCO and surveillance requirement. Therefore, the

proposed amendments will not create the possibility of a new or different kind of accident from any accident previously evaluated.

Standard 3 -- Involve a significant reduction in a margin of safety.

The clarification will enhance LCO 3.4.8.3 and Surveillance Requirement 4.4.8.3.1 for heatup and cooldown evolutions by ensuring operators are aware of this applicability during periods of steady state conditions. This clarification does not involve a change to safety limits, setpoints, or design margins. As such, the proposed amendments will not involve a significant reduction in a margin of safety at PVNGS.

The NRC staff has reviewed the licensees' analysis and, based on that review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment requests involve no significant hazards consideration.

Local Public Document Room location: Phoenix Public Library, 12 East McDowell Road, Phoenix, Arizona 85004

Attorney for licensees: Nancy C. Loftin, Esq., Corporate Secretary and Counsel, Arizona Public Service Company, P.O. Box 53999, Mail Station 9068, Phoenix, Arizona 85072-3999

NRC Project Director: Theodore R. Quay

Arizona Public Service Company, et al.,
Docket Nos. STN 50-528, STN 50-529,
and STN 50-530, Palo Verde Nuclear
Generating Station, Unit Nos. 1, 2, and
3, Maricopa County, Arizona

Date of amendment requests: June 17 1994

Description of amendment requests: The proposed amendments would increase the minimum nitrogen accumulator pressure for the atmospheric dump valves (ADVs), as stated in the surveillance requirements of Technical Specification (TS) 3/4.7.1.6. The change to the Bases increases the minimum time the ADV accumulators must be operable.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensees have provided their analysis about the issue of no significant hazards consideration, which is presented below:

Standard 1 -- Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed Technical Specification change in the nitrogen accumulator supply minimum pressure will not increase the probability or consequences of any accident previously analyzed. The nitrogen accumulator pressure is normally maintained between 650-680 psig. Nitrogen pressure from the accumulator is reduced to 105 psig

prior to use in the operation of the ADVs. The pressure reduction will remain the same with the higher minimum accumulator pressure.

Standard 2 -- Create the possibility of a new or different kind of accident from any accident previously evaluated.

Increasing the nitrogen accumulator minimum pressure does not create any new or different accidents than those previously evaluated. The normal air supply (the Instrument Air System) to the ADV is maintained between 105 to 125 psig. Currently, nitrogen from the accumulator is reduced to 105 psig prior to use in the ADV. The increased minimum pressure in the accumulator will still be reduced to 105 psig prior to use in the ADV.

Standard 3 -- Involve a significant reduction in a margin of safety.

The limitation on maintaining the nitrogen accumulator at a certain pressure is to ensure that a sufficient volume of nitrogen is in the accumulator to operate the associated ADV. Maintaining a higher minimum pressure ensures that sufficient nitrogen will be available to maintain the unit at HOT STANDBY for four hours and an additional 9.3 hours to reach COLD SHUTDOWN under natural circulation conditions in the event of failure of the normal control air system. Therefore, the proposed change does not involve a reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on that review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment requests involve no significant hazards consideration.

Local Public Document Room
Location: Phoenix Public Library, 12 East McDowell Road, Phoenix, Arizona 85004

Attorney for licensees: Nancy C. Loftin, Esq., Corporate Secretary and Counsel, Arizona Public Service Company, P.O. Box 53999, Mail Station 9068, Phoenix, Arizona 85072-3999
NRC Project Director: Theodore R. Quay

Arizona Public Service Company, et al., Docket Nos. STN 50-528, STN 50-529, and STN 50-530, Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3, Maricopa County, Arizona

Date of amendment requests: July 12, 1994

Description of amendment requests: The proposed amendment would enhance the PVNGS Technical Specifications (TS) by adding a limiting condition for operation (LCO) action statement to Entry VIII B of Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation." The proposed action statement would enhance safe plant operation by requiring timely plant shutdown if more than one of the new solid state degraded

voltage relays in either train of 4.16kV are inoperable or not energized.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensees have provided their analysis about the issue of no significant hazards consideration, which is presented below:

Standard 1--Involve a significant increase in the probability or consequence of an accident previously evaluated:

The proposed amendment will add an action statement to TS Table 3.3-3 entry VIII B which would allow eight hours to effect repairs. This action statement would be entered if more than one of the required four degraded voltage relays on either 4.16 kv bus is inoperable or not energized. If the eight hour allowed outage time is not met, the unit is placed in Hot Standby within six hours and in Cold Shutdown within the next thirty hours. Technical Specification 3.8.3.1 currently allows eight hours to restore a 4.16 kv bus in the event of a loss of power to that bus. The loss of degraded voltage relays on that bus does not impact plant nuclear safety any more than the loss of the bus itself. Furthermore, even with the loss of all four degraded voltage relays monitoring one 4.16 kv bus (for example, due to a blown 125 vdc circuit fuse), the loss-of-voltage relays on that bus, and the degraded voltage relays, as well as the loss-of-voltage relays monitoring the other bus would be unaffected. None of the UFSAR chapter 15 accident analyses are affected by this proposed amendment. The existing TS requirements and those components to which they apply are not altered by this TS amendment. There are no changes to the maintenance, surveillance, and/or qualification of any component/function in Table 3.3-3. Therefore, the addition of this proposed eight hour action statement to Table 3.3-3 entry VIII B does not increase the probability of occurrence or the consequences of any previously evaluated accident.

Standard 2--Create the possibility of a new or different kind of accident from any accident previously evaluated:

The TS requirements and the components to which they apply are not altered by this amendment. The new solid state degraded voltage relays in each 4.16 kv bus were installed under the 10 CFR 50.59 change process. APS [Arizona Public Service Company] determined that the installation created no unreviewed safety question. This amendment has no impact on plant maintenance, testing, shutdown equipment, or component qualification. Plant operational safety is enhanced by this amendment. Therefore, the possibility of a new or different kind of accident is not created by this amendment.

Standard 3--Involve a significant reduction in a margin of safety:

The TS does not alter existing TS requirements or those components to which they apply. More specifically, there is no impact on safe plant shutdown, maintenance, containment isolation capability, containment leakage rate, or the operability of safety related valves. Therefore, the

addition of the proposed action statement to the TS will not involve reduction in a margin of safety for fission product release to the atmosphere.

The NRC staff has reviewed the licensee's analysis and, based on that review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment requests involve no significant hazards consideration.

Local Public Document Room
Location: Phoenix Public Library, 12 East McDowell Road, Phoenix, Arizona 85004

Basis for proposed no significant hazards consideration determination:
Attorney for licensees: Nancy C. Loftin, Esq., Corporate Secretary and Counsel, Arizona Public Service Company, P.O. Box 53999, Mail Station 9068, Phoenix, Arizona 85072-3999
NRC Project Director: Theodore R. Quay

Baltimore Gas and Electric Company, Docket Nos. 50-317 and 50-318, Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2, Calvert County, Maryland

Date of amendments request: June 8, 1994

Description of amendments request: The proposed amendment would revise the Calvert Cliffs Nuclear Power Plant (CCNPP) Units 1 and 2 Technical Specification (TS) Section 4.7.1.2.c to extend the interval for three Auxiliary Feedwater (AFW) surveillance requirements from 18 to 24 months. Specifically, TS Section 4.7.2.c.1 requires the verification of each automatic valve in the flowpath actuate to its correct position and each AFW pump automatically start upon receipt of each AFW actuation system test signal; TS Section 4.7.2.c.2 requires verification that the AFW system is capable of providing a minimum 300 gallons per minute nominal flow to each leg. This request is one of a series of proposed license amendments that would eliminate the need for mid-cycle surveillance outages by extending 18-month frequency surveillances to every refueling outage (nominally each 24 months).

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The Auxiliary Feedwater (AFW) System provides a safety-related source of feedwater to the steam generators to mitigate design

basis accidents involving loss of Main Feedwater. Failure of the AFW System is not an initiator for any previously analyzed accident. Therefore, the proposed change does not involve an increase in the probability of an accident previously evaluated.

A historical review of surveillance test results and system performance indicates that the AFW System is very reliable. In addition, monthly surveillances of the AFW System will continue to verify proper pump and valve operation. The AFW System reliability and monthly surveillances provide assurance that undetected system degradation will not occur between 24-month surveillances. Therefore, the AFW System will continue to perform its safety function and there will be no significant increase in the consequences of accidents. Therefore, the proposed Technical Specification changes do not increase the probability or consequences of an accident previously evaluated.

2. Would not create the possibility of a new or different type of accident from any accident previously evaluated?

This requested revision to increase the interval for some AFW surveillances from 18 to 24 months does not involve a significant change in the design or operation of the plant. No hardware is being added to the plant as part of the proposed change. The proposed change will not introduce any new accident initiators. Therefore, this change would not create the possibility of a new or different type of accident from any accident previously evaluated.

3. Does operation of the facility in accordance with the proposed amendment involve a significant reduction in a margin of safety?

The AFW System provides a margin of safety by providing a safety-related alternate supply of feedwater to the steam generator for removal of decay heat and cooldown of the Reactor Coolant System. The proposed changes do not affect the operation or design of the AFW System. Monthly surveillances and historical data provide assurance that the reduction in surveillance frequency will not adversely affect our ability to detect degradation in the system. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendments request involves no significant hazards consideration.

Local Public Document Room location: Calvert County Library, Prince Frederick, Maryland 20678.

Attorney for licensee: Jay E. Silbert, Esquire, Shaw, Pittman, Potts and Trowbridge, 2300 N Street, NW., Washington, DC 20037.

NRC Project Director: Michael L. Boyle

Consolidated Edison Company of New York, Docket No. 50-247, Indian Point Nuclear Generating Unit No. 2, Westchester County, New York

Date of amendment request: April 29, 1994

Description of amendment request: This amendment is an additional followup to the amendment request of May 29, 1992, published in the **Federal Register** on July 8, 1992 (57FR30242), which changed the Technical Specifications Section 1.0, Definitions, to accommodate a 24-month fuel cycle and which proposed the extension of the test intervals for specific surveillance tests. This amendment proposes extending the surveillance intervals to 24 months for the following additional surveillance tests: (1) Calibrate and test channels for Auxiliary Feedwater (AFW) initiation on steam generator water level (low-low). (2) Test channels for Auxiliary Feedwater initiation on trip of main feedwater pumps. The licensee's amendment proposal of November 25, 1992, requested approval for extending the surveillance interval of the Auxiliary Feedwater System to accommodate a 24-month fuel cycle and the approved change was issued in License Amendment No. 166. Subsequently, the licensee determined that two additional surveillances associated with this system had not been identified in the November 25, 1992, request. This amendment proposal requests approval of the additional surveillances. The changes requested by the licensee are in accordance with Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

The proposed change does not involve a significant hazards consideration since:

1. There is no significant increase in the probability or consequences of an accident.

The test results over the last four refuelings confirmed system operability with only one failure. This failure would not have impaired the ability of the auxiliary feedwater system to perform its intended safety function. The auxiliary feedwater system is redundant and diverse. The failure in the turbine driven pump did not impact the motor driven pumps.

Based on the historical test data, it is concluded that no significant increase in the probability or consequences of an accident would be incurred by extending the operating cycle due to an increased surveillance interval.

2. The possibility of a new or different kind of accident from any previously analyzed has not been created.

The failure noted from the past test data appears random in nature and would not have defeated the redundancy in design that exists in the AFW system. The AFW system would have been capable of performing its intended safety function and therefore a new or different kind of accident would not have been created.

3. There has been no reduction in the margin of safety.

Past historical data demonstrates that the AFW systems would perform their safety function for an extended operating cycle should the surveillance period be extended by several months.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Attorney for licensee: Brent L. Brandenburg, Esq., 4 Irving Place, New York, New York 10003.

NRC Project Director: Pao Tsin Kuo

Consolidated Edison Company of New York, Docket No. 50-247, Indian Point Nuclear Generating Unit No. 2, Westchester County, New York

Date of amendment request: June 16, 1994

Description of amendment request: The proposed amendment would revise License Condition 2.K of the license issued August 24, 1981, to provide for compliance with the NRC-approved fire protection program as described in the Updated Final Safety Analysis Report and for making changes to the NRC-approved fire protection program; would delete fire protection Technical Specification (TS) Sections 3.13 and 4.14 which contain limiting conditions for operation and surveillance requirements, respectively, for the high-pressure water fire protection system, fire protection spray systems, penetration fire barriers, fire detection systems, fire hose stations and hydrants, and the cable spreading room halon system; would delete Section 6.2.2.f which contains fire brigade staffing requirements; would delete Section 6.4.2 which contains fire brigade training requirements; would add Section 6.5.1.6.1 to add fire protection program responsibilities to the Station Nuclear Committee; would add Section 6.8.1.e to require written procedures and administrative policies for the fire protection program; would delete

Section 6.9.2.b which requires a Special Report for inoperable fire protection and detection equipment; and would make corresponding changes to the Table of Contents and List of Tables.

Generic Letter (GL) 86-10, dated April 24, 1986, and GL 88-12, dated August 2, 1988, from the NRC provided guidance to licensees to request removal of the fire protection TS. The licensee's proposed amendment is in response to these GLs.

Basis for proposed no significant hazards consideration determination:

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

The Commission has provided guidance concerning the application of the standards for determining whether a "Significant Hazards Consideration" exists by providing certain examples in 51 FR 7744 (dated March 6, 1986). Example (vii) of those involving no significant hazards considerations relates to "a change to conform a license to changes in the regulations, where the license change results in very minor changes to facility operations clearly in keeping with the regulations."

In this case, NRC Generic Letters 86-10 and 88-12, although not regulations, provide pertinent guidance relative to the above described proposed changes and implementation of the NRC fire protection regulations of 10 CFR 50.48(a). Specifically, the generic letters allow licensees to delete fire protection related technical specifications, provided that administrative requirements are added to technical specifications and a license condition is provided that requires the implementation and maintenance in effect of the approved fire protection program. Further, the generic letters provide for inclusion of the fire protection program into the UFSAR [Updated Final Safety Analysis Report] and permits future changes to the fire protection program without prior NRC approval, all as provided by the license condition and in accordance with the provisions of 10 CFR 50.59. Therefore, since the actions required by the generic letters have been taken and conform to the license to the current interpretation of NRC fire protection regulations as described in Generic Letters 86-10 and 88-12, with no changes to facility operations, these proposed changes are in accordance with Example (vii) above.

In accordance with the requirements of 10 CFR 50.92, the proposed changes to the Technical Specifications are deemed not to involve any "Significant Hazards Considerations" because operation of Indian Point Unit No. 2 in accordance with these changes would not:

(1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

The fire protection program requirements are not affected in that the function, operation or surveillance requirements for any fire protection system or component are

not being altered. The proposed changes simply relocate these requirements from the Technical Specifications to the UFSAR, are administrative in nature, and do not affect any other current plant equipment or practices. Therefore, the conclusions of current accident analyses are not affected. Further, as permitted by the proposed License Condition 2.K, changes in the NRC-approved fire protection program will require an evaluation per the criteria of 10 CFR 50.59 to determine that the proposed change will not involve an unreviewed safety question. Therefore, future changes to the fire protection program will be evaluated in accordance with appropriate criteria.

(2) Create the possibility for a new or different kind of accident from any previously evaluated.

The proposed changes introduce no new mode of plant operation, do not involve physical modification to any structure, system or component, do not affect the function, operation or surveillance requirements for any equipment necessary for safe operation or shutdown of the plant, or of fire protection equipment which protects such equipment, and do not involve any changes to setpoints or operating parameters. The changes are administrative only and all existing fire protection requirements are maintained. Therefore, the changes can not result in an unanalyzed accident. Further, as permitted by the proposed License Condition 2.K, changes in the NRC-approved fire protection program will require an evaluation per the criteria of 10 CFR 50.59 to determine that the proposed change will not involve an unreviewed safety question. Therefore, future changes to the fire protection program will be evaluated in accordance with appropriate criteria.

(3) Involve a significant reduction in the margin of safety.

The existing fire protection program operability and surveillance requirements are retained as they are contained in the FPPP [Fire Protection Program Plan], and compliance will continue through proposed License Condition 2.K. Therefore, no margins of safety established by design or verified by testing to ensure operability of fire protection systems or components are affected. Further, as permitted by the proposed License Condition 2.K, changes in the NRC-approved fire protection program will require an evaluation per the criteria of 10 CFR 50.59 to determine that the proposed change will not involve an unreviewed safety question. Therefore, future changes to the fire protection program will be evaluated in accordance with appropriate criteria.

Based on the above discussion, since these proposed changes to the Indian Point Unit No. 2 Technical Specifications satisfy the criteria specified in 10 CFR 50.92, are similar to an example provided by the Commission of a change which involves "No Significant Hazards Considerations", and are not similar to any examples that involve a "Significant Hazards Consideration", Con Edison has determined that this amendment application does not involve any "Significant Hazards Considerations."

The proposed Technical Specification changes have been reviewed by the Station

Nuclear Safety Committee and the Con Edison Nuclear Facilities Safety Committee. Both committees concur that these proposed changes do not represent any "Significant Hazards Considerations."

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Attorney for licensee: Brent L. Brandenburg, Esq., 4 Irving Place, New York, New York 10003.

NRC Project Director: Michael L. Boyle

Consolidated Edison Company of New York, Docket No. 50-247, Indian Point Nuclear Generating Unit No. 2, Westchester County, New York

Date of amendment request: July 8, 1994

Description of amendment request: The proposed amendment would revise Technical Specification Section 3.7, Auxiliary Electrical Systems to clarify offsite power availability requirements and to revise emergency diesel generator fuel oil availability requirements.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Consistent with the requirements of 10 CFR 50.92, the enclosed application involves no significant hazards based on the following information:

1) Does the proposed license amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: Neither the probability nor the consequence of an accident previously analyzed is increased due to the proposed changes. There are no changes on the existing offsite power supply configuration or on the existing diesel fuel oil supply system or inventory requirements. This proposed amendment will allow for three diesel operation when a fuel oil storage tank or transfer pump is unavailable. In the event of an accident at this time, the three diesel operation would allow for more than minimum safeguards to be available, with maximum safeguards available for the first part of the event.

2) Does the proposed license amendment create the possibility of a new or different kind of accident from any previously evaluated?

Response:

The existing 138 kV and 13.8 kV offsite power reliability is maintained with this change. There is no impact on availability of the alternate AC system, the three gas turbines, with this change. This change is consistent with the original licensing basis that the AEC accepted for the diesel fuel oil supply system.

3) Does the proposed amendment involve a significant reduction in the margin of safety?

Response:

The proposed amendment does not involve a significant reduction in the margin of safety. The proposed amendment maintains the reliability of the preferred 138 kV and 13.8 kV offsite power and is consistent with the original licensing basis for diesel fuel oil inventory.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room

location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Attorney for licensee: Brent L. Brandenburg, Esq., 4 Irving Place, New York, New York 10003.

NRC Project Director: Robert A. Capra

Duquesne Light Company, et al., Docket No. 50-334, Beaver Valley Power Station, Unit No. 1, Shippingport, Pennsylvania

Date of amendment request: July 29, 1994

Description of amendment request:

The proposed amendment would revise Technical Specifications (TSs) 3/4.4.5 and 3/4.4.6.2 and associated bases to allow the implementation of interim steam generator tube plugging criteria for the tube support elevations during cycle 11. The allowed primary-to-secondary operational leakage from any one steam generator is proposed to be reduced from 500 gallons per day (gpd) to 150 gpd. The total allowed primary-to-secondary operational leakage from all steam generators would be reduced from one gallon per minute (1440 gpd) to 450 gpd.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

Testing of model boiler specimens for free span tubing (no tube support plate [TSP] restraint) at room temperature conditions

show[s] burst pressures in excess of 5000 psi for indications of outer diameter stress corrosion cracking with voltage measurement as high as 19 volts. Burst testing performed on intersections pulled from BVPS [Beaver Valley Power Station] with up to a 2.7 volt indication shows measured burst pressure in excess of 6600 psi at room temperature. Burst testing performed on pulled tubes from other plants with up to 7.5 volt indications show[s] burst pressures in excess of 6300 psi at room temperatures. Correcting for the effects of temperature on material properties and minimum strength levels (as the burst testing was done at room temperature), tube burst capability significantly exceeds the safety factor requirements of RG [Regulatory Guide] 1.121. As stated earlier, tube burst criteria are inherently satisfied during normal operating conditions due to the proximity of the TSP. Test data indicates that tube burst cannot occur within the TSP, even for tubes which have 100 percent through wall electric discharge machining (EDM) notches, 0.75 inch long, provided that the TSP is adjacent to the notched area. Since tube to TSP proximity precludes tube burst during normal operating conditions, use of the criteria must retain tube integrity characteristics which maintain a margin of safety of 1.43 times the bounding faulted condition steam line break (SLB) pressure differential. As previously stated, the RG 1.121 criterion requiring maintenance of a safety factor of 1.43 times the SLB pressure differential on tube burst is satisfied by 7/8 inch diameter tubing with bobbin coil indications with signal amplitudes less than 8.82 volts regardless of the indicated depth measurement. The plugging criteria (resulting in a projected end-of-cycle [EOC] voltage) compares favorably with the 8.82 volt structural limit considering the extremely slow apparent voltage growth rate of indications at BVPS. Using the established methodology of RG 1.121, the structural limit is reduced by allowances for uncertainty and growth to develop a beginning-of-cycle (BOC) repair limit which should preclude indications at EOC conditions which exceed the structural limit. The non-destructive examination (NDE) uncertainty component is 20.5 percent and is based on the EPRI [Electric Power Research Institute] Alternate Repair Criteria (ARC). A bounding growth allowance of 40 percent will be applied. This value is conservative for BVPS Unit 1. The BOC maximum allowable repair limit should not permit the existence of EOC indications (when the 40 percent growth and 20.5 percent uncertainty allowances are applied) which exceed the 8.82 volt structural limit. By adding NDE uncertainty allowances and an allowance for crack growth to the repair limit, the structural limit can be validated. Therefore, the maximum allowable BOC repair limit (RL) based on the structural limit of 8.82 volts can be represented by the expression:

$$RL + (0.205 \times RL) + (0.40 \times RL) = 8.82 \text{ volts, or the maximum allowable BOC repair limit can be expressed as:}$$

$$RL = 8.82 \text{ volt structural limit} / 1.605 = 5.5 \text{ volts.}$$

It is reasonable that this repair limit (5.5 volts) could be applied for IPC [interim

plugging criterion] implementation to repair bobbin indications greater than 1.0 or 2.0 volts independent of RPC [rotating pancake coil] confirmation of the indication. The analyses were performed based on a 1.0 or 2.0 volt repair limit. Duquesne Light Company has chosen to use a steam generator tube repair limit of 1.0 volt. Conservatively, an upper limit of 3.6 volts will be used to assess tube integrity for those bobbin indications which are above 1.0 volt but do not have confirming RPC calls. This 3.6 volt upper limit for non-confirmed RPC calls is consistent with other recently approved IPC programs for the two other plants with 7/8 inch tubing that currently implement IPCs. Since the upper bound for repair of non-confirmed RPC is limited to a value far less than the limit associated with a full alternate criteria, the establishment of the repair limits are [is] judged to be independent of the pulled tube data base used.

The conservatism of the growth allowance used to develop the repair limit is shown by the most recent BVPS eddy current data. The average voltage growth for all indications was 16 percent while the average voltage growth for indications greater than 0.75 volts at BOC was 6 percent. The largest overall voltage growth in a particular steam generator was found in the "A" steam generator, which had an overall average growth of 25 percent. Only two tubes had an absolute voltage growth which exceeded 1.0 volt for Cycle 9. The maximum absolute voltage growth in the 1993 inspection was recorded to be 1.18 volts. Each of the last three inspections, which included 100 percent of all hot leg tubes, showed decreasing voltage growth trends in each successive inspection for all categories; overall voltage growth, growth of BOC indications less than 0.75 volts, and growth of indications greater than 0.75 volts. The decreasing voltage growth rate trend data indicates that DLC has good control of the ODSCC [outer diameter stress corrosion cracking] occurring in the BVPS Unit 1 steam generators and also implies that atypical voltage growth of a few indications is unlikely.

Relative to the expected leakage during accident condition loadings, it has been previously established that a postulated main SLB [steam line break] outside of containment but upstream of the main steam isolation valve (MSIV) represents the most limiting radiological condition relative to the IPC. In support of implementation of the interim plugging criteria, it will be determined whether the distribution of cracking indications at the TSP intersections at the end of Cycle 11 are [is] projected to be such that primary-to-secondary leakage would result in site boundary doses within a small fraction of the 10 CFR 100 guidelines. A separate calculation has determined this allowable SLB leakage limit to be 6.6 gpm in the faulted loop. This limit was calculated using the Technical Specification RCS [reactor coolant system] Iodine-131 activity level of 1.0 micro Curies per gram dose equivalent Iodine-131 and the recommended Iodine-131 transient spiking values consistent with NUREG-0800. The projected SLB leakage rate calculation methodology prescribed in Section 3.3 of draft NUREG-

1477 will be used to calculate EOC leakage. The log-logistic probability of leakage correlation will be used to establish the SLB leak rate used for comparison with the 6.6 gpm faulted loop allowable limit. Due to the relatively low voltage levels of indications at BVPS and low voltage growth rates, it is expected that the actual calculated leakage values will be far less than this limit. Additionally, the current Iodine-131 levels as of May 1994 at BVPS are about 1000 times less than the Technical Specification limit of 1.0.

Application of the criteria requires the projection of postulated SLB leakage, based on the projected EOC voltage distribution for the upcoming cycle. Projected EOC voltage distribution is developed using the most recent EOC eddy current results and a voltage measurement uncertainty. Data indicate that a threshold voltage of 2.8 volts would result in through wall cracks long enough to leak at steam line break conditions. Draft NUREG-1477 requires that all indications to which the IPC are applied must be included in the leakage projection. Tube pull results from another plant with 7/8 inch tubing with a substantial voltage growth data base have shown that tube wall degradation of greater than 40 percent through wall was readily detectable either by the bobbin or RPC probe. The tube with maximum through wall penetration of 56 percent (42 percent average) had a voltage of 2.02 volts. This indication also was the largest recorded bobbin voltage from the EOC eddy current data. Based on the BVPS pulled tube and industry pulled tube data supporting a lower threshold for SLB leakage of 2.8 volts, inclusion of all IPC intersections in the leakage model is quite conservative. The ODSCC occurring at BVPS has historically resulted in relatively low voltage levels and has exhibited decreasing voltage growth trends over the last three inspections. BVPS has not identified ODSCC as a contributor to operational leakage. The current leakage levels at BVPS are negligible (less than 1 gpd). In order to satisfy the requirements of draft NUREG-1477, EOC 10 eddy current data will be used to calculate the projected SLB leakage according to draft NUREG-1477 methodology. Leakage calculated using the recommended EPRI leakage correlation will also be provided. Duquesne Light Company is requesting that the NRC review and approve the EPRI SLB leakage calculation methodology. Sufficient justification is included to establish acceptability of the EPRI leakage correlation based on criteria provided by the NRC in the February 8, 1994, Industry/NRC working meeting on the voltage based criteria.

In order to assess the sensitivity of application of the voltage based criteria upon SLB leakage, the EOC 9 eddy current results were used to calculate postulated EOC 10 leakage using both the NUREG-1477 methodology and EPRI correlation assuming that a 1.0 or 2.0 volt plugging limit were implemented at the BOC 10.

Results indicate SLB leakage of 0.46 gpm and 0.044 gpm using the NUREG and EPRI methodologies with an assumed probability of detection (POD) of 0.6 for a 2.0 volt repair limit. Since Duquesne Light Company has

chosen to limit the voltage based plugging limit at 1.0 volt, EOC 11 SLB leakage is analyzed to be approximately 5 percent lower than the calculated SLB leakage with a 2.0 volt repair limit.

Therefore, implementation of the interim plugging criteria does not adversely affect steam generator tube integrity and implementation will be shown to result in acceptable dose consequences, therefore, the proposed amendment does not result in any increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

Implementation of the proposed steam generator tube interim TSP plugging criteria does not introduce any significant changes to the plant design basis. Use of the criteria does not provide a mechanism which could result in an accident outside of the region of the TSP elevations; no ODSCC that has been identified at the TSP has been detected outside the thickness of the TSPs. Neither a single or multiple tube rupture event would be expected in a steam generator in which the plugging criteria has been applied (during all plant conditions).

Specifically, Duquesne Light Company will implement a maximum leakage rate limit of 150 gpd per steam generator to help preclude the potential for excessive leakage during all plant conditions. The technical specification limits on primary-to-secondary leakage at operating conditions are to be a maximum of 450 gpd for all steam generators, or, a maximum of 150 gpd for any one steam generator. The RG 1.121 criterion for establishing operational leakage rate limits that require plant shutdown are based upon leak-before-break considerations to detect a free span crack before potential tube rupture during faulted plant conditions. The 150 gpd limit should provide for leakage detection and plant shutdown in the event of the occurrence of an unexpected single crack resulting in leakage that is associated with the longest permissible crack length. RG 1.121 acceptance criteria for establishing operating leakage limits are based on leak-before-break considerations such that plant shutdown is initiated if the leakage associated with the longest permissible crack is exceeded.

The single through wall crack lengths that result in tube burst at 1.43 times the steam line break pressure differential and SLB pressure differential alone are approximately 0.57 inch and 0.84 inch, respectively. A leak rate of 150 gpd will provide for detection of 0.41 inch long cracks at nominal leak rates and 0.62 inch long cracks at the lower 95 percent confidence level leak rates. Since tube burst is precluded during normal operation due to the proximity of the TSP to the tube and the potential exists for the crevice to become uncovered during SLB conditions, the leakage from the maximum permissible crack must preclude tube burst at SLB conditions. Thus, the 150 gpd limit provides for plant shutdown prior to reaching critical crack lengths for SLB conditions using the lower 95 percent leakage data. Additionally, this leak-before-break evaluation assumes that the entire

crevice area is uncovered during blowdown. Partial uncovering will provide benefit to the burst capacity of the intersection. Analyses have shown that only a small percentage of the TSPs are deflected greater than the TSP thickness during a postulated SLB.

Steam generator tube integrity continues to be maintained through inservice inspection and primary-to-secondary leakage monitoring, therefore, the possibility of a new or different kind of accident from any accident previously developed is not created.

3. Does the change involve a significant reduction in a margin of safety?

The use of the voltage based bobbin probe interim TSP elevation plugging criteria is demonstrated to maintain steam generator tube integrity commensurate with the requirements of RG 1.121. RG 1.121 describes a method acceptable to the NRC staff for meeting GDCs 14, 15, 31, and 32 by reducing the probability or the consequences of steam generator tube rupture. This is accomplished by determining the limiting conditions of degradation of steam generator tubing, as established by inservice inspection, for which tubes with unacceptable cracking should be removed from service. Upon implementation of the criteria, even under the worst case conditions, the occurrence of ODSCC at the TSP elevations is not expected to lead to a steam generator tube rupture event during normal or faulted plant conditions. The EOC distribution of crack indications at the TSP elevations will be confirmed to result in acceptable primary-to-secondary leakage during all plant conditions and that radiological consequences are not adversely impacted.

In addressing the combined effects of loss of coolant accident (LOCA) and safe shutdown earthquake (SSE) on the steam generator component (as required by GDC 2), it has been determined that tube collapse may occur in the steam generators at some plants. This is the case as the TSP may become deformed as a result of lateral loads at the wedge supports at the periphery of the plate due to the combined effects of the LOCA rarefaction wave and SSE loadings. Then, the resulting pressure differential on the deformed tubes may cause some of the tubes to collapse.

There are two issues associated with steam generator tube collapse. First, the collapse of steam generator tubing reduces the RCS flow area through the tubes. The reduction in flow area increases the resistance to flow of steam from the core during a LOCA which, in turn, may potentially increase peak clad temperature (PCT). Second, there is a potential that partial through wall cracks in tubes could progress to through wall cracks during tube deformation or collapse.

Consequently, since the leak-before-break methodology is applicable to the BVPS reactor coolant loop piping, the probability of breaks in the primary loop piping is sufficiently low that they need not be considered in the structural design of the plant. The limiting LOCA event becomes either the accumulator line break or the pressurizer surge line break. LOCA loads for the primary pipe breaks were used to bound the conditions at BVPS for smaller breaks. The results of the analysis using the larger

break inputs show that the LOCA loads were found to be of insufficient magnitude to result in steam generator tube collapse or significant deformation. The LOCA and SSE tube collapse evaluation performed for another plant with Series 51 steam generators using bounding input conditions (large break loadings) is considered applicable to BVPS.

Addressing RG 1.83 considerations, implementation of the bobbin probe voltage based interim tube plugging criteria is supplemented by: enhanced eddy current inspection guidelines to provide consistency in voltage normalization, a 100 percent eddy current inspection sample size at the TSP elevations, and RPC inspection requirements for the larger indications left inservice to characterize the principal degradation as ODSCC.

As noted previously, implementation of the TSP elevation plugging criteria will decrease the number of tubes which must be repaired. The installation of steam generator tube plugs reduces the RCS flow margin. Thus, the implementation of the alternate plugging criteria will maintain the margin of flow that would otherwise be reduced in the event of increased tube plugging.

Based on the above, it is concluded that the proposed license amendment request does not result in a significant reduction in margin with respect to plant safety as defined in the Final Safety Analysis Report or any Bases of the Technical Specifications.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: B. F. Jones Memorial Library, 663 Franklin Avenue, Aliquippa, Pennsylvania 15001.

Attorney for licensee: Gerald Charnoff, Esquire, Jay E. Silberg, Esquire, Shaw, Pittman, Potts & Trowbridge, 2300 N Street, NW., Washington, DC 20037.

NRC Project Director: Walter R. Butler, Director

Entergy Operations, Inc., Docket Nos. 50-313, Arkansas Nuclear One, Unit 1, Pope County, Arkansas

Date of amendment request: June 22, 1994

Description of amendment request: The proposed amendment revises technical specifications (TSs) related to the emergency feedwater system (EFW). The proposed changes extend the allowable outage time when one EFW train is inoperable from 36 hours to 72 hours and adapt other EFW sections from the "Restructured Standard Technical Specifications for B&W Plants" to the Arkansas Nuclear One, Unit 1 (ANO-1) format.

Basis for proposed no significant hazards consideration determination:

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Criterion 1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The Emergency Feedwater (EFW) system mitigates the consequences of any event with a loss of normal feedwater. This system is not the initiator of any previously analyzed accident, and therefore, changes to the specifications applicable to the EFW system present no significant increase in the probability of any previously evaluated accident.

The changes that revise the required Actions and Allowable Outage Times associated with the EFW system have been evaluated for their effect on the Core Damage Frequency (CDF) previously calculated in the ANO-1 Probabilistic Risk Assessment (PRA). The new ANO-1 CDF values, incorporating the proposed AOT extension, are 4.73E-05 (for the turbine-driven EFW pump) and 4.70E-05 (for the motor-driven pump). These values do not exceed the NRC Safety Goal of 1.0E-04 per reactor year, as stated in the Federal Register 50FR32138. The delta CDF associated with these changes (6.16E-07 for the turbine-driven EFW pump and 3.04E-07 for the motor-driven EFW pump) have been evaluated with respect to criteria contained in SECY-91-270, dated August 27, 1991, and NUMARC 91-04, dated January 1992, and fall within the category of events of low risk significance requiring no compensatory measures. This evaluation has shown the risk associated with the proposed changes to pose no undue risk to public health and safety, to be categorized as having low risk significance, and involve no significant increase in the consequences of an accident previously evaluated.

The changes revising the Limiting Conditions for Operation result in more restrictive controls on the operability of the motor-driven EFW pump. The previous specification required operability of both EFW pumps when the reactor was heated above 280°F. The proposed change requires the operability of the motor-driven EFW pump whenever the unit is above the cold shutdown condition and any steam generator is relied upon for heat removal. With this change, the motor-driven EFW pump is now required to be operable in a condition not previously specified, constituting an additional requirement not previously specified. This change does not involve a significant increase in the consequences of an accident previously evaluated.

The changes revising the Limiting Conditions for Operation also incorporate an Allowable Outage Time for the turbine-driven EFW pump steam supply valves which was not previously specified. The 7 day AOT is reasonable based on:

1. The redundant steam supply (from the opposite steam generator) to the turbine-driven EFW pump is operable,
2. The motor-driven EFW pump is operable, and

3. The probability of an event occurring that would require the inoperable steam supply valve to actuate is relatively low.

The changes to the surveillance specifications clarify the proper conditions required for the operability test of the turbine-driven EFW pump, and revise the requirement for the verification of proper EFW flow path valve alignment. The change clarifying the test conditions is required to ensure a sufficient steam supply to the turbine-driven EFW pump to perform the test. During plant startup, from an RCS temperature of 280°F to an RCS temperature of approximately 525°F (corresponding to a steam generator pressure of approximately 830 psig) the turbine-driven EFW pump is classified as available until operability is proven by successful completion of the surveillance requirement. The proposed changes state that the EFW pumps and their associated flow paths shall be operable when the RCS is above the cold shutdown condition with any steam generator relied upon for heat removal (motor-driven EFW pump) and when RCS temperature is greater than or equal to 280°F (turbine-driven EFW pump). This specification requires that the flow paths be properly aligned to maintain operability and is as restrictive as the current TS 4.3.1.c. The revised specification incorporates a new requirement to verify operator flexibility in determining the method of verification. Some methods that could be considered as fulfilling this requirement would include valve alignment checks, or a flow test verifying a level decrease in the 'Q' condensate storage tank with a corresponding level increase in both steam generators. These changes result in no significant increase in the consequences of an accident previously evaluated.

The other proposed changes included in this submittal, including the Bases changes, are considered to be administrative in nature and have no effect on the consequences of an accident previously evaluated. Relocation of the Emergency Feedwater Initiation and Control (EFIC) requirements from Section 3.4 to Section 3.5 places the requirements for this instrumentation system with the requirements for other instrumentation systems, resulting in greater consistency throughout the ANO-1 TS. Information in the Bases associated with the EFIC system has been corrected to reflect the actual plant condition and resolve a conflict with the ANO-1 Safety Analysis Report. The Bases changes add clarifying information to aid the operator in determining the applicability of the various EFW specifications.

Therefore, this change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

Criterion 2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The proposed changes introduce no new mode of plant operation. The EFW system is not an event initiator. It functions to mitigate the consequences of any event with a loss of normal feedwater.

Therefore, this change does not create the possibility of a new or different kind of accident from any previously evaluated.

Criterion 3 - Does Not Involve a Significant Reduction in the Margin of Safety.

The changes proposed to the Limiting Conditions for Operation associated with the EFW system are more conservative than the current specification, thus resulting in an increase in the margin of safety. The proposed changes to the actions required when both of the EFW trains are inoperable and the auxiliary feedwater pump is unavailable no longer require an immediate plant runback, that is currently required, which could introduce a plant transient, thus resulting in an increase in the margin of safety.

The changes revising the Limiting Conditions for Operations also incorporate and Allowable Outage Time for the turbine-driven EFW pump steam supply valves which was not previously specified. The 7 day AOT is reasonable based on:

1. The redundant steam supply (from the opposite steam generator) to the turbine-driven EFW pump is operable,

2. The motor-driven EFW pump is operable, and

3. The probability of an event occurring that would require the inoperable steam supply valve to actuate is relatively low.

The changes to the surveillance specifications clarify the proper conditions required for the operability test of the turbine-driven EFW pump, and revise the requirement for the verification of proper EFW flow path valve alignment. The change clarifying the test conditions is required to ensure a sufficient steam supply to the turbine-driven EFW pump to perform the test. During plant startup, from an RCS temperature of 280°F to an RCS temperature of approximately 525°F (corresponding to a steam generator pressure of approximately 830 psig) the turbine-driven EFW pump is classified as available until operability is proven by successful completion of the surveillance requirement. The proposed changes state that the EFW pumps and their associated flow paths shall be operable when the RCS is above the cold shutdown condition with any steam generator relied upon for heat removal (motor-driven EFW pump) and when RCS temperature is greater than or equal to 280°F (turbine-driven EFW pump). This specification requires that the flow paths be properly aligned to maintain operability and is as restrictive as the current TS 4.8.1.c. The revised specification incorporates a new requirement to verify proper alignment prior to relying upon any steam generator for heat removal. This allows the operator flexibility in determining the method of verification. Some methods that could be considered as fulfilling this requirement would include manual valve alignment checks, or a flow test verifying a level decrease in the 'Q' condensate storage tank with a corresponding level increase in both steam generators.

This change does involve an incremental reduction in the margin of safety since the extension of the EFW Allowable Outage Time from 36 hours to 72 hours does result in a slight increase in the Core Damage Frequency (CDF) as calculated in the ANO-1 Probabilistic Risk Assessment. The new ANO-1 CDF values, incorporating the

proposed AOT extension, are 4.73E-05 (for the turbine-driven EFW pump) and 4.70E-05 (for the motor-driven EFW pump). These values do not exceed the NRC Safety Goal of 1.0E-04 per reactor year, as stated in the Federal Register 50FR32138. The CDF associated with these changes (6.16E-07 for the turbine-driven EFW pump and 3.04E-07 for the motor-driven EFW pump) have been evaluated with respect to criteria contained in SECY-91-270, dated August 27, 1991, and NUMARC 91-04, dated January 1992, and fall within the category of events of low risk significance requiring no compensatory measures. This reduction is not considered significant in that the increase in CDF has been evaluated as posing no undue risk to the public health and safety and is categorized as having low risk significance.

The other proposed changes included in this submittal, including the Bases changes, are considered to be administrative in nature. Relocation of the Emergency Feedwater Initiation and Control (EFIC) requirements from Section 3.4 to Section 3.5 places the requirements for this instrumentation system with the requirements for other instrumentation systems, resulting in greater consistency throughout the ANO-1 TS. Information in the Bases associated with the EFIC system has been corrected to reflect the actual plant condition and resolve a conflict with the ANO-1 Safety Analysis Report. The Bases changes add clarifying information to aid the operator in determining the applicability of the various EFW specifications.

Therefore, this change does not involve a significant reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room
location: Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801

Attorney for licensee: Nicholas S. Reynolds, Esquire, Winston and Strawn, 1400 L Street, N.W., Washington, D.C. 20005-3502

NRC Project Director: William D. Beckner

Entergy Operations, Inc., Docket Nos. 50-313 and 50-368, Arkansas Nuclear One, Unit Nos. 1 and 2 (ANO-1&2), Pope County, Arkansas

Date of amendment request: June 20, 1994

Description of amendment request: The proposed amendments revise the administrative and control sections of the technical specifications (TSs) for Arkansas Nuclear One, Units 1 and 2. The proposed changes relocate controls associated with the "Review and Audit" functions from the TSs to the Quality Assurance Program and relocate

requirements for the audit of emergency and security plans and implementing procedures from the TSs to the respective emergency and security plans.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Criterion 1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The proposed changes do not affect reactor operations or accident analyses, have no radiological consequences, and are considered to be purely administrative in nature. All requirements relocated from the TSs have been evaluated with respect to the four criteria of the NRC "Final Policy Statement On Technical Specifications Improvements" as presented in SECY-93-067, and found to meet none of the criteria for inclusion in the TS.

Therefore, this change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

Criterion 2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The proposed changes introduce no new mode of plant operation and do not affect the operability of safety-related equipment. All requirements relocated or deleted from the TSs have been evaluated with respect to the four criteria of the NRC "Final Policy Statement On Technical Specifications Improvements" as presented in SECY-93-067, and found to meet none of the criteria for inclusion in the TS.

Therefore, this change does not create the possibility of a new or different kind of accident from any previously evaluated.

Criterion 3 - Does Not Involve a Significant Reduction in the Margin of Safety.

Existing TS operability and surveillance requirements are not reduced by the proposed change, thus no margins of safety are reduced. All requirements relocated or deleted from the TSs have been evaluated with respect to the four criteria of the NRC "Final Policy Statement On Technical Specifications Improvements" as presented in SECY-93-067, and found to meet none of the criteria for inclusion in the TS.

Therefore, this change does not involve a significant reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room
location: Tomlinson Library, Arkansas Tech University, Russellville, Arkansas 72801

Attorney for licensee: Nicholas S. Reynolds, Esquire, Winston and Strawn,

1400 L Street, N.W., Washington, D.C.
20005-3502

NRC Project Director: William D.
Beckner

Entergy Operations Inc., Docket No. 50-
382, Waterford Steam Electric Station,
Unit 3, St. Charles Parish, Louisiana

Date of amendment request: February
9, 1993 as supplemented by letter dated
July 22, 1994

Description of amendment request:
The proposed amendment would revise
Section 3.0 and 4.0 of the Technical
Specifications (TSs) consistent with the
provision and intent of Generic Letter
(GL) 87-09 dated June 4, 1987.

Basis for proposed no significant
hazards consideration determination:
As required by 10 CFR 50.91(a), the
licensee has provided its analysis of the
issue of no significant hazards
consideration, which is presented
below:

TS 3.0.4 prevents entry into an operational
mode or other specified condition unless
Limiting Conditions for Operations (LCOs)
are met without reliance on Action
Requirements. The intent of this TS is to
ensure that a higher mode of operation is not
entered when equipment is inoperable or
when parameters exceed their specified
limits.

The proposed change clarifies TS 3.0.4
such that LCOs with Action Statements that
permit continued operation for an unlimited
period of time are exempt from the
restrictions of TS 3.0.4. This provision is
modified to require an additional plant safety
review prior to implementing additional
exceptions to 3.0.4 other than those currently
stated in the individual specifications. This
proposed change is consistent with existing
NRC regulatory requirements for LCOs.

The proposed change to TS 4.0.3
incorporates a 24-hour delay in
implementing the Action Statements due to
a missed surveillance requirement when the
Action Statements provide a restoration time
that is less than 24 hours. As reflected in GL
87-09, this change is justified in that it is
overly conservative to assume that systems or
components are immediately inoperable
when a surveillance requirement has not
been performed. The NRC concludes in
Generic Letter 87-09 that a 24-hour time limit
balances the risks associated with an
allowance for completing the surveillance
within this period against the risks associated
with the potential for a plant upset and
challenge to safety systems when the
alternative is a shutdown to comply with
Action Statements before the surveillance
can be completed. The NRC further states
that the potential for a plant upset and
challenge to safety systems is increased if
surveillances are performed during actions to
initiate a shutdown to comply with Action
Requirements.

TS 4.0.4 has been modified to note that its
provisions shall not prevent passage through
or to operational modes as required to
comply with Action Requirements. This

change is consistent with the intent of the
existing TS and represents a clarification.

No previously analyzed accident scenario
is changed by the proposed TS changes
described above. Initiating conditions and
assumptions remain as previously analyzed.

Therefore, the proposed changes will not
involve a significant increase in the
probability or consequences of any accident
previously evaluated.

The proposed change to TS 3.0.4 is
administrative in nature. Entry into an
operational mode or other specified
condition will be allowed for those
specifications not currently stating an
exception to 3.0.4 when 1) the applicable
LCOs Action Requirement permits continued
operation for an unlimited period of time and
2) the PORC (plant operations review
committee) has reviewed and approved the
exception.

The proposed change to TS 4.0.3 will allow
continued operation for an additional 24-
hours after discovery of a missed
surveillance. As reflected in GL 87-09,
missing a surveillance does not mean that a
component or system is inoperable. In most
cases, surveillances provide positive
verification of operability.

The proposed change to TS 4.0.4 will
alleviate conflict within the TS. The change
is necessary to allow the plant to proceed
through or to required operational modes to
comply with Action Statements even if
applicable Surveillance Requirements may
not have been performed.

These changes do not affect the operation
of the plant or the manner in which it is
operated.

Therefore, the proposed changes will not
create the possibility of a new or different
kind of accident from any accident
previously evaluated.

The proposed change to TS 3.0.4 is
administrative in nature and will have no
impact on any margin of safety.

The proposed change to TS 4.0.3 will allow
up to 24-hours to perform a missed
surveillance. In some cases this will
eliminate the need for a plant shutdown. As
reflected in GL 87-09, the overall effect is an
increase in plant safety by avoiding
unnecessary shutdowns and associated
system transients due to missed
surveillances.

The proposed change to TS 4.0.4 will
eliminate an internal conflict within the TS
and allow the plant to proceed through or to
required operational modes to comply with
Action Statements even if applicable
Surveillance Requirements for that mode
may not have been performed. The NRC staff
has previously evaluated these change in
Generic Letter 87-09 and determined that the
TS modifications will result in improved TS.

Therefore, the proposed change will not
involve a significant reduction in a margin of
safety.

The NRC staff has reviewed the
licensee's analysis and, based on this
review, it appears that the three
standards of 10 CFR 50.92(c) are
satisfied. Therefore, the NRC staff
proposes to determine that the
amendment request involves no
significant hazards consideration.

Local Public Document Room

location: University of New Orleans
Library, Louisiana Collection, Lakefront,
New Orleans, Louisiana 70122

Attorney for licensee: N.S. Reynolds,
Esq., Winston & Strawn 1400 L Street
N.W., Washington, D.C. 20005-3502

NRC Project Director: William D.
Beckner

Florida Power and Light Company, et
al., Docket No. 50-335, St. Lucie Plant,
Unit No. 1, St. Lucie County, Florida

Date of amendment request: July 28,
1994

Description of amendment request:
The amendment will revise Technical
Specifications (TS) 3/4.4.13 to
incorporate Low Temperature
Overpressure Protection (LTOP)
requirements similar to those
recommended by the NRC staff via
Generic Letter 90-06. The proposed
changes are in accordance with the
resolution of Generic Issue 94 for St.
Lucie Units 1 and 2.

Basis for proposed no significant
hazards consideration determination:
As required by 10 CFR 50.91(a), the
licensee has provided its analysis of the
issue of no significant hazards
consideration, which is presented
below:

Pursuant to 10 CFR 50.92, a determination
may be made that a proposed license
amendment involves no significant hazards
consideration if operation of the facility in
accordance with the proposed amendment
would not: (1) involve a significant increase
in the probability or consequences of an
accident previously evaluated; or (2) create
the possibility of a new or different kind of
accident from any accident previously
evaluated; or (3) involve a significant
reduction in a margin of safety. Each
standard is discussed as follows:

(1) Operation of the facility in accordance
with the proposed amendment would not
involve a significant increase in the
probability or consequences of an accident
previously evaluated.

The changes proposed for St. Lucie Unit 1
Technical Specifications (TS) 3/4.4.13 are
similar to those recommended by the NRC
staff via Generic Letter 90-06 for Low
Temperature Overpressure Protection (LTOP)
systems. On the basis of technical studies
performed for Generic Issue 94, the staff
concluded that LTOP system unavailability is
a contributor to the risk associated with
overpressure transients during the shutdown
modes of plant operation. Revisions to the
actions required and the time for completion
of such actions, in the event that one or more
Power Operated Relief Valves (PORV)
become inoperable, provide more rigor than
the existing specifications and are designed
to increase LTOP system availability. The
administrative restrictions do not change the
results of existing analyses performed to
evaluate postulated accidents but will
improve the availability of systems designed
to mitigate pressure transients that could

occur within the LTOP range. Therefore, operation of the facility in accordance with the proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment will not change the physical plant or the modes of operation defined in the facility license. The changes do not involve the addition of new equipment or the modification of existing equipment, nor do they alter the design of St. Lucie plant systems. Therefore, operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety.

The proposed amendment provides additional administrative restrictions for the operation of LTOP equipment. The applicability of Limiting Conditions of Operation (LCO) involving the PORVs will be extended to include Operational MODE 6 when the head is on the reactor vessel, and the rigor of required actions and action completion times in the event that one or more PORVs become inoperable will be increased. Consequently, the risk of low temperature operations will be reduced and safety during the shutdown modes of operation will be enhanced. Therefore, operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety.

Based on the discussion presented above and on the supporting Evaluation of Proposed TS Changes, FPL has concluded that this proposed license amendment involves no significant hazards consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Indian River Junior College Library, 3209 Virginia Avenue, Fort Pierce, Florida 34954-9003

Attorney for licensee: Harold F. Reis, Esquire, Newman and Holtzinger, 1615 L Street, NW., Washington, DC 20036

NRC Project Director: Victor M. McCree (Acting)

Northeast Nuclear Energy Company, et al., Docket No. 50-336, Millstone Nuclear Power Station, Unit No. 2, New London County, Connecticut

Date of amendment request: July 1, 1994

Description of amendment request: The proposed amendment to the Technical Specification (TS) would: 1. Modify the facility by providing an auctioneered power supply for the engineered safety feature actuation system (ESFAS) sensor cabinets; 2. Reinstate the 2-out-of-4 sump recirculation system (SRAS) logic; 3. Change Table 3.3 of the (Safety Feature Actuation System Instrumentation) by adding Manual main steam isolation (MSI) (Trip Buttons); by removing note (f) which describes the SRAS logic as a modified 2-out-of-4 logic; and by replacing Action Statement 4 with an Action Statement that allows operation with a second inoperable channel, provided both channels are placed in the bypassed condition. 4. Add to the TS new limiting conditions for operation and new surveillance requirements together with BASES (TS 3.3.2.2 and 4.3.2.2.1 and 4.3.2.2.2) for the ESFAS sensor cabinet power supply drawers.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

...The proposed changes do not involve an SHC [significant hazards consideration] because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously analyzed.

SRAS Logic Modification
Implementation of the auctioneered power supply for the sensor cabinets will permit the reinstatement of the original 2-out-of-4 (six possible combinations) logic for SRAS initiation. The current logic only has four possible combinations. Changing the minimum number of SRAS channels required to be operable from four to three does not significantly reduce the available actuation combinations. Operation with one channel inoperable will still provide a 2-out-of-3 logic (three possible trip combinations). With the current SRAS logic, operation with one channel in bypass does not meet the single failure criterion for proper SRAS operation. Amendment No. 168 prevents that condition.

Allowing continued operation with three operable channels is consistent with the original Millstone Unit No. 2 Technical Specifications (prior to Amendment No. 168).

Note (f), which describes the current logic, will no longer apply after the auctioneering circuit is installed. This note is for information only and has no associated action or surveillance requirements. Therefore, removal of note (f) cannot affect either the probability or consequences of a postulated accident.

In addition to the change in the minimum number of channels required to be operable, Action statement 4 will be revised to allow a limited period of two hours when a second

channel may be placed in bypass for performance of surveillance testing. This is acceptable due to the installation of the auctioneering circuit and restoration of the full SRAS logic. Prior to the implementation of the short term modifications and Amendment No. 168, Action Statement 2 also applied to the SRAS. That Action Statement allows two hours of operation with two channels out of service. However, Action Statement 2 requires one of the two channels to be placed in the tripped position.

Postulating a LOCA [loss-of-coolant accident] and an additional failure, while in an action statement that specifies a maximum allowed outage time, is beyond the design basis of Millstone Unit No. 2. However, with one SRAS channel in bypass and one in the tripped position, an additional failure (such as the loss of a DC vital bus) following the onset of a LOCA could result in a false SRAS signal.

From an overall safety perspective, the potential consequences from a false SRAS at the onset of a LOCA are more severe than those from the failure to automatically generate an actuation signal. Proposed Action Statement 4 would require actuation of the remaining channel (following a LOCA and a loss of DC bus as a second failure) to initiate the SRAS. The existing operation procedures instruct the operator to ensure that the SRAS actuation occurs when the refueling water storage tank level decreases to a predetermined value. In the unlikely event that a LOCA occurred while a Action Statement 4 and no SRAS was generated at the appropriate time due to an additional failure which prevents one channel from tripping, the SRAS would be manually initiated by the operator.

The amount of time that Millstone Unit No. 2 would operate under Action Statement 4 (with two SRAS channels in bypass) is approximately 6 hours per month. This is based on the requirement to conduct monthly channel functional tests for the three operable channels. The probability of a LOCA occurring during these surveillance, while in Action Statement 4, with a subsequent failure of the remaining 2-out-of-2 SRAS logic, is very low.

Sensor Cabinet Auctioneering
The proposed new Technical Specification 3.3.2.2, which establishes the requirements for the ESFAS sensor cabinets power supply drawers, permits 48 hours to restore an inoperable sensor cabinet power supply drawer to operable status. A power supply drawer renders it inoperable, or if either its normal or backup power is not available.

Existing Technical Specification 3.8.2.1 contains an 8-hour action statement for restoring the power sources (VA-10, 20, 30, and 40) if they become inoperable. The proposed 48-hour action statement for the power supply drawers is appropriate since the sensor cabinet would remain functional if either normal or alternate power was not available. However, a LOCA and an additional failure while in the action statement could result in a false SRAS, since two channels would be supplied from a single DC power supply.

Prior to Amendment No. 168, operation with an inoperable power supply drawer

could continue indefinitely, provided the provisions of Technical Specification 3/4.3.2 were followed. Operation with a power supply inoperable for an indefinite period of time places all the signals associated with that sensor cabinet in the tripped condition. This creates a 1-out-of-4 tripped condition for SRAS. In this condition, the single failure required to be postulated could result in a false SRAS actuation.

This 48-hour action statement is consistent with other action statements for ESFAS such as Action Statement 1 of Table 3.3-3. Also, this is consistent with the current wording of Action Statement 4 which allows 48 hours to restore an inoperable channel to operable while operating with the modified 2-out-of-4 logic.

MSI Trip Button Addition

The manual trip buttons provide a mechanism for the control room operator to initiate an MSI trip. The proposed Technical Specification change will require that a plant shutdown be initiated if either channel is out of service for more than 48 hours, and establishes a requirement for surveillance testing every refueling outage. Including the trip buttons in the Technical Specifications and establishing operation and surveillance requirements ensures their operability commensurate with their safety significance.

Based on the above, the changes to Technical Specification 3/4.3 do not increase the probability or consequence of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any previously analyzed.

SRAS Logic Modification

Changing the number of channels required to be operable from four to three is acceptable since the original 2-out-of-4 logic will be restored. This change only affects the number and combinations of actuation channels necessary to initiate a SRAS. There is no change to the source or types of initiators, nor is there a change to the automatic response resulting from a SRAS.

Note (f), which described the modified logic, will no longer apply after the auctioneering circuit is installed. This note is for information only and has no associated action or surveillance requirements. Therefore, removal of note (f) cannot create a new or different kind of accident.

New Action Statement 4 restores the ability to operate for an indefinite period of time with one channel in bypass and for a limited period of time while two channels are out of service. The change from the original action statement to require that both channels be in bypass will prevent a false SRAS in the unlikely (and beyond design basis) event of a LOCA with an additional failure of a DC bus while in an LCO [limiting condition for operation].

Sensor Cabinet Auctioneering

The addition of a Technical Specification for the sensor cabinet power supply drawers does not create a potential for a new or different kind of accident. This new specification implements more restrictive operating requirements for the sensor cabinets. These are necessary to ensure that the sensor cabinets are energized from their primary power supply. The new specification

does not affect the initiation of a SRAS signal nor the type of signal produced.

The auctioneering modification does bring two vital AC facilities together via isolation devices. This introduces a potential for a new type of failure mechanism. As described in Attachment 1, adequate isolation ensures that a failure on one side of an isolation transformer does not adversely degrade the other side.

MSI Trip Button Addition

The manual trip buttons provide a mechanism for the control room operator to initiate an MSI trip. The Technical Specification change will require that a plant shutdown be initiated if either manual trip channel is out of service for more than 48 hours, and establishes a requirement for surveillance testing every refueling outage. The trip buttons were installed during the 1992 outage. Establishing operability requirements and surveillance frequency cannot create a new or different kind of accident.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously analyzed.

3. Involve a significant reduction in the margin of safety.

The net effect of the proposed modifications is to improve the reliability of the ESFAS and restore the design 2-out-of-4 logic for the SRAS. The proposed modifications improve the availability of the ESFAS, and do not affect the vital AC instrument panels.

The Technical Specification changes establish controls for the use of the SRAS with the restored logic configuration. The combination of the auctioneering of the power supplies, the restoration of the 2-out-of-4 logic, and the revised Technical Specifications restores the margin of safety and operational flexibility originally designed for the sensor cabinets.

Based on the above, there is no reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room

Location: Learning Resource Center, Three Rivers Community-Technical College, Thames Valley Campus, 574 New London Turnpike, Norwich, Connecticut 06360.

Attorney for licensee: Gerald Garfield, Esquire, Day, Berry & Howard, City Place, Hartford, Connecticut 06103-3499.

NRC Project Director: John F. Stolz

PECO Energy Company, Docket No. 50-353, Limerick Generating Station, Unit 2, Montgomery County, Pennsylvania

Date of amendment request: June 30, 1994

Description of amendment request:

This amendment would remove certain remote shutdown system control valves and primary containment isolation valves from Technical Specifications Tables 3.3.7.4-1 and 3.6.3-1 respectively, as a result of eliminating the steam condensing mode of the Residual Heat Removal system.

Basis for proposed no significant hazards consideration determination:

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed Technical Specifications (TS) changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

These proposed changes will result in abandoning in place certain remote shutdown system control valves and removing from service and abandoning in place certain Primary Containment Isolation Valves (PCIVs) associated with the Residual Heat Removal (RHR) system steam condensing mode, and will remove the interface between the High Pressure Coolant Injection (HPCI) and RHR systems, therefore changing the primary containment pressure boundary.

The RHR system steam condensing mode is a non-safety related function of the RHR system; however, the pressure and structural integrity of the associated piping and valves are safety-related. These proposed changes will not affect any components required to perform the safety-related function of the RHR or HPCI systems.

The ability of the RHR or HPCI systems to respond to an accident will not be degraded. Only valves specifically dedicated for use for the RHR system steam condensing mode will be abandoned in-place, or removed from the plant. The valves' handswitches which are part of the remote shutdown panel (RSP) controls, will be physically removed from the RSP, since they will not perform any function (i.e., the associated valves will have the electrical power removed). The flanges and penetration caps that will become part of the primary containment boundary will be periodically tested for leakage as required by TS and 10CFR50, Appendix J. All piping and components that will remain operable will meet the original design requirements. The other modes of operation of the RHR system (e.g., Low Pressure Coolant Injection (LPCI), Shutdown [Cooling] (SDC)) will not be affected by these changes. Therefore, the proposed TS changes do not involve an increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

No new failure modes of RHR or HPCI systems are created by the proposed TS changes. The proposed changes will have no impact on the existing High Energy Line Break (HEL) analysis for Limerick Generating Station (LGS). All valves or

piping removed and/or abandoned in place, are dedicated specifically for the RHR system steam condensing mode, and will not affect the operation of any components or piping required for other modes of operation of the RHR or HPCI systems. Therefore, the proposed TS changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed TS changes do not involve a significant reduction in a margin of safety.

The steam condensing mode is a non-safety related function of the RHR system and, therefore, is not addressed in the TS. This mode will be physically separated from the other modes of operation of RHR and HPCI systems, and consequently, will not preclude them from performing their safety-related functions. The remote shutdown system control valves to be abandoned in place are not being used presently, and the proposed changes will not impact the safety operation of LGS Unit 2. The primary containment penetration caps, safety-related pipe caps and the flanges replacing the removed PCIVs will be designed, fabricated and installed in accordance with the original design requirements, i.e., American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section III, 1971 Edition with Addenda through Winter flanges will be capable of maintaining the primary containment pressure boundary and the isolation capabilities that were required of the PCIVs and will be tested for leakage periodically, as required by TS and 10 CFR 50, Appendix J. Additionally, all piping and components that will remain operable will meet original design requirements. Therefore, the proposed TS changes do not involve a reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room
location: Pottstown Public Library, 500 High Street, Pottstown, Pennsylvania 19464.

Attorney for licensee: J. W. Durham, Sr., Esquire, Sr. V. P. and General Counsel, PECO Energy Company, 2301 Market Street, Philadelphia, Pennsylvania 19101

NRC Project Director: Charles L. Miller

Pennsylvania Power and Light Company, Docket Nos. 50-387 and 50-388 Susquehanna Steam Electric Station, Units 1 and 2, Luzerne County, Pennsylvania

Date of amendment requests: July 19, 1994

Description of amendment request: This amendment will change the Technical Specification 3.1.5 for each unit for the standby liquid control

system (SLCS) to remove the operability requirement for the SLCS while in Operational Condition 5 (refueling) with any control rod withdrawn, and to delete the 18-month system surveillance requirement (Surveillance Requirement 4.1.5.d.3).

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. This proposal does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed Technical Specification change to delete the operability requirement for the SLC System in OPCON 5* (OPERATIONAL CONDITION 5 with any control rod withdrawn) does not affect the probability or consequences of an accident previously evaluated. Design basis accident mitigation scenarios for SSES in OPCON 5 do not depend on, or require, SLC operability; therefore, the proposed change to delete SLC operability in OPCON 5* does not affect the probability or consequences of an accident previously evaluated.

The proposed Technical Specification change to delete Surveillance Requirement 4.1.5.d.3, 18 month SLC heater operability check, does not affect the probability or consequences of an accident previously evaluated. Regarding the SLC heater function, the operability of the SLC system depends on maintaining the temperature of the sodium pentaborate solution above 70°F to prevent the boric acid from precipitating out of solution. SLC heater 'A' is used to maintain tank temperature between 85°F and 95°F, thus ensuring that the boric acid remains in solution. The operability of the heater 'A' is verified through the daily performance of Technical Specification Surveillance Requirement 4.1.5.a.1, which checks SLC solution temperature, and a control room alarm. Heater 'B' functions to raise SLC solution temperature prior to the mixing of SLC chemicals - the mixing of sodium pentaborate and water is an endothermic (heat consuming) reaction. The operability of heater 'B' is verified at the time when chemicals are added to the SLC tank, since a precondition for adding the chemicals is using heater 'B' to increase tank temperature to 100°F. Heater 'B' does not function to maintain tank temperature during normal operation. Therefore, the proposed change does not impact Susquehanna's ability to maintain SLC solution temperature and thus does not increase the probability or consequences of an accident previously evaluated.

2. This proposal does not create the possibility of a new or different kind of accident or [sic] from any accident previously evaluated.

The proposed Technical Specification change to delete the operability requirement for the SLC System in OPCON 5* does not create the possibility of a new or different kind of accident or [sic] from any accident

previously evaluated. The purpose of the SLC System is to provide backup capability for bringing the reactor from full power to a cold, Xenon-free shutdown, assuming that none of the withdrawn control rods can be inserted. This basis is consistent with the required operability of the SLC System in OPCONs 1 & 2. The proposed change does not affect the ability of SLC to meet its design basis. No credit is taken for SLC in OPCON 5 to mitigate the effects of reactivity transients, and the SLC system is not designed to terminate an inadvertent criticality event during core alterations (OPCON 5) with vessel water level at least 22 feet above top of vessel flange. Therefore, no new or different accident scenarios are created by the proposed change.

The proposed Technical Specification change to delete Surveillance Requirement 4.1.5.d.3, 18 month SLC heater operability check, does not create the possibility of a new or different kind of accident or [sic] from any accident previously evaluated. The proposed change does not affect systems, structures, or components (SSCs) or the operation of these [SSCs]. The heating and heater control subsystems of the SLC system will continue to function as they were designed. The proposed change does not alter the heating limits or the method for maintaining SLC solution temperature. Therefore, the proposed change does not create the possibility of a new or different kind of accident or [sic] from any accident previously evaluated. 3. This change does not involve a significant reduction in a margin of safety.

The proposed Technical Specification change to delete the operability requirement for the SLC System in OPCON 5* does not involve a significant reduction in a margin of safety. The potential for a decrease in the margin of safety, under this proposed change, would be associated with periods during OPCON 5* when the SLC system was not operable. Allowing the SLC system to be inoperable during OPCON 5* with the vessel level at least 22 feet above top of vessel flange, represents no reduction in the margin of safety since the SLC System is not designed to terminate an inadvertent criticality event with a greater volume of water in the reactor. Having the SLC system inoperable in OPCON 5* with reactor water levels at normal operating volumes, does not significantly reduce the margin of safety because of the number of other design and operating features which act to prevent inadvertent criticality events. Adequate shutdown margin is maintained through design and administrative controls; including, Shutdown Margin Demonstration, Technical Specification 3.1.1, defueling and refueling procedures, and refueling interlocks. In addition, the Reactor Protection System monitors for recriticality and actuates the Control Rod Scram function if a significant reactivity addition is sensed.

The proposed Technical Specification change to delete Surveillance Requirement 4.1.5.d.3, 18 month SLC heater operability check, does not involve a significant reduction in a margin of safety. Adequate controls are in place, independent of the 18 month heater operability check, to ensure

that the temperature of the sodium pentaborate solution is maintained above 70° F. These controls include Surveillance Requirement 4.1.5.a.1, which checks SLC solution temperature daily, a control room alarm on low and high temperature, and the ambient temperature conditions in the SLC area which prevent rapid changes in SLC solution temperature. Operability of the 'B' heater is not needed to maintain SLC solution temperature, and the operability of this heater is verified at the time when chemicals are added to the SLC tank.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Osterhout Free Library, Reference Department, 71 South Franklin Street, Wilkes-Barre, Pennsylvania 18701

Attorney for licensee: Jay Silberg, Esquire, Shaw, Pittman, Potts and Trowbridge, 2300 N Street NW., Washington, DC 20037

NRC Project Director: Charles L. Miller, Power Authority of the State of New York, Docket No. 50-333, James A. FitzPatrick Nuclear Power Plant, Oswego County, New York

Date of amendment request: June 13, 1994

Description of amendment request: The proposed amendment would modify the Facility Operating License by removing License Condition 2.E. This condition applies to the construction cleanup, restoration, and maintenance of transmission lines. It is incorporated into the Facility Operating License the requirements of U.S. Department of Interior publication "Environmental Criteria for Electric Transmission Systems" - 1970. The proposed amendment was requested to eliminate duplication of regulatory authority by government agencies of the same activity.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Operation of the FitzPatrick plant in accordance with the proposed Amendment would not involve a significant hazards consideration as defined in 10 CFR 50.92, since it would not:

1. involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change will remove a license condition unrelated to nuclear safety. License condition 2.E incorporated into the Operating

License the requirements of U.S. Department of Interior publication "Environmental Criteria for Electric Transmission Systems" - 1970. The goal of this standard is to "safeguard aesthetic and environmental values within the constraints imposed by the current state of high-voltage transmission technology." License condition 2.E addresses the preservation of the environment and natural resources. Removing this condition from the Facility Operating License has no bearing on plant safety or the health and safety of the public considering its non-nuclear safety nature. The transmission line right-of-ways maintained by the Authority are subject to regulation by other State and Federal agencies. Removal of this license condition will not affect operation of safety related structures, systems or components nor affect the quality assurance program at the FitzPatrick plant. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. create the possibility of a new or different kind of accident from any accident previously evaluated.

License condition 2.E of the James A. FitzPatrick Plant Operating License applies to the construction cleanup, restoration, and maintenance of transmission lines. The Authority's transmission lines are managed under guidelines based on the "Generic Transmission Line Right-of-Way Management" plan requirements. The requirements imposed by the plan on the FitzPatrick transmission line right-of-ways exceed those of the U.S. Department of Interior publication referenced in license condition 2.E in both scope and details. Therefore, implementing the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. involve a significant reduction in a margin of safety.

License condition 2.E of the James A. FitzPatrick Operating License applies to the construction cleanup, restoration, and maintenance of transmission lines. The requirements imposed by this license condition are unrelated to nuclear safety.

Continued operation of the plant without Condition 2.E does not involve a significant reduction in any margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room

location: Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York 13126.

Attorney for licensee: Mr. Charles M. Pratt, 1633 Broadway, New York, New York 10019.

NRC Project Director: Michael L. Boyle

Power Authority of the State of New York, Docket No. 50-333, James A. FitzPatrick Nuclear Power Plant, Oswego County, New York

Date of amendment request: July 21, 1994

Description of amendment request: The proposed changes would modify paragraph 2.C.(3) of the Facility Operating License and relocate fire protection requirements from the Technical Specifications to an administrative procedure. These changes are based on the guidance contained in NRC Generic Letter 86-10, "Implementation of Fire Protection Requirements," and Generic Letter 88-12, "Removal of Fire Protection Requirements from Technical Specifications."

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Operation of the FitzPatrick plant in accordance with the proposed Amendment will not involve a significant hazards consideration as defined in 10 CFR 50.92, because:

(1) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated because no modifications, no changes to operating procedure requirements, no reduction in administrative controls and no reduction in equipment reliability are being made as a result of these changes. This proposed amendment relocates the fire protection LCOs [Limiting Conditions for Operation] and Surveillance Requirements from the Technical Specifications to an Administrative Procedure. No significant changes in content are being made to the Technical Specification requirements that are being relocated. Operating limitations will continue to be in effect, and required surveillances will continue to be performed in accordance with written procedures and instructions auditable by the NRC.

Although future proposed changes to the fire protection program elements previously located in the Technical Specifications will no longer be controlled by 10 CFR 50.36, proposed changes to the Fire Protection requirements will be controlled by the License Condition and plant procedures. Programmatic controls will continue to assure that fire protection program changes do not reduce the effectiveness of the program to achieve and maintain safe shutdown in the event of a fire.

(2) The possibility of an accident or malfunction of a different type than evaluated previously in the safety analysis report is not created because no reduction to the fire protection requirements, no modifications, no changes to operating procedure requirements, no reduction in administrative controls and no reduction in equipment reliability are being made as a

result of these changes. Programmatic controls will continue to assure that fire protection program changes do not reduce the effectiveness of the program to achieve and maintain safe shutdown in the event of a fire.

(3) This proposed amendment does not involve a reduction to the approved fire protection program or Fire Protection Technical Specification requirements because the Technical Specification fire protection requirements are being relocated, with no significant change in content, to an administrative procedure. Since there is no reduction in the requirements, no modifications, no changes to operating procedure requirements, no reduction in administrative controls and no reduction in equipment reliability are being made as a result of these changes, there is no reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York 13126.

Attorney for licensee: Mr. Charles M. Pratt, 1633 Broadway, New York, New York 10019.

NRC Project Director: Pao Tsin Kuo

Power Authority of The State of New York, Docket No. 50-286, Indian Point Nuclear Generating Unit No. 3, Westchester County, New York

Date of amendment request: July 25, 1994

Description of amendment request: The licensee has requested an amendment to the Technical Specifications (TS) to revise Table 3.6-1 (Non-Automatic Containment Isolation Valves Open Continuously or Intermittently for Plant Operation) and Table 4.4-1 (Containment Isolation Valves) to delete valves SI-1833A(B) and add valves SI-MOV-1835A(B). The valves being deleted no longer perform a containment isolation function as a result of a modification which removed the boron injection tank. The valves being added are needed for testing the safety injection pumps.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Consistent with the criteria of 10 CFR 50.92, the enclosed application is judged to involve no significant hazards based on the following information:

(1) Does the proposed license amendment involve a significant increase in the probability or consequences of any accident previously evaluated?

Response:

The proposed license amendment does not involve a significant increase in the probability or consequences of any accident previously evaluated. The change permits the removal of the two containment isolation valves on the Boron Injection Tank (BIT) bypass line. A previous amendment [Amendment No. 139, issued on October 15, 1993] to the Operating License removed the functional requirement for the BIT. Consequently, the function of the BIT bypass line to provide a Safety Injection (SI) pump test flow path has been rendered obsolete, permitting removal of the bypass line and associated valves. The bypass line will be cut and capped to assure containment integrity, therefore eliminating the need for containment isolation valves SI-1833A and SI-1833B. Opening the BIT outlet valve [SI-MOV-1835A or B] permits operability testing of the SI pumps, and is consistent with the current provision permitting opening of the BIT bypass valves. The changes do not impact the current operability and surveillance requirements for the Safety Injection System.

(2) Does the proposed license amendment create the possibility of a new or different kind of accident from any previously evaluated?

Response:

The proposed license amendment does not create the possibility of a new or different kind of accident from any previously evaluated. The change proposes to eliminate two containment isolation valves on the BIT bypass line whose function has been rendered obsolete by a previous amendment to the Operating License. The bypass line will be cut and capped to assure containment integrity, therefore eliminating the need for these containment isolation valves. Intermittent opening of the BIT outlet valve is consistent with the current provision permitting opening of the BIT bypass valves, thereby allowing operability testing of the SI pumps. The changes do not impact the operability or surveillance requirements for the Safety Injection System.

(3) Does the proposed amendment involve a significant reduction in a margin of safety?

Response:

The proposed license amendment does not involve a significant reduction in a margin of safety for the following reasons. Currently, an orientation deficiency with the inboard BIT bypass isolation valve exposes its stem packing to the non-isolable side of the valve. The modification corrects this problem by removing both isolation valves and capping the pipes to assure integrity of the Containment and Safety Injection System. Additionally, removal of the isolation valves removes the potential for containment leakage resulting from valve degradation. Finally, removal of the BIT bypass line and its associated isolation valves does not inhibit the ability to test the SI pumps since a previous modification approved in an Amendment to the Operating License removed the functional requirement for the

BIT. Consequently, the SI pumps may be flow tested with the BIT inservice, rendering obsolete the function of the BIT bypass line. Intermittent opening of the BIT outlet valve is consistent with the current provision permitting opening of the BIT bypass valves, thereby allowing operability testing of the SI pumps.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10601.

Attorney for licensee: Mr. Charles M. Pratt, 10 Columbus Circle, New York, New York 10019.

NRC Project Director: Pao Tsin Kuo

Public Service Electric & Gas Company, Docket Nos. 50-272 and 50-311, Salem Nuclear Generating Station, Unit Nos. 1 and 2, Salem County, New Jersey

Date of amendment request: June 29, 1994

Description of amendment request: These proposed amendments would revise the Technical Specifications to increase the minimum volume of oil contained in the Diesel Fuel Oil Storage Tanks (DFOSTs) at the Salem Generating Station (SGS). It would also revise the Updated Final Safety Analysis Report (UFSAR) description of the fuel oil storage system capability.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

(1) [This proposal does] not involve a significant increase in the probability or consequences of an accident previously evaluated.

Emergency Diesel Generator (EDG) fuel oil is used to support mitigation of design basis events involving loss of the preferred (offsite) source of A.C. power. Fuel oil storage capacity has no effect on the probability of any accident previously evaluated.

Onsite fuel oil storage capability is designed to provide assurance of long term diesel operation to mitigate the consequences of a design basis accident. The proposed change would increase the minimum required volume in the Seismic Class I Diesel Fuel Oil Storage Tanks (DFOSTs), and would revise the Updated Final Safety Analysis Report (UFSAR), as part of an effort to reconstitute the basis for SGS fuel oil storage capacity. The DFOST inventory at the proposed minimum Technical Specification (TS) limit, combined with the emergency fill connection and Seismic Class III Fuel Oil

Storage Tank and transfer capability, would continue to provide a long term onsite fuel oil supply to the EDGs. Operations and Emergency Preparedness procedures would facilitate the transfer of fuel oil, and procurement from offsite sources as a contingency measure. Therefore, the ability to provide a long term supply of fuel oil to the EDG's is maintained, and the proposed change would not result in any significant increase in consequences of an accident previously evaluated.

(2) [This proposal does] not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change would increase the minimum DFOST level required by TS, and redefines the fuel oil storage and transfer systems' capability based on plant specific fuel oil consumption rate and EDG load profiles. These changes would not result in operation in any configuration prohibited by the present TS, and do not introduce the possibility of any new type of accident.

(3) [This change does] not involve a significant reduction in a margin of safety.

The EDG fuel oil storage and transfer capability would continue to support reliable, long term EDG operation, thereby maintaining an acceptable margin of safety relative to the ability of onsite A.C. power to support operation of equipment important to safety. The proposed changes do not involve a significant reduction in margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room

location: Salem Free Public library, 112 West Broadway, Salem, New Jersey 08079

Attorney for licensee: Mark J. Wetterhahn, Esquire, Winston and Strawn, 1400 L Street, NW., Washington, DC 20005-3502

NRC Project Director: Charles L. Miller

Tennessee Valley Authority, Docket Nos. 50-259 and 50-296, Browns Ferry Nuclear Plant, Units 1 and 3, Limestone County, Alabama

Date of amendment request: March 31, 1994 (TS 319)

Description of amendment request: The proposed amendment revises the setpoints for instrumentation used to isolate high energy line breaks in the high pressure coolant injection (HPCI) and reactor core isolation cooling (RCIC) systems. The proposed amendment also defines specific areas where steam line space temperatures are monitored.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the

licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes to the HPCI and RCIC steam line space isolation setpoints do not affect any precursor for any design basis events or operational transients analyzed in the Browns Ferry Final Safety Analysis Report. Therefore, the probability of an accident previously evaluated is not increased.

The HPCI and RCIC steam line space high temperature isolations are provided to ensure automatic closure of each system's primary containment isolation valves for a HPCI or RCIC steam line break. The isolation occurs when a very small leak has occurred. If the small leak is allowed to continue without isolation, offsite dose limits may be reached. As a result of the environmental qualification program, the environmental responses of the reactor building to high energy line breaks were analyzed. TVA used computer modeling techniques to predict the temperature response of various reactor building zones to high energy line breaks. The results indicate that the setpoints for the HPCI and RCIC temperatures switches should be lowered. The lower setpoints assure the timely initiation of a closure signal to the primary containment isolation valves. Therefore, assuring the maximum allowable temperatures are not exceeded.

The proposed change to the HPCI and RCIC steam line space isolation setpoints are in the conservative direction and provides the same or earlier detection and isolation of HPCI and RCIC steam line breaks.

The proposed trip level settings are high enough to ensure that spurious trips do not occur from normal or transient system operation and low enough to ensure that line breaks are detected and isolated before design conditions are exceeded. Therefore, the proposed changes will not significantly increase the consequences of an accident previously evaluated.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change to the HPCI/RCIC steam line space high temperature isolations does not involve any modification to plant equipment or changes in operating procedures. No new failure modes are introduced. There is no effect on the function or operation of any other plant system. No new system interactions have been introduced by the change. The results of a break in the HPCI or RCIC steam lines remain as before. The HPCI or RCIC steam line area temperature switches will still detect a break due to an increase in area temperature and provide an initiation signal to close the system primary containment isolation valves to prevent reactor coolant loss. The proposed change will conservatively serve to detect and mitigate HPCI and RCIC line breaks more expeditiously.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident.

3. The proposed amendment does not involve a significant reduction in a margin of safety.

The proposed change will not reduce the margin of safety. The proposed change ensure that HPCI and RCIC steam line breaks are isolated at the same or lower steam line area temperatures. Computer modeling techniques were utilized to predict the temperature response in various areas through which the HPCI and RCIC steam lines pass. The revised setpoints are established above the maximum expected normal room temperatures to avoid spurious actions due to ambient conditions and below the analytical limits to ensure timely pipe break detection and isolation. Substantial margin exist between the maximum temperature expected in each area and the minimum actuation temperature determined for each temperature switch. With the substantial margin between maximum temperatures for the areas and the minimum actuation temperature of the switches, the maximum temperatures cannot result in actuation of the switches. The design and function of the affected components has not been changed. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Athens Public Library, South Street, Athens, Alabama 35611

Attorney for licensee: General Counsel, Tennessee Valley Authority, 400 West Summit Hill Drive, ET 11H, Knoxville, Tennessee 37902

NRC Project Director: Mr. Frederick J. Hebdon

Tennessee Valley Authority, Docket No. 50-260, Browns Ferry Nuclear Plant, Unit 2, Limestone County, Alabama

Date of amendment request: May 11, 1994 (TS 347T)

Description of amendment request: The proposed amendment extends the allowed outage time for the Browns Ferry Nuclear Plant (BFN) Unit 2 250 volt DC (direct current) control power supplies from 5 to 45 days. The amendment is a temporary revision to the BFN Unit 2 Technical Specifications (TS) to permit replacement of batteries and other hardware.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change involves temporarily (one-year period) extending the 5-day AOT [allowed outage time] for the 250-volt shutdown board control power supplies to 45 days. As such, this change does not increase the probability of any accident previously analyzed.

The 250-volt DC Power System is required to function to mitigate the consequences of design basis accidents. The loss of a single 250-volt DC shutdown board control power supply will result in a loss of control power for the 480-volt and the 4160-volt shutdown board that it serves. Loss of control power results in loss of only those engineered safeguards supplied by its respective shutdown boards. Redundant safe shutdown equipment exists to mitigate the consequences of design basis accidents. As discussed in Final Safety Analysis Report (FSAR) subsection 8.6.4.3, a single failure of a shutdown board control power supply is acceptable.

Loss of a single 250-volt plant DC power supply will not prevent Unit 2 safe shutdown. The 250-volt plant DC power supply system is designed so that any two out of the three power supplies carry the entire load needed for safe shutdown. As discussed in FSAR subsection 8.6.4.2 a single failure of a 250-volt plant DC power supply is acceptable.

At no time will control power be unavailable to the shutdown boards during the system upgrades. The proposed change will only increase the time allowed to operate the plant while a 250-volt DC shutdown board control power supply is out of service.

The proposed TS change allows an additional 40 days to perform system upgrades and results in a small increase in risk. This small increase in risk is associated with the probability and consequences of a 250-volt plant DC power supply malfunction while it is supplying shutdown board control power. The increase in risk associated with extending the AOT was analyzed in a Probabilistic Safety Assessment (PSA) and determined to be approximately 0.3 percent. This small increase in risk is determined to be insignificant and well within the uncertainty bounds of the PSA.

The proposed TS change does not change the function of any plant structure, system or component. The proposed change allows for improvements to the 250-volt DC shutdown board control power supply system. The improvements will increase the capability and reliability of the system. Qualified backup power will be utilized at all times during system modifications. Only one power supply will be out of service at a time during the modifications.

The small increase in risk is more than offset by the increased capability, capacity, and reliability of the new power supplies. Therefore, the power supply modifications will result in a net overall safety benefit.

[The licensee has also committed to implement compensatory measures while performing the power supply modifications.

These measures provide additional confidence that potential accident consequences are not increased.]

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Extending the 5-day AOT for the 250-volt shutdown board control power supplies to 45 days does not create the possibility of a new or different kind of accident, nor does it increase the probability that an accident will occur. The AOT extension does not involve plant modifications that could create the possibility of a new or different kind of accident from any of those discussed in the FSAR.

The 250-volt DC shutdown board control power supply modifications involve replacement of the existing components with more reliable, increased capacity equipment having the same functions as before.

3. The proposed amendment does not involve a significant reduction in a margin of safety.

The proposed TS change involves a risk increase of approximately 0.3 percent. TVA [the Tennessee Valley Authority, the licensee] considers this small increase to be insignificant. TVA also considers that the small increase in risk is offset by the benefits associated with replacing the control power supplies with new, upgraded equipment. Therefore, the proposed TS change does not involve a significant reduction in a margin of safety.

[The licensee has also committed to implement compensatory measures while performing the power supply modifications. These measures provide additional capability to mitigate an accident, minimizing any effect on safety margin.]

The NRC has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Athens Public Library, South Street, Athens, Alabama 35611

Attorney for licensee: General Counsel, Tennessee Valley Authority, 400 West Summit Hill Drive, ET 11H, Knoxville, Tennessee 37902

NRC Project Director: Mr. Frederick J. Hebdon

Wisconsin Electric Power Company, Docket Nos. 50-266 and 50-301, Point Beach Nuclear Plant, Unit Nos. 1 and 2, Town of Two Creeks, Manitowoc County, Wisconsin

Date of amendment request: July 18, 1994

Description of amendment request: The proposed amendment would modify Point Beach Nuclear Plant Technical Specification (TS) 15.3.7, "Auxiliary Electrical Systems," by including an allowed outage time for one of the four connected station battery

chargers and subsequent shutdown requirements. The basis for Section 15.3.7 would also be revised to support the above changes.

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented below:

In accordance with the requirements of 10 CFR 50.91(a), Wisconsin Electric Power Company (Licensee) has evaluated the proposed changes against the standards of 10 CFR 50.92 and has determined that the operation of Point Beach Nuclear Plant, Units 1 and 2, in accordance with the proposed amendments, does not present a significant hazards consideration. A proposed facility operating license amendment does not present a significant hazards consideration if operation of the facility in accordance with the proposed amendment will not:

1. Create a significant increase in the probability or consequences of an accident previously evaluated; or
2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or
3. Will not create a significant reduction in a margin of safety.

The proposed amendment allows operation for up to two hours with one out of the four connected station battery chargers out of service. The 2-hour outage time is based on Regulatory Guide 1.93 and reflects a reasonable time to assess plant status and either connect an operable battery charger to the affected DC bus or prepare to effect an orderly and safe shutdown of the operating unit(s). Since the batteries, chargers, and their associated vital instrument buses provide sufficient redundancy to assure the initiation of proper protective actions during degraded system conditions, operation of PBNP in accordance with these proposed amendments cannot create an increase in the probability or consequences of an accident previously evaluated, create a new or different kind of accident, or result in a significant reduction in a margin of safety. Therefore, the proposed changes do not present a significant hazards consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Local Public Document Room location: Joseph P. Mann Library, 1516 Sixteenth Street, Two Rivers, Wisconsin 54241.

Attorney for licensee: Gerald Charnoff, Esq., Shaw, Pittman, Potts, and Trowbridge, 2300 N Street, NW., Washington, DC 20037.

NRC Project Director: John N. Hannon

Previously Published Notices Of consideration Of Issuance Of Amendments To Facility Operating Licenses, Proposed No Significant Hazards Consideration Determination, And Opportunity For A Hearing

The following notices were previously published as separate individual notices. The notice content was the same as above. They were published as individual notices either because time did not allow the Commission to wait for this biweekly notice or because the action involved exigent circumstances. They are repeated here because the biweekly notice lists all amendments issued or proposed to be issued involving no significant hazards consideration.

For details, see the individual notice in the *Federal Register* on the day and page cited. This notice does not extend the notice period of the original notice.

Georgia Power Company, Docket No. 50-366, Edwin I. Hatch Nuclear Plant, Unit 2, Appling County, Georgia

Date of amendment request: July 19, 1994

Description of amendment request: The proposed amendment would revise Technical Specification 3.3.6.6 to permit the traversing incore probe (TIP) system to be considered operable with less than four operable TIP units. Date of publication of individual notice in *Federal Register*: July 22, 1994 (59 FR 37516) Expiration date of individual notice: Comment Period expires August 8, 1994; Notice period expires August 22, 1994

Local Public Document Room location: Appling County Public Library, 301 City Hall Drive, Baxley, Georgia 31513

Notice Of Issuance Of Amendments To Facility Operating Licenses

During the period since publication of the last biweekly notice, the Commission has issued the following amendments. The Commission has determined for each of these amendments that the application 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.

Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for A Hearing in

connection with these actions was published in the *Federal Register* as indicated.

Unless otherwise indicated, the Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.12(b) and has made a determination based on that assessment, it is so indicated.

For further details with respect to the action see (1) the applications for amendment, (2) the amendment, and (3) the Commission's related letter, Safety Evaluation and/or Environmental Assessment as indicated. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document rooms for the particular facilities involved.

Carolina Power & Light Company, Docket No. 50-261, H. B. Robinson Steam Electric Plant, Unit No. 2, Darlington County, South Carolina

Date of application for amendment: September 15, 1993

Brief description of amendment: The amendment revises the pressure-temperature limits from 15 to 24 effective full power years.

Date of issuance: July 29, 1994

Effective date: July 29, 1994

Amendment No. 149

Facility Operating License No. DPR-23. Amendment revises the Technical Specifications.

Date of initial notice in Federal Register: October 13, 1993 (58 FR 52980) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Hartsville Memorial Library, Home and Fifth Avenues, Hartsville, South Carolina 29550

Carolina Power & Light Company, et al., Docket No. 50-400, Shearon Harris Nuclear Power Plant, Unit 1, Wake and Chatham Counties, North Carolina

Date of application for amendment: February 4, 1994

Brief description of amendment: The amendment revises the Action Statement of TS 3.6.5, Vacuum Relief System, to require in Modes 1-4 with one vacuum relief system inoperable

that the system be restored to the operable status within seventy-two hours or be in at least hot standby within the next six hours.

Date of issuance: July 27, 1994

Effective date: July 27, 1994

Amendment No. 49

Facility Operating License No. NPF-63. Amendment revises the Technical Specifications.

Date of initial notice in Federal Register: March 30, 1994 (59 FR 14886) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 27, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Cameron Village Regional Library, 1930 Clark Avenue, Raleigh, North Carolina 27605.

Carolina Power & Light Company, et al., Docket No. 50-400, Shearon Harris Nuclear Power Plant, Unit 1, Wake and Chatham Counties, North Carolina

Date of application for amendment: May 11, 1994

Brief description of amendment: The amendment revises TS 3/4.2.3 to establish limits on reactor power level as a function of total reactor coolant system (RCS) flow rate up to 5 percent below the current specified flow rate.

Date of issuance: July 27, 1994

Effective date: July 27, 1994

Amendment No. 50

Facility Operating License No. NPF-63. Amendment revises the Technical Specifications.

Date of initial notice in Federal Register: May 25, 1994 (59 FR 27079) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 27, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Cameron Village Regional Library, 1930 Clark Avenue, Raleigh, North Carolina 27605.

Commonwealth Edison Company, Docket Nos. STN 50-456 and STN 50-457, Braidwood Station, Unit Nos. 1 and 2, Will County, Illinois

Date of application for amendments: March 30, 1994, as supplemented by letters dated June 13, June 14, July 11, July 21 and July 28, 1994

Brief description of amendments: The amendment revises the Technical Specifications (TSSs) by changing the Unit 1 heatup and cooldown pressure-temperature (P-T) curves (i.e., Figures 3.4-2a and 3.4-3a) to incorporate a newly determined reactor pressure vessel (RPV) reference nil-ductility temperature, RT_{NDT}. This new value of

RT_{NDT} was determined from the licensee's analysis of the first irradiation sample removed from Unit 1. The setpoint curve contained in Figure 3.4-4a for the Unit 1 Low Temperature Overpressure Protection System (LTOPS) is also revised to reflect the changes in the P-T curves and to provide a margin for uncertainties in measuring the reactor pressure. Additionally, the amendment updates the removal schedule of RPV surveillance capsules for both units in accordance with the American Society for Testing Materials (ASTM) Standard ASTM E185-82. Finally, the amendment incorporates an editorial change for Unit 2 in which some clarifying text was added in the Table of Contents to indicate the lifetime applicability of Figure 3.4-4b for Unit 2.

Date of issuance: July 29, 1994

Effective date: July 29, 1994

Amendment Nos.: 53 and 53

Facility Operating License Nos. NPF-72 and NPF-77. The amendments revised the Technical Specifications.

Date of initial notice in Federal Register: May 12, 1994 (59 FR 24747) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Wilmington Township Public Library, 201 S. Kankakee Street, Wilmington, Illinois 60481.

Commonwealth Edison Company, Docket Nos. 50-373 and 50-374, LaSalle County Station, Units 1 and 2, LaSalle County, Illinois

Date of application for amendments: September 10, 1993 as supplemented November 17, 1993

Brief description of amendments: The amendments revise the LaSalle County Station, Units 1 and 2 Updated Final Safety Analysis Report Section 11.5.2.1.4 to specify that operator action is required to trip the mechanical vacuum pump upon receipt of a main steam line high radiation alarm, rather than the action of an automatic trip, which is currently described in the UFSAR. NRC approval was required because the required operator action, an existing condition, is contrary to that described in the UFSAR and the NRC's Safety Evaluation Report related to the operation of LaSalle County station (NUREG-0519), and involved an unreviewed safety question.

Date of issuance: July 26, 1994

Effective date: July 26, 1994

Amendment Nos.: 101 and 85

Facility Operating License Nos. NPF-11 and NPF-18. The amendments revised the UFSAR.

Date of initial notice in Federal Register: December 1, 1993 (58 FR 63403) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 26, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Public Library of Illinois Valley Community College, Rural Route No. 1, Oglesby, Illinois 61348.

Commonwealth Edison Company, Docket Nos. 50-295 and 50-304, Zion Nuclear Power Station, Units 1 and 2, Lake County, Illinois

Date of application for amendments: June 16, 1994

Brief description of amendments: The amendments change specification 3/4.10.1 to recognize the exemption of a single valve on each unit from Type C testing until the next refueling outage on each unit.

Date of issuance: August 1, 1994

Effective date: August 1, 1994

Amendment Nos.: 155 and 143

Facility Operating License Nos. DPR-39 and DPR-48. The amendments revised the Technical Specifications.

Date of initial notice in Federal Register: June 30, 1994 (59 FR 33798) Public comments requested as to proposed no significant hazards consideration: yes. The notice provided an opportunity to submit comments on the Commission's proposed no significant hazards consideration determination. No comments have been received. The notice also provided an opportunity to request a hearing by August 1, 1994, but indicated that if the Commission makes a final no significant hazards consideration determination, any such hearing would take place after issuance of the amendment. The Commission's related evaluation of the amendment and final significant hazards consideration determination is contained in a Safety Evaluation dated August 1, 1994.

Local Public Document Room location: Waukegan Public Library, 128 N. County Street, Waukegan, Illinois 60085.

Consolidated Edison Company of New York, Docket No. 50-003 and Docket No. 50-247, Indian Point Nuclear Generating Unit Nos. 1 and 2, Westchester County, New York

Date of application for amendments: September 29, 1993

Brief description of amendments: The amendments revise the Technical Specifications (TSs) to change the

submission frequency of the Radioactive Effluent Release Report from semiannually to annually, and change the reporting date.

Date of issuance: July 21, 1994

Effective date: As of the date of issuance to be implemented within 30 days.

Amendment Nos.: 44 and 172
Facility Operating License Nos. DPR-5 and DPR-26: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: November 24, 1993 (58 FR 62153) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 21, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Consolidated Edison Company of New York, Docket No. 50-247, Indian Point Nuclear Generating Unit No. 2, Westchester County, New York

Date of application for amendment: September 29, 1993, as supplemented by letter dated April 1, 1994.

Brief description of amendment: The amendment revises the Technical Specifications to remove the cycle-specific parameter limits and to reference a Core Operating Limits Report containing these limits. These changes are in accordance with the guidance provided in Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications."

Date of issuance: July 26, 1994

Effective date: This license amendment is effective as of the date of issuance of the COLR by the licensee to be implemented no later than the return to operation following the 1995 refueling outage.

Amendment No.: 173

Facility Operating License No. DPR-26: Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: November 24, 1993 (58 FR 62154) The April 1, 1994, provided additional information that did not change the initial determination. The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 26, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610. Consolidated Edison Company of New York, Docket No. 50-247, Indian Point Nuclear Generating

Unit No. 2, Westchester County, New York

Date of application for amendment: January 28, 1994

Brief description of amendment: The amendment revises the TSs to change the containment isolation valve testing frequency and the acceptance criteria for the combined containment leakage rate to accommodate operation on a 24-month fuel cycle. These changes follow the guidance provided in Generic Letter 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle."

Date of issuance: July 29, 1994
Effective date: As of the date of issuance to be implemented within 30 days.

Amendment No.: 174

Facility Operating License No. DPR-26: Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: April 13, 1994 (59 FR 17596) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Consumers Power Company, Docket No. 50-155, Big Rock Point Plant, Charlevoix County, Michigan

Date of application for amendment: April 22, 1994, as supplemented July 6, 1994

Brief description of amendment: The amendment revised the reactor vessel pressure-temperature limits in the Technical Specifications. The change insures that the vessel fracture toughness requirements of Section V of 10 CFR Part 50, Appendix G, are satisfied through end of life.

Date of issuance: July 25, 1994

Effective date: July 25, 1994

Amendment No.: 113

Facility Operating License No. DPR-6: Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: May 12, 1994 (59 FR 24749). The July 6, 1994, letter provided clarifying information within the scope of the initial notice and did not affect the staff's proposed no significant hazards consideration findings. The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 25, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: North Central Michigan

College, 1515 Howard Street, Petoskey, Michigan 49770.

Detroit Edison Company, Docket No. 50-341, Fermi-2, Monroe County, Michigan

Date of application for amendment: May 10, 1994

Brief description of amendment: The amendment revises the Fermi-2 Technical Specifications (TS) to remove Table 3.6.3-1, the list of primary containment isolation valves and Table 3.8.4.3-1, the list of safety systems' motor-operated valve thermal overload protection from the TS to administrative procedures in accordance with the guidance contained in Generic Letter 91-08.

Date of issuance: August 1, 1994

Effective date: August 1, 1994, with full implementation within 45 days.

Amendment No.: 102

Facility Operating License No. NPF-43: Amendment revises the Technical Specifications

Date of initial notice in Federal Register: June 8, 1994 (59 FR 29626) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 1, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Monroe County Library System, 3700 South Custer Road, Monroe, Michigan 48161.

Duke Power Company, Docket Nos. 50-369 and 50-370, McGuire Nuclear Station, Units 1 and 2, Mecklenburg County, North Carolina

Date of application for amendments: November 11, 1993, as supplemented on June 13, 1994

Brief description of amendments: The amendments revise the Technical Specification surveillance requirements for the emergency core cooling system subsystems.

Date of issuance: July 29, 1994

Effective date: July 29, 1994

Amendment Nos.: 145 and 127

Facility Operating License Nos. NPF-9 and NPF-17: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: April 13, 1994 (59 FR 17579) The June 13, 1994, letter provided clarifying and additional information that did not change the scope of the November 11, 1993, application and the initial proposed no significant hazards consideration determination.

The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Atkins Library, University of North Carolina, Charlotte (UNCC Station), North Carolina 28223

Duke Power Company, Docket Nos. 50-369 and 50-370, McGuire Nuclear Station, Units 1 and 2, Mecklenburg County, North Carolina

Date of application for amendments: May 5, 1994, as supplemented June 13, 1994.

Brief description of amendments: The amendments revise the Technical Specifications to increase Main Steam and Pressurizer Code Safety Valve Setpoint Tolerances.

Date of issuance: August 2, 1994

Effective date: August 2, 1994

Amendment Nos.: 146 and 128

Facility Operating License Nos. NPF-9 and NPF-17: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: June 21, 1994 (59 FR 32029) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Atkins Library, University of North Carolina, Charlotte (UNCC Station), North Carolina 28223

Entergy Operations, Inc., Docket No. 50-382, Waterford Steam Electric Station, Unit 3, St. Charles Parish, Louisiana

Date of amendment request: December 14, 1993

Brief description of amendment: The amendment revised the Technical Specifications to revise the azimuthal power tilt limit from less than or equal to 0.10 (10%) to less than or equal to 0.03 (3%) and revises the action statement for control element assembly misalignment to allow 24 hours to restore the tilt to less than 3%.

Date of issuance: August 3, 1994

Effective date: August 3, 1994

Amendment No.: 97

Facility Operating License No. NPF-38: Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: January 19, 1994 (59 FR 2866) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 3, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: University of New Orleans Library, Louisiana Collection, Lakefront, New Orleans, Louisiana 70122.

**GPU Nuclear Corporation, et al.,
Docket No. 50-219, Oyster Creek
Nuclear Generating Station, Ocean
County, New Jersey**

Date of application for amendment:
April 6, 1994, as supplemented June 21,
1994

Brief description of amendment: The amendment eliminates the scram and main steam line isolation valve (MSIV) closure requirements associated with the main steam line radiation monitors (MSLRM). The amendment also eliminates the following related automatic isolation functions that are associated with the MSLRM scram and MSIV isolation: a) Main Steam Line Condenser Drain Valves, b) Emergency Condenser Drain Valves, c) Reactor Recirculation Loop Sample Valve, d) Instrumental Air Valves, and e) Condenser Pump Isolation.

Date of issuance: July 29, 1994

Effective date: As of the date of issuance to be implemented at the restart from refueling outage 15R.

Amendment No.: 169

Facility Operating License No. DPR-16. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: April 28, 1994 (59 FR 22003). The June 21, 1994, letter provided clarifying information that did not change the initial proposed no significant hazards consideration determination. The Commission's related evaluation of this amendment is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Ocean County Library, Reference Department, 101 Washington Street, Toms River, New Jersey 08753.

**GPU Nuclear Corporation, et al.,
Docket No. 50-289, Three Mile Island
Nuclear Station, Unit No. 1, Dauphin
County, Pennsylvania**

Date of application for amendment:
July 15, 1993.

Brief description of amendment: The amendment revises the plant Technical Specifications (TSs) on the Reactor Coolant Inventory Trending System (RCITS). The change is consistent with NUREG-1430 entitled "Standard Technical Specifications for Babcock and Wilcox Plants." The RCITS information will be available to the operator to enhance the operator's ability to understand and manage transients and events when needed.

Date of issuance: August 1, 1994

Effective date: As of its date of issuance, to be implemented within 30 days of issuance.

Amendment No.: 191

Facility Operating License No. DPR-50. Amendment revised the Technical Specifications. *Date of initial notice in Federal Register:* June 8, 1994 (59 FR 29626) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 1, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, Pennsylvania 17105.

**GPU Nuclear Corporation, et al.,
Docket No. 50-289, Three Mile Island
Nuclear Station, Unit No. 1, Dauphin
County, Pennsylvania**

Date of application for amendment:
February 10, 1994

Brief description of amendment: The amendment revises the TMI-1 Technical Specifications (TS) to revise specification 3.7.2.c, "Unit Electric Power System," to provide an option to testing an emergency diesel generator (EDG) when the redundant EDG is inoperable.

Date of issuance: July 25, 1994

Effective date: As of the date of issuance to be implemented within 30 days.

Amendment No.: 188

Facility Operating License No. DPR-50. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: June 22, 1994 (59 FR 32230) The Commission's related evaluation of this amendment is contained in a Safety Evaluation dated July 25, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, Pennsylvania 17105.

**GPU Nuclear Corporation, et al.,
Docket No. 50-289, Three Mile Island
Nuclear Station, Unit No. 1, Dauphin
County, Pennsylvania**

Date of application for amendment:
March 2, 1994

Brief description of amendment: The amendment revises the plant Technical Specifications to modify Operational Safety Instrumentation requirements to specify completion time which allows for performance of maintenance or surveillance within a reasonable time and to be consistent with the allowable outage time for other safety-related

equipment when only one train is affected.

Date of issuance: July 25, 1994
Effective date: As of the date of issuance to be implemented within 30 days after issuance.

Amendment No.: 189

Facility Operating License No. DPR-50. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: April 13, 1994 (59 FR 17600). The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 25, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, Pennsylvania 17105.

**GPU Nuclear Corporation, et al.,
Docket No. 50-289, Three Mile Island
Nuclear Station, Unit No. 1, Dauphin
County, Pennsylvania**

Date of application for amendment:
March 11, 1994

Brief description of amendment: The amendment revises the plant Technical Specifications to specify an allowable outage time for the Emergency Feedwater Pumps during surveillance activities. It also changes the requirement to test redundant components for operability to a requirement to ensure operability based on verification of completion of appropriate surveillance activities.

Date of issuance: July 25, 1994

Effective date: As of the date of issuance to be implemented within 30 days of issuance.

Amendment No.: 190

Facility Operating License No. DPR-50. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: April 13, 1994 (59 FR 17601). The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 25, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, Pennsylvania 17105.

**Gulf States Utilities Company, Cajun
Electric Power Cooperative, and
Entergy Operations, Inc., Docket No.
50-458, River Bend Station, Unit 1,
West Feliciana Parish, Louisiana**

Date of amendment request: January
14, 1994

Brief description of amendment: The amendment revised TS Sections 3/4.3, "Instrumentation," 3/4.4.2, "Safety/Relief Valves," and associated Bases to increase the surveillance test intervals and allowable out-of-service times for various instruments.

Date of issuance: August 2, 1994

Effective date: August 2, 1994

Amendment No.: 74

Facility Operating License No. NPF-47. The amendment revised the Technical Specifications.

Date of initial notice in Federal Register: April 26, 1994 (59 FR 21787) The additional information contained in the supplemental letter dated July 15, 1994, was clarifying in nature and thus, within the scope of the initial notice and did not affect the staff's proposed no significant hazards consideration determination. The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received. No.

Local Public Document Room location: Government Documents Department, Louisiana State University, Baton Rouge, Louisiana 70803

Houston Lighting & Power Company, City Public Service Board of San Antonio, Central Power and Light Company, City of Austin, Texas, Docket Nos. 50-498 and 50-499, South Texas Project, Units 1 and 2, Matagorda County, Texas

Date of amendment request: March 16, 1994

Brief description of amendments: The amendments modified Figure 3.4-4, "Nominal Maximum Allowable PORV Setpoint for the Cold Overpressure System," for the cold overpressure mitigation system with a revised setpoint curve.

Date of issuance: August 3, 1994

Effective date: August 3, 1994, to be implemented within 31 days of issuance

Amendment Nos.: Unit 1 - Amendment No. 63; Unit 2 - Amendment No. 52

Facility Operating License Nos. NPF-76 and NPF-80. The amendments revised the Technical Specifications.

Date of initial notice in Federal Register: April 13, 1994 (59 FR 17601) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated August 3, 1994. No significant hazards consideration comments received. No.

Local Public Document Room location: Wharton County Junior College, J. M. Hodges Learning Center, 911 Boling Highway, Wharton, Texas 77488

Northeast Nuclear Energy Company, Docket No. 50-245, Millstone Nuclear Power Station, Unit 1, New London County, Connecticut

Date of application for amendment: April 29, 1994

Brief description of amendment: The amendment changes the requirement for reactor operators in Table 6.2-1 from 2 to 3 for the RUN, STARTUP/HOT STANDBY and HOT SHUTDOWN conditions. In addition, two typographical corrections were made to page 6-4.

Date of issuance: August 2, 1994

Effective date: As of the date of issuance to be implemented within 60 days.

Amendment No.: 75

Facility Operating License No. DPR-21. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: June 22, 1994 (59 FR 32231) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received. No.

Local Public Document Room location: Learning Resource Center, Three Rivers Community-Technical College, Thames Valley Campus, 574 New London Turnpike, Norwich, Connecticut 06360.

Pacific Gas and Electric Company, Docket No. 50-133, Humboldt Bay Power Plant, Unit 3, Humboldt County, California

Date of application for amendment: October 8, 1993 (Reference HBL-93-058)

Brief description of amendment: This amendment modified the Technical Specifications (TS) incorporated in **Facility Operating License No.** DPR-7 as Appendix A by incorporating a title change into Section VII, Administrative Controls. This change reflects a plant organizational name change.

Date of issuance: July 26, 1994

Effective date: This license amendment is effective as of the date of its issuance and must be fully implemented no later than 30 days from the date of issuance.

Amendment No.: 27

Facility Operating License No. DPR-7: The amendment revised the TS.

Date of initial notice in Federal Register: January 5, 1994 (59 FR 624) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 26, 1994. No significant hazards consideration comments received. No.

Local Public Document Room location: Humboldt County Library, 636 F Street, Eureka, California 95501

Philadelphia Electric Company, Public Service Electric and Gas Company, Delmarva Power and Light Company, and Atlantic City Electric Company, Docket Nos. 50-277 and 50-278, Peach Bottom Atomic Power Station, Unit Nos. 2 and 3, York County, Pennsylvania

Date of application for amendments: October 27, 1993, as supplemented by letters dated April 29, 1994, and June 27, 1994

Brief description of amendments: These amendments revise the Unit 2 and Unit 3 Technical Specifications to allow one of the required on-shift senior reactor operators (SRO) to be combined with the required shift technical advisor (STA) position (i.e., dual-role SRO/STA position) as long as a minimum of three qualified individuals fill the SRO and STA positions.

Date of issuance: August 2, 1994

Effective date: August 2, 1994

Amendments Nos.: 191 and 196

Facility Operating License Nos. DPR-44 and DPR-56: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: December 8, 1993 (58 FR 64613) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received. No.

Local Public Document Room location: Government Publications Section, State Library of Pennsylvania, (REGIONAL DEPOSITORY) Education Building, Walnut Street and Commonwealth Avenue, Box 1601, Harrisburg, Pennsylvania 17105.

Power Authority of The State of New York, Docket No. 50-286, Indian Point Nuclear Generating Unit No. 3, Westchester County, New York

Date of application for amendment: May 10, 1994

Brief description of amendment: The Technical Specifications amendment revised Section 3.1.C.3 and Table 4.1-1 of Appendix A of the Operating License. These changes require that the reactor coolant average temperature (T_{avg}) be no lower than 540°F during critical operation. Critical operation at T_{avg} less than 540°F requires operator response to restore T_{avg} to greater than or equal to 540°F within 15 minutes or be in hot shutdown within the following 15 minutes. Additionally, the change in Table 4.1-1 entitled, "Minimum Frequencies for Checks, Calibrations and Tests," adds the requirement for T_{avg} instrument check frequency to be reduced to 30 minutes when the T_{avg} banks are above zero steps.

Furthermore, the revision to the Bases indicates that the minimum temperature for criticality provides assurance that the reactor is operated within the bounds of the safety analyses. Also included is an administrative change to correct some typographical errors on page 3.1-25 of the Technical Specifications.

Date of issuance: July 25, 1994

Effective date: As of the date of issuance to be implemented within 30 days.

Amendment No.: 149

Facility Operating License No. DPR-64: Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: June 8, 1994 (59 FR 29630) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 25, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: White Plains Public Library, 100 Martine Avenue, White Plains, New York 10610.

Public Service Electric & Gas Company, Docket Nos. 50-272 and 50-311, Salem Nuclear Generating Station, Unit Nos. 1 and 2, Salem County, New Jersey

Date of application for amendments: May 3, 1994

Brief description of amendments: The amendments revised the Technical Specification (TS) for Combustible Gas Control (3/4.6.4.1) by changing the surveillance frequency for performing the channel functional test to once-per-quarter and the channel calibration to once-per-refueling. Also, the TS for the Auxiliary Feedwater System (3/4.7.1.2) were changed to reduce the surveillance frequency for performing pump operability tests to once-per-quarter on a staggered test basis. These changes are consistent with the provisions of Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements For Testing During Power Operations."

Date of issuance: July 27, 1994

Effective date: July 27, 1994

Amendment Nos.: 153 and 134

Facility Operating License Nos. DPR-70 and DPR-75: These amendments revised the Technical Specifications.

Date of initial notice in Federal Register: June 8, 1994 (59 FR 29634) The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated July 27, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Salem Free Public Library, 112

West Broadway, Salem, New Jersey 08079

South Carolina Electric & Gas Company, South Carolina Public Service Authority, Docket No. 50-395, Virgil C. Summer Nuclear Station, Unit No. 1, Fairfield County, South Carolina

Date of application for amendment: March 11, 1994

Brief description of amendment: The amendment changes the Technical Specifications to delete TS Surveillance Requirement 4.8.4.1.a.3 that requires periodic retest of containment penetration overcurrent protection fuses and to remove references to containment penetration fuse testing from the TS Bases.

Date of issuance: July 29, 1994

Effective date: July 29, 1994

Amendment No.: 115

Facility Operating License No. NPF-12: Amendment revises the Technical Specifications.

Date of initial notice in Federal Register: May 12, 1994 (59 FR 24752) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 29, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Fairfield County Library, Garden and Washington Streets, Winnsboro, South Carolina 29180.

Southern Nuclear Operating Company, Inc., Docket No. 50-348, Joseph M. Farley Nuclear Plant, Unit 1, Houston County, Alabama.

Date of application for amendment: June 17, 1994

Brief description of amendment: The amendment changes the Technical Specifications to revise the nuclear enthalpy rise hot channel factor (F delta H) from equal to or less than 1.65 [1 plus 0.3(1-P)] to equal to or less than 1.70 [1 plus 0.3(1-P)] where P is a fraction of rated power. The amendment also revises the action statement to reflect guidance contained in the improved standard technical specifications.

Date of issuance: July 22, 1994

Effective date: July 22, 1994

Amendment No.: 109

Facility Operating License No. NPF-2: Amendment revises the Technical Specifications.

Date of initial notice in Federal Register: June 22, 1994 (59 FR 32249) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 22, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Houston-Love Memorial

Library, 212 W. Burdeshaw Street, Post Office Box 1369, Dothan, Alabama 36302

Tennessee Valley Authority, Docket Nos. 50-259, 50-260 and 50-296, Browns Ferry Nuclear Plant, Units 1, 2 and 3, Limestone County, Alabama

Date of application for amendments: August 25, 1992 (TS 321)

Brief description of amendments: The amendments delete reference to recirculation equalizer valves from the technical specifications. These components have been removed from Browns Ferry Unit 3, and are not used in Browns Ferry Units 1 and 2.

Date of issuance: August 4, 1994

Effective date: August 4, 1994

Amendment Nos.: 211, 226 and 184 *Facility Operating License Nos. DPR-33, DPR-52 and DPR-68:* Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: October 28, 1992 (57 FR 48829) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 4, 1994. No significant hazards consideration comments received: None

Local Public Document Room location: Athens Public Library, South Street, Athens, Alabama 35611

Tennessee Valley Authority, Docket Nos. 50-327 and 50-328, Sequoyah Nuclear Plant, Units 1 and 2, Hamilton County, Tennessee

Date of application for amendments: June 17, 1993 (TS 93-08)

Brief description of amendments: The amendments revise the allowable values for the intermediate and source range neutron flux reactor trip setpoints.

Date of issuance: July 26, 1994

Effective date: July 26, 1994

Amendment Nos.: 185 and 177

Facility Operating License Nos. DPR-77 and DPR-79: Amendments revise the technical specifications.

Date of initial notice in Federal Register: August 4, 1993 (58 FR 41514) The Commission's related evaluation of the amendments are contained in a Safety Evaluation dated July 26, 1994. No significant hazards consideration comments received: None

Local Public Document Room location: Chattanooga-Hamilton County Library, 1101 Broad Street, Chattanooga, Tennessee 37402

Toledo Edison Company, Centerior Service Company, and The Cleveland Electric Illuminating Company, Docket No. 50-346, Davis-Besse Nuclear Power Station, Unit No. 1, Ottawa County, Ohio

Date of application for amendment: February 17, 1993

Brief description of amendment: This amendment increases the TS trip setpoint and its associated allowable value for containment high-radiation specified in TS Table 3.3-4 from " $<2 \times$ Background at RATED THERMAL POWER" to " $<4 \times$ Background at RATED THERMAL POWER."

Date of issuance: July 27, 1994

Effective date: As of the date of issuance to be implemented within 90 days.

Amendment No. 190

Facility Operating License No. NPF-3. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: June 23, 1993 (58 FR 34096) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated July 27, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: University of Toledo Library, Documents Department, 2801 Bancroft Avenue, Toledo, Ohio 43606.

TU Electric Company, Docket Nos. 50-445 and 50-446, Comanche Peak Steam Electric Station, Unit Nos. 1 and 2, Somervell County, Texas

Date of amendment request: February 14, 1994, as supplemented by letter dated April 29, 1994.

Brief description of amendments: The amendments increase the boron concentration limits for the Unit 2 refueling water storage tank and emergency core cooling system, and delete a footnote concerning refueling canal boron concentration during initial fuel load for both units.

Date of issuance: August 2, 1994

Effective date: August 2, 1994, to be implemented prior to startup for Cycle 2 for Comanche Peak Steam Electric Station, Unit 2.

Amendment Nos.: Unit 1 - Amendment No. 26; Unit 2 - Amendment No. 12

Facility Operating License Nos. NPF-87 and NPF-89. The amendments revised the Technical Specifications.

Date of initial notice in Federal Register: April 28, 1994 (59 FR 22015) The information contained in the April 29, 1994, letter was editorial in nature and thus, within the scope of the initial notice and did not affect the staff's proposed no significant hazards consideration determination. The Commission's related evaluation of the amendments is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: University of Texas at

Arlington Library, Government Publications/Maps, 701 South Cooper, P.O. Box 19497, Arlington, Texas 76019.

Union Electric Company, Docket No. 50-483, Callaway Plant, Unit 1, Callaway County, Missouri

Date of application for amendment: February 17, 1994, supplemented by letter dated May 18, 1994

Brief description of amendment: The amendment revises the Technical Specification 3/4.5.1 and associated Bases Section 3/4.5.1. A new Action Statement a. provides a 72-hour allowed outage time (AOT) for one accumulator inoperable due to boron concentration. The Action Statement b. AOT was changed to 24 hours. Surveillance Requirements 4.5.1.1.a.1 and 4.5.1.1.b were revised and 4.5.1.2 was deleted from the TS.

Date of issuance: August 5, 1994

Effective date: August 5, 1994 to be implemented within 30 days

Amendment No.: 91

Facility Operating License No. NPF-30. Amendment revised the Technical Specifications 3/4.5.1 and associated Bases Section 3/4.5.1.

Date of initial notice in Federal Register: March 30, 1994 (59 FR 14898) The additional information contained in the May 18, 1994, letter provided additional supplemental information that did not change the initial proposed no significant hazards consideration. The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 5, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Callaway County Public Library, 710 Court Street, Fulton, Missouri 65251.

Virginia Electric and Power Company, et al., Docket Nos. 50-338 and 50-339, North Anna Power Station, Units No. 1 and No. 2, Louisa County, Virginia

Date of application for amendments: April 19, 1994

Brief description of amendments: The amendments revise the NA-1&2 Technical Specifications surveillance frequency requirements for control rod motion testing from once per 31 days to once per 92 days.

Date of issuance: July 28, 1994

Effective date: July 28, 1994

Amendment Nos.: 185 and 166

Facility Operating License Nos. NPF-4 and NPF-7: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: May 25, 1994 (59 FR 27070) The Commission's related evaluation of the amendments is contained in a Safety

Evaluation dated July 28, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: The Alderman Library, Special Collections Department, University of Virginia, Charlottesville, Virginia 22903-2498.

Virginia Electric and Power Company, Docket Nos. 50-280 and 50-281, Surry Power Station, Unit Nos. 1 and 2, Surry County, Virginia.

Date of application for amendments: April 19, 1994

Brief description of amendments: These amendments modify the surveillance frequency of the control rod motion testing from monthly to quarterly

Date of issuance: August 2, 1994

Effective date: August 2, 1994

Amendment Nos.: 192 and 192

Facility Operating License Nos. DPR-32 and DPR-37: Amendments revised the Technical Specifications.

Date of initial notice in Federal Register: May 25, 1994 (59 FR 27070) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 2, 1994. No significant hazards consideration comments received: No

Local Public Document Room location: Swem Library, College of William and Mary, Williamsburg, Virginia 23185

Washington Public Power Supply System, Docket No. 50-397, Nuclear Project No. 2, Benton County, Washington

Date of application for amendment: April 1, 1993

Brief description of amendment: The amendment modifies the Technical Specifications to add inservice inspection requirements for reactor coolant system piping in accordance with Generic Letter 88-01, "NRC Position on Intergranular Stress Corrosion Cracking (IGSCC) in BWR Austenitic Stainless Steel Piping." In addition, the amendment corrects an administrative error in a TS that references a table listing high/low pressure interface valve leakage pressure monitors.

Date of issuance: July 28, 1994

Effective date: 30 days after the date of issuance.

Amendment No.: 130

Facility Operating License No. NPF-21: The amendment revised the Technical Specifications.

Date of initial notice in Federal Register: May 12, 1993 (58 FR 28065) The Commission's related evaluation of the amendment is contained in a Safety

Evaluation dated July 28, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Richland Public Library, 955 Northgate Street, Richland, Washington 99352

Washington Public Power Supply System, Docket No. 50-397, Nuclear Project No. 2, Benton County, Washington

Date of application for amendment: February 17, 1994, supplemented by letter dated May 13, 1994.

Brief description of amendment: The amendment changes the Technical Specifications (TS) 10-year hydrostatic testing requirements. The changes (1) add a special test exception for inservice leak testing and hydrostatic testing, (2) add a new minimum reactor vessel metal pressure-temperature curve for less than or equal to eight effective full power years, and (3) delete Table B 3/4.4.6-1, "Reactor Vessel Toughness," from the TS bases.

Date of issuance: May 27, 1994

Effective date: May 27, 1994

Amendment No.: 122

Facility Operating License No. NPF-21: The amendment revised the Technical Specifications.

Date of initial notice in Federal Register: March 30, 1994 (59 FR 14902) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated May 27, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: Richland Public Library, 955 Northgate Street, Richland, Washington 99352

Wisconsin Public Service Corporation, Docket No. 50-305, Kewaunee Nuclear Power Plant, Kewaunee County, Wisconsin

Date of application for amendment: December 1, 1993

Brief description of amendment: The amendment revises the Kewaunee Nuclear Power Plant (KNPP) Technical Specifications (TS) by incorporating technical and administrative changes to TS 3.10, Control Rod and Power Distribution Limits. The changes eliminate specifications for fuel designs no longer used at Kewaunee, specify required actions to be taken upon exceeding control bank insertion limits, and revise the limits for Departure from Nucleate Boiling (DNB) related parameters to assure operation within the assumptions of the Updated Safety Analysis Report (USAR) analyses.

Date of issuance: August 3, 1994

Effective date: As of the date of issuance to be implemented within 30 days.

Amendment No.: 110
Facility Operating License No. DPR-43. Amendment revised the Technical Specifications.

Date of initial notice in Federal Register: February 2, 1994 (59 FR 4949) The Commission's related evaluation of the amendment is contained in a Safety Evaluation dated August 3, 1994. No significant hazards consideration comments received: No.

Local Public Document Room location: University of Wisconsin Library Learning Center, 2420 Nicolet Drive, Green Bay, Wisconsin 54301.

Notice Of Issuance Of Amendments To Facility Operating Licenses And Final Determination Of No Significant Hazards Consideration And Opportunity For A Hearing (Exigent Public Announcement Or Emergency Circumstances)

During the period since publication of the last biweekly notice, the Commission has issued the following amendments. The Commission has determined for each of these amendments that 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.

Because of exigent or emergency circumstances associated with the date the amendment was needed, there was not time for the Commission to publish, for public comment before issuance, its usual 30-day Notice of Consideration of Issuance of Amendment, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing.

For exigent circumstances, the Commission has either issued a **Federal Register** notice providing opportunity for public comment or has used local media to provide notice to the public in the area surrounding a licensee's facility of the licensee's application and of the Commission's proposed determination of no significant hazards consideration. The Commission has provided a reasonable opportunity for the public to comment, using its best efforts to make available to the public means of communication for the public to respond quickly, and in the case of telephone comments, the comments have been recorded or transcribed as

appropriate and the licensee has been informed of the public comments.

In circumstances where failure to act in a timely way would have resulted, for example, in derating or shutdown of a nuclear power plant or in prevention of either resumption of operation or of increase in power output up to the plant's licensed power level, the Commission may not have had an opportunity to provide for public comment on its no significant hazards consideration determination. In such case, the license amendment has been issued without opportunity for comment. If there has been some time for public comment but less than 30 days, the Commission may provide an opportunity for public comment. If comments have been requested, it is so stated. In either event, the State has been consulted by telephone whenever possible.

Under its regulations, the Commission may issue and make an amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any person, in advance of the holding and completion of any required hearing, where it has determined that no significant hazards consideration is involved.

The Commission has applied the standards of 10 CFR 50.92 and has made a final determination that the amendment involves no significant hazards consideration. The basis for this determination is contained in the documents related to this action. Accordingly, the amendments have been issued and made effective as indicated.

Unless otherwise indicated, the Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.12(b) and has made a determination based on that assessment, it is so indicated.

For further details with respect to the action see (1) the application for amendment, (2) the amendment to Facility Operating License, and (3) the Commission's related letter, Safety Evaluation and/or Environmental Assessment, as indicated. All of these items are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room for the particular facility involved.

The Commission is also offering an opportunity for a hearing with respect to the issuance of the amendment. By September 16, 1994, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room for the particular facility involved. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of a hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the

proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses. Since the Commission has made a final determination that the amendment involves no significant hazards consideration, if a hearing is requested, it will not stay the effectiveness of the amendment. Any hearing held would take place while the amendment is in effect.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to **(Project Director)**:

petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this **Federal Register** notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for a hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

Commonwealth Edison Company,
Docket Nos. STN 50-454 and STN 50-455, Byron Station, Unit Nos. 1 and 2, Ogle County, Illinois

Date of application for amendments:
August 2, 1994

Brief description of amendments: The amendments revise the Technical Specifications by adding a footnote that recognizes that through the end of cycle 6, the Unit 1, loop B wide range hot leg indication at the remote shutdown panel is inoperable.

Date of issuance: August 5, 1994

Effective date: August 5, 1994

Amendment Nos.: 63 and 63

Facility Operating License Nos. NPF-37 and NPF-66. The amendments revised the Technical Specifications. Public comments requested as to proposed no significant hazards consideration: No. The Commission's related evaluation of the amendments, finding of emergency circumstances, and final determination of no significant hazards consideration are contained in a Safety Evaluation dated August 5, 1994.

Attorney for licensee: Michael I. Miller, Esquire; Sidley and Austin, One First National Plaza, Chicago, Illinois 60690

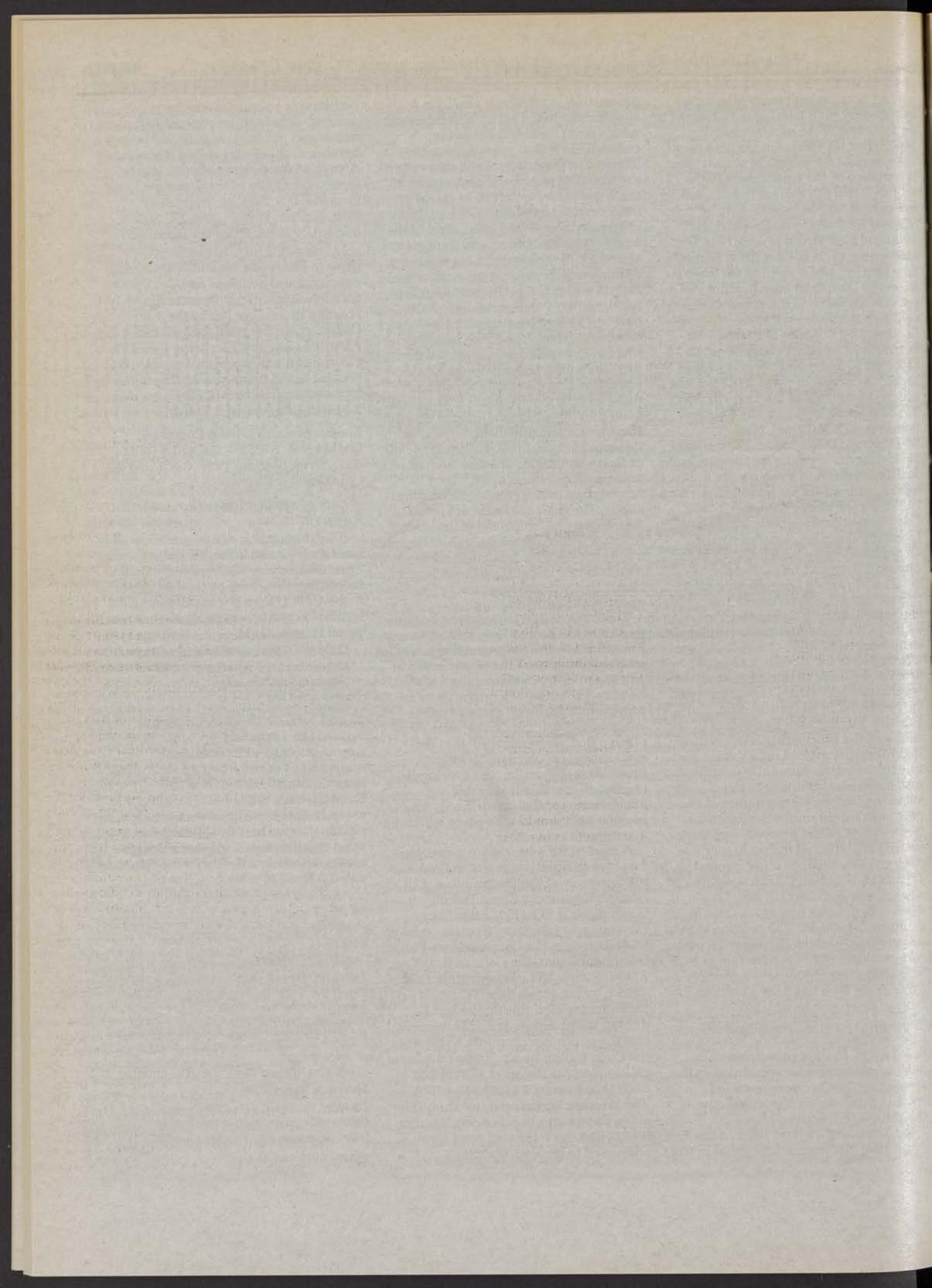
Local Public Document Room location: Byron Public Library, 109 N. Franklin, P.O. Box 434, Byron, Illinois 61010.

NRC Project Director: Robert A. Capra
Dated at Rockville, Maryland, this 10th day of August 1994.

For The Nuclear Regulatory Commission
Steven A. Varga,

Director, Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation
[Doc. 94-20006 Filed 8-16-94 8:45 am]

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Final Report
Federal Register

Wednesday
August 17, 1994

Part III

**Environmental
Protection Agency**

Final Report: Principles of Neurotoxicity
Risk Assessment; Notice

**ENVIRONMENTAL PROTECTION
AGENCY**

[FRL-5050-8]

**Final Report: Principles of
Neurotoxicity Risk Assessment**
AGENCY: U.S. Environmental Protection Agency.

ACTION: Final Document.

SUMMARY: The U.S. Environmental Protection Agency is publishing a document entitled *Final Report: Principles of Neurotoxicity Risk Assessment*, which was prepared by the Working Party on Neurotoxicology under the auspices of the Subcommittee on Risk Assessment of the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET). The purpose of this report is to articulate a view of neurotoxicology that scientists generally hold in common today and to draw on this understanding to generate a series of general principles that can be used to establish guidelines for assessing neurotoxicity risk. It is not the intent of this report to provide specific directives for how neurotoxicity risk assessment should be performed. The intent of this document is to provide the scientific basis for the development of a cogent strategy for neurotoxicity risk assessment.

SUPPLEMENTARY INFORMATION: This document is the result of the combined efforts of senior scientists of 13 Federal agencies comprising the ad hoc Interagency Committee on Neurotoxicology, including the Agency for Toxic Substances and Disease Registry, Center for Food Safety and Applied Nutrition, Center for Biologics Evaluation and Research, Center for Drug Evaluation and Research, Consumer Product Safety Commission, Department of Agriculture, Department of Defense, Environmental Protection Agency, National Center for Toxicological Research, National Institutes of Health, National Institute for Occupational Safety and Health, and National Toxicology Program. Discussions were held under the auspices of the Working Party on Neurotoxicology of the Subcommittee on Risk Assessment of the Federal Coordinating Council for Science, Engineering, and Technology. The draft report, a product of the Working Party on Neurotoxicology, contains six chapters: an introduction, an overview of the discipline of neurotoxicology, a review of methods for assessing human neurotoxicity, a review of methods for assessing animal neurotoxicity, an

overview of principles of neurotoxicity risk assessment, and a general summary.

The draft report was prepared in view of the decision-making processes currently used by many regulatory agencies relating to neurotoxicity risk assessment. It is intended that the principles reviewed in this document will serve as the basis for consistent regulatory neurotoxicity guidelines to be used by Federal agencies to meet their respective legislative mandates. This document is not meant to be used to perform risk assessment nor does it recommend one approach or strategy. The document reviews the science of neurotoxicology and attempts to formulate general assumptions and principles that could lead to such approaches or strategies.

The draft report has undergone interagency review under the auspices of the Subcommittee on Risk Assessment of FCCSET. Public comments received were used in the preparation of the final report by the Working Party on Neurotoxicology.

Dated: August 9, 1994.

Ken Sexton,

Director, Office of Health Research.

**Final Report: Principles of
Neurotoxicology Risk Assessment**
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1. Introduction

1.1. Background

Over the years, agencies and programs have been established to deal with hazardous substances, with a focus on deleterious long-term effects, including noncancer endpoints such as neurotoxicity (Reiter, 1987). Recent evidence indicates that exposure to neurotoxic agents may constitute a significant health problem (WHO, 1986;

OTA, 1990; chapter 2). Table 1-1 lists the four Federal regulatory agencies with authority to regulate either exposure to or use of chemicals and that require data reporting on assessment of hazards. Regulatory bodies vary greatly in their mandate to require approval of chemicals prior to entering the marketplace and to regulate subsequent exposure (Fisher, 1980) (Table 1-2). The Occupational Safety and Health Administration (OSHA) cannot require chemical testing by the manufacturer whereas all other agencies can. Only the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA) have authority for premarketing testing of chemicals (i.e., FDA for drugs and food additives and EPA for pesticides). EPA can, under some circumstances, require premarket testing of industrial and agricultural chemicals. The Consumer Product Safety Commission (CPSC) regulates a number of consumer products including household chemicals and fabric treatments. Laws administered by CPSC require cautionary labeling on all hazardous household products whether the hazard is based on acute or chronic effects. These laws also provide the authority to ban hazardous products and to ask for data in support of product labeling.

TABLE 1-1.—MAJOR REGULATORY AGENCIES

Agency	Statute and sources covered
Food and Drug Administration (FDA) A unit of the Department of Health and Human Services with authority over the regulation of medical and veterinary drugs; foods and food additives; cosmetics.	Food, Drug, and Cosmetics Act for food additives; color in cosmetics; medical devices; animal drugs of medical and feed additives.
Occupational Safety and Health Administration (OSHA) A unit of the Department of Labor that regulates workplace conditions ..	Occupational Safety and Health Act covers toxic chemicals in the workplace.
Environmental Protection Agency (EPA). Independent agency (i.e., not part of a Cabinet department); administers a number of diverse laws concerned with human health and the environment.	Toxic Substances Control Act requires premanufacture evaluation of all new chemicals (other than foods, food additives, drugs, pesticides, alcohol, tobacco); allows EPA to regulate existing chemical hazards not sufficiently controlled under other laws. Clean Air Act requires regulation of hazardous air pollutants. Federal Water Pollution Control Act governs toxic water pollutants. Safe Drinking Water Act covers drinking water contaminants. Federal Insecticide, Fungicide, and Rodenticide Act covers pesticides. Resource Conservation and Recovery Act covers hazardous wastes. Marine Protection Research and Sanctuaries Act covers ocean dumping.
Consumer Product Safety Commission (CPSC). Regulates a variety of consumer products including household chemicals and fabric treatments.	Federal Hazardous Substances Act covers "toxic" household products. Consumer Product Safety Act covers dangerous consumer products. Poison Prevention Packaging Act covers packaging of dangerous children's products. Lead-Based Paint Poison Prevention Act covers use of lead paint in federally assisted housing.

TABLE 1-2.—AUTHORITIES FOR TOXICITY TESTING

Agency	Law	Coverage	Authorities		
			Premarketing approval	Testing by manufacturer	Reporting of data
FDA	Food, Drug, and Cosmetics Act	Drugs and foods	x	x	x
		Food additives and cosmetics	x	x	
EPA	Federal Insecticide, Fungicide, and Rodenticide Act	Pesticides	x	x	x
	Toxic Substances Control Act	Industrial chemicals	¹ x	x	x
	Clean Air Act	Air pollutants		x	x
OSHA	Resource Conservation and Recovery Act	Industrial waste		x	x
	Occupational Safety and Health Act	Occupational exposure			x
CPSC	Federal Hazardous Substances Act	Consumer products		x	
	Consumer Product Safety Act	Consumer products			x

¹ Can require testing based on available data.

1.2. Purpose of This Report

The purpose of this document is to: (1) articulate a view of neurotoxicity that scientists generally hold in common today and (2) draw upon this understanding to compose, as was done here by senior scientists from a number of Federal agencies, a series of general principles that can be used to establish general guidelines for assessing neurotoxicity risk. It is not the intent of this report to provide specific directives to agencies with respect to their own approach for neurotoxicity risk assessment. This document is intended to provide the scientific basis for the development of a cogent strategy for neurotoxicology risk assessment as needed by each agency.

Because of present gaps in understanding, the principles contained in this document are based on the best judgment of those involved in writing this document, as well as statements of what is generally accepted as fact. There has been, however, an attempt to distinguish where possible between the different types of information presented.

The principles contained in this document can serve as the basis for consistent regulatory neurotoxicology guidelines that the Federal agencies can tailor to meet the requirements of the legislative acts they are charged to implement. This document should be viewed broadly as part of an ongoing process within the Federal Government to periodically update and review the current scientific understanding and regulatory utility of neurotoxicity risk assessment.

This document is the result of the combined efforts of senior scientists from the following Federal health-related units, operating under the direction of the Office of Science and Technology Policy (OSTP):

Agency for Toxic Substances and Disease Registry (ATSDR)
Center for Biologics Evaluation and Research (CBER), FDA
Center for Drug Evaluation and Research (CDER), FDA
Center for Food Safety and Applied Nutrition (CFSAN), FDA
Consumer Product Safety Commission
Department of Agriculture (USDA)
Department of Defense (DoD)
Environmental Protection Agency
National Center for Toxicological Research (NCTR), FDA
National Institutes of Health (NIH)
National Institute for Occupational Safety and Health
National Toxicology Program (NTP)

1.3. Context of This Report

This document was prepared in light of a decision-making process used by many regulatory agencies pertaining to the assessment of neurotoxicity risks posed by chemical agents. The scientific basis for such assessment can be best understood by examining the decision-making process in some detail.

Risk can be thought of as being composed of two aspects, each of which can be addressed by science, i.e., hazard and exposure assessment. Although other definitions have been used historically, this document conforms to present usage. Hazard generally refers to the toxicity of a substance and is deduced from a wide array of data, including those from epidemiological studies or controlled clinical trials in humans, short- and long-term toxicological studies in animals, and studies of mechanistic information and structure-activity relationships. Exposure generally refers to the amount of a substance with which people come in contact. The risk in a quantitative risk assessment is estimated by considering the results of the exposure and hazard

assessments. As either the hazard or exposure approaches zero, the risk also approaches zero.

As a first step in assessing the neurotoxic risk associated with the use of a particular chemical substance, the qualitative evidence that a given chemical substance is likely to be a human neurotoxicant must be evaluated. In this step, as in the whole process, a number of assumptions and approximations must be made in order to deal with inherent limitations found in the existing data bases. Then, estimates of human exposure and distribution of exposures likely to be encountered in the population are made. In the absence of dose-response relationships in humans, one or more methods for estimating the dose-response relationship including doses below those generally used experimentally must also be evaluated. Finally, the exposure assessment is combined with the dose-response relationship to generate an estimate of risk. The various ways in which these steps are conducted and combined and their attendant uncertainties constitute what is generally referred to as "neurotoxicity risk assessment."

Some legislation calls for action in the presence of any risk. Other forms of legislation use the concept of unreasonable risk, defined in some acts as a condition in which the risks outweigh the benefits. A spectrum of regulatory responses, from simply informing the public of a risk through restricted use to a complete ban, may be available to bring the risks and benefits into appropriate balance.

This document does not perform a risk assessment nor does it suggest that one method of neurotoxicology risk assessment is better than another. Rather, it attempts to review the science

of chemical neurotoxicology and develops from this review a set of general principles. It is not a comprehensive review nor a document written for the lay public; this document is a semitechnical review that evaluates the impact of scientific findings of the last decade on general assumptions or principles important to risk assessment. This is based on the belief that elucidation of the basic mechanisms underlying neurotoxicity and the identification of neurotoxic agents and conditions, when coupled to research aimed at identifying and characterizing the problems caused by such agents, should provide the best scientific bases for making sound and reasonable judgments. These overlapping approaches to evaluating the problems of neurotoxicology should form a strong foundation for decision-making.

1.4. Content of This Report

Including the Introduction (chapter 1), this document contains six chapters. Chapter 2 provides an overview of the discipline of neurotoxicology. It is important to understand the scope of the problem as it relates to neurotoxicology, including: (1) Definitions of neurotoxicity and adverse effect, (2) examples of neurotoxicity and incidents of exposure, and (3) Federal response to neurotoxicology. Chapter 2 also discusses the basic principles of toxicology that apply generally to the evaluation of neurotoxicity. Issues such as dose, exposure, target site, and the intended use of the chemical are discussed, as are principles of pharmacodynamics, chemical interactions, and the concept of threshold. Chapter 2 also lays the neurobiological basis for understanding how and where chemicals can affect the nervous system and provides examples of such chemical types. Finally, chapter 2 discusses special considerations for neurotoxicology including the issue of susceptible populations, the blood brain barrier, and the limited capability of the nervous system to repair following chemical insult.

Chapter 3 examines methods for assessing human neurotoxicity. Neurologic evaluations, neuropsychological testing, and applicability of methods used in clinical evaluations and case studies are discussed in this chapter. Epidemiologic study designs, endpoints, and methods are also discussed, as well as problems of causal inference and applications and limitations of epidemiologic and field study methods for risk assessment. Chapter 3 also describes human laboratory exposure studies, including methods for assessing neurobehavioral

function, self-report methods for assessing subjective states, and a number of other methodological issues. This chapter also discusses the comparability of human and animal laboratory methods and special considerations in human neurotoxicity assessments.

Chapter 4 assesses methods for evaluating animal neurotoxicity. Discussed in this chapter is the role that animal models play in the assessment of chemicals for neurotoxicity, the validity of animal models, and experimental design considerations in animal neurotoxicological studies. Also included in this chapter is a discussion of tier-testing approaches in chemical evaluations. Specific endpoints used in animal neurotoxicological studies are also discussed, including methods for neurobehavioral, neurophysiological, neuroanatomical, and neurochemical assessments. Developmental neurotoxicology and *in vitro* neurotoxicology are also described in this chapter.

Chapter 5 of this document discusses principles of neurotoxicity risk assessment. This chapter evaluates the generic assumptions in neurotoxicity risk assessment, ending with a discussion of uncertainty reduction and identification of knowledge gaps.

Chapter 6 is a general summary of the material presented in the first five chapters.

2. Overview of Neurotoxicology

2.1. Scope of the Problem

2.1.1. Introduction

Chemicals are an integral part of our lives, with the capacity to both improve as well as endanger our health. The general population is exposed to chemicals with neurotoxic properties in air, water, foods, cosmetics, household products, and drugs used therapeutically or illicitly. Naturally occurring neurotoxins, such as fish and plant toxins, present other hazards. During the daily life of an ordinary person, there is a multitude of exposures, both voluntary and unintentional, to neuroactive substances. Under conditions of multiple exposures, identifying the substance responsible for an adverse response may be difficult. The EPA's inventory of toxic chemicals is greater than 65,000 and increasing yearly. Concerns have been raised about the toxicological data available for many compounds used commercially (NRC, 1984).

It is not known how many chemicals are neurotoxic to humans. However, estimates have been made for subsets of

substances. A large percentage of the more than 500 registered active pesticide ingredients are neurotoxic to varying degrees. Of 588 chemicals listed by the American Conference of Government and Industrial Hygienists (ACGIH), 167 affected the nervous system or behavior (Anger, 1984; CDC, 1986). Using a generally broad definition of neurotoxicity, Anger (1990a) estimated that of the approximately 200 chemicals to which 1 million or more American workers are exposed, more than one-third may have adverse effects on the nervous system at some level of exposure. Anger (1984) also recognized neurotoxic effects as one of the ten leading workplace disorders. In addition, a number of therapeutic substances, including some anticancer and antiviral agents and abused drugs, can cause adverse or neurotoxicological side effects (OTA, 1990). It has been estimated that there is inadequate toxicological information available for more than three-fourths of the 12,860 chemicals with a production volume of 1 million pounds or more (NRC, 1984). It should be noted, however, that estimates concerning the number of neurotoxicants vary widely. O'Donoghue (1989), for example, reported that of 488 compounds assessed in his chemical evaluation process, only 2.7% had effects on the nervous system.

2.1.2. Examples of Neurotoxicity and Incidents of Exposure

There is a long-standing history associating certain neurological and psychiatric disorders to exposure to a toxin or chemical of an environmental origin (OTA, 1990) (Table 2-1). Lead is one of the earliest examples of a neurotoxic chemical with widespread exposure. This metal is widely distributed with major sources of inorganic lead including industrial emissions, lead-based paints, food, beverages, and the burning of leaded gasolines. Organic lead compounds such as tetraethyl lead have been reported to produce a toxic psychosis (Cassells and Dodds, 1946). If exposure occurs at relatively low levels during development, lead can cause a variety of neurobehavioral problems, learning disorders, and altered mental development (Bellinger et al., 1987; Needleman, 1990). Over the years, Federal Government regulations have been developed to decrease human exposure to lead, and as a goal an intervention level of 10 $\mu\text{g}/\text{dcl}$ whole blood has been recommended (CDC, 1991). Lead exposure in the United States has decreased significantly during the last several years.

TABLE 2-1.—HUMAN NEUROTOXIC EXPOSURES

Year(s)	Location	Substance	Comments
370 B.C.	Greece	Lead	Lead toxicity recognized in mining industry.
1st century A.D.	Rome	Lead	Vapors recognized as toxic.
1837	Scotland	Manganese	Chronic manganese poisoning described.
1924	United States (New Jersey)	Tetraethyl lead	Workers suffer neurologic symptoms.
1930	United States (Southeast)	Tri-o-cresylphosphate (TOCP)	Chemical contaminant added to Ginger Jake, an alcoholic beverage substitute; more than 5,000 paralyzed, 20,000 to 100,000 affected.
1930's	Europe	Apiol	Drug containing TOCP causes 60 cases of neuropathy.
1932	United States (California)	Thallium	Contaminated barley laced with thallium sulfate poisons family, causing neurologic symptoms.
1937	South Africa	TOCP	Paralysis develops after use of contaminated cooking oil.
1946	England	Tetraethyl lead	Neurologic effects observed in people cleaning gasoline tanks.
1950's	Japan (Minamata)	Methylmercury	Fish and shellfish contaminated with mercury are ingested, causing neurotoxicity.
1950's	France	Organotin	Medication (Stallion) containing diethyltin diiodide results in poisoning.
1950's	Morocco	Manganese	Miners suffer chronic manganese intoxication.
1950's	Guam	Cycad	Ingestion of plants associated with amyotrophic lateral sclerosis and Parkinson-like syndrome.
1956	Turkey	Hexachlorobenzene	Hexachlorobenzene causes poisoning.
1956	Japan	Clioquinol	Drug causes neuropathy.
1959	Morocco	TOCP	Cooking oil contaminated with lubricating oil causes poisoning.
1960	Iraq	Methylmercury	Mercury-treated seed grain causes neurotoxicity.
1964	Japan	Methylmercury	Methylmercury neurotoxicity.
1968	Japan	PCBs	Polychlorinated biphenyls are leaked into rice oil, causing neurotoxicity.
1969	Japan	n-Hexane	Neuropathy due to n-hexane exposure.
1969	United States (New Mexico)	Methylmercury	Fungicide-treated grain results in alkyl mercury poisoning.
1971	United States	Hexachlorophene	Hexachlorophene-containing disinfectant is found to be toxic to nervous system.
1971	Iraq	Methylmercury	Methylmercury used as fungicide to treat seed grain causes poisoning.
1972	France	Hexachlorophene	Hexachlorophene poisoning of children.
1973	United States (Ohio)	Methyl n-butylketone	Fabric production plant employees exposed to MnBK solvent suffer polyneuropathy.
1974-1975	United States (Virginia)	Chlordecone (Keptone)	Chemical plant employees exposed to insecticide suffer severe neurologic problems.
1976	United States (Texas)	Leptophos (Phosvel)	At least nine employees suffer serious neurologic problems after exposure to insecticide.
1977	United States (California)	Dichloropropene (Telone II)	People hospitalized after exposure to pesticide.
1979-1980	United States (Texas)	2-t-Butylazo-2-hydroxy-5-methylhexane (BMMH) (Lucel-7)	Employees of manufacturing plant experience serious neurologic problems.
1980's	United States	Methylphenyltetrahydropyridine (MPTP)	Impurity in synthesis of illicit drug causes Parkinson's disease-like effects.
1981	Spain	Toxic oil	People ingesting toxic substance in oil suffer severe neuropathy.
1983-84	United States	Vitamin B ₆	Excessive intake, causes sensory neuropathy, numbness, parathesia, and motor dysfunction.
1985	United States and Canada	Aldicarb	People experience neuromuscular deficits after ingestion of contaminated melons.
1987	Canada	Domoic acid	Ingestion of mussels contaminated with domoic acid causes illnesses.
1988	India	TOCP	Ingestion of adulterated rapeseed oil cause polyneuritis.
1989	United States	L-tryptophan-containing products	Ingestion of a chemical contaminant associated with the manufacture of L-tryptophan results in eosinophilia-myalgia syndrome.
1991	Nigeria	Scopoletin	Natural component of gari caused neuropathy associated with optic atrophy and ataxia.

Mercury compounds are potent neurotoxic substances and have caused a number of human poisonings, with symptoms of vision, speech, and coordination impairments (Chang, 1980). Erethism, a syndrome with such neurologic features as tremor and behavioral symptoms as anxiety, irritability, and pathologic shyness, is seen in people exposed to elemental mercury (Bidstrup, 1964). One major

incidence of human exposure occurred in the mid-1950's when a chemical plant near Minamata Bay, Japan, discharged mercury as part of waste sludge. An epidemic of mercury poisoning developed when the local inhabitants consumed contaminated fish and shellfish. Congenitally affected children displayed a progressive neurological disturbance resembling cerebral palsy and manifested other

neurological problems as well. In 1971, an epidemic occurred in Iraq from methylmercury used as a fungicide to treat grain (OTA, 1990).

Manganese is used in metal alloys and has been proposed to replace lead in gasoline. It is an essential dietary substance for normal body functioning yet parenteral exposure to manganese can be neurotoxic, producing a dyskinetic motor syndrome similar to Parkinson's disease (Cook et al., 1974).

Exposed miners in several countries have suffered from "manganese madness" characterized by hallucinations, emotional instability, and numerous neurological problems. Long-term manganese toxicity produces muscle rigidity and staggering gait similar to that seen in patients with Parkinson's disease (Politis et al., 1980).

A Parkinsonian-like syndrome was also observed in people who accidentally ingested 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) (Langston et al., 1983). MPTP was a byproduct of a meperidine derivative sold illicitly as "synthetic heroin."

Organic solvents are encountered frequently in occupational settings. Most solvents are volatile, i.e., they can be converted from a liquid to a gaseous state and readily inhaled by the worker. They are also lipid soluble and readily accumulate in the fat deposits of the exposed organism. An example of a solvent exposure in humans is carbon disulfide. Workers exposed to high levels of this solvent were found to have an increased frequency of depression and suicide (Seppalainen and Haltia, 1980). Furthermore, repeated exposure to organic solvents is suspected of producing chronic encephalopathy. Workers exposed to methyl-n-butyl ketone, a dye solvent and cleaning agent, displayed peripheral nervous system neuropathy involving degeneration of nerve fibers (Spencer and Schaumburg, 1980). Solvents including ether, ketones, alcohols, and various combinations are commonly used in glues, cements, and paints and when inhaled can be neurotoxic. Repeated abuse of such solvents can lead to permanent neurological effects due to severe and permanent loss of nerve cells (OTA, 1990).

Pesticides are one of the most commonly encountered classes of neurotoxic substances. These can include insecticides (used to control insects), fungicides (for blight and mildew), rodenticides (for rodents such as rats, mice, and gophers), and herbicides (to control weeds). Active ingredients are combined with so-called inert substances to make thousands of different pesticide formulations. Workers who are overexposed to pesticides may display obvious signs of poisoning, including tremors, weakness, ataxia, visual disturbances, and short-term memory loss (Ecobichon and Joy, 1982). Chlordecone exposure results in nervousness and tremors (Cannon et al., 1978). The organophosphorous insecticides have neurotoxic properties and account for approximately 40 percent of registered pesticides. A

delayed neurotoxicity can be seen as a result of exposure to certain organophosphate pesticides, producing irreversible loss of motor function and an associated neuropathology (Ecobichon and Joy, 1982).

Organophosphate and carbamate insecticides are known to interfere with a specific enzyme, acetylcholinesterase (AChE) (Davis and Richardson, 1980). Paralysis has also been reported following consumption of nonpesticide organophosphate products such as tri-cresylphosphate (TOCP).

Neurotoxicities in humans, domestic livestock, and poultry associated with fungal toxins (mycotoxins) have been well documented (Kurata, 1990; Aibara, 1986; Wyllie and Morehouse, 1978). Mycotoxins not only have a negative economic effect on animal production, but they also represent a definite threat to human health. Mycotoxins occur in forages, field crops, and grains used for livestock; they also are incorporated into cereals, grains, and grain-based products used for human consumption. Therefore, human exposure may occur either through direct consumption of these products or secondarily through consumption of meat, milk, or eggs. An example of human exposure to fungal toxins is *Claviceps purpurea*- or *C. paspali*-infected wheat, barley, and oats used for bread and as a dietary supplement for livestock. These fungal toxins are notorious for producing the gangrenous and convulsive forms of the disease known as "ergotism" (Bove, 1970). These fungi are in the family *Clavicipitaceae* and produce a group of compounds known as ergot alkaloids, which have neurotropic, uterotonic, and vasoconstrictive activities. They may act as dopamine agonists or serotonin antagonists, and also block alpha-adrenergic receptors. Since there are numerous naturally occurring ergot alkaloids, this represents only part of their pharmacopoeia (Berde and Schield, 1978). These alkaloids are highly toxic and cause both acute and chronic poisonings. Although guidelines now limit the amount of *Claviceps*-contaminated, or "ergot"-contaminated, grains, these compounds may enter human food sources through secondary mechanisms. Other fungi associated with ergot-like syndromes in livestock include *Acremonium lolii* (Gallagher et al., 1984) and *A. coenophialum* (Thompson and Porter, 1990).

Cyclopiazonic acid (CPA) is an indole tetramic acid produced by *Aspergillus flavus*, *A. oryzae*, *Penicillium cyclopium*, and *P. camemberti*. This mycotoxin is suspected of causing "kodua poisoning" in humans who

consumed kodo millet seed in India (Rao and Husain, 1985). *Fusarium moniliforme* is a common fungal infection in corn (Bacon et al., 1992) and directly related to neurotoxic syndrome in horses known as equine leukoencephalomalacia (ELEM).

Natural plant toxins also represent a health risk to both livestock and humans. Movement toward limited uses of herbicides, fungicides, and no-till agricultural practices increases the possibility of noxious weeds and weed seeds being incorporated into food products. Ergot alkaloids also are produced by morning glories (*Ipomea violacea*) and may be incorporated into soybeans, corn, peas, etc., during harvest. Export regulations limit morning glory-contaminated soybeans because of the hallucinogenic and other effects produced by ergot alkaloids. Jimson weed (*Datura stramonium*), another weed incorporated into agricultural commodities, produced scopolamine, hyocyanine, and atropine, all of which have parasympatholytic (anticholinergic) activities.

Recently, an outbreak of toxic encephalopathy caused by eating mussels contaminated with domoic acid, an excitotoxin, was reported (Perl et al., 1990).

2.1.3. Federal Response

In the United States, several agencies, including EPA, FDA, OSHA, CPSC, NIOSH, and ATSDR, have been given the mandate to regulate or evaluate public exposure to toxic chemicals (Tilson, 1989).

2.1.3.1. Food and Drug Administration.

The FDA has the authority to regulate the use of food and color additives as well as to determine whether or not various foods are unsafe for human consumption because of adulteration by environmental contaminants. The manufacturer must supply adequate data to establish the safety of the food additives. Before marketing approval, the potential toxicity of proposed food and color additives is established in a battery of animal toxicity studies. During all of these studies, clinical signs of toxicity, including abnormal behavior, are monitored and abnormalities recorded. At the termination of these studies, tissues from all organs, including the brain, are sectioned and evaluated for both gross and histopathological changes, in addition to being evaluated for their clinical chemistry and hematology. None of the routinely required tests is specifically designed to assess neurotoxicity. If neurotoxic effects are detected during any of the standard

toxicity tests, however, they must be reported. Specific neurotoxicity testing may then be required. The FDA is currently revising its guidelines for the safety assessment of direct food and color additives to include neurotoxicity as a routine element in toxicological testing.

The FDA is also authorized to regulate substances in food considered to be poisonous or deleterious. Unavoidable environmental contaminants in food fall into this category. The FDA determines a level at which the risks from realistically possible intakes are negligible or acceptable. Based on this risk assessment, an action level or tolerance is established. Once the action level or tolerance is formally established, the FDA may take appropriate action to restrict adulterated food from the market if these standards are exceeded.

The FDA is responsible for assessing the toxicity of human therapeutic products. Many products have been shown to produce adverse effects on the nervous system at standard therapeutic doses as well as at higher doses. Before marketing approval is given, the toxicity of potential new products is assessed. A battery of animal toxicity study parameters relevant to the nervous system, including gross behavioral observation and gross and histopathological examination of the nervous tissue, are evaluated. This information is used to help guide the surveillance of human subjects for adverse effects that are assessed during clinical trials.

2.1.3.2. Occupational Safety and Health Administration.

OSHA has been given the responsibility to ensure that the working environment is a safe and healthy place of employment. In the early 1970's, OSHA adopted the existing Federal standards, most of which were developed under the Walsh-Healy Act (including the 1968 ACGIH Threshold Limit Values), and approximately 20 consensus standards of the American National Standards Institute (ANSI) as Permissible Exposure Limits (PELs). Of the 393 remaining original PELs, 145 were set in part to protect the individual from neurotoxic effects.

Since the adoption of the initial standards, OSHA has issued new or revised health standards or work practices for 23 substances. Of these, the one concerning lead was based in part on nervous system effects. Four other compounds, inorganic arsenic, acrylonitrile, ethylene oxide, and 1,2-dibromo-3-chloropropane, were cited as causing various disturbances in the

nervous system, but the standards for these were based primarily on carcinogenic effects.

In 1989, OSHA updated 428 exposure limits for air contaminants. Of these, 25 substances were categorized by OSHA as "substances for which limits are based on avoidance of neuropathic effects." In addition, 24 substances were included in the category "substances for which limits are based on avoidance of narcosis." However, OSHA stated that the categorization was intended as a tool to manage the large number of substances being regulated and not to imply that the category selected identified the most sensitive or the exclusive adverse health effects of that substance.

2.1.3.3. National Institute for Occupational Safety and Health.

The Occupational Safety and Health Act established NIOSH as a Public Health Service (PHS) agency to develop and recommend criteria for prevention of disease and hazardous conditions in the workplace. NIOSH also performs research on occupational health issues and conducts worksite evaluations of suspected hazards. OSHA and the Mine Safety and Health Administration (MSHA) use NIOSH recommendations in the promulgation of new or revised health and safety standards.

In establishing recommended exposure limits (RELs) for chemicals, NIOSH examines all relevant scientific information about a given compound and attempts to identify exposure limits that will protect all workers from adverse effects. NIOSH has recommended standards for approximately 644 chemicals or classes of chemicals. For 214 (33 percent) of these, neurotoxicity was cited as a health effect considered when formulating the REL (NIOSH, 1992).

2.1.3.4. Environmental Protection Agency.

The Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) provide the legislative authority for EPA to require data collection for premarket approval of chemicals. Under section 5 of TSCA, after a manufacturer has notified EPA of its plans to produce a "new" chemical that has not yet been listed on the inventory, EPA has the responsibility to assess possible health hazards. Potential neurotoxicity is included in the health hazards assessment. If there are reasons to suspect neurotoxicologic effects (e.g., from structure-activity analysis, information in the literature, or data submitted by the manufacturer), EPA

can issue a test rule requiring the manufacturer to develop data directed toward these effects. At the same time, EPA can restrict the chemical or prohibit it entirely from entering commerce until the required data are submitted and reviewed. In addition, for "old" chemicals (under section 4 of TSCA), if EPA suspects neurotoxicity, a test rule would be the mechanism used for obtaining the data. Many other statutes provide authority to regulate chemicals through the setting of standards, including the Clean Air Act, Clean Water Act, and Safe Drinking Water Act.

Neurotoxicity is recognized as a health effect of concern under FIFRA, and there are neurotoxicity testing requirements for premarketing submission of data to EPA for registration of a pesticide under FIFRA.

2.1.3.5. Consumer Product Safety Commission.

The CPSC is an independent Federal regulatory agency with jurisdiction over most consumer products. Most chemical hazards are regulated under the Federal Hazardous Substances Act (FHSA) administered by CPSC. The FHSA requires appropriate cautionary labeling on all hazardous household products (hazards include chronic toxicity such as neurotoxicity). While the FHSA does not require premarket registration, a manufacturer is required to assess the hazards of a product prior to marketing and assure that it is labeled with all necessary cautionary information. The FHSA also bans children's products that are hazardous and provides the CPSC with the authority to ban other hazardous products.

2.1.3.6. Agency for Toxic Substances and Disease Registry.

ATSDR has a mission to prevent or mitigate adverse effects to both human health and the quality of life resulting from exposure to hazardous substances in the environment. The ATSDR publishes a National Priority List (NPL) of hazardous substances that are found at National Priority Waste Sites. The order of priority is based on an algorithm, taking into consideration frequency with which substances are found at NPL sites, toxicity, and potential for human exposure; this list is reranked on a yearly basis. So far, 129 toxicological profiles have been developed for the priority hazardous substances, and 92 substances have a profile with a neurological health effect endpoint (HAZDAT, 1992). Neurotoxicity has been selected by the ATSDR to be one of the seven high-

priority health conditions resulting from exposure to environmental toxicants.

2.2. Basic Toxicological Considerations for Neurotoxicity

2.2.1. Basic Toxicological Principles

A chemical must enter the body, reach the tissue target site(s), and be maintained at a sufficient concentration for a period of time in order for an adverse effect to occur. Not all chemicals have the same level of toxicity; some may be very toxic in small amounts while others may have little effect even at extremely high amounts. Thus, the dose-response relationship is a major concept in determining the toxicity of a specific substance. Other factors in determining toxicity include the physical and chemical properties of the substance, the route and level of exposure, the susceptibility of the target tissue, and the health, gender, and age of the exposed individual.

Once the toxic substance has entered the body, usually through the lungs (inhalation), the skin (absorption), or the gastrointestinal tract (ingestion), it is partitioned into various body tissues where it can act on its target sites. The substance is eliminated from the bloodstream by the process of accumulation into the various sites in the body, with the liver and kidney being major sites of accumulation of toxic substances. This is thought to be associated with these organs' large blood capacity and major role in elimination of substances from the body. Lipophilic chemicals accumulate in lipid-rich areas of the body and present a significant potential problem for the nervous system. The nervous system is unique in its high percentage content of lipid (50 percent of dry weight) and may be particularly vulnerable to such chemicals. The site or sites of accumulation for a specific toxic substance may or may not be the primary sites of action. Examples include two known neurotoxicants, carbon monoxide in the red blood cells and lead in the bone. It must be noted that some substances are not distributed throughout the body, partially as a function of their insolubility, polarity, or molecular weight.

The effect that a substance has will generally depend on the body burden or level in the tissue and duration of exposure. The time course of the levels is determined by several factors, including the amount at time of exposure, duration of exposure, and metabolic fate of the chemical. The study of such metabolic processes, pharmacokinetics, has demonstrated

complex patterns in the absorption, distribution, possible biotransformation, and elimination of various substances (Klaassen, 1980).

Many substances are removed by the kidney and excreted through the urine. The liver can detoxify substances like organic lead, which are excreted from the liver into the bile and then the small intestines, bypassing the blood and kidney. Lipophilic toxic substances are primarily removed from the body through feces and bile, and water-soluble metabolites are removed in the urine, through the skin, and through expiration into the air. Biotransformation is a biochemical process that converts a substance into a different chemical compound, allowing it to be excreted more easily. Substances are more easily removed if they are biotransformed into a more hydrophilic compound. Biotransformation can either aid in the detoxification of a substance or produce a more toxic metabolite. Therefore, the original substance may not be the substance that is producing the toxicity on the nervous system or any other system. Thus, several factors must be taken into consideration when evaluating the potential neurotoxicity of a chemical. They include the pharmacokinetics of the parent compound, the target tissue concentrations of the parent chemical or its bioactivated proximate toxicant, the uptake kinetics of the parent chemical or metabolite into the cell and/or membrane interactions, and the interaction of the chemical or metabolite with presumed receptor sites.

2.2.2. Basic Neurotoxicological Principles

Neurotoxicity can be manifest as a structural or functional adverse response of the nervous system to a chemical, biological, or physical agent (Tilson, 1990b). It is a function of both the property of the agent and a property of the nervous system itself. Neurotoxicity refers broadly to the adverse neural responses following exposure to chemical or physical agents (e.g., radiation) (Tilson, 1990b). Adverse effects include any change that diminishes the ability to survive, reproduce, or adapt to the environment. Neuroactive substances may also impair health indirectly by altering behavior in such a way that safety is decreased in the performance of numerous activities. Toxicity can occur at any time in the life cycle, from conception through senescence, and its manifestations can change with age. The range of responses can vary from temporary responses following acute exposures to delayed responses following acute or chronic

exposure to persistent responses. Neurotoxicity may or may not be reversible following cessation of exposure. The responses may be graded from transient to fatal and there may be different responses to the same neurotoxicant at different dose levels but similar responses to exposure to different agents. Displays of a neurotoxic response may be progressive in nature, with small deficits occurring early in exposure and developing to become more severe over time. Expression of neurotoxicity can encompass multiple levels of organization and complexity including structural, biochemical, physiological, and behavioral measurements.

Caution must be exercised in labeling a substance neurotoxic. The intended use and effect of the chemical, the dose, exposure scenario and whether or not the chemical acts directly or indirectly on the nervous system, must be taken into consideration. A substance that may be neurotoxic at a high concentration may be safe and beneficial at a lower concentration. For example, vitamin A, vitamin B6, are required in the diet in trace amounts, yet all result in neurotoxicity when consumed in large quantities. Pharmaceutical agents may also have adverse effects at high dose levels or where the beneficial effects outweigh the adverse side effects. For example, antipsychotic drugs have allowed many people suffering from schizophrenia to lead relatively normal lives; however, chronic prescribed use of some of these drugs may result in severe tardive dyskinesia characterized by involuntary movements of the face, tongue, and limbs. Other examples include toxic neuropathies induced by chemotherapeutic agents like cisplatin, toxic anticholinergic effects of high doses of tricyclic antidepressants, disabling movement disorders in patients treated with anti-Parkinsonian agents and major tranquilizers, and hearing loss and balance disruption triggered by certain antibacterials (Serman and Schaumburg, 1980). Drugs of abuse such as ethanol also have neurotoxic potential. Opiates such as heroin may lead to dependence, which is considered to be a long-term adverse alteration of nervous system functioning. Simultaneous exposure to drugs or toxic agents may produce toxic interactions either in the environment or occupational settings. For example, exposure to noise and certain antibiotics can exacerbate the loss of hearing function (Boettcher et al., 1987; Lim, 1986; Bhattacharyya and Dayal, 1984).

The nervous system is a highly complex and integrated organ. It is

possible that nonlinear dose-response relationships or a threshold effect could exist for some agents. It has been hypothesized that the nervous system has a reserve capacity that masks subtle damage and any exposure that does not overcome this reserve capacity may not reach the threshold and no observable impairment will be evident (Tilson and Mitchell, 1983). However, the functional reserve may be depleted over time and the manifestations of toxicity may be delayed in relationship to the exposure. The reserve may be depleted by a number of factors including aging, stress, or chronic exposure to an environmental insult, in which case functioning will eventually be impaired and toxicity will become apparent. If a number of events occur simultaneously, the response is progressive in nature, or there is a long latency between exposure and manifestation of toxicity, the identification of a single cause of the functional impairment may not be possible.

2.3. Basic Neurobiological Principles

2.3.1. Structure of the Nervous System

The nervous system is composed of two parts: the central nervous system (CNS) and the peripheral nervous system (PNS) (Spencer and Schaumburg, 1980). Within the nervous system, there exist predominantly two general types of cells—nerve cells (neurons) and glial cells. Neurons have many of the same structures found in every cell of the body; they are unique, however, in that they have axons and dendrites, extensions of the neuron along which nerve impulses travel. The structure of the neuron consists of a cell body, 10 to 100 μm in diameter, containing a nucleus and organelles for the synthesis of various components necessary for the cell's functioning, e.g., proteins and lipids. There are numerous branch patterns of elongated processes, the dendrites, that emanate from the cell body and increase the neuronal surface area available to receive inputs from other sources. Neurons communicate with each other by releasing chemical signals onto specific surface regions, receptors, of the other neuron. The axon is a process specialized for the conduction of nerve impulses away from the cell toward the terminal synapses and eventually toward other cells (neurons, muscle cells, or gland cells).

Neurons are responsible for the reception, integration, transmission, and storage of information (Raine, 1989). Certain nerve cells are specialized to respond to particular stimuli. For example, chemoreceptors in the mouth

and nose send information about taste and smell to the brain. Cutaneous receptors in the skin are involved in the sensation of pressure, pain, heat, cold, and touch. In the retina, the rods and cones sense light. In general, the length of the axon is tens to thousands of times greater than the cell body diameter. For example, the cell body whose processes innervate the muscles in the human foot is found in the spinal cord at the level of the middle back. The axons of these cells are more than a meter in length. Many, but not all, axons are surrounded by the layers of membrane from the cytoplasmic process of glial cells. These layers are called myelin sheaths and are composed mostly of lipid. In the PNS, the myelin sheaths are formed by Schwann cells, while in the CNS the sheaths are formed by the oligodendroglia. The myelin sheath formed by one glial cell covers only a short length of the axon. The entire length of the axon is ensheathed in myelin by numerous glial cells. Between adjacent glial sheaths, a very short length of bare axon exists called the node of Ranvier. In unmyelinated axons, a nerve impulse must travel in a continuous fashion down the entire length of the nerve. The presence of myelin accelerates the nerve impulse by up to 100 times by allowing the impulse to jump from one node to the next in a process called "saltatory conduction."

The nerve cells of the PNS are generally found in aggregates called ganglia. The brain and spinal cord make up the CNS and the neurons are segregated into functionally related aggregates called nuclei. They synthesize and secrete neurotransmitters, which are specialized chemical messengers that interact with receptors of other neurons in the communication process. Various nuclei together with the interconnecting bundles of axonal fibers are functionally related to one another to form higher levels of organization called systems. For example, there is the motor system, the visual system, and the limbic system. At the base of the brain, several small nuclei in the hypothalamus form the neuroendocrine system, which plays a critical role in the control of the body's endocrine (hormone-secreting) glands. Nerve cells in the hypothalamus secrete chemical messengers into a short loop of blood vessels that carries the messengers to the pituitary gland which, in turn, releases chemical messengers into the general circulation. These pituitary messengers regulate other glands (e.g., the thymus and the gonads). The entire system maintains a

state of optimal physiological function for all of the body's organ systems.

2.3.2. Transport Processes

All types of cells must transport proteins and other molecular components from their site of production near the nucleus to the other sites in the cell (Hammerschlag and Brady, 1989). Neurons are unique in that the neuronal cell body must maintain not only the functions normally associated with its own support, but it must also provide support to its various processes. This support may require transport of material over relatively vast distances. Delivery of necessary substances by intracellular transport down the axon (axonal transport) represents a supply line that is highly vulnerable to interruption by toxic chemicals. In addition, the integrity of the function of the neuronal cell body is often dependent on a supply of trophic factors from the cells that it innervates. These factors are continually supplied to the neural cells by the process of retrograde axonal transport, often as a process of normal exchange between two or more cells. They play a significant factor in the normal growth and maintenance of the neural cells, and a continual supply of certain trophic factors is necessary for cell functioning.

The majority of axonal transport occurs along longitudinally arranged fiber tracks called neurofilaments. This movement along neurofilaments requires energy in the form of oxidative metabolism. Toxicants that interfere with this metabolism or that disrupt the spatial arrangement or production of neurofilaments may block axonal transport and can produce neuropathy (Lowndes and Baker, 1980). This can be seen following exposure to many substances, such as n-hexane and methyl n-butyl ketone as well as the drugs vincristine, vinblastine, and taxol. Acrylamide produces a dying-back axonopathy but by an alternative mechanism involving altered axonal transport.

2.3.3. Ionic Balance

The axonal membrane is semipermeable to positively and negatively charged ions (mostly potassium, sodium, and chloride) within and outside of the axon. There are several enzyme systems that maintain an ionic balance that changes following depolarization of the membrane (Davies, 1968). This is maintained only by the continual active transport of ions across the membrane, which requires an expenditure of energy. The nerve impulse is a traveling

wave of depolarization normally originating from the cell body; however, in sensory neurons it originates at the terminal receptive end of specialized axons (Davies, 1968). The wave is continued by openings in the membrane that allow ions to rush into the axon. This sudden change in the charge across the axon's membrane is the nerve impulse. It is an amplified depolarization that reaches the threshold value and spreads down the axon from one length to another until the next length of membrane reaches the threshold value. It continues in this fashion until it reaches the synaptic terminal regions. There are a number of varieties of membrane channels (e.g., calcium) that rapidly open and close during impulse generation; the common ones are the sodium and potassium channels. They are very small and allow only ions of a certain size to pass. Several classes of drugs (e.g., local anesthetics) and natural toxins (e.g., tetrodotoxin) inhibit nerve impulse conduction by blocking these channels.

2.3.4. Neurotransmission

The terminal branches of the axon end in small enlargements called synaptic "boutons." It is from these boutons that chemical messengers will be released in order to communicate with the target cell at the point of interaction, the synapse (Hammerschlag and Brady, 1989). When the nerve impulse reaches the terminal branches of the axon, it depolarizes the synaptic boutons. This depolarization causes the release of the chemical messengers (neurotransmitters and neuromodulators) stored in vesicles in the axon terminal (Willis and Grossman, 1973). Classical neurotransmitters include serotonin, dopamine, acetylcholine, and norepinephrine and are typically secreted by one neuron into the synaptic cleft where they are on the postsynaptic membrane. Neuropeptides, however, may travel long distances through the bloodstream to receptors on distant nerve cells or in other tissues. Following depolarization, the amount of secretion is dependent on the number of nerve impulses that reach the synaptic bouton, i.e., the degree of depolarization. The chemical messengers diffuse across the synaptic cleft or into the intraneuronal space and bind to receptors on adjacent nerve cells or effector organs, thus triggering biochemical events that lead to electrical excitation or inhibition.

When information is transmitted from nerves to muscle fibers, the point of interaction is called the neuromuscular junction and the interaction leads to contraction or relaxation of the muscle.

When the target is a gland cell, the interaction leads to secretion. Synaptic transmission between neurons is slightly more complicated, but still dependent on the opening and closing of ion channels in the membrane. The binding of the messenger to the receptor of the receiving cell can lead to either the excitation or inhibition of the target cell. At an excitatory synapse, the neurotransmitter-receptor interaction leads to an opening in certain ion-specific channels. The charged ions that move through these opened chambers carry a current that serves to depolarize the cell membranes. At inhibitory synapses, the interaction leads to an opening in a different type of ion-specific channel that produces an increase in the level of polarization (hyperpolarization). The sum of all the depolarizing and hyperpolarizing currents determines the transmembrane potential and when a threshold level of depolarization is reached at the axon's initial segment, a nerve impulse is generated and begins to travel down the axon.

The duration of neurotransmitter action is primarily a function of the length of time it remains in the synaptic cleft. This duration is very short due to specialized enzymes that quickly remove the transmitter either by degrading it or by reuptake systems that transport it back into the synaptic bouton. A toxic substance may disrupt this process in several different ways. It is important that the duration of the effect of synaptically released chemical messengers be limited. Some neurotoxicants, e.g., cholinesterase-inhibiting organophosphorous pesticides, inhibit the enzyme (AChE), which serves to terminate the effect of the neurotransmitter (acetylcholine) on its target. The result is an overstimulation of the target cell. Other substances, particularly biological toxins, are able to interact with the receptor molecule and mimic the action of the neurotransmitter. Some toxic substances, like neuroactive pharmaceuticals, may interfere with the synthesis of a particular neurotransmitter, while others may block the neurotransmitter's access to its receptor molecule.

2.4. Types of Effects on the Nervous System

The normal activity of the nervous system can be altered by many toxic substances. A variety of adverse health effects can be seen ranging from impairment of muscular movement to disruption of vision and hearing to memory loss and hallucinations (WHO, 1986; Anger, 1984, 1990). Toxic

substances can alter both the structure and the function of cells in the nervous system. Structural alterations include changes in the morphology of the cell and its subcellular structures. In some cases, agents produce neuropathic conditions that resemble naturally occurring neurodegenerative disorders in humans (Calne et al., 1986). Cellular alterations can include the accumulation, proliferation, or rearrangement of structural elements (e.g., intermediate filaments, microtubules) or organelles (mitochondria) as well as the breakdown of cells. By affecting the biochemistry and/or physiology of a cell, a toxic substance can alter the internal environment of any neural cell. Intracellular changes can result from oxygen deprivation (anoxia) because neurons require relatively large quantities of oxygen due to their high metabolic rate.

Many times the response of the nervous system to a toxic substance can be a slow degeneration of the nerve cell body or axon that may result in permanent neuronal damage. Substances can act as a cytotoxicant after having been transported into the nerve terminal. A complete loss of nerve cells can occur following exposure to a number of toxic substances. Sensory nerve cells may be lost following treatment with megavitamin doses of vitamin B6; hippocampal neurons undergo degeneration with trimethyltin and trimethyl lead poisoning; motor nerve cells are affected in cycad toxicity, which has been loosely linked to Guam-ALS-Parkinsonism dementia. Acute carbon monoxide poisoning can produce a delayed, progressive deterioration over a period of weeks of portions of the nervous system that may lead to psychosis and death. Substances such as mercury and lead can cause central nervous system dysfunction. In children, mercury intoxication can cause degeneration of neurons in the cerebellum and can lead to tremors, difficulty in walking, visual impairment, and even blindness. Lead affects the cortex of the immature brain, resulting in mental retardation.

At the cellular level, a substance might interfere with cellular processes like protein synthesis, leading to a reduced production of neurotransmitters and brain dysfunction (Bondy, 1985). Nicotine and some insecticides mimic the effects of the neurotransmitter acetylcholine. Organophosphorous compounds, carbamate insecticides, and nerve gases act by inhibiting AChE, the enzyme that inactivates the neurotransmitter acetylcholine. This results in a buildup

of acetylcholine and can lead to loss of appetite, anxiety, muscle twitching, and paralysis. Amphetamines stimulate the nervous system by releasing and blocking reuptake of the neurotransmitters norepinephrine and dopamine from nerve cells. Cocaine affects the release and reuptake of norepinephrine, dopamine, and serotonin. Both drugs can cause paranoia, hyperactivity, aggression, high blood pressure, and abnormal heart rhythms. Opium-related drugs such as morphine and heroin act at specific opioid receptors in the brain, producing sedation, euphoria, and analgesia. They also tend to slow the heart rate and cause nausea, convulsions, and slow breathing patterns. Other substances can alter the synthesis and release of specific neurotransmitters and activate their receptors in specific neuronal pathways. They may perturb the system by overstimulating receptors, blocking transmitter release and/or inhibiting transmitter degradation, or blocking reuptake of neurotransmitter precursors.

Also at the cellular level, the flow of ions such as calcium, sodium, and potassium across the cell membrane may be changed and the transmission of information between nerve cells altered. A substance may interfere with the ionic balance of a neuron. Organophosphate and carbamate insecticides produce autonomic dysfunction and organochlorine insecticides increase sensorimotor sensitivity, produce tremors and in some cases cause seizures and convulsions (Ecobichon and Joy, 1982). Lindane, DDT, pyrethroids, and trimethyltin also produce convulsions. Conversely, solvents act to raise the threshold for eliciting seizures or act to reduce the severity or duration of the elicited convulsions.

The role of excitatory amino acid (EAA)-mediated synaptic activation is critical for normal function of the CNS. Because endogenous EAA-mediated synaptic transmission is a widespread excitatory system in the brain and is involved in the process of learning and memory, the issue of the effects of endogenous and exogenous EAA-related toxicity has broad implications for both CNS morbidity and mortality in humans. Much of the injury and neuronal death associated with toxicity is mediated by receptors for excitatory amino acids, especially glutamic acid. When applied in sufficient excess from either endogenous or exogenous sources, EAAs have profound neurotoxic effects that can result in the destruction of neurons and, as a consequence, lead to acute phase confusion, seizures, and generalized

weakness or to persistent impairments such as memory loss (Choi, 1988).

A final common path in the activation of these receptor classes is an increase in free cytosolic Ca^{++} that can result in the release and activation of intracellular enzymes (which break down the cytoskeleton) and in further release of glutamate, both of which can be cytotoxic (Choi, 1988). Critical to an understanding of the etiopathology associated with at least some of the neurotoxic degeneration may be the link that impaired energy metabolism could have with excitotoxic neuronal death. It is likely that reduced oxidative metabolism results in the partial depolarization of resting membrane potential, the activation of ionotropic membrane receptor/channels, and the influx of Ca^{++} or its release from intracellular stores.

The nervous system is dependent on an extensive system of blood vessels and capillaries to deliver large quantities of oxygen and nutrients as well as to remove toxic waste products. Damage to the capillaries in the brain can lead to the swelling characteristic of encephalopathy. This can be seen following exposure to higher concentrations of lead. Other metals (e.g., cadmium, thallium, and mercury) and organotin (e.g., trimethyltin) cause rupturing of vessels that can also result in encephalopathy.

One large aspect of function that may be affected by neurotoxicants is behavior, which is the product of various sensory, motor, and associative functions of the nervous system. Neurotoxic substances can adversely affect sensory or motor functions, disrupt learning and memory processes, or cause detrimental behavioral effects; however, the underlying mechanisms for these effects have yet to be determined. Although changes may be subtle, the assessment of behavior may serve as a robust means of monitoring the well-being of the organism (Tilson and Cabe, 1978).

2.5. Special Considerations

2.5.1. Susceptible Populations

Everyone is at a certain level of risk of being adversely affected by neurotoxic substances. Individuals of certain age groups, health states, and occupations, however, may be at a greater level of risk. Fetuses, children, the elderly, workers in occupations involving exposure to relatively high levels of toxic chemicals, and persons who abuse drugs are among those in high-risk groups. Neurotoxic substances may exacerbate existing neurological or psychiatric disorders in a population.

Although controversial (Waddell, 1993), recent evidence suggests that there may be a subpopulation of people who have become sensitive to chemicals and experience adverse reactions to low-level exposures to environmental chemicals (Bell, et al., 1992). Confounded in all of these groups is the role that nutrition plays in the response of the organism to exposure. Both general nutritional status and specific nutritional deficiencies (for example, protein, iron, and calcium) can significantly influence the response to a toxic substance.

It is widely accepted that during development adverse effects can result from exposure to some chemicals at lower levels than would be necessary for the average adult (Suzuki, 1980). The developing nervous system appears to be differentially sensitive to some kinds of damage (Cushner, 1981; Pearson and Dietrich, 1985; Annau and Eccles, 1986; Hill and Tennyson, 1986; Silbergeld, 1986). During the developmental period, the nervous system is actively growing and establishing intricate cellular networks. Both the blood-brain and blood-nerve barriers that will eventually protect much of the adult brain, spinal cord, and peripheral nerves are incomplete. The protective mechanisms by which the organism deals with toxic substances, such as the detoxification systems, are not fully developed. Exposure to chemicals during development can result in a range of effects. At the highest exposure, effects include death, gross structural abnormalities, or altered growth. Larger populations are generally exposed to more moderate levels resulting in more subtle functional impairments. The qualitative nature of some injuries during development may differ from those seen in the adult, such as changes in tissue volume, misplaced or misoriented neurons, or delays or acceleration of the appearance of functional or structural endpoints (Rodier, 1986). In many cases, the results of early injuries may become evident only as the nervous system matures and ages (Rodier, 1990). There are several instances in which functional alterations have resulted from exposure during the period between conception and sexual maturity (Riley and Vorhees, 1986; Vorhees, 1987).

Early exposure to relatively low levels of lead can result in reduced scores on tests of mental development (Bellinger et al., 1987; Needleman, 1990). Early gestational exposure to neurotoxicants such as cocaine can produce long-term neurobehavioral abnormalities (Anderson-Brown et al., 1990;

Hutchings et al., 1989); heavy alcohol exposure produces craniofacial abnormalities and mental retardation (Jones and Smith, 1973), while moderate levels of alcohol consumption during gestation can delay motor development (Little et al., 1989).

With aging, the level of risk for a number of health-related factors increases; it has been hypothesized that the risk for toxic perturbations to the nervous system also increases with age (Weiss, 1990). It is generally believed that with increasing age comes a decreased ability of the nervous system to respond to adverse events or to compensate for either biological, physical, or toxic effects. At the tissue and cellular level, the aging process can result in nerve cell loss, formation of neurofibrillary tangles (abnormal accumulation of certain filamentous proteins) and neuritic plaques (abnormal clusters of proteins and other substances near synapses). As cells die, the complex neuronal circuitry of the brain becomes impaired.

Neurotransmitter concentrations and the enzymes involved in their synthesis may be altered. Some axons can gradually lose their myelin sheath, resulting in a slowed conduction of nerve impulses along the axon. It has been postulated that with age, not only might the nervous system become more susceptible to new insults, but the effects of previous exposures also may become evident, with a diminished capacity for compensation (Weiss, 1990). The increased incidence of multiple drug-taking in the elderly population might also lead to interactions, either drug/drug or drug/chemical, which can adversely affect the nervous system. Nutritionally, the aged experience increased incidences of both general undernutrition and deficits of specific nutrients such as iron or calcium, which might influence the response to toxic substances.

In the geriatric population, the clinical manifestation of neurodegenerative disorders may have a contributing component of past exposures to environmental chemical agents. Calne et al. (1986) hypothesized that various agents contribute to Alzheimer's disease, Parkinson's disease, or amyotrophic lateral sclerosis (ALS, motoneuron disease, or Lou Gehrig's disease) by depleting neuronal reserves to an extent that perturbations become observable in the context of the natural aging process. B-N-methylamino-L-alanine, from the seed of the false sago palm (*Cycas circinalis* L.), has been reported to induce a form of amyotrophic lateral sclerosis (Spencer et al., 1987). Alzheimer-type

syndromes have been reported in individuals occupationally exposed to organic solvents or metal vapors (Freed and Kandel, 1988). Severe cognitive dysfunction has been noted in Alzheimer's disease and aluminum intoxication (Yokel et al., 1988).

At any age, preexisting physical as well as mental disorders of the individual may play a significant role in the manifestation of a toxic response following exposure to a potentially toxic substance. Both types of disorders compromise the system in some way so that either the defense mechanisms of the organism are not able to deal with the toxic substance or are not able to repair themselves quickly. In addition to the basic altered biology, for individuals with a physical or mental disorder who are under some form of medical intervention, the combination of therapeutic drugs and toxic substances may have an interactive effect on the nervous system. For example, due to the delicate electrochemical balance of the nervous system, mental disorders may be exacerbated by exposure to a toxic substance.

2.5.2. Blood-Brain and Blood-Nerve Barriers

The bioavailability of a specific chemical to the nervous system is a function of both the target tissue and the chemical. The brain, spinal cord, and peripheral nerves are surrounded by a series of semipermeable tissues referred to as the blood-brain and blood-nerve barriers (Katzman, 1976; Peters et al., 1991). In the central nervous system, the blood-brain barrier is composed of tight junctions formed by endothelial cells and astrocytes. These tight junctions and cellular interactions forming the barrier restrict the free passage of most bloodborne substances. By doing this, they create a finely controlled extracellular environment for the nerve cells. Certain regions of the brain and nerves are directly exposed to chemicals in the blood because the barrier is not present in some areas of the nervous system. For example, it is absent in the circumventricular area, around the dorsal root ganglion in the peripheral nervous system, and around the olfactory nerve, which may allow chemicals to penetrate directly from the nasal region to the frontal cortex.

The existence of these blood-brain and blood-nerve barriers suggests that proper functioning of the nervous system is dependent on control of the substances to which nerve cells are exposed. The term "barrier," however, is somewhat of a misnomer. Although water-soluble and polar compounds enter the brain poorly, lipophilic

substances readily cross the barrier. In addition, a series of specific transport mechanisms exist through which required nutrients (hormones, amino acids, peptides, proteins, fatty acids, etc.) reach the brain (Pardridge, 1988). If toxicants are lipid soluble or if they are structurally similar to substances that are normally transported into the brain, they can achieve high concentrations in brain tissue. It has been proposed that one reason why the developing nervous system may be differentially sensitive to some toxicants is that the blood-brain barrier is less effective than in an adult. The effectiveness of the blood-brain barrier may also be changed by chemical-induced physiological events such as metabolic acidosis and nutritional deprivation.

2.5.3. Metabolism

The central nervous system has a very high metabolic rate and, unlike other organs, the brain depends almost entirely on glucose as a source of energy and raw material for the synthesis of other molecules (Damstra and Bondy, 1980). The absence of an alternative energy source makes the CNS critically dependent on an uninterrupted supply of oxygen as well as the proper functioning of enzymes that metabolize glucose. Substances can be toxic to the nervous system if they perturb neuronal metabolism. Without glucose, nerve cells usually begin to die within minutes. Despite its relatively small size, the energy demands of the brain require 14 percent of the heart's output and consumes about 18 percent of the oxygen absorbed by the lungs.

2.5.4. Limited Regenerative Ability

The nervous system has a combination of special features not found in other organ systems. It is composed of a variety of metabolically active neurons and supporting cell types that interact through a multitude of complex chemical mechanisms. Each cell type has its own functions and vulnerabilities. At the time of puberty, the system is fully developed and neurogenesis (the birth of new neurons from cell division of precursor cells called neuroblasts) ceases. This is in marked and significant contrast to almost all other tissues, where cell replacement is continual.

It is this loss of neurogenesis that limits the nervous system's ability to recover from damage and influences the plasticity of the system. Neurons are unable to regenerate following damage; therefore, they are no longer able to perform their normal functions. Toxic damage to the brain or spinal cord that results in cell loss is usually permanent.

If nerve cell loss is concentrated in one of the CNS's functional subsystems, the outcome could be debilitating; for example, a relatively small loss of neurons that use acetylcholine as their neurotransmitter may produce a profound disturbance of memory. A relatively minor insult concentrated in a subsystem that relies on dopamine as its neurotransmitter may drastically impair motor coordination. However, in response to injury, neurons are able to show considerable plasticity both during development and after maturation. Damage to the nervous system alters connectivity between the surviving neurons, permitting functional adjustments to occur to compensate for the damage. Such responsiveness may, in and of itself, have profound consequences for neurological, behavioral, and related body functions.

After damage to axons in the peripheral nerves, if the neurons are not damaged, the axons have the ability to regenerate and to attempt to reach their original target site. This is the basis, for example, of the eventual return of sensation and muscle control in a surgically reattached limb. Neurons in the CNS also have the ability to regenerate interrupted axons; however, they have a much more difficult task in reaching their original targets due to both the presence of scar tissue formed by proliferating glia and to the increased complexity of the connectivity in the CNS.

3. Methods for Assessing Human Neurotoxicity

3.1. Introduction

This chapter outlines and discusses current methods for detecting neurotoxicity in humans. In contrast to studies of neurotoxicity in animals where functional changes readily can be correlated with neuroanatomic and neurochemical alterations, there are ethical and technical barriers to the direct observation of neuronal damage in humans. Neurotoxicity in humans is most commonly measured by relatively noninvasive neurophysiologic and neurobehavioral methods that assess cognitive, affective, sensory, and motor function. The evaluation of human neurotoxicity and the relevance to risk assessment will be discussed within the context of clinical evaluation, epidemiologic/worksites studies, and human laboratory exposure studies.

3.2. Clinical Evaluation

Neurobehavioral assessment methods are used extensively in clinical neurology and neuropsychology to

evaluate patients suspected of having neurologic disease. An extensive array of examiner-administered and paper and pencil tasks are used to assess sensory, motor, cognitive, and affective functions and personality states/traits. Neurobehavioral data are synthesized with information from neurophysiologic studies, imaging techniques, medical history, etc., to derive a working diagnosis. Clinical diagnostic approaches have provided a rich conceptual framework for understanding the functions (and malfunctions) of the central and peripheral nervous systems and have formed the basis for the development of methods for measuring the behavioral expression of nervous system disorders. Human neurobehavioral toxicology has borrowed heavily from neurology and neuropsychology for concepts of nervous system impairment and functional assessment methods. Neurobehavioral toxicology has adopted the neurologic/neuropsychologic model, using adverse changes in behavioral function to assist in identifying chemically or drug-induced changes in nervous system processes.

3.2.1. Neurologic Evaluation

Assessment of neurobehavioral function by the clinical examination of a patient has long been used as a primary tool in neurologic diagnosis. The domains of cognitive function, motor function, sensation, reflexes, and cranial nerve function are a standard part of the clinical neurologic exam. Movement and gait, speech fluency and content, verbal memory, deep tendon reflexes, muscle strength, symmetry of movement and strength, ocular movements, sensory function (pressure, vibration, visual, auditory), motor coordination, and logical reasoning are only a few of the functions assessed by neurologists (Denny-Brown et al., 1982).

Trained and experienced clinicians gather these data by observation, verbal exchange, and direct examination. Neurologic exams are sensitive indicators of neurologic disease; the data have predictive value for the diagnosis of underlying nervous system disease, and the methods have been extensively validated against other diagnostic procedures (e.g., imaging, neurophysiologic testing), the course of the illness, and autopsy findings. Examination of the patient in a semistructured procedure can yield a wealth of information and insights about functional impairment and the underlying neuropathology.

3.2.2. Neuropsychological Testing

Neuropsychologists have developed quantitative methods to supplement clinical neurologic exam and laboratory data for the diagnosis of neurologic disease. Currently, two assessment batteries, the Luria-Nebraska and the Halstead-Reitan, and shorter versions are used in clinical practice. The batteries consist of subtests that quantify a wide spectrum of cognitive, motor, sensory, intellectual, affective, and personality functions. The pattern of relative performance on the subtests can be interpreted along with historical and medical data to suggest the presence or absence of neurologic disease and the possible anatomic location of any focal lesions or degeneration. Clinical interpretation of the data is enhanced by data on age-related population norms for many subtests and by the systematic observation of the patient during testing.

Several neurotoxicity assessment batteries use components of neuropsychological tests and have adapted and shortened analogs of some subtests. Tests derived from the Wechsler Adult Intelligence Scale—Revised (WAIS-R) have been used frequently to assess neurobehavioral impairment from chemical agents, and other abbreviated variations of neuropsychological battery subtests have been incorporated into neurobehavioral toxicity batteries and used in field and laboratory studies.

3.2.3. Applicability of Clinical Methods to Neurotoxicology Risk Assessment

Neurologic and neuropsychologic methods have long been employed to identify the adverse health effects of environmental workplace exposures. Peripheral neuropathies (with sensory and motor disturbances), encephalopathies, organic brain syndromes, extrapyramidal syndromes, demyelination, autonomic changes, and dementia are well-characterized consequences of acute and chronic exposure to chemical agents. The range of exposure conditions that produce clinical signs of neurotoxicity also has been defined by using these clinical methods. It is very important to make external/internal dose measurements in humans in order to determine the actual dose(s) which can cause unwanted effects.

Aspects of the clinical neurologic examination approach limit its usefulness for neurotoxicologic risk assessment. Information obtained from the neurologic exam is mostly qualitative and descriptive rather than quantitative. Estimates of the severity of functional impairment can be reliably

placed into only three or four categories (for example, mild, moderate, severe). Much of the assessment depends on the subjective judgment of the examiner; the magnitude and symmetry of muscle strength are often judged by having the patient push against the resistance of the examiner's hands. The datum is therefore the absolute and relative amount of muscle load sensed by the examiner in his or her arms.

Compared with other methods, the clinical neurologic exam may be less sensitive in detecting early neurotoxicity in peripheral sensory and motor nerves. While clinicians' judgments are equal in sensitivity to quantitative methods in assessing the amplitude of tremor, tremor frequency is poorly quantified by clinicians. Thus, important aspects of the clinical neurologic exam may be insufficiently quantified and lack sufficient sensitivity for detecting early neurobehavioral toxicity produced by environmental or workplace exposure conditions.

However, a neurologic evaluation of persons with documented neurobehavioral impairment would be helpful for identifying nonchemical causes, such as diabetes and cardiovascular insufficiency.

Administration of a neuropsychological battery also requires a trained technician, and interpretation requires a trained and experienced neuropsychologist. Depending on the capabilities of the patient, 2 to 4 hours may be needed to administer a full battery; 1 hour may be needed for the shorter screening versions. These practical considerations may limit the usefulness of neuropsychological assessment in large field studies of suspected neurotoxicity.

In addition to logistical problems in administration and interpretation, neuropsychological batteries and neurologic exams share two disadvantages with respect to neurotoxicity risk assessment. First, neurologic exams and neuropsychological test batteries are designed to confirm and classify functional problems in individuals selected on the basis of signs and symptoms identified by the patient, family, or other health professionals. Their usefulness in detecting low-base rate impairment in workers or the general population may be generally thought to be limited, decreasing the usefulness of clinical assessment approaches for epidemiologic risk assessment.

Second, neurologic exams and neuropsychologic test batteries were largely developed to assess the functional correlates of the most

common forms of nervous system dysfunction: brain trauma, focal lesions, and degenerative conditions. The clinical tests were primarily validated against these neurologic disease states. There has been insufficient research to demonstrate which tests designed to assess functional expression of neurologic disease are most useful in characterizing the modes of CNS impairment produced by chemical agents and drugs. More research is needed to validate the usefulness of neuropsychologic test methods in neurotoxicology.

3.3. Current Neurotoxicity Testing Methods

3.3.1. Neurobehavioral Methods

Chemical agents directly or indirectly affect a wide range of nervous system activities. Many of these chemical actions are expressed as alterations of behavior; Anger (1990a) lists 35 neurobehavioral effects of chemical exposure that illustrate alterations in sensory, motor, cognitive, affective, and personality function. Professional judgment is important in the interpretation of data from studies using neurobehavioral methods since some endpoints can be subjective.

Dozens of tests of neurobehavioral function have been proposed or used in field or laboratory studies to assess the neurotoxicity of chemical agents. Table 3-1 lists some frequently used tests of motor, sensory, cognitive, and affective neurobehavioral function.

TABLE 3-1.—NEUROBEHAVIORAL METHODS

Neurobehavioral function	Test
Sensation	Flicker Fusion. Lanthony (color vision).
Motor/Dexterity	Pursuit Aiming. Finger Tapping. Postural Stability. Reaction Time. Santa Ana Peg Board.
Cognition	Benton Visual Retention. Continuous Performance Task. Digit-Symbol. Digit Span. Dual Tasks. Paired-Associate. Symbol-Digit Task. Wechsler Adult Intelligence Scale—Revised® (Components).

TABLE 3-1.—NEUROBEHAVIORAL METHODS—Continued

Neurobehavioral function	Test
Affect	Wechsler Memory Scale.® Profile of Mood States® (POMS).

In contrast to the individual focus in clinical evaluation, neurobehavioral tests primarily have been used to evaluate differences between groups, comparing unexposed groups with persons environmentally or occupationally exposed to a suspected neurotoxic agent. An ideal evaluation of groups for quantitative evidence of chemically induced neurobehavioral impairment would involve the assessment of a wide variety of functions, but testing all possible neurobehavioral functions that might be affected in a group of exposed workers, for example, would be impossible. Therefore, a testing strategy has been to use limited number tests that sample representative neurobehavioral functional domains such as dexterity, visual memory, and reaction time.

3.3.1.1. Test batteries.

Many field and laboratory studies have selected neurobehavioral methods according to available information about the spectrum of effects of the suspected neurotoxic agent(s). This focused strategy is useful for answering specific questions about known neurotoxins. To identify unspecified neurotoxic effects in groups of workers or to characterize the effects of less well-studied chemicals or mixtures of chemicals, several tests that sample a representative range of functional domains have been grouped into test batteries. The advantage of a standardized battery is that data from different study populations and chemical classes can be compared, and similarities in effects observed (Johnson, 1987). Standardized batteries can be categorized into investigator-administered and computer-administered types.

3.3.1.2. Investigator-administered test batteries.

The WHO-recommended Neurobehavioral Core Test Battery (NCTB) (Johnson, 1987), the Finnish Institute of Occupational Health (FIOH) (Hanninen, 1990), and the Pittsburgh Occupational Exposures Test Battery (POET) (Ryan et al., 1987) are three commonly used batteries. The NCTB is frequently used in field studies worldwide and can be fit inside a

medium-sized suitcase for transport. The NCTB consists of the following tests: simple reaction time task, digit-symbol coding task, timed motor coordination test (Santa Ana pegboard), digit span memory test, Benton Visual Retention test, pursuit aiming test, and the Profile of Mood States (POMS). Based on factor-analytic studies (Hooisma et al., 1990), these tests are believed to measure the functional domains of immediate memory, attention, dexterity/hand-eye coordination, reaction time, and mood. Long-term memory, verbal and language functions, auditory sensation, judgment, and so forth are not assessed.

3.3.1.3. Computerized test batteries.

Computerized tests and batteries have been developed for field and laboratory use. The Neurobehavioral Evaluation System (NES) (Baker et al., 1985), MicroTox (Eckerman et al., 1985), the SPES (Iregren et al., 1985), and the NCTR Operant Battery (Paule et al., 1990) are computerized systems developed for neurotoxicity assessment. Current versions of the NES, for example, consist of about 15 different neurobehavioral tests, and the battery has been used in epidemiologic studies of groups exposed to solvent, pesticide, and mercury, and in laboratory studies of NO₂, ethanol, and toluene (Letz, 1990).

Although many computerized tests appear to tap similar neurobehavioral domains as noncomputerized batteries, the visual mode of presentation, the manual mode of response, and the emphasis on speed of responding are believed to have led to significant differences in results obtained from computerized versus noncomputerized forms of similar tests. Attempts to clarify the differences between computerized and noncomputerized test batteries have met with difficulty. Although some tests are similar in each type of battery, size and duration of stimuli, presentation and response modality, number of trials, and scoring vary arbitrarily, preventing direct comparison. An example is the digit-symbol test on the NCTB and the symbol-digit test on the NES. Although almost identical in task requirements, procedural and scoring differences prevent direct comparison of the results from these two tests.

Postural stability is an aspect of integrated sensory and motor function that increasingly is being evaluated in clinical, epidemiologic, and laboratory investigations of effects of pesticides and solvents, and would be useful for assessing therapeutic drug-induced movement disorders such as

neuroleptics. Measurement of postural stability requires a computer, special software, monitor, and a force transduction platform on which the subjects must stand (Dick et al., 1990). Mechanical and capacitive field methods for assessing the amplitude and frequency of tremor also are seeing more frequent use.

An advantage of computerized testing is the standardization of test presentation, but a disadvantage is the need for delicate, expensive computers and measurement devices that require transport for field studies. Noncomputerized test batteries may be less costly to purchase and easier to transport, enhancing their desirability in field studies, but test administrators require training and small differences in test administration may affect the data.

3.3.2. Neurophysiologic Methods

With improvements in the capabilities and size of equipment, quantitative neurophysiologic measurement of sensory and motor function will be increasingly useful in human neurotoxicity evaluations. A major advantage of these methods for risk assessment is that they can be assessed in both human and animal subjects and the data can be interpreted in an homologous manner.

Electromyographic responses (EMG) and nerve conduction velocity (NCV) have been used in the assessment of peripheral nerve neurotoxicity. Some techniques require that needle electrodes be placed beneath the skin for stimulation and recording and are therefore somewhat uncomfortable for the subject. However, the methods are quantitative, provide multiple endpoints of PNS function, and have clinical relevance.

The adverse effects of solvents, pesticides, and metals have been identified with EMG/NCV neurophysiologic measures. Although not reduced as a function of duration of employment, maximum nerve conduction velocity (MCV) has been reported to vary systematically with cumulative exposure to carbon disulfide (Johnson et al., 1983), suggesting that this measure may be particularly valuable for quantitative risk assessment of some types of peripheral motor nerve toxicity.

Noninvasive neurophysiologic test methods used in neurotoxicity evaluations include the electroencephalogram (EEG), visually evoked response (VER), somatosensory evoked potential (SEP), and the brainstem auditory evoked response (BAER). The EEG is the summed electrical activity of neurons measured

with scalp electrodes; voltage and frequency are primary measures. Evoked methods employ specific eliciting stimuli applied to the sense organs to measure nervous system electrical response. Visual patterns, sounds, and cutaneous stimuli are presented to the subject, and "evoked" voltage changes in the nervous system are measured with skin electrodes.

While EEGs were developed as a tool in the neurologic diagnosis of seizure disorders and other brain diseases, dose-related EEG changes in chemically exposed (especially solvents and styrene) individuals have been noted (Seppalainen and Harkonen, 1976). EEG measurement requires large recording devices that can be used in the laboratory or clinic, but are difficult to use in field studies. However, compact computerized recording equipment has been developed, and automated spectral analyses of EEGs have recently been applied to neurotoxicity evaluation (Piikivi and Tolonen, 1989).

In contrast to EEGs, evoked response technology is improving, and equipment, while expensive, is becoming more portable. VERs have been used to detect the sensory toxicity of solvents and carbon monoxide in human subjects, and a relationship has been suggested between BAER and blood lead levels in children exposed to lead-containing dust in the environment (Otto and Hudnell, 1990). Evoked potentials also may be conditioned, allowing the use of sensory methods to investigate associative processes.

Dose-response functions have been found with evoked methods. A curvilinear relationship was found between BAER and blood lead concentrations in children (Otto and Hudnell, 1990), and a biphasic function described visual evoked potential (VEP) latency and visual contrast sensitivity and perchloroethylene exposure concentration in a laboratory study (Altmann et al., 1991). In the latter study, the direction of the response was jointly dependent on dose and stimulus parameters. In addition, changes over time in the effect of the solvent on VEP were dose and stimulus parameter dependent.

Two important methodologic considerations are illustrated by BAER and VEP data. One is that low concentrations of some chemical agents may produce effects (shorter latencies in these examples) that could be inaccurately interpreted as facilitation rather than impairment. Changes in neuronal latencies in either direction could be a result of a neurotoxic process. The second is that the detection of neurotoxic effects is dependent on

dose-time-testing parameter interactions. A thorough understanding of the effects of testing parameters on the dose-response relationship and the time course of chemical effect will be necessary for interpreting neurotoxicity studies.

The development of neurophysiologic methods, such as evoked and conditioned potentials, for neurotoxicity risk assessment should be encouraged. These methods provide relatively unambiguous quantitative data on sensory function that may have clear implications for health, are influenced by fewer extraneous variables than are self-report and neurobehavioral performance tests, and allow relatively direct extrapolation of effects between animals and humans.

3.3.3. Neurochemical Methods

One of the major difficulties in risk assessment is estimating exposure parameters and the dose or body burden actually absorbed by the individual. In epidemiologic studies, the actual absorption and bioavailability of a chemical from an exposure are frequently unknown.

Measurement of chemical concentrations in biologic fluids or tissues is one way to measure more precisely the concentration at the site(s) of toxic effect. In epidemiologic studies, this has been possible only for chronic exposure and for acute exposure to chemicals with long biologic half-lives in the body, such as lead, other metals, and bromides. Blood lead levels show correlations with neurobehavioral impairment, but blood lead levels are representative correlates of toxicity only for relatively acute doses. In children, for example, the majority of lead-related impairment is the result of chronic, rather than acute, absorption. The cumulative amount of lead sequestered in tissues (such as deciduous teeth) may be a more representative indicator of the area under the time-concentration curve.

For chemicals with half-lives in the body too short for estimating absorbed dose, the biochemical products from the chemical or from the physiologic effects of the chemical may serve as an index of exposure. Serum enzyme concentrations (cholinesterase) and esterases in other tissues (lymphocyte target esterase) have been employed in field studies to detect pesticide exposure, while vanillylmandelic acid (product of catecholamine neurotransmitter biotransformation) and erythrocyte protoporphyrin concentrations have been used with varying success in differentiating between lead-exposed and control

workers. The addition of similar "exposure biomarker" measures to laboratory studies may allow the development of quantitative estimates of absorbed dose under various exposure conditions.

The measurement of metabolic products of neurotoxic agents may be extremely useful in risk assessment; an example comes from cancer risk assessment. Human data from the early 1970s on saturation of microsomal methylene chloride biotransformation to carbon monoxide (Stewart et al., 1972), along with subsequent animal carcinogenesis data garnered in the 1980s, provided a quantitative basis for a physiologically based pharmacokinetic model of methylene chloride cancer risk assessment (Andersen et al., 1991). The information on human CO pathway kinetics provided the homologous key that allowed extrapolation of risk from animals to humans on a comparative physiologic basis rather than using default assumptions.

3.3.4. Imaging Techniques

A number of recently developed computerized imaging techniques for evaluating brain activity and cerebral/peripheral blood flow have added valuable information to the neurologic diagnostic process. These imaging methods include thermography, positron emission tomography, passive neuromagnetic imaging (magnetoencephalography), magnetic resonance imaging, magnetic resonance spectroscopy, computerized tomography, doppler ultrasonography, and computerized EEG recording/analysis (brain electrical activity mapping). The research application of these invasive and noninvasive quantitative methods has primarily been in neurology, schizophrenia research, drug abuse, AIDS research and toxic encephalopathy (Hagstadius et al., 1989). Although the equipment for brain imaging is expensive and not portable, neuroimaging techniques promise to be valuable clinical and laboratory research tools in human neurotoxicology.

3.3.5. Neuropathologic Methods

Neuropathologic examination of nervous system tissue has been used to confirm data from clinical testing and to contribute to the understanding of mechanisms of action of neurotoxicity. Peripheral nerve biopsies have confirmed chemically induced peripheral neuropathies and evaluated rates of recovery (Fullerton, 1969). Postmortem examination of nervous tissue also has elucidated the neuropathologic effects of carbon

disulfide, clioquinol, and doxorubicin (Spencer and Schaumburg, 1980).

3.3.6. Self-Report Assessment Methods

Self-report measures relevant to neurotoxicity risk assessment consist of histories of symptoms, events, behaviors, and environmental conditions. Information is obtained by face-to-face interviews, structured interviews (often conducted for diagnostic purposes), medical histories, questionnaires, and survey instruments.

Self-report instruments are the only means for measuring some symptoms and all interoceptive states, such as pain and nausea. Self-reports also are used to obtain information on behaviors and events (e.g., exposure conditions) especially when practical, legal, or ethical limitations prevent direct observation.

Subjective symptoms elucidated from self-report instruments are responsive to dose. Hanninen et al. (1979) found that subjective symptoms were positively correlated with blood lead levels in exposed workers. Subjective pain estimations are correlated with dose and type of centrally and peripherally acting analgesics, and anxiety scores on a variety of scales are responsive to the size of the anxiolytic dose.

Symptom checklists are used in epidemiologic research to identify the pattern of subjective complaints, which can be used to guide the selection of objective assessment methods. The distribution of symptoms can be correlated with indices of exposure to determine if particular symptoms are more prevalent in exposed persons (Sjogren et al., 1990).

Self-report data are notable for biases that may influence them; these biases are well known in epidemiology, clinical practice, and social science. Even in the most superficial of questions, respondents may consciously or unknowingly bias the answer to fit what they believe to be the examiner's expectations. Details of objective events or subjective states are subject to alteration; recall and reporting of remembered occurrences may be biased to fit interpretations and expectations. The socioeconomic status, gender, and affiliation of the tester also have been identified as biasing variables. Bias occurs when information is requested about behaviors, beliefs, or feelings believed by the respondent to be socially undesirable or when reinforcement contingencies (e.g., litigation) strongly favor selective reporting.

Biases in self-report data can be reduced by making the questionnaire anonymous or highly confidential;

objective data can be used to validate self-reports. Ethnographic observations, objective measurement of behavior, biologic samples, and the observations of significant others are employed to validate self-report data. Consistent descriptions of events by several persons lend credence to the reliability of the report. Many clinical interviews and self-report assessment instruments include some mechanisms for detecting self-report bias, either by looking for endorsement of improbable behaviors, or by examining the consistency of information gathered in several ways or from several sources. Concordance among biologic indices, observations, and physical examinations increases the judged validity of self-reports.

3.3.6.1. Mood scales.

Changes in mood and emotionality can be consequences of neurotoxicity. For example, case reports have identified mood changes from exposure to mercury, lead, solvents, and organophosphate insecticides. The Taylor Manifest Anxiety Scale and the Profile of Mood States (POMS) are standardized self-report assessment instruments for which there is some evidence of sensitivity to chemical insult.

The POMS, a component of the Neurobehavioral Core Test Battery, is a self-report measure that asks respondents to use a 5-point scale to rate the magnitude of 65 subjective states, such as "tense," "relaxed," "hopeless," "guilty," etc., that they have experienced within the past week. The responses are scored according to six mood factors, and a Total Mood Disturbance Score also may be calculated. Liang et al. (1990) used the POMS to evaluate lead-exposed workers (mean blood lead concentration of 41 µg/dL) from a battery plant and a control group from a fabric-weaving manufacturer. Exposed workers were significantly higher on tension, depression, anger, fatigue, and confusion scales.

Mood scales were developed to aid in assessment of psychological disorders, such as depression, and to track treatment response. In addition, mood is modulated by metabolic and endocrine variables in health and disease and can change rapidly in response to interpersonal, workplace, and environmental events. The large number of nonchemical variables and the lability of mood make inclusion of carefully selected controls essential in using affect as an endpoint in neurotoxicity research.

The validity of mood scales may be limited to the specific populations in

which the validity studies were performed. As characterizations of internal states, the meaning of the descriptors in the POMS established for one culture may not be the same as the meaning of that concept or term in other cultures or in other language systems. There may be variations in interpretation of the terms by respondents across English-speaking subcultures, perhaps as a function of education or the size of the verbal community. While these differences may not impede a global clinical interpretation, the reduction in generalizability across study populations may be sufficient to decrease the usefulness of subjective scales in quantitative neurotoxicity risk assessment.

3.3.6.2. Personality scales.

The Minnesota Multiphasic Personality Inventory (MMPI), the Cattell 16 PF, and the Eysenck Personality Inventory have occasionally been used in neurotoxicity research. Exposed and nonexposed groups have differed on several scales derived from these standardized questionnaires. The diagnostic power of the MMPI, for example, is not in the individual scales but in the pattern of scores on the 10 clinical and 3 validity scales. Because interpretation of the MMPI requires a trained diagnostician with experience in the population of interest, it is less likely to be useful in quantitative neurotoxicity assessment.

3.4. Approaches to Neurotoxicity Assessment

3.4.1. Epidemiologic Studies

Epidemiology has been defined as "the study of the distributions and determinants of disease and injuries in human populations" (Mausner and Kramer, 1985). Knowing the frequency of illness in groups and the factors that influence the distribution is the tool of epidemiology that allows the evaluation of causal inference with the goal of prevention and cure of disease. Epidemiologic studies are a means of evaluating the effects of neurotoxic substances in human populations, but such studies are limited because they must be performed shortly after exposure if the effect is acute. Most often these effects are suspected to be a result of occupational exposures due to the increased opportunity for exposure to industrial and other chemicals.

3.4.1.1. Case reports.

The first type of human study undertaken is the case report or case series, which can identify cases of a

disease and are reported by clinicians or discerned through active or passive surveillance, usually in the workplace. For example, the neurological hazards of exposure to Kepone, dimethylaminopropionitrile, and methyl-n-butyl ketone were first reported as case studies by physicians who noted an unusual cluster of diseases in persons later found to have been exposed to these chemicals (Cone et al., 1987). However, case histories where exposure involved a single neurotoxic agent, though informative, are rare in the literature; for example, farmers are exposed to a wide variety of potentially neurotoxic pesticides. Careful case histories assist in identifying common risk factors, especially when the association between the exposure and disease is strong, the mode of action of the agent is biologically plausible, and clusters occur in a limited period of time.

Case reports are inexpensive compared with other types of epidemiologic studies and can be obtained more quickly than more complex studies. They provide little information about disease frequency or population at risk, but their importance has been clearly demonstrated, particularly in accidental poisoning or acute exposure to high levels of toxicant. They remain an important source of index cases of new diseases and for surveillance in occupational settings. These studies require confirmation by additional epidemiologic research employing other study design.

3.4.1.2. Cross-sectional studies.

In cross-sectional studies or surveys, both the disease and suspected risk factors are ascertained at the same time and the findings are useful in generating hypotheses. A group of people is interviewed, examined, and tested at a single point in time to ascertain a relationship between a disease and a neurotoxic exposure. This study design does not allow the investigator to determine whether the disease or the exposure came first, rendering it less useful in estimating risk. These studies are intermediate in cost and time required to complete compared with case reports and more complex analytical studies.

3.4.1.3. Case-control (retrospective) studies.

Last (1986) defines a case-control study as one that "starts with the identification of persons with the disease (or other outcome variable) of interest, and a suitable control population (comparison, reference)

group of persons without the disease." He states that the relationship of an "attribute" to the disease is measured by comparing the diseased with the nondiseased with regard to how frequently the attribute is present in each of the groups. The cases are assembled from a population of persons with and without exposure and the comparison group is selected from the same population; the relative distribution of the potential risk factor (exposure) in both groups is evaluated by computing an odds ratio that serves as an estimate of the strength of the association between the disease and the potential risk factor. The statistical significance of the ratio is determined by calculating a p-value and is used to approximate relative risk.

The case-control approach to the study of potential neurotoxins in the environment has provided a great deal of information. In his recent text, Valciukas (1991) notes that the case-control approach is the strategy of choice when no other environmental or biological indicator of neurotoxic exposure is available. He further states: "Considering the fact that for the vast majority of neurotoxic chemical compounds, no objective biological indicators of exposure are available (or if they are, their half-life is too short to be of any practical value), the case-control paradigm is a widely accepted strategy for the assessment of toxic causation." The case-control study design, however, can be very susceptible to bias. The potential sources of bias are numerous and can be specific to a particular study, and will be discussed only briefly here. Many of these biases also can be present in cross-sectional studies. For example, recall bias or faulty recall of information by study subjects in a questionnaire-based study can distort the results of the study. Analysis of the case-comparison study design assumes that the selected cases are representative persons with the disease—either all cases with the disease or a representative sample of them have been ascertained. It further assumes that the control or comparison group is representative of the nondiseased population (or that the prevalence of the characteristic under study is the same in the control group as in general population). Failure to satisfy these assumptions may result in selection bias, but violation of assumptions does not necessarily invalidate the study results.

An additional source of bias in case-control studies is the presence of confounding variables, i.e., factors known to be associated with the exposure and causally related to the

disease under study. These must be controlled either in the design of the study by matching cases to controls on the basis of the confounding factor or in the analysis of the data by using statistical techniques such as stratification or regression. Matching requires time to identify an adequate number of potential controls to distinguish those with the proper characteristics, while statistical control of confounding requires a larger study.

The definition of exposure is critical in epidemiologic studies. In occupational settings, exposure assessment is based on the job assignment of the study subjects, but can be more precise if detailed company records allow the development of exposure profiles.

3.4.1.4. Prospective (cohort, followup) studies.

In a prospective study design, a healthy group of people is assembled and followed forward in time and observed for the development of disease. Such studies are invaluable for determining the time course for development of disease (e.g., followup studies performed in various cities on the effects of lead on child development). This approach allows the direct estimate of risks attributed to a particular exposure since disease incidence rates in the cohort are determined and allows the study of chronic effects of exposure. One major strength of the cohort design is that it allows the calculation of rates to determine the excess risk associated with an exposure. Also, biases are reduced by obtaining information before the disease develops. This approach, however, can be very time-consuming and costly.

In cohort studies information bias can be introduced when individuals provide distorted information about their health because they know their exposure status and may have been told of the expected health effects of the exposure under study.

A special type of cohort study is the retrospective cohort study in which the investigator goes back in time to select the study groups and traces them over time, often to the present. The studies usually involve specially exposed groups and have provided much assistance in estimating risks due to occupational exposures. Occupational retrospective cohort studies rely on company records of past and current employees that include information on the dates of employment, age at employment, date of departure, and whether diseased (or dead in the case of mortality studies). Workers can then be

classified by duration and degree of exposure. A retrospective cohort study was performed in which a cohort of 1,790 bricklayers and 2,601 men exposed to paint solvents was retrospectively identified and, if a disability pension had been awarded, the subjects were examined for evidence of presenile dementia. This study found a rate ratio of 3.4 for presenile dementia among the painters as compared with the bricklayers (Johnson, 1987).

3.4.2. Human Laboratory Exposure Studies

Neurotoxicity assessment has an advantage not afforded the evaluation of other toxic endpoints, such as cancer or reproductive toxicity, in that the effects of some chemicals are short in duration and reversible. Under certain circumstances, it is ethically possible to perform human laboratory exposure studies and obtain data relevant to the risk assessment process. Information from experimental human exposure studies has been used to set occupational exposure limits, mostly for organic solvents that can be inhaled.

Laboratory exposure studies have contributed to risk assessment and the setting of exposure limits for several solvents and other chemicals with acute reversible effects. These chemicals include methylene chloride, perchloroethylene, trichloroethylene, and p-xylene (Dick and Johnson, 1986).

Human exposure studies offer advantages over epidemiologic field studies. Combined with appropriate biological sampling (breath or blood), it is possible to calculate body concentrations, to examine toxicokinetics, and identify metabolites. Bioavailability, elimination, dose-related changes in metabolic pathways, individual variability, time course of effects, interactions between chemicals, interactions between chemical and environmental/biobehavioral factors (stressors, workload/respiratory rate) are some processes that can be evaluated in laboratory studies.

Other goals of laboratory studies include the indepth characterization of effects, the development of new assessment methods, and the examination of the sensitivity, specificity, and reliability of neurobehavioral assessment methods across chemical classes.

The laboratory is the most appropriate setting for the study of environmental and biobehavioral variables that affect the action of chemical agents. The effects of ambient temperature, task difficulty, the rate of ongoing behavior, conditioning variables, tolerance/

sensitization, sleep deprivation, motivation, etc., can be studied.

3.4.2.1. Methodologic aspects.

From a methodologic standpoint, human laboratory studies can be divided into two categories—between-subjects and within-subjects designs. In the former, the neurobehavioral performance of exposed volunteers is compared with that of nonexposed participants. In the latter, preexposure performance is compared with neurobehavioral function under the influence of the chemical or drug. Within-subjects designs have the advantage of requiring fewer participants, eliminating individual differences as a source of variability, and controlling for chronic mediating variables, such as caffeine use and educational achievement. A disadvantage of the within-subjects design is that neurobehavioral tests must be administered more than once. Practice on many neurobehavioral tests often leads to improved performance that may confound the effect of the chemical/drug. It is important to allow a sufficient number of test sessions in the preexposure phase of the study to allow performance on all tests to achieve a relatively stable baseline level.

3.4.2.2. Human subject selection factors.

Participants in laboratory exposure studies may be recruited from populations of persons already exposed to the chemical/drug or from naive populations. Although the use of exposed volunteers has ethical advantages, can militate against novelty effects, and allows evaluation of tolerance/sensitization, finding an accessible exposed population in reasonable proximity to the laboratory is difficult. Naive participants are more easily recruited, but may differ significantly in important characteristics from a representative sample of exposed persons. Naive volunteers are often younger, healthier, and better educated than the populations exposed environmentally, in the workplace, or pharmacotherapeutically. For example, phase I drug trial data from relatively young and healthy volunteers may not adequately predict the incidence of neurotoxic side effects in older persons with chronic health problems.

3.4.2.3. Exposure conditions and chemical classes.

Compared with workplace and environmental exposures, laboratory exposure conditions can be controlled more precisely, but exposure periods are much shorter. Generally only one or two relatively pure chemicals are studied for

several hours while the population of interest may be exposed to multiple chemicals containing impurities for months or years. Laboratory studies are therefore better at identifying and characterizing effects with acute onset and the selective effects of pure agents.

Most laboratory studies of neurobehavioral function have employed individual solvents, combinations of two solvents, or very low concentrations of chemicals released from household and office materials (volatile organic compounds). This selection is primarily because solvent effects are reversible, because there are wide margins of safety for acute effects of solvents, because solvents can be administered via inhalation methods that allow calculation of body concentrations by breath sampling methods that do not require needle sticks, because over 1 million workers may have occupational solvent exposure, and because of the extensive use of solvents in household products. Chemicals studied in the laboratory over the past 40 years have included ozone, NO₂, CO, styrene, lead, anesthetic gases, pesticides, irritants, chlorofluorocarbon compounds, and propylene glycol dinitrite. Caffeine, diazepam, and ethanol have been used in laboratory studies as positive control substances.

3.4.2.4. Test methods.

Neurobehavioral test methods may be selected according to several strategies. A test battery that examines multiple neurobehavioral functions may be more useful for screening and the initial characterization of acute effects. Selected neurobehavioral tests that measure a more limited number of functions in multiple ways may be more useful for elucidating mechanisms or validating specific effects.

3.4.2.5. Controls.

Both chemical and behavioral control procedures are valuable for examining the specificity of the effects. A concordant effect among different measures of the same neurobehavioral function (e.g., reaction time) and a lack of effect on some other measures of psychomotor function (e.g., untimed manual dexterity) would increase the confidence in a selective effect on motor speed and not on attention or on nonspecific motor function. Likewise, finding concordant effects among similar chemical or drug classes along with different effects from dissimilar classes would support the specificity of chemical effect. For example, finding that the effects of a solvent were similar to those of ethanol but not caffeine

would support the specificity of solvent effects on a given measure of neurotoxicity.

3.4.2.6. Ethical issues.

Most human exposure studies in the laboratory have been justified on the basis of data indicating that the chemical or drug exposure produces only temporary and reversible functional effects. The use of occupationally, environmentally, or therapeutically exposed populations as a source of participants also makes the risks from research exposure small relative to nonlaboratory sources of risk. Protection of human subjects is also provided by the informed consent process; the health risks (known and unknown) and benefits of the research are thoroughly explained to each participant, who may terminate participation in the study at any time.

Despite safeguards, several chemicals and drugs thought at the time of the exposure study to produce only temporary neurobehavioral effects are now (20 years later) suspected of being potential human carcinogens on the basis of animal and human data (e.g., methylene chloride, perchloroethylene). Other chemicals, however, are now thought to be less carcinogenic or otherwise less toxic in humans than once believed. Rapid advances in all areas of toxicology make it difficult to communicate, to potential subjects, reliable information about the likelihood of long-term, latent, or delayed adverse effects on health subsequent to the study. The communication of uncertainty about potential long-term effects to research participants is essential if human exposure studies are to be conducted ethically and are to continue their contributions to neurotoxicology and risk assessment.

3.5. Assessment of Developmental Neurotoxicity

3.5.1. Developmental Deficits

While adult neurotoxicology evaluates the effects of chemical exposure on relatively stable nervous system structure and function, developmental neurotoxicology addresses the special vulnerabilities of the young and the old. Neurobehavioral assessment of chemical neurotoxicity is complicated by having to measure functional impairment within a sequential progression of emergence, maturation, and gradual decline of nervous system capabilities. Methods in developmental neurotoxicity assessment must reflect the diversity of

neurobehavioral functions, from neonates to the elderly.

Exposure of pregnant women to alcohol, drugs of abuse, therapeutic drugs, nicotine, and environmental chemicals may result in the immediate or delayed appearance of neurobehavioral impairment in children (Kimmel, 1988; Nelson, 1991a). Postnatal exposure of children to chemical agents in the environment, such as lead, also may impair IQ and other indices of neurobehavioral function (Needleman et al., 1979). Neurotoxic effects may impair speech and language, attention, general intelligence, "state" regulation and responsiveness to external stimulation, learning and memory, sensory and motor skills, visuospatial processing, affect and temperament, and responsiveness to nonverbal social stimuli. Chemical neurotoxicity may be manifested as decreases in functional capabilities or delays in normative developmental progression.

Neurotoxic effects are not limited to direct exposure of the fetus or child to the chemical. Animal studies suggest that altered neurobehavioral development in offspring may result from exposure of males (Joffe and Soyka, 1981) and females to chemical substances prior to conception. In this case, altered postnatal development may reflect chemical influences on mechanisms of inheritance, copulatory behavior, nutritional status, hormonal status, or the uterine environment. In animals and humans, chemical exposure of parents may indirectly impair postnatal development through changes in milk composition, parenting behaviors, and other aspects of the environment.

In older adults the normal aging process alters the response to neurotoxicants. Both pharmacodynamic and pharmacokinetic changes may underlie altered sensitivities to the neurotoxic effects of drugs and chemicals. An example well known in geriatric medicine is the apparent increase in sensitivity of the elderly to the toxic effects of anxiolytics (Salzman, 1981). Decreases in biotransformation rate and renal elimination of parent drug and active metabolites, not related to disease processes, may partially account for the increased vulnerability (Friedel, 1978). Chronic disease states in older persons may result in decreased functional capabilities and increased vulnerability to neurotoxic effects. Chronic diseases also may prompt pharmacotherapy that may impair neurobehavioral function. Cardiovascular, psychopharmacologic, and antineoplastic medications may

result in patterns of neurobehavioral impairment not typically seen in younger individuals.

3.5.2. Methodologic Considerations

Standardized methods are being developed for pediatric neurotoxicity assessment. Neurobehavioral functions emerge during developmental phases from neonatal stage through secondary school, and nervous system insult may be reflected not only in impairment of emergent functions, but also as delays in the appearance of new functions. Both the severity and type of deficit are affected by the dose and duration of exposure (Nelson, 1991b), and different sensitivities to chemical effects may be exhibited at different stages of nervous system development. Early episodes of exposure may produce structural damage to the nervous system that may not be developmentally expressed in behavior for several months or years.

The selection of appropriate testing methods and conditions is more important when assessing children because of shorter attention spans and increased dependence on parental and environmental supports. In addition, because of the increasing complexity of functional capabilities during early development, only a few tests appropriate for infants can be validly readministered to older children. Given the complexity of these variables, the task of devising sensitive, reliable, and valid assessment instruments or batteries for pediatric populations will be challenging.

Assessment methods in older adults must be capable of distinguishing chemical and drug effects from the effects of aging processes and chronic disease states (Crook et al., 1983). Assessment methods must be valid and reliable with repeated administration across a significant portion of the lifespan, and take into consideration the time (days, months, or years) that may intervene between exposure/insult and the expression of neurotoxicity as functional impairment. Research on nonexposed populations to develop age-appropriate normative scores for neurobehavioral functions will be important for the interpretation of assessment instruments.

Environmental exposure to neurotoxic chemicals and drugs is correlated with socioeconomic and ethnic status. Assessment methods will therefore have to be adapted to diverse ethnic, cultural, and language groups. While gender differences in early development have been noted, differential responses of males and females to neurotoxicants have been less well explored and should receive attention.

3.6. Issues in Human Neurotoxicology Test Methods

3.6.1. Risk Assessment Criteria for Neurobehavioral Test Methods

The value of human neurobehavioral test methods for quantitative risk assessment is related to the number of the following criteria that can be met:

a. Demonstrate sensitivity to the kinds of neurobehavioral impairment produced by chemicals; that is, able to detect a difference between exposed and nonexposed populations in field studies or between exposure and nonexposure periods in human laboratory research or within exposed populations over time.

b. Show specificity for neurotoxic chemical effects and not be unduly responsive to a host of other nonchemical factors, and show specificity for the neurobehavioral function believed to be measured by the test method.

c. Demonstrate adequate reliability (consistency of measurement over time) and validity (concordance with other behavioral, physiologic, biochemical, or anatomic measures of neurotoxicity).

d. Show graded amounts of neurobehavioral change as a function of exposure parameter, absorbed dose, or body burden along some ordinal or continuous metric (dose response).

e. For representative classes or subclasses of CNS/PNS-active chemicals, identify single effects or patterns of impairment across several tests or functional domains that are reasonably consistent from study to study (structure-activity).

f. Be amenable to the development of a procedurally similar counterpart that can be used to assess homologous behaviors in animals.

g. Whenever it is relevant, care must be taken to insure to the extent possible that subjects are blind to the variate of interest (Benignus, 1993).

3.6.1.1. Sensitivity.

Individual neurobehavioral tests and test batteries have detected differences between exposed and nonexposed populations in epidemiologic studies and in laboratory studies. Effects have been detected by neurobehavioral methods at concentrations thought by other kinds of evaluation not to produce neurotoxicity. Workplace exposure limits to many chemicals have been set on the basis of neurobehavioral studies. While the overall sensitivity of neurobehavioral methods is sufficient to be useful in neurotoxicology risk assessment, some methods are notably insensitive across several chemical classes while the sensitivity of other neurobehavioral tests varies according

to the spectrum of neurotoxic effects of the chemical or drug.

Sensitivity is sometimes negatively correlated with reliability; selecting for tests that show little change over time may also select for tests that are not sensitive to neurotoxic insult.

Having more control over the testing environment and using a repeated measures design may decrease variability and increase statistical power, but these tactics may introduce other problems. There is some suggestion that experience in highly structured laboratory environments with explicit stimulus conditions may reduce the sensitivity of humans and animals to the effects of drugs and chemicals, and the sensitivity of neurobehavioral measures to impairment by a chemical or drug may depend on neurobehavioral training history (Terrace, 1963; Brady and Barrett, 1986). Sensitivity may also be decreased if baseline behaviors are stable and well practiced or an escape/avoidance procedure is employed.

The systematic introduction of stimulus or response changes to induce transitional behaviors, such as in a transitional state or repeated learning paradigms, may be one way to retain the advantage of a stable baseline, have sufficient sensitivity, and avoid practice effects (Anger and Setzer, 1979).

3.6.1.2. Specificity.

There are two kinds of specificity in neurobehavioral assessment of chemical or drug neurotoxicity. Chemical specificity refers to the ability of a test to reflect chemical or drug effects and to be relatively resistant to the influence of nonchemical variables. The second type of specificity refers to the ability of a test method to measure changes in a single neurobehavioral function (e.g., dexterity) or a restricted number of functions, rather than a broad range of functions (attention, reasoning, dexterity, and vision).

The neurobehavioral expression of neurotoxic chemical or drug effects is a function of the joint interaction of ongoing nervous system processes with the chemical substance and with biopsychosocial variables that also influence nervous system activity. In laboratory exposure studies numerous environmental, behavioral, and biologic variables can influence the type or magnitude of neurotoxic effects of chemical agents and drugs (MacPhail, 1990). These variables include ambient temperature, physical workload, task difficulty, the social and tangible reward characteristics of the laboratory setting, redundancy of stimuli, the rate and form of the behavioral response, conditioning

factors, and the interoceptive stimulus properties of the chemicals.

The laboratory research participant's history and habits outside the laboratory also may affect chemical-neurobehavioral interactions by influencing the baseline level of performance on neurobehavioral tests or directly affecting the response of the CNS to the exposure. Age, gender, educational level, intellectual functioning, economic status, acute and chronic health conditions (including developmental or current neurologic conditions), alcohol/drug/tobacco effects or withdrawal, emotional status or significant life events, sleep deprivation, fatigue, and cultural factors are only a few of the variables that may affect performance in laboratory studies (Williamson, 1991; Cassitto et al., 1990).

The influence of these selection and biopsychosocial variables on the neurobehavioral effects of workplace chemicals is poorly understood, although their effects on drug-behavior interactions have been more thoroughly explored. Controlling or understanding chemical and nonchemical variables will be important for ensuring adequate specificity for risk assessment purposes.

3.6.1.3. Reliability and validity.

Reliability refers to the ability of a given test to produce closely similar results when administered more than once over a period of time or in similar populations. Reliability is meaningful only with respect to the measurement of functions that would not be expected to change significantly over the time period. Test-retest reliability coefficients are between 0.6 and 0.9 (Beaumont, 1990) for most of the tests in the NCTB. With notable exceptions, other neurobehavioral tests have similar reliabilities. Reliabilities in the 0.3 to 0.9 range are usually thought acceptable. As reliability decreases, measurement error is more likely to mask neurotoxic chemical effects.

The validity of a given neurotoxicity test relies on evidence that it adequately measures the domain of interest and is not highly correlated with tests that are believed to measure unrelated functions. These convergent and divergent aspects of validity are frequently divided into construct, content, and criterion subcategories. Construct validity refers to the ability of a given test to measure the intended function or construct (e.g., attention), content to how well the test measures the major aspects of the function, and criterion to how highly the test correlates with other tests of the same function or predicts neurotoxic impairment after similar insult.

Many neurobehavioral tests purport to measure the same or similar cognitive, sensory, or motor functions, but correlations between these tests under chemical exposure or control conditions can be disappointingly low. This is not surprising given the procedural differences that exist among neurobehavioral tests. Tests intended to measure the same function often have different presentation and response modalities (visual, verbal, manual), have differing numbers of trials or a different time limit, and have different methods for scoring the results. Many tests have such large procedural differences that direct comparison is difficult. Assessment of validity for neurobehavioral tests of specific constructs, such as attention, is further complicated in that sensory input, other cognitive processes, and motor responses are unavoidable contributors to the test result.

3.6.1.4. Dose response.

Dose in this discussion refers to the measurement of chemical or metabolite concentrations in the body and to estimations of exposure. Both exposure assessment and biologic concentrations should be measured whenever possible. Dose-response relationships have been observed both in field and laboratory studies. Two recent human solvent exposure studies used lower exposure concentration that resulted in mucosal membrane effects reported by subjects as odors or irritation (Dick et al., 1992; Hjelm et al., 1990). Neurobehavioral impairment was not detected in these studies. A review of over 50 organic solvent human exposure experiments found that neurobehavioral impairment generally occurred at mean concentrations higher than those associated with irritation, although there was often overlap among the irritant and impairment concentration ranges (Dick, 1983). Defining neurotoxic dose-response relationships in humans decreases the uncertainties of extrapolation from animal data and allows a more accurate risk assessment.

Recent human solvent exposure studies have employed low concentrations under which neurobehavioral impairment was not observed. Rather, these studies have primarily detected the effects of solvents on mucosal membranes reported by subjects as odors or irritation (Dick, unpublished observation). While these data may be relevant to setting workplace and environmental exposure limits, they can be expected to provide little information about the neurobehavioral impairment that occurs at higher concentrations. The

relationship between irritant/odor concentration-effect functions and neurobehavioral impairment concentration-effect functions is not known, but it is probably not linear. Dose-dependent mechanisms of toxic effect can be expected to complicate risk extrapolation across the dose-response range in humans.

A further complication in dose-response extrapolation is that low concentrations of chemicals may appear to improve performance as measured by neurobehavioral tests, while higher doses are more likely to impair performance. Improved performance does not necessarily indicate the absence of neurotoxicity; both increases and decreases in neurobehavioral performance may result from deleterious chemical interactions with neurons. Dose-response extrapolation is further complicated by the observation that facilitative or impairment effects within a given dosage range may occur at some parameters of the test stimulus or aspects of the response (response rate-dependent) but not at others (Altmann et al., 1991). Therefore, dose extrapolations are more difficult when there is uncertainty about the shape of the dose-response function (biphasic, linear, etc.) at the relevant test stimulus and response parameters.

The risk assessment process with animal data involves extrapolation from the effects of high doses in animals to predict the effects of chronic low-dose exposure in humans. With data from laboratory studies of humans in a risk assessment, however, the extrapolation is in the other direction, from very low-dose laboratory exposure to predict the effects of chronic exposure at higher (but still low) concentrations in the environment and workplace. Low- to high-dose extrapolation within the same species may require different assumptions and risk assessment procedures. Although high-dose human exposures have occurred in accidents, those data are primarily descriptive in nature and cannot easily be plugged into a quantitative risk extrapolation process. Low dose laboratory data may be combined with data from epidemiologic studies of persons exposed to higher concentrations.

3.6.1.5. Structure-activity.

Structure-activity relationships for well-known chemicals have largely been established by clinical methods (and animal studies) and verified by neurobehavioral and neurophysiologic testing. Although an area of active research, neurobehavioral testing of humans has not yet been able to identify reliable patterns of impairment among

chemical classes. This endeavor has been hampered by most laboratory research having been limited to the evaluation of low concentrations of solvents and a few other reversible toxicants and by the exposure uncertainties, biases, and confounding variables found in cross-sectional or cohort field studies.

3.6.2. Other Considerations in Risk Assessment

3.6.2.1. Mechanisms of action

Uncovering behavioral and neurophysiologic mechanisms of action is a potential contribution of human laboratory exposure studies to neurotoxicity risk assessment. For example, Stewart et al. (1972) demonstrated that methylene chloride was metabolized to carbon monoxide in humans, and further studies (Putz et al., 1979) found that CO production could account for some of the neurobehavioral impairment observed with that chemical. Recent human laboratory studies of solvents employed low concentrations that produced mucosal irritation and strong odor, but little neurobehavioral impairment (Dick, unpublished observation). The mechanisms of action that produce mucosal irritation and the neurotoxic mechanisms that are expressed in neurobehavioral impairment may be quite different. Data on mucosal irritation and odor may therefore provide limited information for a neurotoxicity risk assessment.

3.6.2.2. Exposure duration

A criticism of extrapolation from animal studies to human exposure conditions is that the effects of short-term exposure (months to 1-2 years) in animals may not accurately predict the effects of chronic exposure (>10 years) in humans. Laboratory studies rarely expose human subjects to solvents for more than 4-6 hours per day for 2-5 days while environmental and workplace exposures of concern involve 6-8 hours of exposure per day for years. The uncertainties of extrapolating from relatively acute exposures to predict the risks from chronic exposure will not be eliminated by using human laboratory exposure data in risk assessment.

3.6.2.3. Time-dependent effects

The acute exposures that are possible in human laboratory studies may provide little information on chronic time-dependent neurobehavioral effects. The effects of initial exposure may remain the same, decrease (tolerance), or increase (sensitization) with continued or repeated exposure to the chemical. All effects will not change in

unison; tolerance and sensitization may be observed simultaneously on different measures of neurobehavioral function. The multiple toxicodynamic effects of chemical exposure (neurobehavioral and other) seem to follow individual time courses suggestive of multiple mechanisms of action. In addition, the processes of tolerance and sensitization can be influenced by testing conditions and the nature of the behavioral task.

One also must be concerned about latent effects that do not appear for some time after a brief exposure and "silent" cumulative neurotoxic effects that are not observable in acute human studies. Latent and silent effects not only bring up the possibility of unknown risks for human subjects, but also make more difficult the extrapolation of chronic neurotoxic risks on the basis of acute exposures.

Therefore, the acute exposure conditions possible in human laboratory studies may provide us with very limited information about the long-term effects of chronic exposure.

3.6.2.4. Multiple exposures

In the environment and the workplace, persons are seldom exposed to only a single chemical. Rather, they are most often exposed to complex mixtures of chemicals, the relative concentrations of which may vary over time. For example, one farmer had more than 50 different chemical products (pesticides, herbicides, solvents, metals, gases) with nervous system effects that he used, prepared, or stored in his work shed. Chemicals used in industrial processes may also contain impurities or contaminants that may produce neurotoxic effects or alter the neurotoxicity of the more abundant chemical species. Chemical mixtures may have additive or potentiating effects not predictable from studies of single chemicals (Strong and Garruto, 1991). Human laboratory exposure studies traditionally have employed one highly purified chemical or combinations of two chemicals (usually solvents) and thus may produce a spectrum of neurotoxic effects different from environmental and occupational exposures.

Recently volatile organic compounds (VOCs) have been used in human exposure studies (Otto and Hudnell, 1991). VOCs consist of multiple volatile compounds administered at concentrations commonly found in indoor air from emissions by laminates, carpet, plastics, and other building and decorating materials. Although VOCs are thought to produce primarily mucosal irritation and odors, reports of "sick building syndrome" and

individual sensitivity to indoor air contaminants suggest that other neurobehavioral mechanisms also may be operating.

3.6.2.5. Generalizability and individual differences

The results of field studies and laboratory exposure studies are most valuable when they can be extrapolated to the general population. Studies conducted in male workers or in young, healthy volunteers may have limited applicability to women or to people in other age ranges. It therefore is important to conduct studies that include males and females of different ages and ethnic heritage. Culture-sensitive neurobehavioral test methods are being developed and validated in the United States and other countries.

While it is important to increase the generalizability of results, it is equally important to know when results cannot be generalized. Studies should be specifically directed toward identifying subsets of individuals who are more or less sensitive to neurotoxic insult or differ in mode of expression. There are many examples of individual differences that alter response to chemicals and drugs: phenylketonurics are more sensitive to dietary tyramine and persons with variants of plasma pseudocholinesterase are more affected by some neuromuscular blocking agents.

3.6.2.6. Veracity of neurobehavioral test results

In most epidemiologic and human laboratory studies, research volunteers are highly motivated to perform well on tests of neurobehavioral function. Under voluntary conditions, actual neurobehavioral performance may serve as a reasonable index of nervous system capabilities. Some studies, however, are conducted in response to complaints of symptoms thought to be related to workplace, environmental, or therapeutic exposure to chemicals and drugs. The performance of research participants with symptoms and complaints may be significantly affected (consciously or unconsciously) by monetary rewards, emotional relief, or social gains from the validation of their complaints. Under these conditions, performance may or may not accurately reflect the capabilities of the nervous system and may lead to inaccurate conclusions about the magnitude of nervous system dysfunction or about putative chemical or drug etiologies.

In addition to suboptimal performance engendered by potential reinforcers or rewards, research participants involved in disputes over suspected neurotoxic exposures or in

litigation for monetary damages are likely to be experiencing significant emotional and behavioral reactions from situational sources that can alter the outcome of neurobehavioral assessment. Anxiety, depression, sleep disturbances, fatigue, worry, obsessive thoughts, and distractibility may contribute to less than optimal performance on motor and cognitive neurobehavioral tasks, especially where speed and sustained concentration are important. Under stressful conditions, it may be extremely difficult to differentiate between neurotoxic and situational sources of observed functional impairment. Functional neurobehavioral tests are not well equipped to distinguish between impairment from neurotoxicity and from nonchemical variables. The use of functional tests in symptomatic populations requires great care in interpretation. The development of validity scales and other control procedures for assessing nonchemical influences on performance is greatly needed.

3.6.3. Cross-Species Extrapolation

Many neurobehavioral tests were developed according to constructs of human cognitive processes. The diverse measures of cognitive, sensory, and motor performance in humans are therefore not easily compared with neurobehavioral function in animals. While it may be possible to conceptually relate some animal and human neurobehavioral tests (e.g., grip strength or signal detection), many procedural differences prevent direct comparison between species.

A more direct extrapolation from animals to man might be possible if the tests were chosen on the basis of procedural similarity rather than on a conceptual basis (Anger, 1991). Stebbins and colleagues (1975) were successful in developing homologous procedures in nonhuman primates for the psychophysical evaluation of antibiotic ototoxicity. Efforts to develop comparable tests of memory and other neurobehavioral functions in animals and humans are under way (Stanton and Spear, 1990; Paule et al., 1990), and such efforts may aid in cross-species extrapolation. Other procedurally defined methods, such as Pavlovian conditioning (Solomon and Pendlebury, 1988), operant conditioning (Cory-Slechta, 1990), signal detection, and psychophysical scaling techniques (Stebbins and Coombs, 1975), could also be used to facilitate interspecies risk extrapolation. Deriving comparable neurobehavioral assessment methods in animals and humans that will allow a more straightforward extrapolation

across species is of paramount importance for neurotoxicity risk assessment.

4. Methods to Assess Animal Neurotoxicity

4.1. Introduction

4.1.1. Role of Animal Models

Determining the risk posed to human health from chemicals requires information about the potential toxicological hazards and the expected levels of exposure. Some toxicological data can be derived directly from humans. Sources of such information include accidental exposures to industrial chemicals, cases of food-related poisoning, epidemiological studies, as well as clinical investigations. While human data are available from clinical trials for therapeutics and they provide the most direct means of determining effects of potentially toxic substances, for other categories of substances, it is generally difficult, expensive, and, in some cases, unethical to develop this type of information. Quite often, the nature and extent of available human toxicological data are too incomplete to serve as the basis for an adequate assessment of potential health hazards. Furthermore, for a majority of chemical substances human toxicological data are simply not available. Consequently, for most toxicological assessments it is necessary to rely on information derived from animal models, usually rats or mice. One of the primary functions of animal studies is to predict human toxicity prior to human exposure. In some cases, species phylogenetically more similar to human, such as monkeys or baboons, are used in neurotoxicological studies.

Biologically, animals resemble humans in many ways and can serve as adequate models for toxicity studies (Russell, 1991). This is particularly true with regard to the assessment of adverse effects to the nervous system, whereby animal models provide a variety of useful information that helps minimize exposure of humans to the risk of neurotoxicity. There are many approaches to testing for neurotoxicity, including whole animal (in vivo) testing and tissue/cell culture (in vitro) testing.

At present, in vivo animal studies currently serve as the principal approach to detect and characterize neurotoxic hazard and to help identify factors affecting susceptibility to neurotoxicity. Data from animal studies are used to supplement or clarify limited information obtained from clinical or epidemiological studies in humans, as well as provide specific types of information not readily

obtainable from humans due to ethical considerations. Frequently, results from animal studies are used to guide the design of toxicological studies in humans.

In vitro tests have been proposed as a means of complementing whole animal tests, which could ultimately reduce the number of animals used in routine toxicity testing. It also has been proposed that in vitro testing, when properly developed, may be less time-consuming and more cost-effective than in vivo assessments (Goldberg and Frazier, 1989; Atterwill and Walum, 1989). By understanding the biological structures or functions affected by toxic substances in vitro, it also may be possible to predict neurotoxicological effects in the whole animal. An added advantage of in vitro testing is the growing availability of human cell lines that could be used for directly assessing potential neurotoxic effects on human tissue. The currently available strategies for in vitro testing have certain limitations, including the inability to model neurobehavioral effects such as loss of memory or sensory dysfunction or to evaluate effectively the influence of organ system interactions (e.g., neuronal, endocrinological, and immunological) on the development and expression of neurotoxicity.

In using animal models to predict neurotoxic risk in humans, it is important to understand that the biochemical and physiological mechanisms that underlie human biological processes, particularly those involving neurological and psychological functions, are very complex and are sometimes difficult, if not impossible, to model exactly in a lower species. While this caveat does not preclude extrapolating the results of animal studies to humans, it does highlight the importance of using valid animal models in well-designed experimental studies.

4.1.2. Validity of Animal Models

Whether animal tests or methods actually measure what they are intended to measure, whether the data from such tests can be obtained reliably, and whether such data can be logically extrapolated to humans are problems for most disciplines in toxicology. Various proposals have been made for the standardization and validation of methods used in neurotoxicological research. It is generally agreed that validation is an ongoing process that establishes the credibility of a test, building an increasing level of confidence in the effective utility of any model of evaluation. The credibility of a method, as it applies to testing, is

usually discussed within several different contexts, including construct validity, criterion validity, predictive validity, and detection accuracy.

Construct validity concerns the ability of a method to measure selectively a particular biological function and not other dimensions. Construct validity is frequently established empirically. For example, sensory dysfunction such as hearing loss is reported by humans exposed to some chemicals, and tests are designed to detect and quantify those changes. Such tests are designed to measure changes in auditory function, while other sensations are unaffected (Tilson, 1987; Moser, 1990).

Criterion validity refers to the ability of a method to measure a characteristic relative to some standard. For example, Horvath and Frantik (1973) noted that the significance of a test measurement as an index of an actual treatment effect should be validated relative to the effects of a defined reference substance or positive control. Furthermore, each specific test or type of effect may require an appropriate reference substance for which the given type of effect is a determining factor of the toxicity. Use of reference agents has obvious advantages in the assessment of unknown chemicals.

Predictive validity refers to the ability of a method to predict effects from an incomplete or partial data set. An animal model of neurotoxicity with good predictive validity would reliably predict neurotoxicity in humans, i.e., the animal to human extrapolation would be good. There are several examples in neurotoxicology where animal models have been developed based on neurotoxicological reports from humans. Presumably, the predictive validity of such models would enable detecting similar kinds of effects produced by uncharacterized chemicals having a similar mechanism of action.

It has been proposed (Tilson and Cabe, 1978) that the most logical approach to validate animal methods in neurotoxicology is to evaluate chemicals with and without known neurotoxicity in humans in tests designed for animals (predictive validity). By using such an approach, it is possible to generate a profile of effects characteristic of each type of neurotoxicant (criterion validity). This profile could then be used to assess the construct validity of various tests. That is, procedures assumed to measure the same neurobiological dimension should show similar effects; measures designed to detect changes in other functions should not be affected. This approach to test validation has been described as the

multitrait-multimethod process of validation (Campbell and Fiske, 1959).

Of particular importance in establishing the credibility of a method is the accuracy of detecting a treatment-related effect (Gad, 1989). Accuracy is a function of two interacting elements, specificity and sensitivity. Specificity is the ability of a test to respond positively only when the toxic endpoint of interest is present. Sensitivity is the ability to detect a change when present. This aspect depends on the inherent design of the procedure and experiment. Increasing the specificity of a test may reduce the possibility of classifying a chemical as neurotoxic when, in fact, it is not (false positive), but it may increase the probability of missing a true neurotoxicant (false negative). Increasing sensitivity of a test may reduce the possibility of false negatives, but may increase the probability of false positives.

4.1.3. Special Considerations in Animal Models

4.1.3.1. Susceptible populations.

Like most other measures of toxicological effect, neurotoxic endpoints are subject to a number of experimental variables that may affect susceptibility to the biological effects of toxicants. In this regard, genetic variation (Festing, 1991) is a particularly important issue in neurotoxicology. For example, most neurotoxicological assessments are carried out with only one or two species. This may pose problems, however, since species may differ in sensitivity to neurotoxicants. For example, nonhuman primates are more sensitive than rats (Boyce et al., 1984) or mice (Heikkila et al., 1984) to the neurodegenerative effects of MPTP, a byproduct in the illicit synthesis of a meperidine analog (Langston et al., 1983). In the assessment of delayed neuropathology produced by some cholinesterase inhibitors, it is well known that hens are much more sensitive than rodents (Cavanagh, 1954; Abou-Donia, 1981, 1983). In addition, rat strains also may be differentially sensitive to some neurotoxicants (Moser et al., 1991). Although it is preferred that more than one species be tested, the cost required for routine multispecies testing must be considered. Whenever possible, the choice of animal models should take into account differences in species with regard to pharmacodynamic, genetic composition and sensitivity to neurotoxic agents.

In addition to species, other factors such as gender of the test animal must be taken into consideration. Some toxic substances may have a greater

neurotoxicological effect in one gender (Squibb et al., 1981; Matthews et al., 1990). Thus, screening evaluations frequently require both male and female animals. Another important variable is the age of the animal (Veronesi et al., 1990). Whether a chemical produces neurotoxicity may depend on the maturational stage of the organism (Rodier, 1986). Most preliminary assessments are designed to provide information on adults, which have the greatest probability of being exposed. However, populations undergoing rapid maturation or aged individuals may be especially vulnerable to neurotoxic agents. Longitudinal studies that assess both genders at any stage of development address many of the problems associated with differentially sensitive populations.

4.1.3.2. Dosing scenario.

The dosing strategy used in experimental studies is an important variable in the development and expression of neurotoxicity (WHO, 1986). Some neurotoxicants can produce neurotoxicity following a single exposure, while others require repeated dosing. Repeated dosing represents the typical pattern of human exposure to many chemical substances. Significant differences in response may occur when an acutely toxic quantity of material is administered over different exposure periods. For some neurotoxicants the onset of neurotoxicity can occur immediately after dosing, while others may require time after exposure for the toxicity to develop. Effects of repeated exposure may result in a progressive alteration in nervous system function or structure, while latent or residual effects may be discovered only in association with age-related changes or after suitable environmental or pharmacological challenge (Zenick, 1983; MacPhail et al., 1983). To ensure adequate assessment of neurotoxicity, study designs should include multiple dosing regimens, e.g., repeated exposure, with appropriate dose-to-response intervals of testing. Conduct of neurotoxicological evaluations in studies utilizing excessively toxic doses should be avoided.

4.1.3.3. Other factors.

There are a number of other factors that should be considered in the design and interpretation of studies using animal models (WHO, 1986). Design factors include such issues as using properly trained personnel to conduct the studies, the use of appropriate numbers of animals per group to achieve reliable statistical significance, and controlling the time-of-day

variability. Time of testing relative to exposure is also important for assessing neurotoxic endpoints such as behavior, and experiments should be designed to generate a time course of effects, including recovery of function, if any. Housing is an important environmental design factor, because animals housed individually and animals housed in groups can respond differently to toxic agents. Temperature, as an experimental variable, may also affect the outcome of neurotoxicological studies. The responsiveness to some chemicals (e.g., triethyltin, methamphetamine) varies with ambient temperature (Dyer and Howell, 1982; Bowyer et al., 1992). Some neurobiological endpoints, such as sensory evoked potentials, can be influenced by the endogenous temperature of the animal (Dyer, 1987). Therefore, changes in body temperature, whether due to fluctuations in ambient temperature or to some chemically induced effect such as inhibition of sweating, can confound the interpretation of measures such as evoked responses unless proper controls are included in the experimental design.

Because a variety of other physiological changes can influence neuronal functions, it is important to recognize that chemical-related neurotoxicity could result from treatment-induced physiological changes, such as altered nutritional state (WHO, 1986). As part of a neurotoxicological profile, correlative measures, such as relative and absolute organ weights, food and water consumption, and body weight and weight gain, may be signs of physiological change associated with systemic toxicity and may be useful in determining the relative contribution of general toxicity.

4.1.3.4. Statistical considerations.

Experimental designs for neurotoxicological studies are frequently complex, with two or more major variables (e.g., gender, time of testing) varying in any single experiment. In addition, such studies typically generate varying types of data, including continuous, dichotomous, and rank-order data. Knowledge and experience in experimental design and statistical analyses are important. There are several key statistical concepts that should be understood in neurotoxicological studies (WHO, 1986; Gad, 1989). The power, or probability, of a study to detect a true effect is dependent on the size of the study group, the frequency of the outcome variable in the general population, and the magnitude of effect to be identified. Statistical evaluation of a treatment-

related effect involves the consideration of two factors or types of errors to be avoided. A Type I error refers to the attribution of an exposure-related neurotoxicological effect when none has occurred (false positive), while a Type II error refers to the failure to attribute an effect when an exposure-related effect has actually occurred (false negative). In general, the probability of a Type I error should not exceed 5 percent and the probability of a Type II error should not exceed 20 percent. Power is defined as one minus the probability of a Type II error.

Determination of power also requires knowledge of the difference in magnitude of outcome measures observed between exposed and control groups and the variability of the outcome measure among subjects. The sample size required to achieve a given level of statistical power increases as variability increases or the difference between groups decreases.

Continuous data (i.e., magnitude, rate, amplitude), if found to be normally distributed, can be analyzed with a general linear model using a grouping factor of dose and, if necessary, repeated measures across time. Post hoc comparisons between control and other treatment groups can be made following tests for overall significance. In the case of multiple endpoints within a series of evaluations, correction for multiple observations (e.g., Bonferroni's) might be necessary.

Descriptive data (categorical) and rank data can be analyzed using standard nonparametric techniques. In some cases, if it is believed that the data fit the linear model, the categorical data modeling procedure can be used for weighted least-squares estimation of parameters for a wide range of general linear models, including repeated measures analyses. The weighted least-squares approach to categorical and rank data allows computation of statistics for testing the significance of sources of variation as reflected by the model.

4.2. Tiered Testing in Neurotoxicology

The utility of tiered testing as an efficient and cost-effective approach to evaluate chemical toxicity, including neurotoxicity, has been recognized (NRC, 1975). Briefly, first-tier tests are designed to determine the presence or absence of neurotoxicity, while second-tier tests characterize the neurotoxic effect (NRC, 1992). There are at least two aspects of tiered testing, one involving the type of test used (Tilson, 1990a) and the other involving the dosing regimen (Goldberg and Frazier, 1989).

4.2.1. Type of Test

Tests designed to measure the presence or absence of an effect are usually different from those used to assess the degree of toxicity or the lowest exposure level required to produce an effect (Tilson, 1990a). Screening procedures are first-tier tests that typically permit the testing of many groups of animals. Such procedures may not require extensive resources and are usually simple to perform. However, these techniques may be labor intensive, provide subjective measures, yield semiquantitative data, and may not be as sensitive to subtle effects as those designed to characterize neurotoxic effects or second-tier tests. Specialized tests are usually more sensitive and employed in studies concerning mechanisms of action or the estimation of the lowest effective dose. Such testing procedures are usually referred to as secondary tests and may require special equipment and more extensive resources. Secondary tests are usually quantitative and yield graded or continuous data amenable to routine parametric statistical analyses.

Testing at the first tier is used to determine if a chemical might produce neurotoxicity following exposure, i.e., hazard detection. In this case, there may be little existing information concerning the neurotoxic potential of an agent. Examples of first-tier tests include functional observational batteries (FOB), including an evaluation of motor activity and routine neurohistopathology. For some chemicals or types of chemicals, there may be a specific interest in screening for a particular presumed mechanism of toxicity (e.g., inhibition of cholinesterase or neurotoxic esterase) or neurobiological response (e.g., a site-specific neuronal degeneration). In these cases, specific neurochemical or neuropathological endpoints can be used in conjunction with first-tier tests. It is desirable that tests selected for use in hazard detection provide a suitable level of sensitivity using the smallest number of animals necessary.

A decision to test at the next tier is based on data suggesting that an agent produces neurotoxicity. The information used to make a decision to test a chemical at the secondary level can come from a variety of sources, including neurotoxicological data already in the literature, structure-activity relationships, data from first-tier testing, or following reports of specific neurotoxic effects in humans exposed to the agent. Testing at the secondary level includes detailed neuropathological evaluation as well as specific behavioral

tests, e.g., procedures to assess learning and memory, or sensory function. Tests at the second tier usually measure the most sensitive endpoints of neurotoxicity, and are the most suitable for determining the no observable adverse effect level or benchmark dose. At this stage of testing, the use of a second species is considered to address the issue of cross-species extrapolation. At the present time, tiered testing approaches in neurotoxicology rely heavily on functional endpoints. It is possible that future testing protocols will employ a different strategy as more information concerning neurotoxic mechanisms of action become available and biologically based dose-response models are developed.

4.2.2. Dosing Regimen

Goldberg and Frazier (1989) have indicated that first-tier evaluations identify effects of substances following acute or repeated exposure over a wide range of doses. Measures are simple, focused on detection of effects, and results are used to help establish parameters for the second tier of testing. The subsequent stage(s) of tier testing are designed to characterize more fully the toxicity of repeated dosing. In this case, animals are exposed repeatedly or continuously to define the scope of toxicity, including latent or delayed effects, development of tolerance, and the reversibility of adverse effects. The subsequent stage(s) of testing also provide information about specific effects or study mechanisms of neurotoxicity. This tier uses methods appropriate to characterize the effects observed in the first tier of testing.

4.3. Endpoints of Neurotoxicity

4.3.1. Introduction

As applied to the safety assessment of chemical substances, neurotoxicity is any adverse change in the development, structure, or function of the central and peripheral nervous system following exposure to a chemical agent (Tilson, 1990b). Measures used in animal neurotoxicological studies are designed to assess these changes. Neurotoxicity can be described at multiple levels of organization, including chemical, anatomical, physiological, or behavioral levels. At the chemical level, for example, a neurotoxic substance might inhibit protein or transmitter synthesis, alter the flow of ions across cellular membranes, or prevent release of neurotransmitter from nerve terminals. Anatomical changes may include destruction of the neuron, axon, or myelin sheath. At the physiological level, neuronal responsiveness to

stimulation might be enhanced by a decrease of inhibitory thresholds in the nervous system. Chemical-induced effects at the behavioral level can involve a variety of alterations in motor, sensory, or cognitive function, including increases or decreases in frequency or accuracy of responding. Although behavioral and neurophysiological endpoints may be very sensitive indicators of neurotoxicity, they can be influenced by other factors. The uncertainties associated with data from functional endpoints can be reduced if interpreted within the context of other neurotoxicological measures (neurochemical or neuropathological) and systemic toxicity endpoints, particularly if such measures are taken concurrently. Behavioral effects that reflect an indirect effect secondary to systemic toxicities may also be considered adverse. Table 4-1 provides examples of potential endpoints of neurotoxicity at the behavioral, physiological, chemical, and structural levels.

TABLE 4-1.—EXAMPLES OF POTENTIAL ENDPOINTS OF NEUROTOXICITY

Behavioral Endpoints:	
Absence or altered occurrence, magnitude, or latency of sensorimotor reflex	
Altered magnitude of neurological measurements, such as grip strength or hindlimb splay	
Increases or decreases in motor activity	
Changes in rate or temporal patterning of schedule-controlled behavior	
Changes in motor coordination, weakness, paralysis, abnormal movement or posture, tremor, ongoing performance	
Changes in touch, sight, sound, taste, or smell sensations	
Changes in learning and memory	
Occurrence of seizures	
Altered temporal development of behaviors or reflex responses	
Autonomic signs	
Neurophysiological Endpoints:	
Change in velocity, amplitude, or refractory period of nerve conduction	
Change in latency or amplitude of sensory-evoked potential	
Change in EEG pattern or power spectrum	
Neurochemical Endpoints:	
Alterations in synthesis, release, uptake, degradation of neurotransmitters	
Alterations in second messenger associated signal transduction	
Alterations in membrane-bound enzymes regulating neuronal activity	
Decreases in brain AChE	
Inhibition of NTE	
Altered developmental patterns of neurochemical systems	
Altered proteins (c fos, substance P)	
Structural Endpoints:	

TABLE 4-1.—EXAMPLES OF POTENTIAL ENDPOINTS OF NEUROTOXICITY—Continued

Accumulation, proliferation, or rearrangement of structural elements
Breakdown of cells
GFAP increases (adult)
Gross changes in morphology, including brain weight
Discoloration of nerve tissue
Hemorrhage in nerve tissue

4.3.2. Behavioral Endpoints

Neurotoxicants produce a wide array of functional deficits, including motor, sensory, and learning or memory dysfunction (WHO, 1986; Tilson and Mitchell, 1984). Many procedures have been devised to assess overt as well as relatively subtle changes in those functions; hence their applicability to the detection of neurotoxicity and to hazard characterization. Many of the behavioral tests have been developed

and validated with well-characterized neurotoxicants. Behavioral tests and agents that affect them have been reviewed recently (WHO, 1986; Cory-Slechta, 1989). Examples of such tests, the nervous system function being measured, and neurotoxicants known to affect these measures are listed in Table 4-2.

TABLE 4-2. EXAMPLES OF SPECIALIZED TESTS TO MEASURE NEUROTOXICITY

Function	Procedure	Representative-agents
Neuromuscular: Weakness	Grip strength; swimming endurance; suspension from rod; discriminative motor function; hindlimb splay.	n-hexane, methyl butylketone, carbaryl.
Incoordination	Rotorod, gait measurements	3-acetylpyridine, ethanol.
Tremor	Rating scale, spectral analysis	Chlordecone, Type I pyrethroids, DDT.
Myoclonia, spasms	Rating scale, spectral analysis	DDT, Type II pyrethroids.
Sensory:		
Auditory	Discriminated conditioning Reflex modification	Toluene, trimethyltin.
Visual toxicity	Discriminated conditioning	Methyl mercury.
Somatosensory toxicity.	Discriminated conditioning	Acrylamide.
Pain sensitivity	Discriminated conditioning (titration); functional observational battery	Parathion.
Olfactory toxicity	Discriminated conditioning	3-methylindole methylbromide.
Learning/Memory:		
Habituation	Startle reflex	Diisopropyl-fluorophosphate (DFP).
Classical conditioning .	Nictitating membrane	Aluminum.
	Conditioned flavor aversion	Carbaryl.
	Passive avoidance	Trimethyltin, IDPN.
	Olfactory conditioning	Neonatal trimethyltin.
	One-way avoidance	Chlordecone.
Operant or instrumental conditioning.		
	Two-way avoidance	Neonatal lead.
	Y-maze avoidance	Hypervitaminosis A.
	Biel water maze	Styrene.
	Morris water maze	DFP.
	Radial arm maze	Trimethyltin.
	Delayed matching to sample	DFP.
	Repeated acquisition	Carbaryl.
	Visual discrimination learning	Lead.

4.3.2.1. Functional observational batteries.

Functional observational batteries are first-tier tests designed to detect and quantify major overt behavioral, physiological, and other neurotoxic effects (Moser, 1989). A number of

batteries have been used (Tilson and Moser, 1992), each consisting of tests generally intended to evaluate various aspects of sensorimotor function. Most FOB are similar to clinical neurological examinations that rate presence or absence and, in some cases, the relative degree of neurological signs. A typical

FOB, as summarized in Table 4-3, evaluates several functional domains, including neuromuscular (i.e., weakness, incoordination, gait, and tremor), sensory (i.e., audition, vision, and somatosensory), and autonomic (i.e., pupil response and salivation) function.

TABLE 4-3.—SUMMARY OF MEASURES IN THE FUNCTIONAL OBSERVATIONAL BATTERY AND THE TYPE OF DATA PRODUCED BY EACH

Home cage and open field	Manipulative	Physiologic
Posture (D)	Ease of removal (R)	Body temperature (I)
Convulsions, tremors (D)	Handling reactivity (R)	Body weight (I)
Palpebral closure (R)		
Lacrimation (R)	Approach response (R)	
Piloerection (Q)	Click response (R)	
Salivation (R)	Touch response (R)	
Vocalizations (Q)	Tail pinch response (R)	
Rearing (C)	Righting reflex (R)	

TABLE 4-3.—SUMMARY OF MEASURES IN THE FUNCTIONAL OBSERVATIONAL BATTERY AND THE TYPE OF DATA PRODUCED BY EACH—Continued

Urination (C)	Landing foot splay (I)
Defecation (C)	Forelimb grip strength (I)
Gait (D, R)	Hindlimb grip strength (I)
Arousal (R)	Pupil response (Q)
Mobility (R)	
Stereotypy (D)	
Bizarre behavior (D)	

D = descriptive data; R = rank order data; Q = quantal data;
I = interval data; C = count data

The major advantages of FOB tests are that they can be administered within the context of other ongoing toxicological tests and provide some indication of the possible neurological alterations produced by exposure. Potential problems include insufficient interobserver reliability, difficulty in defining certain endpoints, and the tendency toward observer bias. The latter can be controlled by using observers unaware of the actual treatment of the subjects. Some FOB tests may not be very sensitive to agent-induced sensory loss (i.e., vision, audition) or alterations in cognitive or integrative processes such as learning and memory. FOB data may be used to trigger experiments performed at the next tier of testing.

FOB data may be interval, ordinal, or continuous (Creason, 1989). The relevance of statistically significant test results from an FOB is judged according to the number of signs affected, the dose(s) at which neurotoxic signs are observed, and the nature, severity, and persistence of the effects. Data from the FOB may provide presumptive evidence of adverse effects and neurotoxicity. If only a few unrelated measures in the FOB are affected or the effects are unrelated to dose, there is less concern about neurotoxic potentials of a chemical. If dose is associated with other overt signs of toxicity, including systemic toxicity, large decreases in body weight, or debilitation, the data must be interpreted carefully. In cases where several related measures in a battery of tests are affected and the effects appear to be dose dependent, the level of concern about the potential of a chemical is higher.

4.3.2.2. Motor activity.

Movement within a defined environment is a naturally occurring response and can be affected by environmental agents. Motor activity represents a broad class of behaviors involving coordinated participation of sensory, motor, and integrative

processes. Motor activity measurements are noninvasive and can be used to evaluate the effects of acute and repeated exposure to chemicals (MacPhail et al., 1989). Motor activity measurements have also been used in humans to evaluate disease states, including disorders of the nervous system (Goldstein and Stein, 1985). The assessment of motor activity is often included in first-tier evaluations, either as part of the FOB or as a separate quantitated measurement.

There are many different types of activity measurement devices, differing in size, shape, and method of movement detection (MacPhail et al., 1989). Because of the accuracy and ease of calibration, devices with photocells are widely used. In general, situating the apparatus to minimize extraneous noise, movements, or lights usually requires that the recording devices be placed in light- and sound-attenuating chambers during the testing period. A number of different factors, including age, gender, and time of day, can affect motor activity, and should be controlled or counterbalanced. Different strains of animals may have significantly different basal levels of activity, making comparisons across studies difficult. A major factor in activity studies is the duration of the testing session. Motor activity levels are generally highest at the beginning of the session and decrease to a low level throughout the session. The rate of decline during the test session is frequently termed "habituation."

Motor activity measurements are typically included as part of a battery of tests to detect or characterize neurotoxicity. Agent-induced alterations in motor activity associated with overt signs of toxicity (e.g., loss of body weight, systemic toxicity) or occurring in non-dose-related fashion are of less concern than changes that are dose dependent, related to structural or other functional changes in the nervous system, or occur in the absence of life-

threatening toxicity and are generally convincing evidence of neurotoxicity.

4.3.2.3. Neuromotor function.

Motor dysfunction is a common neurotoxic effect, and many different types of tests have been devised to measure time- and dose-dependent effects. Anger (1984) reported 14 motor effects of 89 substances, which could be classified into four categories: weakness, incoordination, tremor, and myoclonia or spasms. Chemical-induced changes in motor function can be determined with relatively simple techniques such as the FOB. More specialized tests to assess weakness include measures of grip strength, swimming endurance, suspension from a hanging rod, discriminative motor function, and hindlimb splay. Rotarod and gait assessments measure incoordination, while rating scales and spectral analysis techniques quantify tremor and other abnormal movements (Tilson and Mitchell, 1984).

An example of a second-tier procedure to assess motor function has been described by Newland (1988), who trained squirrel monkeys to hold a bar within specified limits (i.e., displacement) to receive positive reinforcement. The bar was also attached to a rotary device, which allowed measurement of chemical-induced tremor. Spectral analysis was used to characterize the tremor, which was found to be similar to that seen in humans exposed to neurotoxicants or with such neurologic diseases as Parkinson's disease.

Incoordination and performance changes can be assessed with procedures that measure chemical-induced alterations in force (Fowler, 1987). The accuracy of performance may reflect neuromotor function and is sensitive to the debilitating effects of many psychoactive drugs (Walker et al., 1981; Newland, 1988). Gait, an index of coordination, has been measured in rats under standardized conditions and can be a sensitive indication of specific

damage to the basal ganglia and motor cortex (Hruska et al., 1979) as well as damage to the spinal cord and peripheral nervous system.

Procedures to characterize chemical-induced motor dysfunction have been used extensively in neurotoxicology. Most require preexposure training (including alterations of motivational state) of experimental animals, but such tests might be useful, in as much as similar procedures are often used in assessing humans.

4.3.2.4. Sensory function.

Alterations in sensory processes (e.g., paresthesias and visual or auditory impairments) are frequently reported signs or symptoms in humans exposed to toxicants (Anger, 1984). Several approaches have been devised to measure sensory deficits. Data from tests of sensory function must be interpreted within the context of changes in body weight, body temperature, and other physiological endpoints. Furthermore, many tests assess the behavioral response of an animal to a specific sensory stimulus; such responses are usually motor movements that could be directly affected by chemical exposure. Thus, care must be taken to determine whether proper controls were included to eliminate the possibility that changes in response to a sensory stimulus may have been related to agent-induced motor dysfunction.

Several first-tier testing procedures have been devised to screen for overt sensory deficits. Many rely on orientation or the response of an animal to a stimulus. Such tests are usually included in the FOB used in screening (e.g., tail-pinch or click responses). Responses are usually recorded as being either present, absent, or changed in magnitude (Moser, 1989; O'Donoghue, 1989). Screening tests for sensory deficits are typically not suitable to characterize chemical-induced changes in acuity or fields of perception. The characterization of sensory deficits usually necessitates psychophysical methods that study the relationship between the physical dimensions of a stimulus and the behavioral response it generates (Maurissen, 1988).

One second-tier approach to the characterization of sensory function involves the use of reflex-modification techniques (Crofton, 1990). Chemical-induced changes in the stimulus frequency or threshold required to inhibit a reflex are taken as possible changes in sensory function. Prepulse inhibition has been used only recently in neurotoxicology (Fechter and Young, 1983) and can be used to assess sensory

function in humans as well as in experimental animals.

Various behavioral procedures require that a learned response occur only in the presence of a specific stimulus (i.e., discriminated or conditioned responding). Chemical-induced changes in sensory function are determined by altering the physical characteristics of the stimulus (e.g., magnitude or frequency) and measuring the alteration in response rate or accuracy. In an example of the use of a discriminated conditional response to assess chemical-induced sensory dysfunction, Maurissen et al. (1983) trained monkeys to respond to the presence of a vibratory or electric stimulus applied to the fingertip. Repeated dosing with acrylamide produced a persistent decrease in vibration sensitivity; sensitivity to electric stimulation was unimpaired. That pattern of sensory dysfunction corresponded well to known sensory deficits in humans. Discriminated conditional response procedures have been used to assess the ototoxicity produced by toluene (Pryor et al., 1983) and the visual toxicity produced by methylmercury (Merigan, 1979).

Procedures to characterize chemical-induced sensory dysfunction have been used often in neurotoxicology. As in the case of most procedures designed to characterize nervous system dysfunction, training and motivational factors can be confounding factors. Many tests designed to assess sensory function for laboratory animals can also be applied with some adaptation to humans.

4.3.2.5. Learning and memory.

Learning and memory disorders are neurotoxic effects of particular importance. Impairment of memory is reported fairly often by adult humans as a consequence of toxic exposure. Behavioral deficits in children have been caused by lead exposure (Smith et al., 1989), and it is hypothesized (Calne et al., 1986) that chronic low-level exposure to toxic agents may have a role in the pathogenesis of senile dementia.

Learning can be defined as an enduring change in the mechanisms of behavior that results from experience with environmental events (Domjan and Burkhard, 1986). Memory is a change that can be either short-lasting or long-lasting (Eckerman and Bushnell, 1992). Alterations in learning and memory must be inferred from changes in behavior. However, changes in learning and memory must be separated from other changes in behavior that do not involve cognitive or associative processes (e.g., motor function, sensory capabilities, and motivational factors),

and an apparent toxicant-induced change in learning or memory should be demonstrated over a range of stimuli and conditions. Before it is concluded that a toxicant alters learning and memory, effects should be confirmed in a second learning procedure. It is well known that lesions in the brain can inhibit learning. It is also known that some brain lesions can facilitate some types of learning by removing behavioral tendencies (e.g., inhibitory responses due to stress) that moderate the rate of learning under normal circumstances. A discussion of learning procedures and examples of chemicals that can affect learning and memory have appeared in recent reviews (Heise, 1984; WHO, 1986; Peele and Vincent, 1989).

One simple index of learning and memory, which can be measured as a first-tier endpoint, is habituation. Habituation is defined as a gradual decrease in the magnitude or frequency of a response after repeated presentations of a stimulus. A toxicant can affect habituation by increasing or decreasing the number of stimulus presentations needed to produce response decrements (Overstreet, 1977). Although habituation is a very simple form of learning, it can also be perturbed by a number of chemical effects not related to learning.

A more complicated approach to studying the effects of a chemical on learning and memory involves the pairing of a novel stimulus with a second stimulus that produces a known, observable, and quantifiable response (i.e., classical "Pavlovian" conditioning). The novel stimulus is known as the conditioned stimulus, and the second, eliciting stimulus is the unconditioned stimulus. With repeated pairings of the two stimuli, the conditioned stimulus comes to elicit a response similar to the response elicited by the unconditioned stimulus. The procedure has been used in behavioral pharmacology and, to a lesser extent, in neurotoxicology. Neurotoxicants that interfere with learning and memory would alter the number of presentations of the pair of stimuli required to produce conditioning or learning. Memory would be tested by determining how long after the last presentation of the two stimuli the conditioned stimulus would still elicit a response (Yokel, 1983). Other classically conditioned responses known to be affected by psychoactive or neurotoxic agents are conditioned taste aversion (Riley and Tuck, 1985) and conditioned suppression (Chiba and Ando, 1976).

Second-tier procedures to assess learning or memory typically involve

the pairing of a response with a stimulus that increases the probability of future response through reinforcement. Response rate can be increased by using positive reinforcement or removing negative reinforcement. Learning is usually assessed by determining the number of presentations or trials needed to produce a defined frequency of response. Memory can be defined specifically as the maintenance of a stated frequency of response after initial training. Neurotoxicants may adversely affect learning by increasing or decreasing the number of presentations required to achieve the designated criterion. Decrements in memory may be indicated by a decrease in the probability or frequency of a response at some time after initial training.

Toxicant-induced changes in learning and memory should be interpreted within the context of possible toxicant-induced changes in sensory, motor, and motivational factors. Examples of instrumental learning procedures used in neurotoxicology are repeated acquisition (Schrot et al., 1984), passive and active avoidance, Y-maze avoidance, spatial mazes (radial-arm maze), and delayed matching to sample (Heise, 1984; WHO, 1986; Tilson and Mitchell, 1984).

4.3.2.6. Schedule-controlled behavior.

Another type of second-tier procedure is schedule-controlled operant behavior (SCOB), which involves the maintenance of behavior (performance) by response-dependent reinforcement (Rice, 1988). Different patterns of behavior and response rates are controlled by the relationship between response and later reinforcement. SCOB affords a measure of learned behavior and with appropriate experimental design may be useful for studying chemical-induced effects on motor, sensory, and cognitive function.

The primary endpoints for evaluation are agent-induced changes in response rate or frequency and the temporal pattern of responding. Response rate is usually related to an objective response, such as lever press or key peck, and differs according to the schedule of reinforcement. Response rates are expressed per unit of time. For some classes of chemicals, the direction of an effect on response rate can differ between low and high doses. Agent-induced changes in temporal pattern of responding can occur independently of changes in the rate and require analysis of the distribution of responses relative to reinforcement schedule.

SCOB has been used to study the effects of psychoactive drugs on

behavior and is sensitive to many neurotoxicants, including methylmercury, solvents, pesticides, acrylamides, carbon monoxide, and organic and inorganic lead (Paule and McMillan, 1984; MacPhail 1985; Cory-Slechta, 1989; Rice, 1988). The experimental animal often serves as its own control, and the procedure provides an opportunity to study a few animals extensively over a relatively long period. SCOB typically requires motivational procedures, such as food deprivation, and training sessions are usually required to establish a stable baseline of responding. Because of its sensitivity to neuroactive chemicals, SCOB has great potential for use in second-tier assessments.

4.3.3. Neurophysiological Endpoints of Neurotoxicity

Neurophysiological studies are those that assess function either directly through measurements of the electrical activity of the nervous system (electrophysiology) or indirectly through measurements of peripheral organ functions controlled or modulated by the nervous system (general physiology) (Dyer, 1987). When performed properly, neurophysiological techniques provide information on the integrity of defined portions of the nervous system. Many of the endpoints used in animals have also been used in humans to determine chemical-induced alterations in neurophysiological function.

The term "electrophysiology" refers to the set of neurophysiological procedures that study neural function through the direct measurement of the electrical activity generated by the nervous system (Dyer, 1987). A variety of electrophysiological procedures are available for application to neurotoxicological problems, which range in scale from procedures that employ microelectrodes to study the function of single nerve cells or restricted portions of them, to procedures that employ macroelectrodes to perform simultaneous recordings of the summed activity of many cells. The latter types of procedures have historically been used in studies to detect or characterize the potential neurotoxicity of agents of regulatory interest. Several macroelectrode procedures are discussed below.

4.3.3.1. Nerve conduction studies.

Nerve conduction studies are generally performed on peripheral nerves and can be useful in investigations of possible peripheral neuropathy. Most peripheral nerves contain mixtures of both individual

sensory and motor nerve fibers, which may or may not be differentially sensitive to neurotoxicants. It is possible to distinguish sensory from motor effects in peripheral nerve studies by measuring activity in purely sensory nerves such as the sural to study sensory effects or by measuring the muscle response evoked by nerve stimulation to measure motor effects. While a number of endpoints can be recorded, the most commonly used variables are (1) Nerve conduction velocity, and (2) response amplitude. In well-controlled studies, decreases in nerve conduction velocity typically are evidence of neurotoxicity (Dyer, 1987). While a decrease in nerve conduction velocity is a reliable measure of demyelination, it frequently occurs rather late in the course of axonal degradation because normal conduction velocity may be maintained for some time in the face of axonal degeneration. For this reason, a measurement of normal nerve conduction velocity does not necessarily rule out peripheral axonal degeneration if other signs of peripheral nerve dysfunction are present. Increases in conduction velocity of adult organisms following treatment with neurotoxic compounds, in the absence of hypothermia, are atypical responses and may, in fact, reflect experimental or statistical errors. Decreases in response amplitude reflect a loss of active nerve fibers, and may occur prior to decreases in conduction velocity in the course of peripheral neuropathy. Hence changes in response amplitude may be more sensitive measurements of axonal degeneration than conduction velocity. Measurements of response amplitude, however, are more variable and require careful experimental techniques, a larger sample size, and greater statistical power than measurements of velocity to detect changes. Alterations in peripheral nerve function are associated with abnormal peripheral sensations such as numbness, tingling, or burning or with motor impairments such as weakness. Examples of compounds that alter peripheral nerve function in humans or experimental animals at some level of exposure include acrylamide, carbon disulfide, hexacarbonyl, lead, and some organophosphates.

4.3.3.2. Sensory evoked potentials.

Sensory evoked potentials are electrophysiological procedures that involve measuring the response elicited by the presentation of a defined sensory stimulus such as a tone, a light, or a brief electrical pulse to the skin. Sensory evoked potentials reflect sensory function, and can be used to

investigate visual, auditory, or somatosensory (body sensation) systems (Rebert, 1983; Mattsson and Albee, 1988). The data are in the form of a voltage record over time, which can be quantified in several ways. Commonly, the positive and negative voltage peaks are identified and measured as to their latency (time from stimulus onset) and amplitude (voltage).

Changes in peak amplitudes or equivalent measures reflect changes in the magnitude of the neural population that is responsive to stimulation. Both increases and decreases in amplitude are possible following exposure to neurotoxicants because (1) The brain normally operates in a careful balance between excitatory and inhibitory systems, and disruption of this balance can produce either positive or negative shifts in the voltages recorded in evoked potential experiments, and (2) excitatory or inhibitory neural activity is translated into a positive or negative deflection in the sensory evoked potential depending on the physical orientation of the electrode with respect to the tissue generating the response, which is frequently unknown. Within any given sensory system, the neural circuits that generate the different evoked potential peaks differ as a function of peak latency. In general, early latency peaks reflect the transmission of afferent sensory information, and changes in either the latency or amplitude of these peaks generally indicate a neurotoxic change that is likely to be reflected in deficits in sensory perception. The later latency peaks, in general, reflect not only the sensory input, but also the more nonspecific factors such as the behavioral state of the subject including such factors as arousal level, habituation, or sensitization. Thus, the neurotoxicological significance of changes in later latency evoked potential peaks must be interpreted in light of the behavioral status of the subject.

4.3.3.3. Convulsions.

Observable behavioral convulsions in animals may be indicative of central nervous system seizure activity. However, behavioral convulsions that occur only at lethal or near lethal dose levels may reflect an indirect effect secondary to systemic toxicity and not directly on the nervous system. Convulsions occurring at dose levels that are clearly sublethal, and in the absence of apparent systemic toxicity, are more likely due to a direct effect on the nervous system. In such cases, neurophysiological recordings of electrical activity in the brain that are indicative of seizures may provide

additional evidence of direct neurotoxicity. In addition to producing seizures, chemicals may also affect seizure susceptibility, altering the frequency, severity, duration, or threshold for eliciting seizures produced through other means. Such changes can occur after acute exposure or after repeated exposure to dose levels below the acute threshold, and are considered neurotoxic. Agents that produce convulsions include lindane, DDT, pyrethroids, and trimethyltin (WHO, 1986). Some agents, including many solvents, act to raise the threshold for eliciting seizures through other means or otherwise act to reduce the severity or duration of the elicited convulsions. These agents are difficult to classify as neurotoxic based on such data, but frequently have other effects on which a determination of neurotoxic potential can be based.

4.3.3.4. Electroencephalography (EEG)

EEG analysis is used widely in clinical settings for the diagnosis of neurological disorders and less often for the detection of subtle toxicant-induced dysfunction (WHO, 1986; Eccles, 1988). The basis for the use of EEG in either setting is the relationship between specific patterns of EEG waveforms and specific behavioral states. Because states of alertness and the stages of sleep are associated with distinct patterns of electrical activity in the brain, it is generally thought that arousal level can be evaluated by monitoring the EEG. Dissociation of EEG activity and behavior can, however, occur after exposure to certain chemicals. Normal patterns of transition between sleep stages or between sleeping and waking states are known to remain disturbed for prolonged periods of time following exposure to certain chemical classes (e.g., organophosphates). Changes in the pattern of the EEG can be elicited by stimuli producing arousal (e.g., lights, sounds) and neuroactive drugs. In studies with toxicants, changes in EEG pattern can sometimes precede alterations in other objective signs of neurotoxicity. EEG experiments must be done under highly controlled conditions, and the neurotoxicological significance of chemical-induced changes in the EEG in the absence of other signs of neurotoxicity must be considered on a case-by-case basis. Many chemicals, including metals, solvents, and pesticides, would be expected to affect the EEG.

4.3.3.5. Electromyography (EMG).

EMG involves making electrical recordings from muscle and has been used extensively in human clinical

studies in the diagnosis of certain diseases of the muscle (WHO, 1986). Changes in the EMG include amplitude and firing frequency of spontaneous firing; evoked muscle responses to nerve stimulation can be used to study alterations in the neuromuscular junction. EMG has been used to study toxicant-induced changes in neuromuscular function, including organophosphate insecticides, methyl n-butyl ketone, and botulinum and tetanus toxin.

4.3.3.6. Spinal reflex excitability.

Segmental spinal monosynaptic and polysynaptic reflexes are relatively simple functions in the central nervous system that can be evaluated by quantitative techniques (WHO, 1986). Many of the procedures used in animals are similar to procedures used clinically to perform neurological tests in humans. One approach infers the functional state of a reflex arc from either the latency and magnitude of the reflex response evoked by stimuli of predetermined intensity or from the stimulus intensity required to elicit a detectable response (i.e., the threshold). This approach is used best in a screening context and the significance of effects in this test should be considered on a case-by-case basis.

A second more involved approach records electrophysiologically the time required for a stimulus applied to a peripheral nerve to reach the spinal cord and return to the site of the original stimulation. Data from this procedure can indicate the excitability of the motoneuron pool, an effect seen with many volatile solvents. Although this approach is more invasive and time-consuming than the noninvasive procedure, it provides better data concerning the possible site of action. In addition, the manner in which the invasive procedure is carried out (i.e., in decerebrated animals) precludes repeated testing on the same animal. The significance of effects in this procedure should also be considered on a case-by-case basis.

4.3.4. Neurochemical Endpoints of Neurotoxicity

Neuronal function within the nervous system is dependent on synthesis and release of specific neurotransmitters and activation of their receptors in specific neuronal pathways. With few exceptions, neurochemical measurements are invasive and therefore used infrequently in human risk assessment. There are many different neurochemical endpoints that could be measured in neurotoxicological studies (Bondy, 1986; Mailman, 1987; Morell and

Mailman, 1987). Neurotoxicants can interfere with the ionic balance of a neuron, act as a cytotoxicant after being transported into a nerve terminal, block uptake of neurotransmitter precursors, act as a metabolic poison, overstimulate

receptors, block transmitter release, and inhibit transmitter degradation. Table 4-4 lists several chemicals with known neurochemical effects. Many neuroactive agents can increase or decrease neurotransmitter levels in the

brain. Dose-related changes on these endpoints may indicate a chemical effect on the nervous system, but the neurotoxicological significance of such changes must be interpreted in the context of other signs of neurotoxicity.

TABLE 4-4.—NEUROTOXICANTS WITH KNOWN NEUROCHEMICAL MECHANISMS

Site of attack	Examples
1. Neurotoxicants acting on ionic balance	
A. Inhibit sodium entry	Tetrodotoxin.
B. Block closing of sodium channel	p,p'-DDT, pyrethroids (I).
C. Increase permeability to sodium	Batrachotoxin.
D. Increase intracellular calcium	Chlordecone.
2. Cytotoxicants—depend on uptake into nerve terminal	MPTP.
3. Uptake blockers	Hemicholinium.
4. Metabolic poisons	Cyanide.
5. Receptor hyperactivators	Domoic acid.
6. Transmitter release (ACh) blockers	Botulinum toxin.
7. Transmitter degradation (ACh) inhibitors	Organophosphates, carbamates.
8. Microtubule disruptors	Vincristine.

Some chemicals, such as the organophosphate and carbamate insecticides, are known to interfere with a specific enzyme, acetylcholinesterase (AChE) (Costa, 1988). Inhibition of this enzyme in brain may be considered evidence of neurotoxicity, whereas decreases in AChE in the blood, which can be easily determined in humans, are only suggestive of a neurotoxic effect. A subset of organophosphate agents produces organophosphate-induced delayed neuropathy (OPIDN) after acute or repeated exposure. Neurotoxic esterase (or neuropathy target enzyme, NTE) has been associated with agents that produce OPIDN (Johnson, 1990).

The ultimate functional significance of many biochemical changes is not known; therefore it may be difficult to determine if a specific biochemical

change can be considered adverse or convincing evidence of neurotoxicity. Any such change, however, is potentially adverse and each determination of adversity requires a judgment to be made. Likewise, the absence of specific biochemical testing protocols does not mean biochemical changes are of no concern, but instead reflects a lack of understanding of the significance of changes at the biochemical level.

4.3.5. Structural Endpoints of Neurotoxicity

The central nervous system (brain and spinal cord) comprises nerve cells or neurons, which consist of a neuronal body, axon, and dendritic processes. Various types of neuropathological lesions may be classified according to

their nature or the site where they are found (WHO, 1986; Krinke, 1989; Griffin, 1990). Lesions may be classified as neuropathy (changes in the neuronal body), axonopathy (changes in the axons), myelinopathy (changes in the myelin sheaths), neurodegeneration (changes in the nerve terminals), and peripheral neuropathy (changes in the peripheral nerves). For axonopathies, a more precise location of the changes should be described (i.e., proximal, central, or distal axonopathy). In some cases, agents produce neuropathic conditions that resemble naturally occurring neurodegenerative disorders in humans (WHO, 1986). Table 4-5 lists examples of such chemicals, their known site of action, the type of neuropathology produced, and the disease or condition that each typifies.

TABLE 4-5.—EXAMPLES OF KNOWN NEUROPATHIC AGENTS

Site of attack	Neuropathology	Corresponding neurotoxicant	Disease or neurodegenerative condition
Neuron cell body	Neuronopathy	Methylmercury .. A.E.T.T.	Minamata disease. Ceroid lipofuscinoses.
		Quinolinic acid .. 3-acetylpyridine ..	Huntington's disease. Cerebellar ataxia.
		Aluminum	Alzheimer's disease.
Nerve terminal	Neurodegeneration	MPTP	Parkinson's disease.
Schwann cell myelin	Myelinopathy	Lead Buckthorn toxin.	Neuropathy of metachromatic leukodystrophy.
		Acrylamide Hexacarbons Carbon disulfide.	Vitamin deficiency.
Central-peripheral distal axon	Distal axonopathy	Clioquinol	Subacute myelo-optico-neuropathy.
Central axons	Central axonopathy ...	B,B'-iminodipropionitrile.	Motor neuron disease.
Proximal axon	Proximal axonopathy .		

In general, chemical effects lead to two types of primary cellular alteration: (1) the accumulation, proliferation, or rearrangement of structural elements (e.g., intermediate filaments, microtubules) or organelles (mitochondria) and (2) the breakdown of cells, in whole or in part. The latter can be associated with regenerative processes that may occur during chemical exposure. Such changes are considered to be neurotoxic.

While most neurotoxic damage is evident at the microscopic level, gross changes in morphology can be reflected by a significant change in the weight of the brain. Weight changes (absolute or relative to body weight), discoloration, discrete or massive cerebral hemorrhage, or obvious lesions in nerve tissue are generally considered neurotoxic effects.

Chemical-induced injury to the central nervous system is associated with astrocytic hypertrophy at the site of damage. Assays of glial fibrillary acidic protein (GFAP), the major intermediate filament protein of astrocytes, has been proposed as a biomarker of this response (O'Callaghan, 1988). A number of chemicals known to injure the central nervous system, including trimethyltin, methylmercury, cadmium, 3-acetylpyridine, and MPTP, have been shown to increase GFAP. In addition, increases in GFAP may be seen at dosages below those necessary to produce cytopathology as determined by Nissl-based stains used in standard neuropathological examinations. Because increases in GFAP may be an early indicator of neuronal injury in the adult, exposure level-dependent increases in GFAP should be viewed with concern.

Chemical-induced alterations in the structure of the nervous system are generally considered neurotoxic effects. To ensure reliable data, it is important that neuropathological studies minimize fixation artifacts and potential differences in the section(s) of the nervous system sampled and control for variability due to the age, sex, and body weight of the subject (WHO, 1986).

4.3.6. Developmental Neurotoxicity

Exposure to chemicals during development can result in effects other than death, gross structural abnormality, or altered growth. There are several instances in which functional alterations have resulted from exposure during the period between conception and sexual maturity (Riley and Vorhees, 1986; Vorhees, 1987). Table 4-6 lists several examples of chemicals known to produce developmental neurotoxicity in experimental animals. Animal models

of developmental neurotoxicity have been shown to be sensitive to several environmental chemicals known to produce developmental toxicity in humans, including lead, ethanol, methylmercury, and PCBs (Kimmel et al., 1990).

TABLE 4-6.—PARTIAL LIST OF AGENTS BELIEVED TO HAVE DEVELOPMENTAL NEUROTOXICITY

Alcohols	Methanol, ethanol
Antimitotics	X-radiation, azacytidine
Insecticides	DDT, kepone, organophosphates
Metals	Lead, methylmercury, cadmium
Polyhalogenated hydrocarbons	PCB, PBB
Psychoactive drugs	Cocaine, phenytoin
Solvents	Carbon disulfide, toluene
Vitamins	Vitamin A

Sometimes functional defects are observed at dose levels below those at which other indicators of developmental toxicity are evident (Rodier, 1986). Such effects may be transient or reversible in nature, but generally are considered adverse effects. Data from postnatal studies, when available, are considered useful for further assessment of the relative importance and severity of findings in the fetus and neonate. Often, the long-term consequences of adverse developmental outcomes noted at birth are unknown and further data on postnatal development and function are necessary to determine the full spectrum of potential developmental effects. Useful data also can be derived from well-conducted multigeneration studies, although the dose levels used in these studies may be much lower than those in studies with shorter-term exposure.

Much of the early work in developmental neurotoxicology was related to behavioral evaluations. Recent advances in this area have been reviewed in several publications (Riley and Vorhees, 1986; Kimmel et al., 1990). Several expert groups have focused on the functions that should be included in a behavioral testing battery, including sensory systems, neuromotor development, locomotor activity, learning and memory, reactivity and habituation, and reproductive behavior. No testing battery has fully addressed all of these functions, but it is important to include as many as possible, and several testing batteries have been developed and evaluated for use in testing.

Direct extrapolation of functional developmental effects to humans is limited in the same way as for other endpoints of developmental toxicity, i.e., by the lack of knowledge about underlying toxicological mechanisms and their significance. It can be assumed that functional effects in animal studies indicate the potential for altered development in humans, although the types of developmental effects seen in experimental animal studies will not necessarily be the same as those that may be produced in humans. Thus, when data from functional developmental toxicity studies are encountered for particular agents, they should be considered in the risk assessment process.

Agents that produce developmental neurotoxicity at a dose that is not toxic to the maternal animal are of special concern because the developing organism is affected but toxicity is not apparent in the adult. More commonly, however, adverse developmental effects are produced only at doses that cause minimal maternal toxicity; in these cases, the developmental effects are still considered to represent developmental toxicity and should not be discounted as secondary to maternal toxicity. At doses causing excessive maternal toxicity (that is, significantly greater than the minimal toxic dose), information on developmental effects may be difficult to interpret and of limited value. Current information is inadequate to assume that developmental effects at maternally toxic doses result only from maternal toxicity; it may be that the mother and developing organism are sensitive to that dose level. Moreover, whether developmental effects are secondary to maternal toxicity or not, the maternal effects may be reversible while effects on the offspring may be permanent. These are important considerations for agents to which humans may be exposed at minimally toxic levels either voluntarily or involuntarily, because several agents are known to produce adverse developmental effects at minimally toxic doses in adult humans (e.g., smoking, alcohol).

Although interpretation of functional developmental neurotoxicity data may be limited at present, it is clear that functional effects must be evaluated in light of other toxicity data, including other forms of developmental toxicity (e.g., structural abnormalities, perinatal death, and growth retardation). The level of confidence in an adverse effect may be as important as the type of change seen, and confidence may be increased by such factors as replicability of the effect either in another study of

the same function or by convergence of data from tests that purport to measure similar functions. A dose-response relationship is considered an important measure of chemical effect; in the case of functional effects, both monotonic and biphasic dose-response curves are likely, depending on the function being tested.

4.3.7. Physiological and Neuroendocrine Endpoints

One of the key roles played by the nervous system is to orchestrate the general physiological functions of the body to help maintain homeostasis. To this end, the nervous system and many of the peripheral organ systems are integrated and functionally interdependent. For example, specific neuronal processes are intimately involved in maintaining or modulating respiration, cardiovascular function, body temperature, and gastrointestinal function. Because many peripheral organ functions involve neuronal components, changes in such physiological endpoints as blood pressure, heart rate, EKG, body temperature, respiration, lacrimation, or salivation may indirectly reflect possible treatment-related effects on the functional integrity of the nervous system. However, since physiological endpoints also depend on the integrity of the related peripheral organ itself, changes in physiological function also may reflect a systemic toxicity involving that organ. Consequently, the neurotoxicological significance of a physiological change must be interpreted within the context of other signs of toxicity. A variety of general physiological procedures can be applied to neurotoxicological problems. These procedures range in scale from simple measurements, for example, of body temperature, respiration, lacrimation, salivation, urination, and defecation, which may be included in routine functional observational batteries used for chemical screening, to more involved procedures involving measurements of blood pressure, endocrine responses, cardiac function, gastrointestinal function, etc. The latter would be more appropriate for second-level tests to characterize the scope of chemically related toxicity.

The central nervous system also regulates the outflow of the endocrine system, which together with the influence of the autonomic nervous system, can affect immunologic function (WHO, 1986). Hormonal balance results from the integrated action of the hypothalamus, located in the central nervous system, and the pituitary, which regulates activities of endocrine

target organs. Each site is susceptible to disruption by neurotoxic agents. Neuroendocrine dysfunction may occur because of a disturbance in the regulation and modulation of the neuroendocrine feedback systems. One major indicator of neuroendocrine function is secretions of hormones from the pituitary. Hormones from the anterior pituitary are important for reproduction (follicle-stimulating hormone, luteinizing hormone), growth (thyroid-stimulating hormone), and response to stress (adrenocorticotropic hormone). Hypothalamic control of anterior pituitary secretions occurs through the release of hypothalamic-hypophysiotropic hormones. Hormones from the posterior hypothalamus (prolactin, melanocyte-stimulating hormone, and growth hormone) are also involved in a number of important bodily functions.

Many types of behaviors (e.g., reproductive behaviors, sexually dimorphic behaviors) are dependent on the integrity of the hypothalamic-pituitary system, which could represent an important site for neurotoxic action. Pituitary secretions arise from a number of different cell types in this gland and neurotoxicants could affect these cells either directly or indirectly. Morphological changes in follicular cells, chromophobe cells, somatotrophic cells, prolactin cells, gonadotropic cells, follicle-stimulating hormone secreting cells, luteinizing hormone-containing cells, thyrotrophic cells, and cortico cells might be associated with adverse effects on the pituitary, which could ultimately affect behavior and the functioning of the nervous system.

Biochemical changes in the hypothalamus also may be used as indices of potential changes in neuroendocrine function. However, the neuroendocrine significance of changes in hypothalamic neurotransmitters and neuropeptides is usually only inferential and data must be considered on a case-by-case basis.

Most anterior pituitary hormones are subject to negative feedback control by peripheral endocrine glands and, if neurotoxicants modify peripheral secretions, neuroendocrine changes can result from this altered feedback. Modifications in the functioning of these endocrine secretions could occur after toxic exposure; a number of agents have been shown to alter blood levels of glucocorticoids, thyroxine, estrogen, corticosterone, and testosterone. Although such changes are not necessarily due to direct neuroendocrine effects, target organ changes often can be a first indication of neuroendocrine changes.

4.3.8. Other Considerations

4.3.8.1. Structure-activity relationship.

Because of a general lack of epidemiologic or toxicologic data on most chemical substances, attempts have been made in toxicology to predict activities based on chemical structure. The basis for inference from structure-activity relationships (SARs) can be either comparison with structures known to have biologic activity or knowledge of structural requirements of a receptor or macromolecular site of action. However, given the complexity of the nervous system and the lack of information on biologic mechanisms of neurotoxic action, there are relatively few well-characterized SARs in neurotoxicology. Since SARs cannot be used to rule out all neurotoxic activity, it is not acceptable to use them as a basis for excluding potential neurotoxicity. Caution is warranted in interpreting SARs in anything other than the most preliminary analyses. Use of SARs requires detailed knowledge not only of structure, but also of each critical step in the pathogenetic mechanism of neurotoxic injury. Such knowledge is still generally unavailable.

SAR approaches are more successful when the range of possible sites of action or mechanisms of action is narrow. Thus, SARs have had more use in relation to carcinogenicity and mutagenicity than in other kinds of toxicity. The SAR approaches used in the development of novel neuropharmacologic structures deserve consideration in neurotoxicology, but their utility depends on a better understanding of neurotoxic mechanisms.

4.3.8.2. In vitro methods.

In vitro procedures for testing have practical advantages, but studies must be done to correlate the results with responses in whole animals. One advantage of validated in vitro tests is that they minimize the use of live animals. Some of the more developed in vitro tests might be simple and might not have to be conducted by highly trained personnel, but, as with many in vivo tests, the analysis and interpretation of results are likely to require expertise. Experience with the Ames test for mutagenesis confirms the advantages of in vitro procedures, but also illustrates the problems that arise when an assay is used to predict an endpoint that is not exactly what it measures (e.g., carcinogenicity rather than specific aspects of genotoxicity). In vitro changes can be markers for toxicity, even when the structural or functional consequences are not known

or predicted. In addition, *in vitro* methods can examine the more evolutionarily conserved elements of the nervous system and improve neurotoxicity detection and could also provide suitable systems for studying developmental neurotoxicity.

A broad range of tissue-culture systems are available for assessing the neurologic impact of environmental agents, including cell lines, dissociated cell cultures, reaggregate cultures, explant cultures, and organ cultures (Veronesi, 1991).

Neuronal and glial cell lines are used extensively in neurobiology and have potential for neurotoxicological studies. They consist of populations of continuously dividing cells that, when treated appropriately, stop dividing and exhibit differentiated neuronal or glial properties. Neuronal lines can develop electric excitability, chemosensitivity, axon formation, neurotransmitter synthesis and secretion, and synapse formation. Large quantities of cells can be generated routinely to develop extensive dose-response or other quantitative data.

When neural tissue, typically from fetal animals, is dissociated into a suspension of single cells, and the suspension is inoculated into tissue-culture dishes, the neurons and glia survive, grow, and establish functional neuronal networks. Such preparations have been made from most regions of the CNS and exhibit highly differentiated, site-specific properties that constitute an *in vitro* model of different portions of the CNS. Most of the neuronal transmitter and receptor phenotypes can be demonstrated, and a variety of synaptic interactions can be studied. Glial cells are also present, and neuroglial interactions are a prominent feature of the cultures. A substantial battery of assays (neurochemical and neurophysiologic) is now available to assess the development of the cultures and to indicate toxic effects of test agents added to the culture medium. Relatively pure populations of different cell types can be isolated and cultured, so that effects on specific cell types can be assessed independently. Pure glial cells or neurons, or even specific neural categories, can be prepared in this way and studied separately, or interaction between neurons and glial cells can be studied at high resolution. The neurobiologic measures used to assess the effect of any agent can be very specific (for example, activity of neurotransmitter-related enzyme or binding of a receptor ligand) or global (for example, neuron survival or concentration of glial fibrillary acidic protein). The two-dimensional character

of the preparations makes them particularly suited for morphologic evaluation, and detailed electrophysiologic studies are readily performed. The toxic effects and mechanisms of anticonvulsants, excitatory amino acids, and various metals and divalent cations have been assessed with these preparations. The cerebellar granular cell culture system, for example, has been exploited recently in studies of the mechanism of alkyllead toxicity (Verity et al., 1990).

A related preparation made from single-cell suspensions of neural tissue is the reaggregate culture. Instead of being placed in culture dishes and allowed to settle onto the surface of the dishes, the cells are kept in suspension by agitation; under appropriate conditions, they stick to one another and form aggregates of controllable size and composition. Typically, the cells in an aggregate organize and exhibit intercellular relations that are a function of, and bear some resemblance to, the brain region that was the source of the cells. The cells establish a three-dimensional, often laminated structure. Reaggregate cultures lend themselves to large-scale, quantitative experiments in which neurobiologic variables can be examined, although morphologic and ligand-binding studies are performed less readily than with surface cultures.

Organotypic explant cultures also are closely related to the intact nervous system. Small pieces or slices of neural tissue are placed in culture and can be maintained for long periods with substantial maintenance of structural and cell-cell relations of intact tissue. Specific synaptic relations develop and can be maintained and evaluated, both morphologically and electrophysiologically. Because all regions of the nervous system are amenable to this sort of preparation, it is possible to analyze toxic agents that are active only in specific regions of the central or peripheral nervous system. Explants can be made from relatively thin slices of neural tissue, so detailed morphologic and intracellular electrophysiologic studies are possible. Their anatomic integrity is such that they capture many of the cell-cell interactions characteristic of the intact nervous system while allowing a direct, continuing evaluation of the effects of a potentially neurotoxic compound added to the culture medium. The process of myelination has been studied extensively in explant cultures, and considerable neurotoxicologic information has been gained. A preparation similar to an explant culture is the organ culture, in which an entire organ, such as the inner ear or a

ganglion, rather than slices or fragments, is grown *in vitro*. Obviously, only structures so small that their viability is not compromised can be treated in this way.

In general, the technical ease of maintaining a culture varies inversely with the degree to which it captures a spectrum of *in vivo* characteristics of nervous system behavior. The problem of biotransformation of potentially neurotoxic compounds is shared by all, although the more complete systems (explant or organ cultures) might alleviate this problem in specific instances. In many culture systems, complex and ill-defined additives—such as fetal calf serum, horse serum, and human placental serum—are used to promote cell survival. A number of thoroughly described synthetic media are now available, however, and such fully defined culture systems can be used where necessary.

5. Neurotoxicology Risk Assessment

5.1. Introduction

Risk assessment is an empirically based process used to estimate the risk that exposure of an individual or population to a chemical, physical, or biological agent will be associated with an adverse effect. Generally, such effects can be quantified and the relative probability of their occurrence can be calculated. The risk assessment process usually involves four steps: hazard identification, dose-response assessment, exposure assessment, and risk characterization (NRC, 1983). Risk management is the process that applies information obtained through the risk assessment process to determine whether the assessed risk should be reduced and, if so, to what extent (NRC, 1983). In some cases, risk is the only factor considered in a decision to regulate exposure to a substance. Alternatively, the risk posed by a substance is weighed against social, ethical, and medical benefits and economic and technological factors in formulating a risk management decision. The risk-balancing approach is used by some agencies to consider the benefits as well as the risks associated with unrestricted or partially restricted use of a substance. The purpose of this chapter is to describe the risk assessment process as it has currently evolved in neurotoxicology and present available options for quantitative risk assessment.

5.2. The Risk Assessment Process

5.2.1. Hazard Identification

Agents that adversely affect the neurophysiological, neurochemical, or

structural integrity of the nervous system or the integration of nervous system function expressed as modified behavior may be classified as neurotoxicants (Tilson, 1990b). For hazard identification, the best or most generalizable studies would measure these changes in humans. With the exclusion of therapeutic agents, information on effects in humans is usually derived from case reports of accidental exposures and epidemiological studies. This type of data affords less certainty regarding generalizability as well as less specific exposure information. As discussed in chapter 4, a common alternative method of data generation for hazard identification is the use of animal models. Animal models that measure behavioral, neurophysiological, neurochemical, and structural effects have been developed and validated. Studies that employ these models to evaluate specific potential hazards are used to predict the outcome of exposure to the same hazard in humans.

5.2.1.1. Human studies

Information obtained through the evaluation of human exposure data provides direct identification of neurotoxic hazards. This type of information is generally available from clinical trials required for the approval of therapeutic products for human use. For the purposes of risk assessment of nontherapeutic substances, data on effects of exposure to humans come primarily from two types of studies, case reports and epidemiological (Friedlander and Hearn, 1980) (see chapter 3). Case studies can supply evidence of an agent's toxicity, but are often limited by both the qualitative nature of the signs and symptoms reported and the nature of the exposure data. Epidemiological studies can provide data on the types of neurotoxic effects and the possible susceptibilities of certain populations. Under appropriate considerations, they can generally provide convincing and reliable evidence of potential human neurotoxicity. As with case studies, however, often only qualitative estimates of exposure can be obtained. Controlled laboratory studies have the potential to provide adequate exposure and effects data for accurate hazard identification, but ethical considerations place moral and practical restrictions on such studies except in those instances where direct benefit to the subjects, as in the case of therapeutic agents, may be expected. Excluding instances of therapeutic product development, most studies are limited to measuring the effects of acute, rather than long-term,

exposure. This limits their utility in risk assessment because the effect of long-term, low-level exposure to a potentially toxic agent is often the issue of concern.

Methods available to evaluate neurotoxicity in humans include examination of neurophysiological and behavioral parameters. Specific tests to measure neuromuscular strength and coordination, alterations in sensation, deficits in learning and memory, changes in mood and personality, and disruptions of autonomic function are frequently employed (see chapter 3).

5.2.1.2. Animal studies

As discussed in chapter 4, animal models for many endpoints of neurotoxicity are available and widely used for hazard identification. Data from animal studies are frequently extrapolated to humans. For example, if exposure to an agent produces neuropathology in an animal model, damage to a comparable structure in humans is predicted. Similarly, biochemical and physiological effects observed in animals are commonly extrapolated to humans. Agents that produce alterations in the levels of specific enzymes in one animal species generally have the same effect in other species, including humans. Neurophysiological endpoints also tend to be affected by the same manipulations across species. Thus, an agent interfering with nerve conduction in an animal study is often assumed to have the same effect in humans. Behavioral studies in animals are also applied to human hazard identification, although the correspondence between methods employed in animals and humans is sometimes not as obvious. For this reason, behavioral methods developed for neurotoxic hazard identification need to be considered on a case-by-case basis.

5.2.1.3. Special issues

5.2.1.3.1. Animal-to-human extrapolation. The use of animal data to identify hazard to humans is not without controversy. Relative sensitivity across species as well as between sexes is a constant concern. Overly conservative risk assessments, based on the assumption that humans are always more sensitive than a tested animal species, can result in poor risk management decisions. Conversely, an assumption of equivalent sensitivity in a case where humans actually are more sensitive to a given agent can result in underregulation that might have a negative impact on human health.

5.2.1.3.2. Susceptible populations. A related controversy concerns the use of data collected from adult organisms,

animal or human, to predict hazards in potentially more sensitive populations, such as the very young and the elderly, or in other groups, such as the chronically ill. In some cases, identification of neurotoxicity hazard does not generally include subjects from either end of the human life span or from other than healthy subjects. Uncertainty factors are used to adjust for more sensitive populations. In addition, single or multigeneration reproductive studies in animals may provide a source of information on neurological disorders, behavioral changes, autonomic dysfunction, neuroanatomical anomalies, and other signs of neurotoxicity in the developing animal (chapter 4).

5.2.1.3.3. Reversibility. For the most part, the basic principles of hazard identification are the same for neurotoxicity as for any adverse effect on health. One notable exception, however, concerns the issue of reversibility and the special consideration that must be given to the inherent redundancy and plasticity of the nervous system.

For many health effects, temporary, as opposed to permanent, effects are repaired during a true recovery. Damage to many organ systems, if not severe, can be spontaneously repaired. For example, damaged liver cells that may result in impaired liver function often can be replaced with new cells that function normally. The resulting restoration of liver function can be viewed as recovery. In the central nervous system, cells generally do not recover from severe damage and new cells do not replace them. When nervous system recovery is observed, it may represent compensation requiring activation of cells that were previously performing some other function, reactive synaptogenesis, or recovery of moderately injured cells. While a damaged liver may recover due to the addition of new cells, severe damage to nervous system cells results in a net loss of cells. This loss of compensatory capacity may not be noticed for many years and, when it does appear, it may be manifest in a way seemingly unrelated to the original neurotoxic event. Lack of ability to recover from a neurotoxic event later in life or premature onset of signs of normal aging may result. It is therefore important to consider the possibility that significant damage to the nervous system may have occurred in experiments where effects appear to be reversible.

5.2.1.3.4. Weight of evidence.

A "weight of evidence" approach to identifying an agent as a neurotoxic

hazard is almost always necessary. With the exception of therapeutic products, a single, complete, controlled study of an agent's effects on the nervous system, conducted in an appropriate representative sample of humans, is rarely, if ever, possible. Rather, those individuals charged with identifying hazard are usually confronted with a collection of imperfect studies, often providing conflicting data (Barnes and Dourson, 1988).

There are several possible approaches, depending on the quality of the evidence. Two examples are the use of data from only the most sensitive species tested and the use of data from only species responding most like the human for any given endpoint. In assessing neurotoxicity of therapeutic products, when human data are available and neurotoxic endpoints detected in animals can be clinically measured, the human findings supersede those of the nonclinical data base. Assuming that all available evidence is to be included, considerations necessary for formulating a conclusion include the relative weights that should be given to positive and negative studies. Sometimes positive studies are given more weight than negative ones, even when the quality of the studies is comparable. Experimental design factors such as the species tested, the number and gender of subjects evaluated, and the duration of the test are given different weights when data from different studies are combined. The route of exposure in a given study and its relevance to expected routes of human exposure are often a weighted factor. The issue of statistical significance is frequently debated. Some argue that an effect occurring at a statistically insignificant level may nevertheless represent a biologically or toxicologically significant event, and should be afforded the same weight as if the finding were statistically significant. In general, however, only statistically significant measures should be considered in hazard identification. The power of various statistical measures is also considered.

5.2.2. Dose-Response Assessment

In the second step of the risk assessment process, the dose-response assessment, the relationship between the extent of damage or toxicity and dose of a toxic substance for various conditions of exposure is determined. Because several different kinds of responses may be elicited by a single agent, more than one dose-response relationship may need to be developed

(e.g., neurochemical and morphological parameters).

When quantitative human dose-effect data are not available for a sufficient range of exposures, other methods must be used to estimate exposure levels likely to produce adverse effects in humans. In the absence of human data, the dose-response assessment may be based on tests performed in laboratory animals. Evidence for a dose-response relationship is an important criterion in assessing neurotoxicity, although this may be based on limited data from standard studies that often use only three dose groups and a control group (Barnes and Dourson, 1988).

The most frequently used approach for risk assessment of neurotoxicants and other noncancer endpoints is the uncertainty- or safety-factor approach (Barnes and Dourson, 1988; Kimmel, 1990). For example, within the EPA, this approach involves the determination of reference doses (RfDs) by dividing a no observed adverse effect level (NOAEL) by uncertainty factors that presumably account for interspecies differences in sensitivity (Barnes and Dourson, 1988). Generally, an uncertainty factor of 10 is used to allow for the potentially higher sensitivity in humans than in animals and another uncertainty factor of 10 is used to allow for variability in sensitivity among humans. Hence, the RfD is equal to the NOAEL divided by 100. If the NOAEL cannot be established, it is replaced by the lowest observed adverse effect level (LOAEL) in the RfD calculation and an additional uncertainty factor of 10 is introduced (i.e., the RfD equals the LOAEL divided by 1000).

If more than one effect is observed in the animal bioassays, the effect occurring at the lowest dose in the most sensitive animal species and gender is generally used as the basis for estimating the RfD (OTA, 1990). Sometimes, different RfDs can be calculated, depending on endpoint or species selected. Selection of safety factors may be influenced by several considerations, including data available from humans, weight of evidence, type of toxic insult, and probability of variations in responses among susceptible populations (e.g., very young or very old). Established guidelines have been accepted by several agencies that use the safety-factor approach to account for intraspecies variability, cross-species extrapolation, and exposure duration. In some instances, comparisons between these predicted values and experimental data have been conducted and the results appear comparable for some

selected examples (Dourson and Stara, 1983; McMillan, 1987).

The uncertainty-factor approach is based on the assumption that a threshold does exist, that there is a dose below which an effect does not change in incidence or severity. The threshold concept is complicated and controversial. As described by Sette and MacPhail (1992), there are several different ways in which the term threshold is used. Thresholds are defined, in part, by the limit of detection of an assay. As the sensitivity of the analytical method or bioassay is improved, the threshold might be adjusted downward, indicating that the true threshold had not been previously determined.

Another problem inherent with an observation of no discernible effects at low doses is that it is impossible to determine whether the risk is actually zero (i.e., the dose is below a threshold dose) or whether the statistical resolving power of a study is inadequate to detect small risks (Gaylor and Slikker, 1992). Every study has a statistical limit of detection that depends on the number of individuals or animals involved. For example, it would be relatively unusual to conduct an experiment on a neurotoxicant with as many as 100 animals per dose. If no deleterious effects were observed in 100 animals at a particular dose, it might be concluded that this dose level is below the threshold dose. However, we can only be 95 percent confident that the true risk is less than 0.03. That is, if 3 percent of the animals in a population actually develop a toxic effect at this dose, there is a 5 percent chance that a group of 100 animals would not show any effect. The observation of no toxic effects in an extremely large sample of 1,000 animals only indicates with 95 percent confidence that the true risk is less than 0.003, etc. Because thresholds cannot be realistically demonstrated, they are therefore assumed.

The notion of threshold may be useful in explaining mechanisms associated with specific types of toxicity. What little is known about mechanisms of neurotoxicity suggests that both threshold and nonthreshold scenarios are possible (Silbergeld, 1990). However, for one of the most studied neurotoxicants, lead, there has been a steady decline in exposure levels shown to have effects, suggesting to some that no threshold dose is apparent (Bondy, 1985). Sette and MacPhail (1992) also consider the threshold as a mathematical assumption and as a population sensitivity and conclude that "the idea of no threshold seems experimentally untestable. . . ."

The RfD approach relies on single experimental observations (the NOAEL or LOAEL) instead of complete dose-response curve data to calculate risk estimations. Chemical interactions with biological systems are often specific, stereoselective, and saturable. Examples include enzyme-substrate binding leading to substrate metabolism, transport, and receptor-binding, any or all of which may be a requirement of an agent's effect or toxicity. Therefore, a chemical's dose-response curve may not be linear. The certainty of low-dose extrapolation has been determined to be markedly affected by the shape of the dose-response curve (Food and Drug Administration Advisory Committee on Protocols for Safety Evaluation, 1971). Therefore, the appropriate use of dose-response curve data should enhance the certainty of risk estimations when thresholds are not assumed or determined.

Dose-response models have generated considerable interest as more appropriate and quantitative alternatives to the safety-factor approach in risk assessment. Rather than routinely applying a "fixed" safety factor to the NOAEL (based on a single dose) to obtain a "safe" dose, another approach uses data from the entire dose-response curve.

Two fundamentally different approaches in the use of dose-response data to estimate risk have been developed. Dews and coworkers (Dews, 1986; Glowa and Dews, 1987; Glowa et al., 1983) and Crump (1984) demonstrated an approach in which they used information on the shape of the dose-response curve to estimate levels of exposure associated with relatively small effects (i.e., a 1, 5, or 10 percent change in a biological endpoint). Both Dews and Crump fit a mathematical function to the data and provided an estimate of the variability in exposure levels associated with a relatively small effect.

An alternative approach developed by Gaylor and Slikker (1990) first establishes a mathematical relationship between a biological effect and the dose of a given chemical. The second step determines the distribution (variability) of individual measurements of biological effects about the dose-response curve. The third step statistically defines an adverse or "abnormal" level of a biological effect in an untreated population. The fourth step estimates the probability of an adverse or abnormal level as a function of dose utilizing the information from the first three steps. The advantages of these dose-response models are that they encourage the generation and use

of data needed to define a complete dose-response curve.

Although more quantitative dose-response assessment models have emerged in recent years, uncertainty remains as to what biological endpoints from which species with what dosing regimen should be analyzed. Within a species, a given agent may produce a variety of effects, including neurochemical, neuropathological, and behavioral effects. In other instances, a chemical may produce alterations of one endpoint but not others (Slikker et al., 1989). Species selection may also dramatically affect the outcome of risk assessments. The Parkinson-like syndrome produced by single doses of MPTP in the human or nonhuman primate is not observed in rats given comparable MPTP doses (Kopin and Markey, 1988). Although endpoint and species selection appear to have a tremendous effect on the outcome of an assessment, only a few studies have systematically investigated the effect on assessment outcome of varying either the species or the endpoint within a species (McMillan, 1987; Hattis and Shapiro, 1990; Gaylor and Slikker, 1992).

5.2.3. Exposure Assessment

This step of the risk assessment process determines the source, route, dose, and duration of human exposure to an agent. The results of the dose-response assessment are combined with an estimate of human exposure to obtain a quantitative estimate of risk. As either the effect of or the exposure to an agent approaches zero, the risk of neurotoxicity approaches zero. It should be recognized that exposures to multiple agents may produce synergistic or additive effects.

Exposure can occur via many routes, including ingestion, inhalation, or contact with skin. Sources of exposure may include soil, food, air, water, or intended vehicle (e.g., drug formulation). The degree of exposure may be strongly influenced by a number of factors, for example, the occupation of the individual involved.

The duration of exposure (i.e., acute or chronic) and interval of exposure (i.e., episodic or continuous) are variables of exposure that are common to all types of risk assessments, including carcinogenicity (OSTP, 1985).

Although not routinely used, biological markers or biomarkers of exposure could theoretically improve the exposure assessment process and, thereby, improve the overall risk assessment of neurotoxicants. Exposure biomarkers may include either the quantitation of exogenous agents or the

complex of endogenous substances and exogenous agents within the system (Committee on Biological Markers, 1987). A limited number of examples of biomarkers of exposure have been reviewed by Slikker (1991) and include blood or dentine lead concentrations (Needleman, 1987), cerebrospinal fluid concentrations of dopamine metabolites following MPTP administration (Kopin and Markey, 1988), cerebrospinal fluid concentrations of a serotonin metabolite following MDMA exposure (Ricaurte et al., 1986), and serum esterase concentrations following organophosphate exposure (Levine et al., 1986). The use of muscarinic receptor binding in peripheral plasma lymphocytes has also been described as a potential biomarker of exposure for the organophosphates (Costa et al., 1990). These examples suggest that biomarkers of exposure are available for some agents, but more effort will be required to demonstrate that these biomarkers can routinely be used to improve the exposure assessment process.

5.2.4. Risk Characterization

The final step of the risk assessment process combines the hazard identification, the dose-response assessment, and the exposure assessment to produce the characterization of risk. As previously stated, the current practice is to divide the NOAEL by the appropriate safety factor to obtain the RfD. The magnitudes of the safety factors used to determine RfDs [interspecies extrapolation (10), intraspecies extrapolation (10), and acute vs. chronic exposure (10) = 1000] are based more on conservative estimates than on actual data (Sheehan et al., 1989; McMillan, 1987) and have been questioned for empirical reasons (Gaylor and Slikker, 1990). Uncertainty factors may be decreased as more data become available. Modifying factors are also employed under certain circumstances to account for the completeness of data sets. Along with this RfD numerical value, any uncertainties and assumptions inherent in the risk assessment should also be stated (OTA, 1990). Although the RfD provides a single numerical value, it does not provide information concerning the uncertainty of this number nor does the RfD approach attempt to estimate the potential risk as a function of dose or consider the potential risk at the NOAEL. The risk at the NOAEL generally is greater than zero and has been estimated to be as high as about 5 percent (Crump, 1984; Gaylor, 1989). Concern has been expressed that the application of the

RfD approach to all neurotoxicants is unlikely to be biologically defensible in light of mechanistic data (NRC, 1992). Several other quantitative risk assessment procedures have recently emerged as alternatives to the RfD approach (Kimmel and Gaylor, 1988).

Quantitative risk assessment may be defined as a data-based process that uses dose-response information and measurements of human exposure to arrive at estimates of risk. Assumptions are required to extrapolate results from high to low doses, to extrapolate from animal results to humans, and to extrapolate across different routes and durations of exposure.

In a step toward quantitative risk assessment, Crump (1984) suggested the use of a benchmark dose defined as "a statistical lower confidence limit corresponding to a small increase in effect over the background level." The benchmark dose is determined with a mathematical model and is less affected by the particular shape of the dose-response curve. Although the benchmark approach avoids several problems inherent in the RfD approach (e.g., lack of precision in defining the LOAEL; Kimmel, 1990), the same final step of dividing by arbitrary safety factors is obligatory.

Another approach to quantitative risk assessment is the statistical or curve-fitting approach. If quantal information concerning the proportion of response at a given dose is available but mechanistic information is lacking, statistical models can be used to fit population data (Wyzga, 1990). This approach has been used to fit various models to data of lead toxicity. The data were sufficient to allow discrimination of several models in terms of goodness of fit; the nerve-conduction velocity data from children exposed to environmental lead as a function of blood lead concentration fit a "hockey-stick" type dose-response curve rather than a logistic or quadratic model (Schwartz et al., 1988). These statistical approaches not only provide a method to extrapolate data to lower exposure conditions but also can provide circumstantial evidence to support a proposed mechanism of action.

The development of quantitative risk assessment approaches depends, in part, on the availability of information on the mechanism of action and pharmacokinetics of the agent in question. In the development of a biologically based, dose-response model for MDMA neurotoxicity, Slikker and Gaylor (1990) considered several factors, including the pharmacokinetics of the parent chemical, the target tissue concentrations of the parent chemical or

its bioactivated proximate toxicant, the uptake kinetics of the parent chemical or metabolite into the target cell and membrane interactions, and the interaction of the chemical or metabolite with presumed receptor site(s). Because these theoretical factors contain a saturable step due to limited amounts of required enzyme, reuptake, or receptor site(s), a nonlinear, saturable dose-response curve was predicted. In this case of neurochemical effects of MDMA in the rodent, saturation mechanisms were hypothesized and indeed saturation curves provided relatively good fits to the experimental results. The conclusion was that use of dose-response models based on plausible biological mechanisms provide more validity to prediction than purely empirical models. Concomitant with attempts to develop quantitative risk assessment procedures, it is imperative that regulatory policy or risk management procedures also be developed to use appropriately the type of data generated by quantitative risk assessment. However, until alternative risk assessment procedures have been validated, the available RfD approach with its limitations will most likely continue to be used.

5.3. Generic Assumptions and Uncertainty Reduction

The purpose of risk assessment is to determine the risk associated with human exposure to a hazard. The quality of the data from toxicological studies differs. In the case of therapeutic products where human effects information is available, risk assessments rely primarily on the result of controlled clinical trials. Even when clinical trial data are available, however, conducting a risk assessment is complicated by many uncertainties. In the face of these uncertainties, conservative assumptions are usually made at several steps in the risk assessment process. For example, unless adequate clinical data are available, the most sensitive experimental species is frequently used. While conservative assumptions may lead to a risk assessment that adequately protects the human population, this may result in an increased financial burden on the public (e.g., manufacturing costs or loss of jobs); even then it is impossible to be certain that the total population will be protected. Conversely, errors leading to allowable exposure levels that are too high reduce the safety margin for human health and increase health care costs. Thus, there are compelling public health and economic reasons to obtain more precise risk assessments; all assumptions cannot be completely

eliminated, but the degree of uncertainty associated with certain specific assumptions can at least be reduced (Sheehan et al., 1989).

Risk assessment for neurotoxicity shares many common features with other noncancer toxicities such as developmental toxicity and immunotoxicity. As such, there are several generic assumptions that apply to all traditional, noncancer endpoint risk assessment procedures (Table 5-1).

TABLE 5-1.—GENERAL ASSUMPTIONS THAT UNDERLIE TRADITIONAL RISK ASSESSMENTS^{a,b}

1. A threshold dose exists for noncancer endpoints.
2. NOAEL/LOAEL uncertainty- or safety-factor approaches are reasonable.
3. Variability in the toxic response to the chemical exposure is not due to a heterogeneous population response.
4. Average dose or total dose is a reasonable measure of exposure when doses are not equivalent in time, rate, or route of administration and the average (or total) dose is proportional to adverse effect.
5. Structure-activity correlations can be used to predict human toxicity.
6. The mechanism of action is the same at all doses for all species.

^aThis is not intended to be an exhaustive list.

^bModified from Sheehan et al., 1989.

One approach to reducing some of the uncertainties is to critically define and examine the assumptions made in the risk assessment process. Several of the more generic of these assumptions are listed in Table 5-1. Despite their diversity, these assumptions share the attribute of being partially replaceable by factual information. If, for example, the assumption of 100 percent absorption of a toxicant from a contaminated food source is replaced by data demonstrating that 90 percent of the toxicant is not biologically available under human exposure conditions, then a revised risk assessment could allow a 10-fold greater exposure from that source; i.e., the former risk assessment was too conservative by a factor of 10. As another example, many risk assessments employ data from two species.

If experimental animals and humans absorb or metabolize the same fraction of a dose, the potency estimate would not change when extrapolating from animals to humans. Therefore, it is necessary to have information on both human and animal rates before changes in potency estimates are made. If a toxicant acts via a reactive intermediate and humans produce 10-fold more of

the intermediate than either of the test species under similar conditions, then allowable human exposure should be decreased 10-fold (i.e., the allowable exposure levels are 10-fold too high) or an increased danger to human health exists. These findings could then replace the "most sensitive species" principle with facts concerning relevant human exposure and susceptibility. In these examples, the identification of the assumption helps define research needs or knowledge gaps (Sheehan et al., 1989).

In general, the knowledge gaps are many and complex, but some can be filled with practical solutions. The combination of ample dose-response data and a quantitative risk assessment process can eliminate assumptions 1 (existence of a threshold) and 2 (reasonableness of safety factors) of the six generic assumptions (Table 5-1). The uncertainty of assumption 4 (exposure comparisons) could be at least reduced with the proper application of appropriate pharmacokinetic data. Likewise, the uncertainty of generic assumption 3 (variability of heterogeneous populations) can theoretically be reduced with the use of biomarkers of exposure and biomarkers of effect, to more accurately define the relationship between exposure and biological effect in a large population.

Many assumptions remain, however, and uncertainty reduction by filling knowledge gaps will ultimately require greater understanding of biological mechanisms underlying neurotoxicity. A single risk assessment model may not be adequate for all conditions of exposure, for all endpoints, or for all agents. Risk assessment models of the future may well include biomarkers of both effect and exposure as well as biologically based mechanistic considerations derived from both epidemiologic and experimental test system data.

6. General Summary

It is now generally accepted that some chemicals, including industrial agents, pesticides, therapeutic agents, drugs of abuse, food-related chemicals, and cosmetic ingredients, can have adverse effects on the structure and function of the nervous system. It has recently been proposed that exposure to neurotoxicants might also be associated with Parkinsonism and Alzheimer's disease. Several Federal agencies have initiated research programs in neurotoxicology, developed neurotoxicology testing guidelines, and used neurotoxic endpoints to regulate chemicals in the environment and workplace.

The scientific basis for identifying and characterizing chemical-induced neurotoxicity has advanced rapidly during the last several years. The manifestation of neurotoxicity depends on the relationship between exposure (applied dose) and the dose at the site of toxic action (delivered or target dose) and response. Chemical-induced changes in the structure or function of the nervous system at the cellular or molecular level can be observed as alterations in sensory, motor, or cognitive function at the level of the whole organism. Several important features about the nervous system make it particularly vulnerable to chemical insult, including differential susceptibilities at different stages of maturation, the presence of blood brain and nerve barriers that may be the target of toxic action, high metabolic rate, and limited regenerative capability following damage.

Methods devised to detect and quantify agent-induced changes in nervous system function in humans include clinical evaluations and neurotoxicity testing methods such as neurobehavioral, neurophysiological, neurochemical, imaging, and self-reporting procedures. Experimental approaches used in human neurotoxicology include epidemiological studies and, to a limited extent, human laboratory exposure studies. There are several important unresolved issues in human neurotoxicology, including the development of commonly accepted risk assessment criteria and animal-to-human extrapolation.

It is generally assumed that if physical or chemical-induced neurotoxicity is observed in animal models, then neurotoxicity will be produced in humans. Considerable research has been performed to demonstrate the validity of many animal models in an experimental context and to show predictive validity. Methods in animal neurotoxicology are frequently used in a tier-testing framework with simpler, more cost-effective tests to screen or identify neurotoxic potential. In hazard identification, the presence of neurotoxicity at the first tier is used to make decisions about subsequent development of a chemical or about the need to conduct additional experiments to define the level at which neurotoxicity will be observed. A number of methods have been devised for studies in animal neurotoxicology, including neurobehavioral, neurophysiological, neurochemical, and neuroanatomical techniques. It is known that the neuroendocrine system may be affected adversely by

neurotoxicants and that there are populations that are differentially vulnerable to neurotoxic agents. Considerable research is in progress to employ structure-activity relationships to predict neurotoxicity and newly developed *in vitro* procedures are being used to augment or complement currently existing *in vivo* approaches.

Principles of risk assessment for neurotoxicity are evolving rapidly. At the present time, neurotoxicity risk assessment is generally limited to qualitative hazard identification. Neurotoxicological risk assessments have been generally based on a no observed adverse effect level and uncertainty factors. As with other noncancer endpoints, there is a need to consider more information about the shape of the dose-response curve and mechanisms of effect in quantitative neurotoxicology risk assessment. Research is needed to develop dose-response models that incorporate biologic information and mechanistic hypotheses into quantitative extrapolation of dose-response relationships across species and from high to low dose exposures.

7. References

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Part IV

Department of Justice

Immigration and Naturalization Service

8 CFR Parts 242 and 287

**Enhancing the Enforcement Authority of
Immigration Officers; Final Rule**

DEPARTMENT OF JUSTICE

Immigration and Naturalization Service

8 CFR Parts 242 and 287

[INS No. 1442-92; AG ORDER 1907-94]

RIN 1115-AC63

Enhancing the Enforcement Authority of Immigration Officers

AGENCY: Immigration and Naturalization Service, Justice.

ACTION: Final rule.

SUMMARY: This final rule implements changes to Immigration and Naturalization Service (Service) procedures that relate to carrying firearms, expanding the arrest and service of process authority of immigration officers beyond matters involving violations of the immigration laws, and requiring that every alien fourteen years of age or older, against whom deportation proceedings are commenced, shall be fingerprinted and photographed and that such fingerprints and photographs shall be made available to other law enforcement agencies upon request. This rule also codifies existing policy guidelines regarding the authority of immigration officers under the direction and control of the Attorney General to arrest persons, carry firearms, serve process, and perform other related enforcement functions. The final rule affirms both existing and newly-developed policies and ensures the consistent application of these policies by all immigration officers involved in the enforcement of the immigration laws.

EFFECTIVE DATE: August 17, 1995.

FOR FURTHER INFORMATION CONTACT: Kathryn E. Sheehan, Special Assistant, Immigration and Naturalization Service, 425 I Street NW., Room 7246, Washington, DC 20536, telephone (202) 514-3032.

SUPPLEMENTARY INFORMATION: On October 14, 1992, at 57 FR 47011-47020, the Attorney General published a proposed rule to implement section 503 of the Immigration Act of 1990 (IMMACT), Public Law No. 101-649 (8 U.S.C. 1357), and requested comments from interested parties by November 30, 1992. Section 503(a) of IMMACT amended section 287 of the Immigration and Nationality Act (Act). Section 503(a) authorizes immigration officers, when performing duties relating to the enforcement of the immigration laws and when authorized under regulations prescribed by the Attorney General, to arrest without a warrant any person likely to flee before a warrant can be

obtained, for any offense against the United States committed in the officer's presence or for any felony cognizable under the laws of the United States if the officer has reasonable grounds to believe the person to be arrested has committed or is committing such a felony. Section 503(a) of IMMACT also authorizes immigration officers, under regulations prescribed by the Attorney General, to carry firearms and to execute and serve any orders, warrants, subpoenas, summonses, or other process issued under the authority of the United States.

Section 503(b) of IMMACT requires fingerprinting and photographing of any alien fourteen years of age or older against whom deportation proceedings have been commenced under section 242 of the Act, and dictates that such fingerprints be made available to law enforcement agencies upon request. Finally, section 503(a) of IMMACT requires, as a condition of immigration officers' authority to make warrantless arrests under amended section 287(a)(5)(B) for felonies, the Attorney General to publish final regulations that define the categories of immigration officers who may use force, including deadly force, and the circumstances under which such force may be used; establish standards with respect to enforcement activities of the Service; require that no immigration officer be authorized to make arrests under section 287(a)(5)(B) of the Act unless that officer has been certified as having completed a training program covering such arrests and standards and establish an expedited internal review process for violations of such standards.

The proposed rule set forth regulations implementing these provisions of section 503 of IMMACT. A total of 235 comments were received, reviewed, and considered in writing this final rule.

General Issues

Five commenters stated that the proposed rule failed to comply with section 4(b) of E.O. 12291 as it relates to the comments of persons directly affected by the rule, and sections 2(a) and 2(b)(2) of E.O. 12778 as they relate to adherence to certain requirements in promulgating new regulations and reviewing existing regulations.

Many of the provisions of E.O. 12291 pertain only to major rules. In the proposed rule, the Attorney General stated that this rule is not a major rule within the meaning of section 1(b) of E.O. 12291. Therefore, section 4(b) of that Executive Order is inapplicable. With regard to E.O. 12778, the Office of Management and Budget (OMB) issued

a Memorandum for Agency Regulatory Contacts dated January 9, 1992, stating that there are two ways that an agency may certify compliance to OMB as part of the regulatory review process. An agency may attach a certification of compliance with E.O. 12778 to Standard Form 83 signed by an attorney, or an agency may insert a statement of such certification in the preamble to the draft rule itself. The Department of Justice (Department), following review of the rule in light of E.O. 12778 and in compliance with that Executive Order, attached a certification of compliance. Accordingly, the Department and the Service believe that the requirements of E.O. 12291 (which was superseded by E.O. 12866 on September 30, 1993), 12866, and 12778 have been met.

One commenter stated that the proposed rule may be in violation of the Service's contract with its collective bargaining unit because the required negotiations have not occurred regarding those aspects of the rule that constitute substantive changes in conditions of employment affecting the bargaining unit. During development of the final rule, negotiations occurred with both the National Immigration and Naturalization Service Council and the National Border Patrol Council.

One commenter asserted that the existing Service Firearms Policy could not be changed because it constituted an agreement with the employee unions. The Service disagrees because there is no agreement between it and the employee unions regarding the existing Service Firearms Policy.

One commenter pointed out that the proposed rule failed to indicate whether the regulations would preempt state or local laws regarding peace officer status. The regulations implement new statutory authorities pertaining to arrests and service of process for federal matters and would not affect current practices with states. State law may provide immigration officers with peace officer status that would also provide the authority to make arrests for state law violations. However, unless specifically authorized as a peace officer under state law, an immigration officer's authority to enforce the state statute is that of an ordinary citizen. The limitations and liabilities associated with such action are defined in state law.

One commenter stated that the proposed regulations appeared to conflict with sections 101(a)(18) and 235 of the Act as they relate to the definition of "immigration officer" and an immigration officer's authority to administer oaths, take and consider evidence, and require by subpoena the

attendance and testimony of witnesses and production of documents. The Service disagrees. Section 101(a)(18) of the Act authorizes the Attorney General to designate, individually or by regulation, any employee or class of employees to perform the functions of an immigration officer specified by the Act or any section thereof. In the proposed regulations, the Attorney General accomplished this by designating those categories of immigration officers authorized to perform the functions of sections 242 and 287 of the Act. The commenter stated incorrectly that § 287.5(a) of the proposed rule required certain immigration officers to obtain individual or class designation in order to be authorized to interrogate and administer oaths. The proposed rule in § 287.5(a) allowed any immigration officer as defined in 8 CFR 103.1(q) to interrogate and administer oaths. With regard to subpoenas, the proposed rule made no changes to the current regulations in § 287.4 pertaining to the subpoena process.

A number of commenters criticized the proposed rule for not providing a sufficient statement of the legislative history of section 503 of IMMACT in the Summary section. An adequate description of the requirements of section 503 was provided by the notice of proposed rulemaking in the Supplementary Information section of the rule in accordance with the Federal Register's document drafting requirements.

One commenter recommended that the effective date of the final rule for other than permanent full-time (OTP) immigration inspectors be extended to two years from date of publication in the Federal Register in order to have sufficient time to provide both basic immigration law enforcement training and training in the new enforcement standards. Such an extension is impracticable as many permanent full-time immigration officers will also need to receive both basic immigration law enforcement training and training in the new enforcement standards. It would be inappropriate to allow the OTP immigration officers to take more time in meeting the training timetable than the permanent full-time employees because this would result in having OTP immigration inspectors operating under the old regulations while working side by side with permanent full-time immigration inspectors recently trained in, and operating under, the new regulations. This situation would not only promote procedural inconsistencies and confusion, but also subject the public to two different

regulatory standards at ports of entry. The Attorney General has delayed implementation of the final rule to one year from date of publication in order to ensure training of approximately 10,000 immigration officers in the new enforcement authorities and standards. The Attorney General recognizes the difficulties inherent in meeting this rigorous training schedule. However, she is committed to ensuring a consistent and unified implementation approach nationwide that only one delayed implementation date can provide.

Policy Issues

Sections 242.2 and 287.7—Apprehension, Custody, and Detention and Retainer Provisions

One commenter stated that the proposed rule was contradictory by requiring that an immigration officer successfully complete basic immigration law enforcement training in order to be authorized to issue a detainer in §§ 242.2(a) and 287.7(a), yet not requiring the successful completion of basic immigration law enforcement training in order to be authorized to issue an order to show cause in § 242.1(a) or a warrant of arrest in § 242.2(c). A detainer is the mechanism by which the Service requests that the detaining agency notify the Service of the date, time, or place of release of an alien who has been arrested or convicted under federal, state, or local law. The Service agrees with the commenter that the standards for issuance of a detainer are no greater than those for issuance of an order to show cause and a warrant of arrest for immigration violations. The final rule deletes the requirement of successful completion of basic immigration law enforcement training for authorization to issue detainers. Training in immigration law and procedure is necessary to issue detainers, but training as a law enforcement officer is not needed to effectively conduct this portion of the immigration process. This does not eliminate the immigration officer's responsibility to ensure that detainees are issued only to aliens who are amenable to exclusion or deportation proceedings.

Two commenters stated that the authority to issue a warrant of arrest in § 242.2(c) should include the authority to serve the warrant of arrest in § 287.5(e)(2). The Service disagrees. Issuance of a warrant of arrest entails signature by an authorized immigration officer, while service of the warrant entails a step-by-step process requiring training and proficiency in service of

process procedures. The two authorities are separate and distinct processes.

Section 287.1—Definitions

One commenter urged the inclusion of the Other Than Permanent Full-Time (OTP) Immigration Inspector Basic Training Course in the definition of "basic immigration law enforcement training" in § 287.1(g). The Service agrees and this section has been amended accordingly. However, an OTP immigration inspector will not be authorized to make arrests for federal offenses under section 287(a)(5) (A) and (B) of the Act until such time as he or she converts status to permanent full-time and successfully completes training applicable to that position.

Four commenters urged the Service to expand the definition of "basic immigration law enforcement training" in § 287.1(g) to include prior law enforcement experience or training with other federal, state, or local agencies as well as lengthy Service experience or other miscellaneous Service training courses apart from the basic training courses. The Service acknowledges that successful completion of one or more training courses presented by the Federal Government or a state-certified program may be substantially equivalent to basic immigration law enforcement training. The final rule provides a mechanism for considering other training by expanding the definition of "basic immigration law enforcement training" to include training that is substantially equivalent thereto as determined by the Commissioner with the approval of the Deputy Attorney General. The Commissioner's review is necessary to ensure that each immigration officer has all the required federal and, in particular, immigration law enforcement training. For example, an immigration officer who was employed previously in another Federal agency as a special agent, and thus had training in general Federal laws, would still need immigration law enforcement training.

Sections 287.5 and 287.9—Exercise of Power by Immigration Officers and Criminal Search Warrant and Firearms Policies

Ninety-eight commenters expressed concern that the proposed regulations precluded immigration officers from carrying firearms in §§ 287.5(f) and 287.9(b), effecting arrests for immigration violations in §§ 287.5(c) (1), (2), and (5), and serving process in § 287.5(e) while off duty. The commenters stated that it is not uncommon for immigration officers or other federal law enforcement officers in

an off-duty status to receive telephone calls at home from other federal, state, or local law enforcement officers requesting their immediate assistance. The commenters pointed out that only §§ 287(a)(5) (A) and (B) of the Act, regarding arrest authority for federal offenses, stipulate that an immigration officer must be "performing duties relating to the enforcement of the immigration laws at the time of the arrest" and that this language should not be included in those sections of the proposed rule regarding the other enforcement authorities. In drafting the proposed rule, the Service did not intend to impair an immigration officer's ability to place himself or herself on duty when necessary for the purpose of enforcing the immigration laws of the United States. To avoid misinterpretation, the Service has removed the language "performing duties relating to the enforcement of the immigration laws at the time of the arrest" from the enforcement authorities except where required by statute. The Service has also removed the language "In an on duty status" from § 287.9(b). Administrative guidelines will be developed to explain when an immigration officer on his or her own initiative may place himself or herself in an on-duty status.

Fifty-two commenters objected to establishing a separate process for Service managers, including district directors, deputy district directors, officers in charge, and assistant officers in charge, to request the Commissioner's authorization to exercise each of the enforcement authorities. The commenters stated that this process would hold managers to a higher standard than their subordinates, many of whom are trainees still on probation, who are automatically empowered to exercise an authority if they have completed the requisite training. The commenters asserted that this process violates standard management hierarchy, and pointed out that the vast majority of affected individuals are career immigration officers who not only have completed basic immigration law enforcement training, but also have extensive experience in field enforcement operations. In fact, due to the Service's limited enforcement resources, these managers participate frequently in Service field enforcement operations or respond to requests for assistance from other law enforcement agencies when their subordinates are out of the office conducting field operations. The commenters asserted that managers in other agencies within the Department, including the Federal

Bureau of Investigation, are vested with the same powers and authorities as their subordinates, and the Service's managers should not be treated differently if they have undergone the requisite training.

The Service and the Department agree that a more streamlined process should be established for granting enforcement authorities to Service managers who are trained and who have maintained qualifications. The rationale behind the proposed rule's segregation of managers was to ensure that law enforcement authorities are granted only to those immigration officers, regardless of rank, who need the authorities and are fully trained in how to exercise them. To accomplish this task more expediently while ensuring the existence of a well-trained cadre of immigration officers at all levels in the agency, the final rule provides enforcement authorities to managers who have successfully completed basic immigration law enforcement training without creating a separate authorization process. The final rule also provides a mechanism for empowering those managers, as well as other immigration officers within one of the designated categories, who have not successfully completed one of the basic immigration law enforcement training courses by allowing them either to attend one of the basic immigration law enforcement training courses or to seek a determination from the Commissioner, with the Deputy Attorney General's approval, that they have training substantially equivalent thereto.

A number of commenters stated that each immigration officer should have the power to exercise all of the enforcement authorities as long as each such officer is trained and certified. They stated that the proposed regulations created a rigid class system wherein only certain categories of immigration officers would be authorized to exercise certain enforcement functions and that this system impedes the Service's ability to respond to operational emergencies. In addition, some commenters stated that the enforcement role of immigration inspectors at ports of entry and the field review work and office interviews conducted by immigration examiners necessitate empowering both inspectors and examiners with all of the enforcement authorities. The Service and the Department disagree. In drafting the proposed rule, the Service used the Attorney General's "Guidelines for Legislation Involving Federal Criminal Law Enforcement Authority" (Guidelines) dated June 29, 1984. Although the Guidelines were developed to guide federal agencies in

preparing legislative proposals concerning future grants of law enforcement authority, the Guidelines' overriding policy is that an officer should be given only the authorities that the officer needs and has been trained to execute. The Guidelines require an agency to extend grants of law enforcement authority only to those employees who have graduated from an accredited course of training in the exercise of that authority and only where a significant likelihood exists that, in the course of performing their assigned duties, the employees will frequently encounter situations in which it is necessary to exercise that authority. Each category of immigration officers has a different mission, and only those categories who satisfied the Attorney General's criteria were granted one or more of the enforcement authorities. In reviewing these regulations, consistent with the Department's review of other regulations, guidelines, and policies affecting criminal law enforcement authority in the Executive Branch, the Department believes that the same delineation of authorities is both appropriate and effective. The following chart summarizes the categories of immigration officers who are authorized to exercise the principal enforcement authorities.

Some commenters stated that immigration inspectors at ports of entry need the authority to execute arrest warrants for immigration violations to conform with historical practices of the United States Attorneys offices. In light of existing practices, the Service and the Department agree that immigration inspectors at ports of entry do need to continue executing arrest warrants for both criminal and administrative immigration violations. However, immigration inspectors do not need the authority to execute arrest warrants for non-immigration criminal violations. The investigation of non-immigration criminal offenses associated with the authority to execute an arrest warrant for non-immigration violations is beyond the scope of an immigration inspector's responsibilities. Accordingly, the structure of § 287.5(e) in the final rule has been changed to focus on the distinction between "immigration" and "non-immigration" offenses, and to grant authority to immigration inspectors to execute arrest warrants for immigration violations.

The revised language of § 287.5(e) also specifies, as the structure of the proposed rule specified, that detention enforcement officers are authorized only to execute warrants of arrest for administrative immigration violations,

not warrants for a criminal arrest that can be executed by other officers. In carrying forward this distinction, the Commissioner is authorized to designate additional officers (individually or as a class) to execute warrants of arrest for administrative immigration violations, while approval of the Deputy Attorney General must be sought to designate additional officers (individually or as a class) to execute criminal arrest warrants. Finally, § 287.5(e)(2)(ii) grants authority to execute criminal warrants of arrest for non-immigration violations only to border patrol agents, special agents, deportation officers, their supervisors and managers, and immigration officers who need such authority and who have been designated by the Commissioner with the approval of the Deputy Attorney General.

Several commenters questioned the efficacy of granting immigration examiners the power to arrest for immigration violations in §§ 287.5(c) (1) and (2) yet not authorizing them to carry firearms in § 287.5(f). Similarly, other commenters stated it was inappropriate to authorize detention enforcement officers to carry firearms yet preclude them from effecting any arrests. The Service and the Department disagree. The ability to effect an arrest is not conditioned upon the carrying of a firearm. Other federal, state, and local law enforcement officers' duties require them to make arrests without a firearm, and they do so without incident. Similarly, the potential need and ability to use deadly force to defend an officer does not imply a concomitant need for arrest authority. The two authorities are not necessarily concomitant. Detention enforcement officers do not need arrest authority. Detention enforcement officers' principal duties are to transport and guard detained individuals who have already been placed under arrest. They also execute warrants of arrest for administrative immigration violations. In order to clarify the detention enforcement officers' authorities, § 287.59(c)(6) has been added to the final rule.

Five commenters questioned whether immigration examiners and deportation officers who perform inspectional duties at ports of entry on an overtime basis would be precluded from exercising the enforcement authorities granted to immigration inspectors. Immigration examiners, including free trade examiners, and deportation officers are considered to be immigration inspectors when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections, provided all training requirements for

immigration inspectors have been met. To avoid misinterpretation, the Service has added language to the rule stipulating that immigration examiners are authorized to exercise the same enforcement authorities granted to immigration inspectors when they are in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections. Deportation officers are already listed as authorized to exercise the same enforcement authorities granted to immigration inspectors, but § 287.5(b) has been amended for clarification to include deportation officers only when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections.

Two commenters stated that certain immigration officers stationed in Service offices overseas should be granted law enforcement authority. They also noted that immigration officers stationed overseas occasionally must work on cases within the United States. The Service and the Department note, however, that immigration officers cannot exercise any of the enforcement authorities while working in foreign countries. When overseas officers are assigned to a duty post within the United States, they assume the power to exercise all of the criminal and civil enforcement authorities assigned to the applicable category of immigration officers, provided all training requirements have been met. For example, a special agent overseas who is detailed to an assignment in the United States has all of the enforcement authorities granted to special agents, provided that the detailed special agent has met all training requirements for special agents. However, overseas immigration officers do need the authority to interrogate, administer oaths, and take and consider evidence. Accordingly, § 287.5(a) in the final rule has been amended to grant such officers authority to interrogate, administer oaths, and take and consider evidence in or outside the United States.

One commenter stated that the proposed rule in § 287.8(c)(2) should be changed to remove the requirement that the immigration officer must document, on appropriate Service forms, the fact that an arrestee was advised of his or her rights. The commenter pointed out that many United States Attorneys accept advice of rights given in the presence of witnesses in lieu of a form. The Service disagrees. Immigration officers must document advice of rights on appropriate Service forms, consistent

with the practice of other components within the Department.

One commenter suggested that proposed § 287.8(c)(2) incorrectly stated that a person arrested and charged with a criminal violation shall be advised of the appropriate rights as required by law at the time of arrest, or as soon thereafter as practicable. The commenter pointed out that current law requires that such warnings be provided only prior to a custodial interrogation. The commenter further stated that many criminal arrests are made where the arresting officer does not want to conduct a custodial interrogation and therefore should not be required to advise the person arrested of the appropriate rights. The Service and the Department disagree with the commenter's interpretation of the rule. First, the rule states that the person arrested shall be advised of the appropriate rights as required by law. The law, including constitutional standards, determines when advice of rights must be provided. Second, to the extent that the rule encourages a uniform advice of rights at or shortly after the point of arrest, it serves as an appropriate reminder of these constitutional standards and establishes a practice that will prevent situations where interrogations are wrongfully undertaken without proper advice of rights.

One commenter stated that the definition of a designated pursuit vehicle in § 287.8(e)(1) should stipulate that the vehicle must be a sedan in order to conform to the Border Patrol Vehicle Pursuit Policy. The Service disagrees. Other enforcement programs will be developing their own vehicle pursuit policies that may permit the use of vehicles other than sedans. The proposed regulations authorized certain categories of immigration officers, including special agents and deportation officers, to initiate a vehicular pursuit. In the final rule, special agents and deportation officers have been removed from the list until such time as the Investigations and the Detention and Deportation Programs have developed their specific vehicle pursuit policy, the policy is approved by the Commissioner, and all of the special agents and/or deportation officers authorized to initiate vehicular pursuits have undergone the requisite pursuit driving training and received training in the new policy.

Section 287.10—Expedited Internal Review Process

One commenter questioned the legitimacy of the Service's Office of Internal Audit, stating that the Service

is trying to create by regulation an office similar in function to the Office of Professional Responsibility, which was transferred from the Service to the Office of the Inspector General of the Department pursuant to section 102(d) of the Inspector General Act Amendments of 1988, Pub. L. No. 100-504. The Service and the Department disagree. The Office of Internal Audit was established in the reorganization of the Service and approved by the Attorney General in April 1991. Regulations have been drafted wherein the Director of Internal Audit is responsible, in part, for providing the capability to investigate alleged misconduct by Service employees and for coordinating that program with other agencies within the Department. The transfer of the Office of Professional Responsibility from the Service to the Office of the Inspector General neither relieved Service management from responsibility for ensuring proper employee conduct nor precluded Service management from exercising its fundamental management authorities to identify and correct employee misconduct.

One commenter stated that the proposed rule in § 287.10 was insufficiently specific because it stated only that allegations of misconduct would be referred "promptly" and did not: describe how the process for resolution would be expedited; describe the circumstances under which a Service employee, against whom allegations were made, might not be notified of the allegations; indicate that more serious allegations would be handled differently than less serious ones; call for the involvement of operational peers or supervisors in resolving allegations; and eliminate from involvement in the process management officials who lack law enforcement experience. It is not appropriate to incorporate the specific requirements for the handling of alleged violations of the enforcement standards into administrative rulemaking, and therefore, no change has been made to the final rule.

Legal Sufficiency

Sixty-nine advocacy organizations and individuals filed substantially similar or identical comments stating that the regulations are legally insufficient to meet the legislative mandate set forth by Congress. These comments are generally summarized below and followed by specific comments and responses.

The commenters stated that the regulations are legally insufficient because they fail to comply with the

congressional mandates: (1) to define the enforcement authority; (2) to elaborate on the scope and limits of such authority and to formulate written policies, directives, rules, and regulations to ensure the exercise of that authority within those limits; (3) to provide training for officers in how to exercise the discretionary authority granted; and (4) to outline a formal procedure for agency accountability to the community when the authority has been exercised. The commenters stated that the regulations are insufficiently specific and detailed on each of these subjects.

While the Service agrees with many of the suggestions regarding appropriate law enforcement standards as consistent with Department policy applicable to all law enforcement agencies, the Service disagrees that these regulations are either the appropriate vehicle to specify the detail of such standards, or that Congress mandated such a degree of specificity. The commenters effectively requested that the Service and the Department provide specific guidelines for discretionary decisions under other legal constraints and sound judgment, detailed procedures of daily operation, and substantive training materials, timetables, and protocols that are encompassed in enforcement manuals, supervisory review procedures, and training curricula. For reasons discussed in greater detail below, the Service will not provide this information and guidance in regulatory form; the Department declines to make an exception to standing policies for the management of the criminal justice system in the Executive Branch.

The suggestions made by these comments are appropriately directed to the functions of training and management, not administrative rulemaking. The Service and the Department agree with many of these suggestions, and, as noted below, have either incorporated them into existing training and management guidelines or are in the process of doing so. A section-by-section discussion of these comments follows.

Section 287.1(g)—Training

The commenters criticized § 287.1(g) for not providing sufficient detail regarding the substance of the training that must be completed by Service officers prior to assuming the new enforcement authority provided by section 503 of IMMACT. The commenters noted that neither the course subjects, length, nor materials are specified, and stated that the regulations should at the very least indicate how the

curriculum of existing Service training programs will be amended.

The commenters also alleged that "nothing new" is added by these regulations because all Service officers have already completed one course of basic immigration law training. The commenters suggested that the regulations should require that Service officers attend additional training before assuming additional enforcement authority. Finally, the commenters suggested that the regulations should require periodic attendance by Service officers at national or local training events devoted to new legal standards, case decisions, and Service interpretations of the law.

In response, the Service notes that these commenters appear to have assumed that Service officers who have previously completed a course of basic immigration law enforcement training will not be required to undergo additional training before being authorized to undertake the enhanced enforcement authority prescribed in section 503. However, § 287.5(c)(4)(iii) of the proposed rule specifically stated that no immigration officer could assume enhanced arrest authority until the Director of Training had certified that the immigration officer had completed a training course encompassing such arrests and the standards for enforcement activities specified in § 287.8 of the regulations. Virtually all affected officers will receive additional training during the planned one-year interval between the publication in the *Federal Register* of this final rule and its effective date. This training is currently being developed in conjunction with other components of the Department to ensure that the training is consistent with existing training on the execution of law enforcement authorities and the investigative and prosecutorial policies of the Department.

The Service agrees that existing training courses in basic law enforcement should be amended to include the training required by section 503; these curricula are in the process of being revised. Furthermore, the Service agrees that officers should receive training throughout their careers regarding new statutes, legal precedent, and policies for enforcement. Service guidelines and training programs will be continually updated to meet these needs. Precisely because judicial precedent and the Department's investigative and prosecutorial policies are constantly evolving, the Department concludes that it is not appropriate to further specify in regulations the curricula or frequency of training

programs. Moreover, daily supervision to ensure compliance with legal standards enunciated by Congress and the courts is generally more effective and efficient than developing detailed statements in the form of regulations that cannot provide guidance in all situations.

Sections 287.5(a)(1) and 287.8(b)—Power to Interrogate and Detain

The commenters suggested that the concept of a "show of authority" to restrain the freedom of an individual to walk away under § 287.8(b)(1) be expanded to specifically include verbal or psychological abuse. The term "show of authority" in the proposed rule was intended to emphasize the intimidating gestures are prohibited during pre-detention questioning. However, the Service has decided to eliminate the term "show of authority" as well as the language "by means of physical force" in the final rule, thereby clarifying that any action taken by an immigration officer during pre-detention questioning must not lead the person being questioned to believe that he or she is not free to leave the presence of the officer. The Service's training program will ensure that all immigration officers have a thorough understanding of proper procedures for conducting pre-detention questioning.

The commenters also suggested that § 287.8(b)(2) be substantially amended to include current judicial precedent defining "reasonable suspicion" and the general authority to interrogate and detain. Binding judicial precedent such as *Brewer v. Williams*, 430 U.S. 387 (1977), is subject to revision in the ongoing process of litigation, and would not be appropriate to codify.

Sections 287.5(c) and 287.8(c)—Power and Authority to Arrest

The commenters generally stated that the provisions in §§ 287.5(c) and 287.8(c) do not incorporate the "standard with respect to enforcement" mandated by section 503 of IMMACT. The commenters suggested that the regulations be amended to incorporate the judicial construction of "reason to believe," and to require compliance with outstanding court orders regarding arrest and post-arrest procedures. As stated previously, judicial precedent and other policy standards are subject to revision and are not appropriate to codify. The Service is clearly bound by such interpretations, including those set forth in *Gerstein v. Pugh*, 420 U.S. 103 (1975). Furthermore, the Service is bound to comply with outstanding court orders, and a regulatory provision to that effect is unnecessary. The

commenters also suggested that the specific provisions of a temporary settlement agreement in *Lopez v. INS*, No. CV 78-1912-WMB (C.D. Cal. August 24, 1992), be incorporated into the final rule. The Service declines this suggestion for the previously stated reasons, as well as for the fact that nothing in the *Lopez* case has required the Service to promulgate regulations on this subject.

One commenter criticized these sections for permitting individuals who have not fulfilled the statutory training requirement for enhanced arrest authority to be designated as service officers with arrest authority. However, all officers who are designated to have such authority must receive the appropriate training pursuant to §§ 287.5(c)(4) (iii)-(iv). The commenter also stated that § 287.5(c)(5), in specifying the authority for arrests under section 274 of the Act, failed to distinguish adequately between arrests with and without a warrant. However, this section of the rule incorporates the enforcement standard regarding arrests set forth in § 287.8(c), which includes a rule requiring officers whenever possible to obtain a warrant prior to arrest. In criminal cases, pursuant to § 287.5(c) (2) and (3), the issuance of such a warrant is reviewed by an Assistant United States Attorney and a Magistrate Judge before an arrest is effected.

Sections 242.2(c)(1) and 287.5(e)(2)—Arrest Warrants

The commenters stated that § 242.2(c)(1) should be amended to provide that an arrest warrant must be obtained unless there is a likelihood of the alien escaping before a warrant can be obtained. This suggestion calls for codification of the judicial precedents concerning exigent circumstances. For the reasons stated previously, the Department does not deem it appropriate to amend this rule to reflect evolving judicial standards. Such standards are incorporated into Service training programs, enforcement guidelines, and manuals.

The commenters also suggested that the rule should specify which factors Service officers should use to determine the likelihood of escape. This is the type of discretionary detail that is appropriate in a training course and manual, but not in a regulation. Finally, the commenters suggested that evidence obtained in violation of rules requiring warrants should be suppressed in civil deportation hearings. The Department declines to extend by regulation into civil proceedings the exclusionary rule,

which has heretofore been applied exclusively in criminal proceedings.

Sections 287.5(d)-(e) and 287.9(a)—Searches

The commenters stated that the rule should provide specific standards governing searches of persons and property at or inside the border; strip and body cavity searches; vehicle stops and searches of persons and vehicles at or inside the border; and searches of private dwellings and lands. Section 503 of IMMACT does not require such specificity in enforcement regulations. Moreover, for that reasons set forth above, such standards will be appropriately addressed in Service training programs, guidelines, and enforcement manuals.

Sections 242.2(a)(1) and 287.7(a)(1)—Detainers

The commenters stated that the authority for issuance of detainers in §§ 242.2(a)(1) and 287.7(a)(1) of the proposed rule was overly broad because the authority to issue detainers is limited by section 287(d) of the Act to persons arrested for controlled substances offenses. This comment overlooked the general authority of the Service to detain any individual subject to exclusion or deportation proceedings. See 8 U.S.C. 1225(b), 1252(a)(1). The detainer authority of these sections of the proposed rule were promulgated pursuant to this general authority. The statutory provision cited by the commenters places special requirements on the Service regarding the detention of individuals arrested for controlled substance offenses, but does not delimit the general detainer authority of the Service.

Section 287.8(d)—Vehicle Transportation

The commenters suggested that the Service install seat belts in all vehicles transporting people. Current regulations under which all motor vehicles, except buses, are manufactured require the factory installation of seat belts. While the Service strongly agrees with the substance of the suggestion, it would be inappropriate to include any additional requirements within an administrative rule. The reference to seat belts has been deleted in the final rule because the standard governing the use of seat belts will be thoroughly addressed in Service training programs, guidelines, and enforcement manuals.

Section 287.8(e)—Vehicular Pursuits

The commenters stated that the provisions of this section provided inadequate protection to public safety

from accidental injury and death resulting from collisions following high-speed vehicular pursuits. The commenters suggested that the rule provide that a vehicular pursuit may not be initiated "when there is imminent danger to the life and safety of innocent third parties." In response to a number of publicized incidents, the Service revised its guidelines and procedures governing vehicular pursuits. However, it would be inappropriate for the Department to codify the standard suggested by these commenters in the final rule. The standard is both unduly restrictive and underinclusive. Actual operating standards for Service officers must permit greater discretion and also specify in greater detail the criteria that should be considered in deciding whether to undertake a pursuit.

The commenter also suggested that officers should be required to successfully complete a separate course in vehicle pursuit prior to having authority under this section. The Department agrees that only those officers specifically trained in pursuit techniques should be authorized to undertake a vehicular pursuit. The only such officers at present who have received such training are border patrol agents. Accordingly, this section has been amended to delete the designations of special agents and deportation officers.

Section 287.8(f)—Site Inspections

The commenters stated that this section was legally insufficient and should provide more detailed requirements concerning the obtaining of warrants and consent for site inspections, the determination of "exigent circumstances," and standards and procedures for detention. Commenters specifically suggested that the rule incorporate judicial precedent based on the Fourth Amendment to the Constitution concerning the issuance of warrants, the obtaining of consent to enter a premises, and the detention of persons subject to questioning; that officers engaged in site inspections be trained in standards of enforcement and procedure pertaining to site inspections; that Service officers not deliberately provoke flight by persons in order to justify entry onto a premises; and that Service officers avoid "unnecessary embarrassment" of persons subject to site inspections, as well as verbal abuse, psychological abuse, threats, and unnecessary physical force.

The Service agrees with the substance of most of the suggestions made by the commenters, but has not incorporated these suggestions into the final rule. For the reasons stated previously, the

Department does not consider it appropriate to incorporate evolving judicial precedent into regulations. Such precedents are included in Service training programs, guidelines, and enforcement manuals. In addition, many of the procedural suggestions made by these commenters either are included in current Service training programs, guidelines, and enforcement manuals or will be considered for inclusion in these materials.

The Department has also revised the ordering of the paragraphs within this section and has revised the text of paragraph (2) in the proposed rule, now designated as paragraph (4). The purpose of these changes is to clarify that the conditions set forth in this section for the conduct of site inspections do not restrict the authority of Service officers to enter into any area of a business or other activity to which the general public has access or onto open fields that are not farm or other outdoor agricultural operations without a warrant, consent, or any particularized suspicion.

Sections 287.5(f), 298.8(a) and 287.9—Use of Force and Firearms

The commenters criticized these provisions of the proposed rule on a number of grounds. The commenters stated that the rule failed to address the 27 recommendations presented in the Audit Report, "Immigration and Naturalization Service Firearms Policy, September 1991," prepared by the Department's Office of the Inspector General, Audit Division. The commenters asserted that the rule's statement that standards on the use of force are based on a force continuum model taught at the Federal Law Enforcement Training Center is inadequate and that the rule should adopt the recommendations of standards for law enforcement agencies developed by the Commission on Accreditation of Law Enforcement Agencies. The commenters also stated that the rule was too narrow in its statement of the authority to carry firearms; the commenters recommended that the rule adopt guidelines that reflect the "multiple psychological dimensions" that might influence an officer's behavior. The commenters also urged that the rule incorporate a statement of 15 Shooting Reduction Techniques published in 1985 by the American Bar Foundation. The commenters stated that the principle of proportionality must be specifically set forth in the rule's guidelines on the use of force along with more specific guidelines on the use of force in specific

situations that immigration officers are likely to encounter.

The Service agrees that many of the recommendations made by the commenters are sound and should be incorporated into the training of immigration officers. In fact, a significant portion of the Service firearms training program is devoted to judgment shooting that includes providing specific scenarios that immigration officers are likely to face. However, as a matter of Departmental policy, it is not appropriate to incorporate such detailed guidelines for law enforcement activities into administrative rulemaking. Most of the recommendations made by the Inspector General in the Audit Report have been, or are in the process of being, adopted or implemented by the Service. The commenters noted that, in a letter dated August 7, 1991, the Commissioner stated that the issues raised by the Audit Report would be addressed in the process of drafting these regulations. The recommendations of the Audit Report have been taken into account in the formulation of this rule. Given the increased training that has been and is being developed, no specific response to these recommendations is provided in the regulatory text.

Several of the commenters criticized the designation of certain Service officers to carry firearms. The Service disagrees with the suggestion that there is no justification for immigration inspectors or deportation officers to carry firearms; this authority is consistent with Department policy in the implementation of other criminal law enforcement authorities. Such authority is commensurate with the responsibility of such officers to exercise general arrest and control authority at frequent points of contact with potential criminal offenders. These officers have also been authorized to carry firearms for many years. The same commenters criticized the rule's delegation to the Commissioner of authority to designate certain other immigration officers to carry firearms, and stated that any such designations must be the subject of proposed rulemaking in accordance with the Administrative Procedure Act (APA). Neither section 503 of IMMACT nor the APA requires such discretionary grants of law enforcement authority, made within general guidelines set forth in regulations, to be the subject of rulemaking. Withdrawing the authority to make such designations would constitute an unwarranted burden on effective law enforcement. Moreover, the Commissioner's action is subject to approval by the Deputy Attorney

General because the authority to carry a firearm is a traditional criminal law enforcement authority, not an authority intrinsic to the Service.

The commenters also criticized § 287.9(b) for failing to specify procedures to be followed in the investigation of a shooting incident involving a Service officer and for failing to provide specific rules regarding loss or theft of an approved firearm, inventory controls on firearms and ammunition, and care and storage of firearms and ammunition. Section 287.9(b) of the proposed rule stated that these matters would be addressed in guidelines promulgated by the Commissioner. It is the view of the Department that since all of these matters relate to internal administration, review, and discipline, the level of detail suggested by the commenters is not appropriate for administrative rulemaking, but should be addressed through operational guidelines. The requirement that these matters be governed according to guidelines promulgated by the Commissioner satisfies the congressional mandate set forth in section 503 of IMMACT.

The commenters also criticized the authorization in § 287.9(b) for Service officers to carry personally owned firearms while on duty, claiming that this will blur the distinction between official and personal use of firearms and inhibit Service control over the use of firearms. The proposed rule required that all firearms, including those personally owned, be approved subject to guidelines to be promulgated by the Commissioner. The authority to utilize a Service-approved, personally owned weapon is needed to respond to the physical diversity of the Service law enforcement workforce, including specific individual characteristics such as the size of an agent's hand. For example, many firearms do not comfortably fit in some smaller or larger hands. Accordingly, the rule is designed to allow flexibility while assuring that each individual agent's firearm has been approved. This is consistent with Departmental policy for the law enforcement community.

Section 287.8(a)(1)—Non-Deadly Force

Several commenters criticized the rule for providing insufficient guidelines on the use of non-deadly force and insufficient inducements for the use of control devices, such as stun guns and gas guns, that do not inflict bodily injury. The commenters also stated that the rule should provide specific requirements for the use of self-defense equipment, including bullet-proof vests and helmets, by Service

officers. The Service issues batons, tear gas, bullet proof vests, and helmets to law enforcement agents, as appropriate, and as appropriated funds permit; the Service does not issue stun guns, gas guns, or other such devices for routine law enforcement purposes. The Service and the Department agree that immigration officers should be trained in a broad range of options in the use of force in order to handle varying situations, that the use of lethal force should be minimized, and that Service officers should be minimized, and that Service officers should be furnished with self-protection equipment and techniques. Such standards cannot be appropriately addressed in rulemaking because of the numerous contingencies that are involved. Service officers are trained in such matters and receive updates in their training to incorporate new law enforcement techniques and new protective devices.

Section 287.8(a)(2)—Deadly Force

The commenters stated that deadly force is an extreme measure and should only be used when an officer reasonably believes it is necessary in defense of human life, including the life of the officer or any person in immediate threat of serious physical harm. To this end, the commenters stated that the rule should require specialized training in specific types of situations to offer guidance to the officer in order to minimize the use of deadly force. Training should include ethics, human rights, and alternatives to the use of force and firearms. "Reasonable belief" and "serious bodily injury" should be defined, according to the commenters, by current judicial standards. The commenters stated that the rule should require that where use of deadly force is likely, the officer should give a warning and allow sufficient time for the warning to be obeyed, but only when the officer or other persons are not at risk.

The Department agrees with many of these suggestions. Furthermore, the rule is consistent with the Department's interpretation of *Tennessee versus Garner*, 471 U.S. 1 (1985), and its progeny, as applied to the missions of the respective Service officers. However, the Department disagrees that these issues can be appropriately addressed in this rule. As stated previously, Service training standards on the use of force are in accordance with prevailing guidelines for all federal law enforcement officials. These guidelines include provisions addressing the issues identified by the commenters.

Section 287.10—Expedited Internal Review Process

The commenters criticized the expedited internal review process proposed in § 287.10 as legally insufficient on a number of grounds. The commenters criticized the proposed rule for incorporating current policies and procedures of the Department's Office of the Inspector General and the Office of Professional Responsibility, stating that these policies and procedures do not provide safeguards that are "accessible and thorough." The commenters stated that the proposed rule provided inadequate notice to the public of its right to lodge complaints. The commenters suggested that an outreach system, including posters, private telephone for detainees, and a 24-hour toll-free number staffed by multi-lingual personnel be mandated in the final rule.

The commenters also stated that a formal procedure for notifying complainants of the receipt and disposition of their complaints should be implemented by the rule. Confidentiality of complaints should be ensured to protect against retaliation, and information obtained in the process of investigation complaints should be excluded from use against the complainant in deportation or exclusion proceedings. The commenters stated that an official record of all complaints, even unsubstantiated complaints, should be retained so that individual officers can be properly evaluated and, if necessary, retrained, counseled, or investigated. Some of the commenters suggested that this information, including unsubstantiated complaints, should be kept in the officer's official personnel file.

The commenters suggested that specific procedures for the investigation of complaints, including provisions for public hearings in the case of serious charges, should be included in the rule. The commenters also stated that an appeals process should be available in cases where complainants or Service officers are dissatisfied with an investigator's report and recommendations. Several commenters also stated that the process for reviewing complaints against Service officers must be improved in order to address allegations of human rights abuses by Service officers patrolling border areas adjacent to Mexico.

In response, the Department notes that many of the suggestions made by these commenters are good practices that are addressed in the policies and procedures of the Department's investigative organizations. However,

many of the specific recommendations regarding notification and timeliness in the completion of investigations are beyond the scope of this rule and must be addressed in these internal policies and procedures. The Department disagrees with the suggestion that an appeals process be provided. Sufficient review of investigatory reports is already provided in the policies and procedures mentioned above. Under these policies and procedures, confidentiality will be maintained in the course of these investigations. If cause for administrative action is found, the administrative process will be followed, and if grounds for civil or criminal prosecution are found, the appropriate litigation will be undertaken. The Department's investigative organizations currently have established procedures to protect the identities of complainants and witnesses from disclosure to Service personnel. Records of unsubstantiated allegations will be centrally maintained by the Service for the purposes identified in the comments and to provide a basis for management review of the number of allegations that have been made to determine whether additional action should be taken at a management level to improve operations and training, but these records will not be kept in an officer's official personnel file.

The commenters also stated that implementation of this section of the rule should be immediate because the reasons for allowing a one-year delay in the provisions of the rule governing enforcement authority do not apply to internal review. The Service and the Department would be in a position to agree if, immediately upon publication of the final rule, the standards were developed and the commensurate training was provided to designated immigration officers. However, the purpose of the one-year delayed implementation period is to enable the Service to develop the standards, provide the training, and certify all designated immigration officers. Because § 287.10 creates an expedited review process exclusively for violations of the standards that will be developed during the one-year implementation period, the effective date of § 287.10 must coincide with all other sections of the final rule. However, this does not alter the established internal review process for alleged violations of existing enforcement policies and procedures.

The commenters also expressed concern that § 287.10(e) of the proposed rule, which would permit Department components to supplement or expand policies and procedures to ensure

proper conduct of Service employees and officers, should not limit or undermine the regulations that govern the review of allegations of improper conduct by Service employees and officers. Neither the Department nor the Service intended that § 287.10(e) be so construed. It is the intention of the Department to provide greater assurances that its officers and employees will conduct themselves appropriately, not to diminish existing standards.

Section 287.11—Disclaimer

The commenters claimed that § 287.11 would preclude victims of unlawful Service enforcement practices from pursuing remedies for regulatory violations. However, this disclaimer merely states that the regulations provide no independent grounds for relief in any civil or criminal proceeding by any party. It does not prevent any party from pursuing relief for alleged violations of the Constitution or laws of the United States. As such, the disclaimer is consistent with the holding in *United States v. Caceres*, 440 U.S. 741 (1979). This disclaimer is a standard element for all regulations affecting substantive federal criminal law enforcement authority and is only intended to ensure that the regulations do not create rights not otherwise existing in law.

Regulatory Flexibility Act

The Attorney General, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed this final rule and, by approving it, certifies that the rule will not have a significant economic impact on a substantial number of small entities.

Executive Order No. 12866

This rule is not considered by the Department of Justice or the Immigration and Naturalization Service to be a "significant regulatory action" under E.O. 12866, section 3(f), Regulatory Planning and Review, and the Office of Management and Budget has waived its review process under section 6(a)(3)(A).

Executive Order No. 12612

The regulations adopted herein will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with E.O. 12612, it is determined that this rule does not have sufficient federalism implications to

warrant the preparation of a Federalism Assessment.

Executive Order No. 12606

The Attorney General certifies that she has assessed this rule in light of the criteria in E.O. 12606 and has determined that this rule will not have an impact on family formation, maintenance, or general well-being.

List of Subjects

8 CFR Part 242

Administrative practice and procedure, Aliens.

8 CFR Part 287

Immigration, Law enforcement officers.

Accordingly, chapter I of title 8 of the Code of Federal Regulations is amended as follows:

PART 242—PROCEEDINGS TO DETERMINE DEPORTABILITY OF ALIENS IN THE UNITED STATES: APPREHENSION, CUSTODY, HEARING, AND APPEAL

1. The authority citation for part 242 continues to read as follows:

Authority: 8 U.S.C. 1103, 1182, 1186a, 1251, 1252, 1252 note, 1252b, 1254, 1362; 8 CFR part 2.

2. Section 242.1 is amended by revising paragraph (a) to read as follows:

§ 242.1 Order to show cause and notice of hearing.

(a) **Commencement.** Every proceeding to determine the deportability of an alien in the United States, except an alien who has been admitted to the United States under the provisions of section 217 of the Act and part 217 of this chapter other than such an alien who has applied for asylum in the United States, is commenced by the filing of an order to show cause with the Office of the Immigration Judge. In the proceeding, the alien shall be known as the respondent. An order to show cause may only be issued by the following immigration officers:

- (1) District directors (except foreign);
- (2) Deputy district directors (except foreign);
- (3) Assistant district directors for investigations;
- (4) Deputy assistant district directors for investigations;
- (5) Assistant district directors for deportation;
- (6) Deputy assistant district directors for deportation;
- (7) Assistant district directors for examinations;
- (8) Deputy assistant district directors for examinations;

- (9) Officers in charge (except foreign);
- (10) Assistant officers in charge (except foreign);
- (11) Chief patrol agents;
- (12) Deputy chief patrol agents;
- (13) Associate chief patrol agents;
- (14) Assistant chief patrol agents;
- (15) The Assistant Commissioner, Investigations;
- (16) Service center directors;
- (17) The Director, Organized Crime Drug Enforcement Task Force (OCDETF);
- (18) Assistant Director, OCDETF (New York, NY; Houston, TX; Los Angeles, CA; and Miami, FL);
- (19) The Assistant Commissioner, Refugees, Asylum and Parole; or
- (20) Supervisory asylum officers.

* * * * *

3. Section 242.2 is amended by revising paragraphs (a)(1) and (c)(1) to read as follows:

§ 242.2 Apprehension, custody, and detention.

(a) *Detainers in general.* (1) A detainer may be issued only in the case of an alien who there is reason to believe is amenable to exclusion or deportation proceedings under any provision of law. The following immigration officers are hereby authorized to issue detainers:

- (i) Border patrol agents, including aircraft pilots;
- (ii) Special agents;
- (iii) Deportation officers;
- (iv) Immigration inspectors;
- (v) Immigration examiners;
- (vi) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and
- (vii) Immigration officers who need the authority to issue detainers in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

* * * * *

(c) *Warrant of arrest.* (1) At the time of issuance of the Order to Show Cause, or at any time thereafter and up to the time the respondent becomes the subject of a duly issued warrant of deportation, the respondent may be arrested and taken into custody under the authority of a warrant of arrest. In the case of a respondent convicted on or after November 18, 1988, of an aggravated felony as defined in section 101(a)(43) of the Act, the respondent shall not be released from custody, either before or after a determination of deportability, unless the respondent has been lawfully admitted and the respondent demonstrates to the satisfaction of the district director that he or she is not a threat to the community and is likely to

appear before any scheduled hearings. A warrant of arrest may be served only by those immigration officers listed in § 287.5(e)(2) of this chapter. A warrant of arrest may be issued only by the following immigration officers:

- (i) District directors (except foreign);
- (ii) Deputy district directors (except foreign);
- (iii) Assistant district directors for investigations;
- (iv) Deputy assistant district directors for investigations;
- (v) Assistant district directors for deportation;
- (vi) Deputy assistant district directors for deportation;
- (vii) Assistant district directors for examinations;
- (viii) Deputy assistant district directors for examinations;
- (ix) Officers in charge (except foreign);
- (x) Assistant officers in charge (except foreign);
- (xi) Chief patrol agents;
- (xii) Deputy chief patrol agents;
- (xiii) Associate chief patrol agents;
- (xiv) Assistant chief patrol agents;
- (xv) The Assistant Commissioner, Investigations;
- (xvi) The Director, Organized Crime Drug Enforcement Task Force (OCDETF); or
- (xvii) Assistant Director, OCDETF (New York, NY; Houston, TX; Los Angeles, CA; and Miami, FL).

* * * * *

4. Section 242.4 is revised to read as follows:

§ 242.4 Fingerprints and photographs.

Every alien 14 years of age or older against whom proceedings are commenced under this part by service of an order to show cause shall be fingerprinted and photographed. Such fingerprints and photographs shall be made available to Federal, State, and local law enforcement agencies upon request to the district director or chief patrol agent having jurisdiction over the alien's record. Any such alien, regardless of his or her age, shall be photographed and/or fingerprinted if required by any immigration officer authorized to issue an order to show cause as listed in § 242.1(a).

PART 287—FIELD OFFICERS; POWERS AND DUTIES

5. The authority citation for part 287 continues to read as follows:

Authority: 8 U.S.C. 1103, 1182, 1225, 1226, 1251, 1252, 1357; 8 CFR part 2.

6. Section 287.1 is amended by:

- a. Removing paragraphs (c), (d), and (e);

b. Redesignating paragraphs (f) through (i) as paragraphs (c) through (f) respectively; and

c. Adding a new paragraph (g) to read as follows:

§ 287.1 Definitions.

* * * * *

(g) *Basic immigration law enforcement training.* The phrase *basic immigration law enforcement training*, as used in §§ 287.5 and 287.8 of this part, means the successful completion of one of the following courses of training provided at the Immigration Officer Academy or Border Patrol Academy: Immigration Officer Basic Training Course after 1971; Border Patrol Basic Training Course after 1950; and Immigration Detention Enforcement Officer Basic Training Course after 1977; or training substantially equivalent thereto as determined by the Commissioner with the approval of the Deputy Attorney General. The phrase *basic immigration law enforcement training* also means the successful completion of the Other than Permanent Full-Time (OTP) Immigration Inspector Basic Training Course after 1991 in the case of individuals who are OTP immigration inspectors. Conversion by OTP immigration to any other status requires training applicable to that position.

7. Section 287.2 is revised to read as follows:

§ 287.2 Disposition of criminal cases.

Whenever a district director or chief patrol agent has reason to believe that there has been a violation punishable under any criminal provision of the laws administered or enforced by the Service, he or she shall immediately initiate an investigation to determine all the pertinent facts and circumstances and shall take such further action as he or she deems necessary. In no case shall this investigation prejudice the right of an arrested person to be taken without unnecessary delay before a United States magistrate judge, a United States district judge, or, if necessary, a judicial officer empowered in accordance with 18 U.S.C. 3041 to commit persons charged with offenses against the laws of the United States.

8. Section 287.5 is revised to read as follows:

§ 287.5 Exercise of power by immigration officers.

(a) *Power and authority to interrogate and administer oaths.* Any immigration officer as defined in § 103.1(q) of this chapter is hereby authorized and designated to exercise anywhere in or outside the United States the power conferred by:

(1) Section 287(a)(1) of the Act to interrogate, without warrant, any alien or person believed to be an alien concerning his or her right to be, or to remain, in the United States, and

(2) Section 287(b) of the Act to administer oaths and to take and consider evidence concerning the privilege of any person to enter, reenter, pass through, or reside in the United States; or concerning any matter which is material or relevant to the enforcement of the Act and the administration of the Immigration and Naturalization Service.

(b) *Power and authority to patrol the border.* (1) Section 287(a)(3) of the Act authorizes designated immigration officers, as listed in paragraph (b)(2) of this section, to board and search for aliens, without warrant, any vessel within the territorial waters of the United States and any railway car, aircraft, conveyance, or vehicle within a reasonable distance from any external boundary of the United States; and within a distance of twenty-five miles from any such external boundary to have access, without warrant, to private lands, but not dwellings, for the purpose of patrolling the border to prevent the illegal entry of aliens into the United States.

(2) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power to patrol the border conferred by section 287(a)(3) of the Act:

- (i) Border patrol agents, including aircraft pilots;
- (ii) Special agents;
- (iii) Immigration inspectors (seaport operations only);
- (iv) Immigration examiners and deportation officers when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections (seaport operations only);
- (v) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(vi) Immigration officers who need the authority to patrol the border under section 287(a)(3) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

(c) *Power and authority to arrest.* (1) *Arrests of aliens under section 287(a)(2) of the Act for immigration violations.*

(i) Section 287(a)(2) of the Act authorizes designated immigration officers, as listed in paragraph (c)(1)(ii)

of this section, to arrest any alien, without warrant, who in the presence or view of the immigration officer is entering or attempting to enter the United States in violation of any law or regulation made in pursuance of law regulating the admission, exclusion, or expulsion of aliens, or to arrest any alien in the United States if the immigration officer has reason to believe that the alien is in the United States in violation of any such law or regulation and is likely to escape before a warrant can be obtained for his or her arrest. When making an arrest, the designated immigration officer shall adhere to the provisions of the enforcement standard governing the conduct of arrests in § 287.8(c).

(ii) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the arrest power conferred by section 287(a)(2) of the Act:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Immigration inspectors;
- (E) Immigration examiners;
- (F) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(G) Immigration officers who need the authority to arrest aliens under section 287(a)(2) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

(2) *Arrests of persons under section 287(a)(4) of the Act for felonies regulating the admission, exclusion, or expulsion of aliens.* (i) Section 287(a)(4) of the Act authorizes designated immigration officers, as listed in paragraph (c)(2)(ii) of this section, to arrest persons, without warrant, for felonies that have been committed and that are cognizable under any law of the United States regulating the admission, exclusion, or expulsion of aliens, if the immigration officer has reason to believe that the person is guilty of such felony and if there is a likelihood of the person escaping before a warrant can be obtained for his or her arrest. When making an arrest, the designated immigration officer shall adhere to the provisions of the enforcement standard governing the conduct of arrests in § 287.8(c) of this part.

(ii) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to

exercise the arrest power conferred by section 287(a)(4) of the Act:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Immigration inspectors;
- (E) Immigration examiners;
- (F) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(G) Immigration officers who need the authority to arrest persons under section 287(a)(4) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(3) *Arrests of persons under section 287(a)(5)(A) of the Act for any offense against the United States.* (i) Section 287(a)(5)(A) of the Act authorizes designated immigration officers, as listed in paragraph (c)(3)(ii) of this section, to arrest persons, without warrant, for any offense against the United States if the offense is committed in the immigration officer's presence while the immigration officer is performing duties relating to the enforcement of the immigration laws at the time of the arrest and there is a likelihood of the person escaping before a warrant can be obtained for his or her arrest. When making an arrest, the designated immigration officer shall adhere to the provisions of the enforcement standard governing the conduct of arrests in § 287.8(c).

(ii) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the arrest power conferred by section 287(a)(5)(A) of the Act:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Immigration inspectors (permanent full-time immigration inspectors only);

(E) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;

(F) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(G) Immigration officers who need the authority to arrest persons under section 287(a)(5)(A) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the

Commissioner with the approval of the Deputy Attorney General.

(4) *Arrests of person under section 287(a)(5)(B) of the Act for any felony.* (i) Section 287(a)(5)(B) of the Act authorizes designated immigration officers, as listed in paragraph (c)(4)(iii) of this section, to arrest persons, without warrant, for any felony cognizable under the laws of the United States if:

(A) The immigration officer has reasonable grounds to believe that the person to be arrested has committed or is committing such a felony;

(B) The immigration officer is performing duties relating to the enforcement of the immigration laws at the time of the arrest;

(C) There is a likelihood of the person escaping before a warrant can be obtained for his or her arrest; and

(D) The immigration officer has been certified as successfully completing a training program which covers such arrests and the standards with respect to the enforcement activities of the Service as defined in § 287.8.

(ii) When making an arrest, the designated immigration officer shall adhere to the provisions of the enforcement standard governing the conduct of arrests in § 287.8(c).

(iii) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the arrest power conferred by section 287(a)(5)(B) of the Act:

(A) Border patrol agents, including aircraft pilots;

(B) Special agents;

(C) Deportation officers;

(D) Immigration inspectors (permanent full-time immigration inspectors only);

(E) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;

(F) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(G) Immigration officers who need the authority to arrest persons under section 287(a)(5)(B) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(iv) Notwithstanding the authorization and designation set forth in paragraph (c)(4)(iii) of this section, no immigration officer is authorized to make an arrest for any felony under the

authority of section 287(a)(5)(B) of the Act until such time as he or she has been certified by the Director of Training as successfully completing a training course encompassing such arrests and the standards for enforcement activities as defined in § 287.8 of this part. Such certification shall be valid for the duration of the immigration officer's continuous employment, unless it is suspended or revoked by the Commissioner or the Commissioner's designee for just cause.

(5) *Arrests of persons under section 274(a) of the Act who bring in, transport, or harbor certain aliens, or induce them to enter.* (i) Section 274(a) of the Act authorizes designated immigration officers, as listed in paragraph (c)(5)(ii) of this section, to arrest persons who bring in, transport, or harbor aliens, or induce them to enter the United States in violation of law. When making an arrest, the designated immigration officer shall adhere to the provisions of the enforcement standard governing the conduct of arrests in § 287.8(c).

(ii) The following immigration officers who have successfully completed basic immigration law enforcement training are authorized and designated to exercise the arrest power conferred by section 274(a) of the Act:

(A) Border patrol agents, including aircraft pilots;

(B) Special agents;

(C) Deportation officers;

(D) Immigration inspectors;

(E) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;

(F) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(G) Immigration officers who need the authority to arrest persons under section 274(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(6) *Custody and transportation of previously arrested persons.* In addition to the authority to arrest pursuant to a warrant of arrest in paragraph (e)(2)(i) of this section, detention enforcement officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to take and maintain custody of and transport any person who has been arrested by an immigration officer pursuant to

paragraphs (c)(1) through (c)(5) of this section.

(d) *Power and authority to conduct searches.* (1) Section 287(c) of the Act authorizes designated immigration officers, as listed in paragraph (d)(2) of this section, to conduct a search, without warrant, of the person and of the personal effects in the possession of my person seeking admission to the United States if the immigration officer has reasonable cause to suspect that grounds exist for exclusion from the United States under the Act that would be disclosed by such search.

(2) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power to conduct searches conferred by section 287(c) of the Act:

(i) Border patrol agents, including aircraft pilots;

(ii) Special agents;

(iii) Deportation officers;

(iv) Immigration inspectors;

(v) Immigration examiners;

(vi) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(vii) Immigration officers who need the authority to conduct searches under section 287(c) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

(e) *Power and authority to execute warrants.* (1) *Search warrants.* The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power conferred by section 287(a) of the Act to execute a search warrant:

(i) Border patrol agents, including aircraft pilots;

(ii) Special agents;

(iii) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above, and

(iv) Immigration officers who need the authority to execute search warrants under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(2) *Arrest warrants.* (1) *Immigration violations.* The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power pursuant to section 287(a) of

the Act to execute warrants of arrest for administrative immigration violations issued under section 242 of the Act or to execute warrants of criminal arrest issued under the authority of the United States:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Detention enforcement officers (warrants of arrest for administrative immigration violations only);
- (E) Immigration inspectors;
- (F) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;
- (G) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(H) Immigration officers who need the authority to execute arrest warrants for immigration violations under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner, for warrants of arrest for administrative immigration violations, and with the approval of the Deputy Attorney General, for warrants of criminal arrest.

(ii) *Non-immigration violations.* The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power to execute warrants of criminal arrest for non-immigration violations issued under the authority of the United States:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(E) Immigration officers who need the authority to execute warrants of arrest for non-immigration violations under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(f) *Power and authority to carry firearms.* The following immigration officers who have successfully completed basic immigration enforcement training are hereby authorized and designated to exercise the power conferred by section 287(a) of the Act to carry firearms provided that they are individually qualified by

training and experience to handle and safely operate the firearms they are permitted to carry, maintain proficiency in the use of such firearms, and adhere to the provisions of the enforcement standard governing the use of force in § 287.8(a):

- (1) Border patrol agents, including aircraft pilots;
- (2) Special agents;
- (3) Deportation officers;
- (4) Detention enforcement officers;
- (5) Immigration inspectors;
- (6) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;
- (7) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and
- (8) Immigration officers who need the authority to carry firearms under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

9. Section 287.7 is amended by revising paragraph (a)(1) to read as follows:

§ 287.7 Detainer provisions under section 287(d)(3) of the Act.

(a) *Detainers in general.* (1) A detainer may be issued only in the case of an alien who there is reason to believe is amenable to exclusion or deportation proceedings under any provision of law. The following immigration officers are hereby authorized to issue detainers under section 287(d)(3) of the Act:

- (i) Border patrol agents, including aircraft pilots;
- (ii) Special agents;
- (iii) Deportation officers;
- (iv) Immigration inspectors;
- (v) Immigration examiners;
- (vi) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(vii) Immigration officers who need the authority to issue detainers under section 287(d)(3) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

* * * * *

10. Part 287 is amended by adding §§ 287.8, 287.9, 287.10, and 287.11 to read as follows:

§ 287.8 Standards for enforcement activities.

The following standards for enforcement activities contained in this

section must be adhered to by every immigration officer involved in enforcement activities. Any violation of this section shall be reported pursuant to § 287.10.

(a) *Use of force.* (1) *Non-deadly force.* (i) Non-deadly force is any use of force other than that which is considered deadly force as defined in paragraph (a)(2) of this section.

(ii) Non-deadly force may be used only when a designated immigration officer, as listed in paragraph (a)(1)(iv) of this section, has reasonable grounds to believe that such force is necessary.

(iii) A designated immigration officer shall always use the minimum non-deadly force necessary to accomplish the officer's mission and shall escalate to a higher level of non-deadly force only when such higher level of force is warranted by the actions, apparent intentions, and apparent capabilities of the suspect, prisoner, or assailant.

(iv) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to exercise the power conferred by section 287(a) of the Act to use non-deadly force should circumstances warrant it:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Detention enforcement officers;
- (E) Immigration inspectors;
- (F) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;
- (G) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and

(H) Immigration officers who need the authority to use non-deadly force under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner.

(2) *Deadly force.* (i) Deadly force is any use of force that is likely to cause death or serious bodily harm.

(ii) Deadly force may be used only when a designated immigration officer, as listed in paragraph (a)(2)(iii) of this section, has reasonable grounds to believe that such force is necessary to protect the designated immigration officer or other persons from the present danger of death or serious bodily harm.

(iii) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby

authorized and designated to exercise the power conferred by section 287(a) of the Act to use deadly force should circumstances warrant it:

- (A) Border patrol agents, including aircraft pilots;
- (B) Special agents;
- (C) Deportation officers;
- (D) Detention enforcement officers;
- (E) Immigration inspectors;
- (F) Immigration examiners when in the uniform of an immigration inspector and performing inspections or supervising other immigration inspectors performing inspections;
- (G) Supervisory and managerial personnel who are responsible for supervising the activities of those officers listed above; and
- (H) Immigration officers who need the authority to use deadly force under section 287(a) of the Act in order to effectively accomplish their individual missions and who are designated, individually or as a class, by the Commissioner with the approval of the Deputy Attorney General.

(b) *Interrogation and detention not amounting to arrest.* (1) Interrogation is questioning designed to elicit specific information. An immigration officer, like any other person, has the right to ask questions of anyone as long as the immigration officer does not restrain the freedom of an individual, not under arrest, to walk away.

(2) If the immigration officer has a reasonable suspicion, based on specific articulable facts, that the person being questioned is, or is attempting to be, engaged in an offense against the United States or is an alien illegally in the United States, the immigration officer may briefly detain the person for questioning.

(3) Information obtained from this questioning may provide the basis for a subsequent arrest, which must be effected only by a designated immigration officer, as listed in § 287.5(c). The conduct of arrests is specified in paragraph (c) of this section.

(c) *Conduct of arrests.* (1) *Authority.* Only designated immigration officers are authorized to make an arrest. The list of designated immigration officers varies depending on the type of arrest as listed in § 287.5(c)(1) through (c)(5).

(2) *General procedures.* (i) An arrest shall be made only when the designated immigration officer has reason to believe that the person to be arrested has committed an offense against the United States or is an alien illegally in the United States.

(ii) A warrant of arrest shall be obtained whenever possible prior to the arrest.

(iii) At the time of the arrest, the designated immigration officer shall, as soon as it is practical and safe to do so:

(A) Identify himself or herself as an immigration officer who is authorized to execute an arrest; and

(B) State that the person is under arrest and the reason for the arrest.

(iv) With respect to an alien arrested and administratively charged with being in the United States in violation of law, the arresting officer shall adhere to the procedures set forth in § 287.3 if the arrest is made without a warrant, and to the procedures set forth in § 242.2(c)(2) of this chapter if the arrest is made with a warrant.

(v) With respect to a person arrested and charged with a criminal violation of the laws of the United States, the arresting officer shall advise the person of the appropriated rights as required by law at the time of the arrest, or as soon thereafter as practicable. It is the duty of the immigration officer to assure that the warnings are given in a language the subject understands, and that the subject acknowledges that the warnings are understood. The fact that a person has been advised of his or her rights shall be documented on appropriate Service forms and made a part of the arrest record.

(vi) Every person arrested and charged with a criminal violation of the laws of the United States shall be brought without unnecessary delay before a United States magistrate judge, a United States district judge or, if necessary, a judicial officer empowered in accordance with 18 U.S.C. 3041 to commit persons charged with such crimes. Accordingly, the immigration officer shall contact an Assistant United States Attorney to arrange for an initial appearance.

(vii) The use of threats, coercion, or physical abuse by the designated immigration officer to induce a suspect to waive his or her rights or to make a statement is prohibited.

(d) *Transportation.* (1) *Vehicle transportation.* All persons will be transported in a manner that ensures the safety of the persons being transported. When persons arrested or detained are being transported by vehicle, each person will be searched as thoroughly as circumstances permit before being placed in the vehicle. The person being transported shall not be handcuffed to the frame or any part of the moving vehicle or an object in the moving vehicle. The person being transported shall not be left unattended during transport unless the immigration officer needs to perform a law enforcement function.

(2) *Airline transportation.* The escorting officer(s) must abide by all Federal Aviation Administration and airline carrier rules and regulations pertaining to weapons and the transportation of prisoners.

(e) *Vehicular pursuit.* (1) A vehicular pursuit is an active attempt by a designated immigration officer, as listed in paragraph (e)(2) of this section, in a designated pursuit vehicle to apprehend fleeing suspects who are attempting to avoid apprehension. A designated pursuit vehicle is defined as a vehicle equipped with emergency lights and siren, placed in or on the vehicle, that emit audible and visual signals in order to warn others that emergency law enforcement activities are in progress.

(2) The following immigration officers who have successfully completed basic immigration law enforcement training are hereby authorized and designated to initiate a vehicular pursuit:

(i) Border patrol agents, including aircraft pilots;

(ii) Supervisory personnel who are responsible for supervising the activities of those officers listed above; and

(iii) Immigration officers who need the authority to initiate a vehicular pursuit in order to effectively accomplish their individual mission and who are designated, individually or as a class, by the Commissioner.

(f) *Site inspections.* (1) *Site inspections* are Service enforcement activities undertaken to locate and identify aliens illegally in the United States, or aliens engaged in unauthorized employment, at locations where there is a reasonable suspicion, based on articulable facts, that such aliens are present.

(2) An immigration officer may not enter into the non-public areas of a business, a residence including the curtilage of such residence, or a farm or other outdoor agricultural operation, except as provided in section 287(a)(3) of the Act, for the purpose of questioning the occupants or employees concerning their right to be or remain in the United States unless the officer has either a warrant or the consent of the owner or other person in control of the site to be inspected. When consent to enter is given, the immigration officer must note on the officer's report that consent was given and, if possible, by whom consent was given. If the immigration officer is denied access to conduct a site inspection, a warrant may be obtained.

(3) Adequate records must be maintained noting the results of every site inspection, including those where no illegal aliens are located.

(4) Nothing in this section prohibits an immigration officer from entering into any area of a business or other activity to which the general public has access or onto open fields that are not farms or other outdoor agricultural operations without a warrant, consent, or any particularized suspicion in order to question any person whom the officer believes to be an alien concerning his or her right to be or remain in the United States.

§ 287.9 Criminal search warrant and firearms policies.

(a) A search warrant should be obtained prior to conducting a search in a criminal investigation unless a specific exception to the warrant requirement is authorized by statute or recognized by the courts. Such exceptions may include, for example, the consent of the person to be searched, exigent circumstances, searches incident to a lawful arrest, and border searches. The Commissioner shall promulgate guidelines governing officers' conduct relating to search and seizure.

(b) In using a firearm, an officer shall adhere to the standard of conduct set forth in § 287.8(a)(2). An immigration officer may carry only firearms (whether Service issued or personally owned) that have been approved pursuant to guidelines promulgated by the Commissioner. The Commissioner shall promulgate guidelines with respect to:

(1) Investigative procedures to be followed after a shooting incident involving an officer;

(2) Loss or theft of an approved firearm;

(3) Maintenance of records with respect to the issuance of firearms and ammunition; and

(4) Procedures for the proper care, storage, and maintenance of firearms, ammunition, and related equipment.

§ 287.10 Expedited internal review process.

(a) *Violations of standards for enforcement activities.* Alleged violations of the standards for enforcement activities established in accordance with the provisions of § 287.8 shall be investigated expeditiously consistent with the policies and procedures of the Office of Professional Responsibility and the Office of the Inspector General of the Department of Justice and pursuant to guidelines to be established by the Attorney General. Within the Immigration and Naturalization Service, the Office of Internal Audit is responsible for coordinating the reporting and disposition of allegations.

(b) *Complaints.* Any persons wishing to lodge a complaint pertaining to violations of enforcement standards contained in § 287.8 may contact the Department of Justice, P.O. Box 27606, Washington, DC, 20038-7606, or telephone 1-800-869-4499.

(c) *Expedited processing of complaints.* When an allegation or complaint of violation of § 287.8 is lodged against an employee or officer of the Service, the allegation or complaint shall be referred promptly for investigation in accordance with the policies and procedures of the Department of Justice. At the conclusion of an investigation of an allegation or complaint of violation of § 287.8, the investigative report shall be referred promptly for appropriate action in accordance with the policies and procedures of the Department of Justice.

(d) *Unsubstantiated complaints.* When an investigative report does not support the allegation, the employee or officer against whom the allegation was made shall be informed in writing that the matter has been closed as soon as practicable. No reference to the

allegation shall be filed in the official's or employee's official personnel file.

(e) *Jurisdiction of other Department of Justice organizations.* Nothing in this section alters or limits, is intended to alter or limit, or shall be construed to alter or limit, the jurisdiction or authority conferred upon the Office of the Inspector General, the Office of Professional Responsibility, the Federal Bureau of Investigation, the United States Attorneys, the Criminal Division or the Civil Rights Division, or any other component of the Department of Justice, or any other order of the Department of Justice establishing policy or procedures for the administration of standards of conduct within the Department of Justice.

§ 287.11 Scope.

With regard to this part, these regulations provide internal guidance on specific areas of law enforcement authority. These regulations do not, are not intended to, and shall not be construed to exclude, supplant, or limit otherwise lawful activities of the Immigration and Naturalization Service or the Attorney General. These regulations do not, are not intended to, shall not be construed to, and may not be relied upon to create any rights, substantive or procedural, enforceable at law by any party in any matter, civil or criminal. The Attorney General shall have exclusive authority to enforce these regulations through such administrative and other means as he or she may deem appropriate.

Dated: August 7, 1994.

Janet Reno,

Attorney General.

[FR Doc. 94-19792 Filed 8-16-94; 8:45 am]

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Wednesday
August 17, 1994



Part V

**Department of
Agriculture**

Agricultural Marketing Service

**7 CFR Parts 1001, 1002, et al.
Milk in New England and Other Marketing
Areas; Amplified Decision; Rule**

DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Parts 1001, 1002, 1004, 1005,
1006, 1007, 1011, 1012, 1013, 1030,
1032, 1033, 1036, 1040, 1044, 1046,
1049, 1050, 1064, 1065, 1068, 1075,
1076, 1079, 1093, 1094, 1096, 1099,
1106, 1108, 1124, 1126, 1131, 1134,
1135, 1137, 1138, 1139

[Docket No. AO-14-A64, etc.; DA-90-017]

RIN: 0581-AA37

Milk in the New England and Other
Marketing Areas; Amplified Decision

7 CFR part	Marketing area	AO Nos.
1001	New England	AO-14-A64
1002	New York-New Jersey	AO-71-A79
1004	Middle Atlantic	AO-160-A67
1005	Carolina	AO-388-A3
1006	Upper Florida	AO-356-A29
1007	Georgia	AO-366-A33
1011	Tennessee Valley	AO-251-A35
1012	Tampa Bay	AO-347-A32
1013	Southeastern Florida	AO-286-A39
1030	Chicago Regional	AO-361-A28
1032	Southern Illinois-Eastern Missouri	AO-313-A39
1033	Ohio Valley	AO-166-A60
1036	Eastern Ohio-Western Pennsylvania	AO-179-A55
1040	Southern Michigan	AO-225-A42
1044	Michigan Upper Peninsula	AO-299-A26
1046	Louisville-Lexington-Evansville	AO-123-A62
1049	Indiana	AO-319-A38
1050	Central Illinois	AO-355-A27
1064	Greater Kansas City	AO-23-A60
1065	Nebraska-Western Iowa	AO-86-A47
1068	Upper Midwest	AO-178-A45
1075	Black Hills, South Dakota	AO-248-A21
1076	Eastern South Dakota	AO-260-A30
1079	Iowa	AO-295-A41
1093	Alabama-West Florida	AO-386-A11
1094	New Orleans-Mississippi	AO-103-A53
1096	Greater Louisiana	AO-257-A40
1097 ¹	Memphis, Tennessee	AO-219-A46
1098 ¹	Nashville, Tennessee	AO-184-A55
1099	Paducah, Kentucky	AO-183-A45
1106	Southwest Plains	AO-210-A52
1108	Central Arkansas	AO-243-A43
1124	Pacific Northwest	AO-368-A19
1126	Texas	AO-231-A60
1131	Central Arizona	AO-271-A29
1134	Western Colorado	AO-301-A22
1135	Southwestern Idaho-Eastern Oregon	AO-380-A9
1137	Eastern Colorado	AO-326-A26
1138 ²	New Mexico-West Texas	AO-335-A36
1139	Great Basin	AO-309-A30

¹ The Memphis, Tennessee and Nashville, Tennessee, Orders were terminated effective July 31, 1993.

² The Lubbock-Plainview, Texas Panhandle and Rio Grande Valley Orders were merged to form the New Mexico-West Texas order, effective December 1, 1991.

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Amplified Decision.

SUMMARY: On April 14, 1994, the United States District Court for the District of Minnesota issued a memorandum opinion and order that, in part, directed

the Secretary of Agriculture to issue an amplified decision that more fully explains the conclusions reached in a final decision published in the **Federal Register** on March 5, 1993. This amplified decision responds to that order and supplements and clarifies the

findings and conclusions of the final decision.

FOR FURTHER INFORMATION CONTACT: John F. Borovics, Chief, Order Formulation Branch, USDA/AMS/Dairy Division, Room 2968, South Building, P.O. Box

96456, Washington, DC 20090-6456, (202) 720-6274.

SUPPLEMENTARY INFORMATION: This administrative action is governed by the provisions of 5 U.S.C. 556 and 557 and therefore is excluded from the requirements of Executive Order 12866.

The Regulatory Flexibility Act (5 U.S.C. 601-612) requires the Agency to examine the impact of a final rule on small entities. Pursuant to 5 U.S.C. 605(b), the Administrator of the Agricultural Marketing Service has certified that this action will not have a significant economic impact on a substantial number of small entities. Each order, as amended, will promote more orderly marketing of milk by producers and regulated handlers.

This final rule has been reviewed under Executive Order 12778, Civil Justice Reform. This action is not intended to have a retroactive effect. This action will not preempt any state or local laws, regulations, or policies, unless they present an irreconcilable conflict with the rule.

The Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674) (AMAA), provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the AMAA, any handler subject to an order may file with the Secretary a petition stating that the order, any provisions of the order, or any obligation imposed in connection with the order is not in accordance with law and requesting a modification of the order or to be exempted from the order. A handler is afforded the opportunity for a hearing on the petition. After a hearing the Secretary would rule on the petition. The AMAA provides that the district court of the United States in any district in which the handler is an inhabitant, or has its principal place of business, has jurisdiction to review the Secretary's ruling on the petition, provided a complaint is filed not later than 20 days after the date of the entry of the ruling.

When the administrative proceeding in this matter was initiated, the Notice of Hearing listed separately the Lubbock-Plainview, Texas (Part 1120); the Texas Panhandle (Part 1132); and Rio Grande Valley (Part 1138) orders. A hearing on a merger of these three orders was held in December 1989. As a result of that hearing, the three orders were merged effective December 1, 1991, under the name of the New Mexico-West Texas order, which is 7 CFR Part 1138. Therefore, all proposed order language in connection with this proceeding is in terms of the merged

order. In this and future documents in this proceeding, the New Mexico-West Texas order will replace the three orders named above.

Prior Documents in This Proceeding

Advance Notice of Proposed Rulemaking: Issued March 29, 1990; published April 3, 1990 (55 FR 12369).

Notice of Hearing: Issued July 11, 1990; published July 17, 1990 (55 FR 29034).

Extension of Time for Filing Briefs and Reply Briefs: Issued March 28, 1991; published April 3, 1991 (56 FR 13603).

Recommended Decision: Issued November 6, 1991; published November 22, 1991 (56 FR 58972).

Extension of Time for Filing Exceptions: Issued December 24, 1991; published January 6, 1992 (57 FR 383).

Final Decision: Issued February 5, 1993; published March 5, 1993 (58 FR 12634).

Proposed Termination of Order: Issued April 20, 1993; published April 27, 1993 (58 FR 25577).

Final Rule and Order: Issued April 20, 1993; published May 11, 1993 (58 FR 27774).

Referendum Order: Issued June 25, 1993; published July 1, 1993 (58 FR 35362).

Final Rule and Withdrawal: Issued August 9, 1993; published August 17, 1993 (58 FR 43518).

Correction of Final Rule: Issued November 29, 1993; published December 6, 1993 (58 FR 64110).

Preliminary Statement

A public hearing was held upon proposed amendments to the marketing agreements and the orders regulating the handling of milk in the New England and other marketing areas. The hearing was held, pursuant to the provisions of the AMAA and the applicable rules of practice (7 CFR Part 900), at Eau Claire, Wisconsin; Minneapolis, Minnesota; St. Cloud, Minnesota; Syracuse, New York; Tallahassee, Florida; and Irving, Texas, on September 5, 1990, through November 20, 1990. Notice of such hearing was issued on July 11, 1990, and published July 17, 1990 (55 FR 29034).

Upon the basis of the evidence introduced at the hearing and the record thereof, the Administrator, on November 6, 1991, issued his recommended decision containing notice of the opportunity to file written exceptions thereto. Following the submission of exceptions and comments on the recommended decision, a final decision was issued on February 5, 1993

General Basis for This Amplified Decision

On April 14, 1994, the United States District Court for the District of Minnesota issued a memorandum opinion and order. The Court held that the Secretary of Agriculture's final decision for the "1990 National Hearing" on amending Federal milk orders was deficient in part. The Court found that the Secretary's decision to retain the existing Class I pricing structure was tantamount to a finding that the structure continued to satisfy the requirements of the AMAA as set out in section 608c(18). The Court stated that this conclusion might or might not be supported by the substantial evidence from the 1990 National Hearing, but since the explicit findings and explanations relative to the § 608c(18) factors were not issued, the Court was unable to make that determination. The final decision was remanded to the Secretary for 120 days for filing of an amplified decision.

This amplified decision provides additional findings and conclusions that address the material issue on the record of the 1990 National Hearing concerning Class I milk pricing and related issues. This document provides an amplified explanation of why the Secretary decided to not change the Class I pricing structure of Federal milk marketing orders and that such determination is consistent with the pricing requirements of section 608c(18) of the AMAA.

Findings, Explanations, and Conclusions

The following findings, explanations, and conclusions on the material issues are based on evidence presented at the hearing and the record thereof:

Statutory Price Factors

7 U.S.C. 608c(18) states:

Whenever the Secretary finds, upon the basis of the evidence adduced at the hearing required by section 608b of this title or this section, as the case may be, that the parity prices of such commodities are not reasonable in view of the price of feeds, the available supplies of feeds, and other economic conditions which affect market supply and demand for milk and its products in the marketing area to which the contemplated agreement, order, or amendment relates, he shall fix such prices as he finds will reflect such factors, insure a sufficient quantity of pure and wholesome milk to meet current needs and further to assure a level of farm income adequate to maintain productive capacity sufficient to meet anticipated future needs, and be in the public interest.

The statute mandates a two-step analysis for determining the appropriate level of prices under Federal milk

market orders. The first step involves ascertainment of parity prices. If the Secretary finds that the parity price levels are not reasonable, then the second step requires investigation of appropriate price levels. Both pricing standards require recognition of explicit statutory factors, namely the price of feeds, the available supplies of feeds, and other economic conditions which affect market supply and demand.

Parity prices are, and have been, at a level that is significantly higher than the prices applicable in competitive milk markets. At the administrative hearing, official notice was requested and granted for a regular publication of the United States Department of Agriculture titled "Dairy Situation and Outlook Yearbook", DS-426, Economic Research Service, August 1990. On page 10, Table 1.—United States dairy situation at a glance, annual average numbers are listed for prices received by farmers (all-milk price for milk sold to plants) and how this price level relates to the parity price measure. The statistics reveal that over the 7-year period from 1983 through 1989, the simple average all-milk price was approximately 55 percent of the value of the calculated parity price level. These statistics show that the calculated parity price levels relative to the all-milk price would be excessively high because more than ample supplies of milk were available for all uses at prices far below the parity price level, and thus, the parity price is not reasonable. This finding was set forth in the final decision at 58 FR 12675. Accordingly, the second step of the section 608c(18) analysis was undertaken. The second step of price determination requires a more in-depth analysis of dairy market structure. The statute allows the Secretary to decide the price levels that will achieve articulated market performance goals: the chosen prices must ensure a sufficient supply of pure and wholesome milk to meet current and future market needs and be in the public interest. As outlined below, the Secretary conducted an extensive analysis of each individual marketing order in light of the statutorily-required dairy market performance goals.

As required by 7 U.S.C. 608c(18), any administratively recognized price level must reflect the price of feeds, the available supplies of feeds, and other economic conditions that affect market supply and demand. The key economic concept focuses on supply and demand. Milk markets consist of both buyers and sellers, the buyer representing a demand for what the seller can supply. Each side could be studied independently. However, it is the simultaneous

consideration of all sides of the market that the Secretary must address when regulating dairy markets and in determining reasonable price levels.

To this end, federal order markets utilize an unregulated and competitive market equilibrium price that measures all economic factors affecting the supply of and demand for milk and its products that captures all of the pricing criteria established by section 608c(18). As discussed below, this price is embodied in the Minnesota-Wisconsin (M-W) price. This price indicates the price-quantity relationship that buyers and sellers arrive at in a market where transactions are free of government intervention, the competition for milk is the most competitive, and milk products produced compete in a national market. The M-W price automatically adjusts to prevailing market supply and demand conditions.

The Minnesota-Wisconsin (M-W) Price

Prior to adoption of the M-W price, federal milk orders relied upon various procedures to establish a basic milk price. Using different measures, each of these procedures attempted to identify the competitive value of milk used for manufacturing purposes. For example, certain orders variously based class prices on prices paid by specific manufacturing plants, such as the Midwestern Condensary Series; on local plant averages; on a three-product U.S. manufacturing price; or on product formulae, such as the butter/powder or butter/cheese formulae.

One major problem with these pricing methods was the difficulty in keeping the pricing methods up-to-date with changes taking place within the dairy industry. For example, varying local needs required that some milk be shipped from plants to meet fluid demands and thus skewed plant-based formulae by affecting yields and prices of manufactured products produced from reserve milk. Moreover, cost factors, which do not lend themselves to accurate evaluation or precise and timely measurement, also complicated efforts to utilize efficiently these various formulae. Changes in labor costs and technology similarly could not be reflected in these product price formulae in a timely fashion.

Thus, there was growing recognition that a competitive pay price which would automatically adjust to prevailing supply and demand conditions (including feed cost and availability) would provide the most practical and reasonable answer to shortcomings in the then-existing pricing methods. The superiority of using a competitive pay price rests upon the economic principle

that dairy processors in a highly competitive economy will tend to purchase milk at prices close to the price an efficient processor could pay for that product. Increasing labor and other costs tend to reduce prices that processors are willing to pay for milk. On the other hand, new assembling, processing, packaging and marketing techniques that reduce costs or increase product returns tend to increase the prices processors are willing to pay producers for milk. As these factors fluctuate, shifts occur in the prices that different processors may be able to pay producers. Other groups of processors must meet or approximate these prices or risk losing their supplies of milk. Similarly, various economic factors affecting producers (i.e., taxes, inflation, feed costs, capital assets costs, salaries, etc.) are automatically reflected in the competitive price that producers are willing and able to charge for their milk. Therefore, a competitive pay price was and is viewed as an excellent and superior indicator of the upward and downward adjustments in costs which are automatically reflected in market prices paid to producers for their milk.

The M-W price is a competitive equilibrium market price that represents an estimate of the average of prices paid to dairy farmers for Grade B milk in Minnesota and Wisconsin by plants producing manufactured dairy products such as butter, nonfat dry milk and cheese. The M-W price was first adopted in 1961 as the basis for setting all minimum classified milk prices in the Chicago Regional marketing area. By 1975, the M-W price had been adopted by all federal milk orders. Both the industry and the Secretary view the M-W price as an accurate indicator of the value of milk in large part because the price reflects all of the supply and demand conditions that must be considered under section 608c(18).

Manufactured dairy products (cheese, butter, and nonfat dry milk) can be made from Grade B or Grade A milk. Because manufactured dairy products are eight to ten times less bulky than raw farm milk and can be stored for much longer periods of time than raw farm milk, these manufactured products are less expensive to move and market than raw farm milk on a per pound basis. As a result, manufactured dairy products can and do compete on a national market basis while competition for raw and packaged fluid milk occurs on a more local or regional level.

Accordingly, since manufacture dairy products (unlike fluid milk) compete in a national market, there is a relationship between the M-W price for Grade B milk and the price of surplus Grade A

milk, which, like Grade B milk, is used to produce manufactured dairy products. The M-W price reflects a competitive free market price for raw farm milk and the explicit link between Grade B and Grade A surplus milk prices. Thus, the M-W price automatically incorporates the effects of innumerable economic factors which have an impact on both buyers and sellers including the relative price and availability of feed for dairy cows. Month-to-month changes in the unregulated free market M-W price (i.e., the price of Grade B milk) reflect changes in the overall supply and demand conditions for milk and its products nationally.

Concern for the need to ensure competitive equity among handlers and the existence of basic price differences between adjacent marketing areas also led to the universal adoption of the M-W price in all federal milk orders. Marketing areas which relied on the other basic pricing formulae noted above often resulted in producer prices that were too low compared to those received by Midwestern producers. This situation created a competitive disadvantage for Midwestern processors with respect to sales of such manufactured dairy products as butter, nonfat dry milk and cheese because these products, which compete on a national rather than "local" market, were more expensive relative to similar products manufactured elsewhere. Consequently, it became clear that a competitive pay price would most accurately indicate the basic value of milk on a national level. Use of the M-W price which, as noted above, is a competitive pay price, automatically indicates the basic value of milk and eliminates the need for making possibly inaccurate judgments concerning particular products, prices, yield factors and manufacturing allowances which otherwise would be used to calculate product price formulae.

In short, the M-W price provides automatic adjustments concerning all of the factors affecting the supply of and demand for milk and its products. Thus, the M-W price has been adopted in all federal milk orders as the "mover" of all Class I and Class II prices and is the Class III price (subject to certain minor adjustments). Using the M-W as the Class III price maintains price coordination between Grade B and surplus Grade A milk supplies used for manufacturing purposes.

Price and Supplies of Feed

Agricultural commodities typically follow cyclical price-quantity patterns. Given fixed levels of demand, as

supplies become plentiful, price for feed trends downward. When supplies become scarce, price for feed trends upward. The market signals incorporated into the M-W price indicate price movements up and down and elicit either more or less commodity production. This coupling pattern between feed supplies and feed prices allows market analysts to focus on either factor and implicitly know what the other is doing.

The cost of feed is a significant factor involved in milk production. Officially noticed documents that are part of the record of the administrative hearing outline cash feed expenses as they relate to the total economic costs of producing milk. ("Economic Indicators of the Farm Sector: Costs of Production, Economic Research Service", ECIFS 3-1, 1983; ECIFS 6-1, 1986; and ECIFS 9-1, 1989.) For the period 1981 through 1989, data describing the annual average cost of producing one hundred pounds of milk were reviewed. Statistics for six individual regions plus the entire United States were examined. Information for one additional region was available for the 1987, 1988, and 1989 years.

Annual regional and total United States summary statistics for a nine-year period from 1981 through 1989 were reviewed. The review of these statistics revealed that the total cash feed expenses as a percentage of the total economic costs of production, on a per hundredweight (cwt.) basis, ranged from 30 percent to 58 percent from year-to-year. This percentage measures the relative significance of cash feed expenses for each region and the United States relative to the estimated total cost of milk production for the respective regions and the United States.

Although the availability and cost of feed are primary factors involved in farm level milk production, there is a limit to how much milk output can be obtained from a given quantity of feed input. This is a physical milk production constraint. It relates to the biological limits of the cow and the economics of milk production decisions made by individual farmers. In general, given a specified level of feed costs, a dairy farmer decides to purchase and/or grow a quantity of feed and forage. This in turn determines the amount of feed that may be made available to cows for milk production and has a direct impact on the aggregate level of milk that may be produced in absence of any consideration being given to the price that can be obtained for the milk that is produced.

Such analysis of the availability and costs of feed provides only one

dimension, albeit an important dimension, of the factors the Secretary must consider in establishing a price for milk. These important statutory pricing factors, however, are automatically embodied in the M-W price. The M-W is a superior basic price indicator for milk because it reflects all of the economic factors that affect the supply of milk as well as all of the factors that affect the demand for the products of milk.

In summary, the rulemaking record contains ample evidence regarding the price and availability of feeds which the agency reviewed when making its decision. However, these factors, as well as all other supply and demand factors, continued to be automatically reflected in the M-W price, which has long been the moving factor in the Class I (and also Class II and III) prices.

The Class I Price and Class I Differential

The Class I price in each order contains two components. The largest component is the M-W price, which applies in all orders. The smaller component is a Class I differential that is specific to each order. Consequently, through the M-W component the Class I price in each order automatically reflects the price and availability of supplies of feed and all other economic factors that affect the supply and demand for milk and dairy products.

Raw milk is a bulky product and is more expensive to transport than the equivalent amount of milk used to produce concentrated manufactured dairy products. There is a direct link between weight and the cost of moving milk across geographic areas.

The Class I differential part of the Class I price is intended to partially reflect the cost of transporting milk. The differential portion serves as a price incentive to draw milk from supply areas toward metropolitan demand centers. One of the statutory objectives of the Federal milk order program is to provide a sufficient amount of fluid milk for consumers. The differential serves as an incentive to move milk from supply areas to demand centers.

In economic terms, a spatial pricing structure for milk evolves when it traverses geographic space. The structure is characterized by a price at the area of supply. Such price increases proportionally as the distance to the area of demand increases. It is noted that there does not need to be a single defined supply area. Furthermore, it is not necessary that prices be identical at all recognized supply areas. Many different supply areas could be considered. However, distance and the cost of transportation implicitly and

efficiently link demand areas to the nearest and/or least cost area of supply. The spatial Class I milk pricing structure recognizes these economic relationships.

The Court's opinion appears to misconstrue the Secretary's description regarding the Class I differential and transportation cost. The Court observed that:

[T]he Secretary expressly states in his final decision that the differentials are no longer meant to reflect the cost of transportation * * * (Opinion, p.7).

In fact, the final decision pointed out that "the Class I pricing structure does not cover the total cost of moving bulk fluid milk from one area to another." (58 FR 12648, emphasis added).

In short, the relevant factor that establishes a limit for Class I differentials is the cost of transportation. Class I differentials partially reflect the cost of transportation at a level that will insure an adequate supply of milk pursuant to statutory objectives. Because some milk is produced just about everywhere, the mix of milk produced near consumption centers with milk shipped from distant areas varies among orders. If no nearby milk is produced for a particular consumption center, the Class I differential would have to more fully reflect the cost of transporting milk from the nearest alternative surplus milk-producing area. However, because some milk is produced just about everywhere, the Class I differential in any particular marketing area merely has to be high enough to bring forth adequate supplies of locally produced milk together with supplemental supplies from other areas.

As the mobility of milk increased, a transition necessarily occurred from considering only isolated local markets to considering a system of regional markets that are linked through class price coordination. Individual markets that previously set class prices based on local supply-demand conditions now are part of larger regional markets whose prices are coordinated through the M-W price as the price mover in federal milk marketing orders. Once the M-W price was adopted, there was a common mechanism for coordinating market price movements.

From the regulatory perspective, the statutory goal of providing an adequate milk supply for each market is furthered by coordinating milk prices among the system of orders. Based upon the cost of moving milk, Class I differentials are established so that the price of milk at any plant location does not exceed the cost of transporting milk from supply areas. Proper alignment of milk prices

between nearby adjacent markets is necessary so that handlers located in more deficit milk producing areas can attract a supply of milk.

The Blend Price

Handlers in each order account for milk in Class I, Class II, and Class III uses at the minimum respective class price established under each order. The blend price that applies to producers is calculated by dividing the total pounds of producer milk into the total value of all milk at class prices used by handlers regulated under an order. Accordingly, the blend price is a weighted average price that, because all milk of an order is part of the price calculation, assures that each producer shares in both the benefits of supplying the fluid milk market and the burden of the reserve or surplus milk supplies associated with each order. Thus, the blend price incorporates regional and national measures: it is a measure of supply and demand conditions in each order as well as a measure of national supply and demand conditions that are reflected in the class prices that are based on the M-W price. Blend prices increase or decrease as class prices increase or decrease in response to changes in national supply and demand conditions. Also, the blend price in each market increases or decreases as the Class III use in each market decreases or increases. Thus, blend prices reflect all of the economic factors that affect the supply of and demand for milk and dairy products that are required to be considered under the pricing criteria of the AMAA.

Producers make their production and marketing adjustments on the basis of changes in blend prices and differences in blend prices among orders. It is not uncommon for supply areas of individual orders to expand or contract in response to blend price changes over time. Also, because milk is free to move to handlers regulated under different orders, it is not uncommon for milk to shift from one order to another in response to blend price differences that result from changes in supply and demand conditions under different orders.

USDA's Supply-Demand Analysis

A supply and demand analysis was conducted by USDA to consider the Class I differential portion of the Class I prices. This analysis was based on the hearing record, exceptions, and comments, and was a proper and sufficient economic review of dairy market performance. By focusing on milk market performance measures, USDA's analysis directly addressed the

statutory goal of ensuring adequate milk supplies to meet the needs of each federal milk marketing area.

The examination conducted by USDA reviewed the level of Class III utilization for each market area. This market performance measure is appropriate because of the basic underlying accounting definitions and regulations in all federal milk orders.

In general, each marketing order defines producer milk receipts as all Grade A milk that is associated with (i.e., used in) the particular order market. The producer receipts may be from dairy farms in or close to the defined "marketing area", or it may come from dairy farms that are located hundreds of miles away. The key identifying factor is that the milk is associated with the market as evidenced by its receipt by handlers regulated under that particular order.

Specific market definitions also describe milk used for Class I, Class II, and Class III uses based on the end products made from such milk. The standard accounting identity applicable for all federal milk market orders requires that the total amount of milk used in Class I, Class II, and Class III products equals the total amount of producer milk receipts associated with each market order. The class utilization percentages are determined by dividing the amount of milk used in each respective class by the amount of producer receipts for the market. In this manner, the class utilization percentage represents how much milk is being used in each class of product relative to the total volume of milk associated with a specifically defined geographic Federal milk marketing area.

Markets generally function by serving Class I demand first, then meeting Class II demands, and finally utilizing the residual volume of producer receipts as Class III. In this manner, the volume of milk utilized in Class III is an indication of the surplus, or reserve, milk level available to meet any supplemental needs of the Class I and Class II market. During certain periods of the year, the level of milk production is low while the demand for Class I and Class II milk is high. In these deficit periods, it may be necessary to use all milk regularly associated with the market to meet the Class I demand. A certain portion of the milk supply in most markets also is needed to meet regular Class II milk demands; consequently, a reserve milk supply of 30 to 35 percent (i.e., Class III percent utilization) is not excessive to ensure that sufficient milk is available in the market at all times to satisfy Class I and II demand.

The Court's opinion suggests that the Secretary's reliance on producer milk in his analysis of whether Class I prices meet the statutory price considerations required by Section 608c(18) does not consider milk supplies available outside the marketing area (Opinion, p.20). In fact, producer milk and, more specifically, Class III utilization does incorporate the availability of milk supplies from outside a marketing area because, regardless of its origin, any milk received by a regulated handler in a marketing area is, by definition, producer milk. Thus, the Class III utilization of producer milk is an important indicator of federal order supply and demand conditions.

The opinion also focuses on the following statement in the final decision (58 FR 12648):

*** There is no national supply and demand standard for the order program as a whole. This is not to say that a regulated market cannot rely on milk supplies from another area, as is often the case. Nevertheless, viewed on an individual market basis, we reaffirm our conclusion that milk supplies available for Class I and Class II uses are not excessive in most markets.

The above finding is in the first of three paragraphs that respond to an exception filed by the Upper Midwest Federal Order Coalition (UMFOC) that maintained the Secretary used too high a measure of what should be considered a reasonable reserve. The Secretary indicated that there was a range of views expressed concerning reserve supplies needed to serve Class I needs on a year-round basis. (58 FR 12646) When both Class I and Class II needs are considered, the Secretary indicated that this analysis of supply and demand for milk on the various markets and regions was valid.

As noted above, the M-W is a measure of supply and demand factors throughout the country. However, there is no single national standard for determining how much reserve milk should be, or needs to be, associated with each marketing order. The amount of reserve milk varies among orders as a result of different circumstances that affect production and marketing practices and conditions. Some regions are affected more than others from year to year by variations in weather conditions that have an impact on milk production and reserve milk supplies. Also, some areas are more heavily involved in manufacturing than others. The amount of involvement has an impact on the amount of reserve milk that is historically associated with certain federal order markets relative to others. Moreover, since the blend price drives producers' production and marketing decisions, milk is shifted to alternative outlets and orders to take advantage of higher prices. This shifting of milk supplies impacts on the amount of reserve milk associated with different orders. Also, milk may be alternatively associated or disassociated from orders altogether depending on the blend price level of a federal milk order relative to returns from unregulated manufacturing plants. Consequently, Class III milk utilization is an important indicator of a market's performance and its ability to meet Class I needs. For these reasons, the Secretary's reliance on producer milk and Class III utilization is appropriate and automatically considers the availability of milk supplies from outside a marketing area.

As detailed in the final decision, the supply-demand analysis conducted by the Secretary considered the level of Class III milk utilization relative to the

established Class I price differential. Most markets appeared to have a relative balance between supply and demand, while some markets were deficit and others were surplus. On a system-wide basis considering all of the testimony from the hearing, comments, and exceptions, the Secretary properly determined that the current Class I differentials were meeting the statutorily described market performance measures.

General Findings

The findings and determinations set forth herein have been issued in response to a memorandum opinion and order of the United States District Court, District of Minnesota, Fourth Division, issued on April 14, 1994. The findings and determinations supplement those that were previously set forth in the final decision issued on February 5, 1993, and published in the **Federal Register** on March 5, 1993, with respect to the New England and other Marketing Area orders. No additional regulatory changes are necessary as a result of this amplified decision.

List of Subjects in 7 CFR Parts 1001, 1002, 1004, 1005, 1006, 1007, 1011, 1012, 1013, 1030, 1032, 1033, 1036, 1040, 1044, 1046, 1049, 1050, 1064, 1065, 1068, 1075, 1076, 1079, 1093, 1094, 1096, 1099, 1106, 1108, 1124, 1126, 1131, 1134, 1135, 1137, 1138, 1139

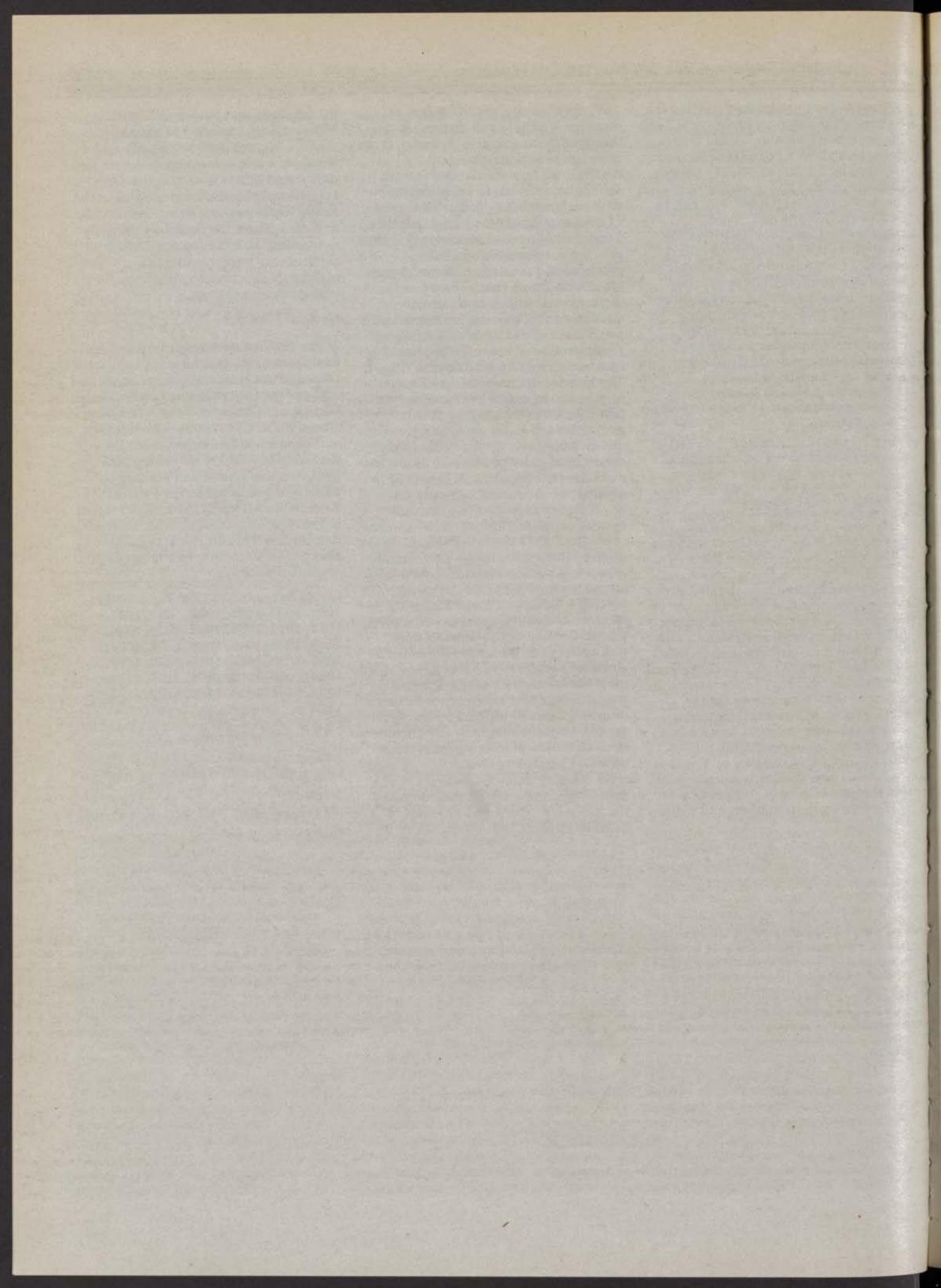
Milk marketing orders.

Dated: August 10, 1994.

Mike Espy,
Secretary.

[FR Doc. 94-19982 Filed 8-16-94; 8:45 am]

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Federal Register

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August 17, 1994

Part VI

Department of Transportation

Federal Aviation Administration

14 CFR Parts 65 and 66
Revision of Certification Requirements:
Mechanics and Repairmen; Proposed
Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 65, and 66

[Docket No. 27863; Notice No. 94-27]

RIN 2120-AF22

Revision of Certification Requirements: Mechanics and Repairmen

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to amend the Federal Aviation Regulations (FAR) that prescribe the certification and training requirements for mechanics and repairmen. Current regulations prescribing these certification requirements do not reflect the significant technological advances that have occurred in the aviation industry and the enhancements in training and instructional methods that have affected all aviation maintenance personnel. The proposed rule would consolidate and clarify all certification, training, experience, and currency requirements for aviation maintenance personnel in a newly established Part 66 of the FAR. The proposal would enhance aviation safety by establishing new training programs for aviation maintenance personnel and would decrease the regulatory burden on these personnel by providing alternatives for meeting experience and currency requirements. The proposed rule would enhance the technical capabilities and increase the level of professionalism among aviation maintenance personnel. All proposals are based on recommendations developed by the Aviation Rulemaking Advisory Committee (ARAC).

DATES: Comments must be submitted on or before October 17, 1994.

ADDRESSES: Comments on this notice should be mailed, in triplicate, to: Federal Aviation Administration, Office of the Chief Counsel, Attention: Rules Docket (AGC-10), Docket No. 27863, 800 Independence Avenue SW., Washington, DC 20591. Comments delivered must be marked Docket No. 27863. Comments may be examined in Room 915G weekdays between 8:30 a.m. and 5 p.m., except on Federal holidays.

FOR FURTHER INFORMATION CONTACT: Mr. Leslie K. Vipond, AFS-302, Aircraft Maintenance Division, Flight Standards Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267-3269.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, federalism, or economic impact that might result from adopting the proposals in this notice are also invited. Substantive comments should be accompanied by cost estimates, if appropriate. Comments should identify the regulatory docket or notice number and should be submitted in triplicate to the Rules Docket address specified above. All comments received on or before the closing date for comments specified will be considered by the Administrator before action is taken on this proposed rulemaking. The proposals contained in this notice may be changed in light of comments received. All comments received 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 rulemaking will be filed in the docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a preaddressed, stamped postcard on which the following statement is made: "Comments to Docket No. 27863." The postcard will be date stamped and mailed to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the Federal Aviation Administration, Office of Public Affairs, Attention: Public Inquiry Center, APA-220, 800 Independence Avenue, SW., Washington, DC 20591, or by calling (202) 267-3484. Communications must identify the notice number of this NPRM.

Persons interested in being placed on the mailing list for future NPRMs should request from the above office a copy of Advisory Circular (AC) No. 11-2A, Notice of Proposed Rulemaking Distribution System, which describes the application procedure.

Background

In keeping with the FAA's policy of reviewing and upgrading regulations to ensure that they are consistent with changes in the aviation environment, the FAA is conducting a two-phase regulatory review to amend Part 65, Subparts D and E (14 CFR Part 65) of the

FAR, which pertain to mechanics, mechanics holding inspection authorizations, and repairmen. Since the recodification requirements for these airmen has not been accomplished and few significant revisions to the subparts have been made. However, numerous technological advances in the aviation industry, recent FAA and international regulatory activities, concerns over aging aircraft, and enhancements in training methods have significantly affected all aspects of maintenance operations. Additionally, various and often conflicting interpretations of the existing regulations periodically have resulted in confusion among the airmen for whom this part was intended. Because of these factors, the FAA has instituted this complete regulatory review of Part 65, Subparts D and E.

In November 1989, a joint industry/FAA Part 65 review group was formed to evaluate and review certification requirements for mechanics and repairmen. The review group's objective was to develop and present a unified position on Part 65. The group comprised representatives from several aviation associations and was coordinated by the Professional Aviation Maintenance Association (PAMA). FAA interests were represented by the Aircraft Maintenance Division (AFS-300) of the FAA.

The review group conducted a series of panel discussions throughout the United States and, as a result, drafted the *Industry/FAA Part 65 Review Group Working Paper*, which was published on January 31, 1991. This paper presented the issues of general agreement within the review group and also presented those issues that the group believed would require further discussion.

Further impetus for the Part 65 review came with ARAC's establishment. The ARAC charter became effective on February 5, 1991. ARAC was established to assist the FAA in the rulemaking process by providing input from outside the Government on major regulatory issues affecting aviation safety. ARAC includes representatives of air carriers, manufacturers, general aviation, labor groups, universities, associations, airline passenger groups, and the general public. Under the framework provided by ARAC, the previously established Part 65 review group became a working group of ARAC. ARAC's formation has given the FAA additional opportunities to solicit information directly from significantly affected parties who meet and exchange ideas about proposed rules and existing rules that should either be revised or eliminated.

The issues agreed upon by the review group in the January 31, 1991, working paper and the consensus achieved at subsequent meetings of the Part 65 working group have become the basis for the changes proposed in this NPRM, which constitute phase I of the Part 65 regulatory review. The issues that require further discussion and agreement by the members of the working group (such as the evaluation of any potential for additional certificates and ratings and the expansion of aviation repair specialist privileges) will become the basis for phase II of the regulatory review and a subsequent NPRM.

In support of this regulatory review, the FAA completed a historical review of Part 65, Subparts D and E, on October 22, 1991. This review revealed that there have been 17 amendments (1 of which was rescinded), 3 petitions for rulemaking, and 100 exemption actions to these subparts since recodification. In addition, one accident, the Aloha Airlines Boeing 737 structural failure on April 28, 1988, generated National Transportation Safety Board (NTSB) recommendations related to these subparts.

The three petitions for rulemaking addressed issues associated with establishing certificates and ratings for avionics and instrument technicians, recertifying mechanics, and allowing applicants for mechanic certificates who desire to qualify on the basis of experience and have not graduated from an approved Part 147 aviation maintenance technician school to take the oral and practical tests for a certificate or rating before completing the required written tests.

The majority of requests for exemption, FAA policy letters, and legal interpretations regarding mechanics pertained to inspection authorization renewal or the general eligibility and experience requirements. The majority of actions concerning repairmen involved certificate privileges and limitations.

The FAA also conducted a survey of FAA regional offices on the certification of mechanics, holders of inspection authorizations, and repairmen during 1991. A copy of this survey has been placed in docket number 27863. The survey questions were derived from issues that surfaced during FAA participation in listening sessions with aviation industry associations and the International Civil Aviation Organization (ICAO) Aircraft Maintenance Engineer Licensing Panel and from issues identified in legal interpretations, petitions for exemption,

petitions for rulemaking, and enforcement actions.

Results of this survey showed clear support for: (1) replacing the term "mechanic" with "aviation maintenance technician"; (2) developing a system for granting additional privileges and limitations for mechanics; (3) encouraging additional FAA participation with ICAO and other aviation authorities to standardize training and certification of maintenance personnel; (4) using aviation maintenance instructor experience to satisfy recent experience requirements; (5) clarifying § 65.75(b), written test requirements; (6) adding "facsimile" to § 65.16; and (7) developing a separate certificate or rating for balloon repairmen. The majority of the respondents supported changes in the English-language requirements for both mechanics and repairmen, the continued acceptance of military aircraft maintenance experience as the basis for airframe and powerplant mechanic certification, and changing the units of time used in § 65.77 to designate experience requirements for mechanics from months to hours.

General Discussion of the Proposal

The proposals developed during phase I of the Part 65 regulatory review and set forth in this NPRM cover a broad range of issues affecting the certification of aviation maintenance personnel. The proposals included in this NPRM would: (1) establish a separate part for aviation maintenance personnel; (2) remove gender-specific terms from the current regulation; (3) change the term "mechanic" to "aviation maintenance technician"; (4) change the term "repairman" to "aviation repair specialist"; (5) establish the equivalency of the aviation maintenance technician and aviation repair specialist certificates with current certificates; (6) allow facsimiles to be used in the process of replacing lost or destroyed aviation maintenance technician and aviation repair specialist certificates; (7) require applicants to demonstrate English-language proficiency by reading and explaining appropriate maintenance publications and by writing defect and repair statements; (8) discontinue the certification of aviation maintenance personnel who are employed outside the United States and are not proficient in the English language; (9) require all aviation maintenance technician applicants to pass a written test that would examine their knowledge of all applicable maintenance regulations; (10) clarify the requirement that each applicant for an aviation maintenance

technician certificate pass all sections of the written test before applying for oral and practical tests; (11) recognize new computer-based testing methods; (12) specify all experience requirements in hours instead of months; (13) establish a basic competency requirement for aviation maintenance technicians; (14) allow aviation maintenance technicians to use equipment-specific training as an additional means to qualify for the exercise of certificate privileges; (15) permit aviation maintenance instructors to use instructional time to satisfy currency requirements; (16) establish training requirements for aviation maintenance technicians who desire to use their certificates for compensation or hire; (17) extend the duration of an inspection authorization from 1 to 2 years; and (18) expand the renewal options available to the holder of an inspection authorization.

This preamble addresses the proposed changes through a discussion of the principal issues and in a section-by-section general analysis of the proposed rule.

Principal Issues

Establishment of a Separate Subpart for Aviation Maintenance Personnel

The FAA proposes to establish a new Part 66 under the title, Certification: Aviation Maintenance Technicians and Aviation Repair Specialists. This new part would be created by removing Subparts D (Mechanics) and E (Repairmen) from the current Part 65 and using these existing subparts as the nucleus for the newly created Subparts B (Aviation Maintenance Technicians) and C (Aviation Repair Specialists) under Part 66. The sections of the current Part 65 Subpart A (General) that apply only to aviation maintenance personnel would be included in Subpart A of the proposed Part 66.

In addition to regulating the certification requirements for aviation maintenance personnel, Part 65 also currently regulates the certification of airmen such as aircraft dispatchers, air traffic controllers, and parachute riggers, whose certification requirements and duties differ markedly from those of aviation maintenance personnel. Currently, there are more than 145,000 certificated mechanics and repairmen. The number of certificated aviation maintenance personnel is second only to the number of certificated pilots. Aviation maintenance personnel work in all aspects of the aviation environment, perform tasks vastly different from those performed by other airmen, and are affected by training and currency requirements that are

substantially more extensive than those affecting other airmen currently regulated by Part 65.

The aviation maintenance sector is one of the most complex sectors of the aviation community and all aviation maintenance personnel must possess many technical skills. The addition of this part to the FAR is warranted because of the complexity of the certification and training requirements affecting aviation maintenance personnel. In addition, the certification requirements for aviation maintenance personnel are expanding under this proposed rule, and additional certificates and ratings are proposed for creation under phase II of the regulatory review.

Removal of Gender-Specific Terms

In accordance with the FAA's policy of implementing gender-neutral regulations and maintaining conformity with other recently revised airman certification regulations that are now gender-neutral, and in view of the increased role of women in the aviation maintenance profession, the FAA proposes to eliminate all gender-specific references in current Part 65 and proposed Part 66. These changes are reflected in the proposed amendment; however, specific changes are not listed in the section-by-section general analysis.

Redesignation of the Term "Mechanic"

Because of changes in aircraft technology, the amount of specialized training required to perform aviation maintenance has increased significantly since the introduction of the term "mechanic." The highly complex and technical field of contemporary aviation maintenance requires substantially more than the manual skills typically associated with individuals classified as mechanics. The FAA asserts that the term "aviation maintenance technician" more completely describes the type of skills necessary to maintain today's complex aircraft and more accurately reflects the level of professionalism found in the aviation maintenance industry. Additionally, adoption of the term "aviation maintenance technician" would standardize terminology throughout the aviation industry and make Part 66 consistent with Part 147 of the FAR (which regulates Aviation Maintenance Technician Schools), aviation maintenance trade publications, and many ICAO member states. These changes are reflected in the proposed amendment, however, specific changes have not been listed in the section-by-section general analysis.

Redesignation of the Term "Repairman"

In view of the specialized nature of aviation maintenance tasks performed by currently certificated repairmen, the FAA proposes that the term "aviation repair specialist" replace the current term "repairman." The FAA contends that the term "aviation repair specialist" more accurately reflects the level of expertise required to maintain today's highly complex aviation systems. In addition, the use of the term "aviation repair specialist" would serve to increase the level of professionalism among aviation maintenance personnel. Adoption of the term would also be consistent with the FAA's policy of implementing gender-neutral regulations. These changes are reflected in the proposed amendment; however, specific changes have not been listed in the section-by-section general analysis.

Equivalency of Ratings

Any valid mechanic or repairman certificate would be equivalent to an aviation maintenance technician or aviation repair specialist certificate, respectively. After implementation of this regulation, the holder of a current mechanic or repairman certificate may continue to exercise the privileges of the corresponding aviation maintenance technician or aviation repair specialist certificate and may exchange a current mechanic or repairman certificate for an aviation maintenance technician or aviation repair specialist certificate respectively. Phase I of the regulatory review does not create additional certificates or ratings.

Replacement of Lost or Destroyed Certificates by Facsimile

The proposal would revise current procedures by permitting an airman who has lost a certificate issued under proposed Part 66 to request a facsimile of the certificate from the FAA as confirmation of the certificate's original issuance. The proposal would also allow any request to the FAA to be made by facsimile and would permit the FAA to send directly to the airman a facsimile that the airman may carry as proof of the original certificate's issuance for a period not to exceed 60 days. Adoption of the proposed change would make the rule consistent with current practices implemented by the Airman Certification Branch (AVN-460) at the Aviation Standards National Field Office in Oklahoma City. Current regulations specify the use of telegrams only.

This change reflects advancements in communications technology and would speed access to FAA services by

permitting the use of other means, such as telephone facsimile or computer modem, to obtain a replacement certificate. The use of these means would speed the replacement of lost certificates to the airman, thereby decreasing the time during which the airman may not exercise the privileges of a certificate of rating. Similar provisions are under consideration for adoption in other parts of the FAR.

Demonstration of English-Language Proficiency and Removal of Exception Criteria for Applicants Employed Outside the United States Who Are Not Proficient in the English Language

The proposal would require an applicant for an aviation maintenance technician certificate or aviation repair specialist certificate to read, write, speak, and understand the English language, as is currently required for applicants desiring to exercise the privileges of the certificate within the United States. The proposal would require the applicant to demonstrate this knowledge by reading and explaining appropriate maintenance publications and by writing defect and repair statements. The proposal also would eliminate the issuances of certificates to individuals who cannot meet this requirement and are employed solely outside the United States by a certificated U.S. repair station, or a certificated U.S. air carrier.

This proposal recognizes the highly technical nature of aviation maintenance in today's aviation industry. Proficiency with the general terminology of the English language is not sufficient to ensure the competency of an aviation maintenance technician or repair specialist. The individual must be able to understand and master the complex and often very specialized language of airworthiness instructions and other terminology associated with the maintenance of highly sophisticated aviation equipment. In operations conducted at certificated U.S. air carriers, certificated U.S. commercial operators, and U.S.-certificated repair stations, the vast majority of technical information is conveyed in the English language. The FAA has determined that the proposed rule would guarantee a level of competency that would ensure that an applicant for either certificate is able to use all relevant maintenance publications effectively.

The FAA also proposed that the current exception, which permits the certification of mechanics (aviation maintenance technicians) who are employed outside the United States and are not proficient in the English language, be deleted. The current

airframe, powerplant, and general written tests for mechanics are all written in the English language. Applicants taking these tests must be proficient in the English language to complete these examinations successfully; therefore, the exception is not necessary.

Although repairmen (aviation repair specialists) are not required to take written tests, these individuals also work in environments that require more than mere proficiency in the English language. Because the FAA does not certify repairmen working under U.S.-certificated foreign repair stations and because of the need for all certificated repairmen to understand technical material written in English, the FAA also proposed that all repairmen (aviation repair specialists) demonstrate proficiency in the English language and that the exception allowing individuals who are not proficient in the English language to be certificated to work only outside the United States be deleted.

Current holders of a mechanic or repairman certificate, who do not meet the English language requirement and are employed outside of the United States by a certificated U.S. air carrier or a certificated U.S. repair station, would continue to exercise the privileges of their certificate without a further showing of competency. Their certificates would remain endorsed "Valid only outside of the United States."

Establishment of a Requirement for Aviation Maintenance Technicians To Pass a Written Test on all Applicable Provisions of Chapter 14

Current regulations require an applicant for a mechanic (aviation maintenance technician) certificate to pass a written test that includes the applicable provisions of Parts 43 and 91 of this chapter. Because contemporary maintenance operations require the applicant to understand certification and maintenance regulations other than those found solely in Parts 43 and 91, the FAA proposes amending the knowledge requirements for the certificate to require an applicant to pass a written test on the applicable provisions of the entire chapter.

Clarification of Requirement To Pass all Sections of the Written Test Before Applying for the Oral and Practical Tests

There has been some confusion among applicants for the mechanic (aviation maintenance technician) certificate who are not enrolled at Part-147-approved aviation maintenance technician schools regarding the

language of § 65.75(b). This section requires an individual to pass each section of the written test before applying for the oral and practical tests prescribed by § 65.79. The FAA believes that it is essential that the applicant display knowledge of the equipment and procedures to be used by the applicant before the oral and practical tests are given. The applicant must possess adequate knowledge before being permitted to take the oral and practical tests, because it is this knowledge that enables an applicant to solve practical problems and demonstrate the ability to perform the work of a certificated aviation maintenance technician. In addition, when taking an oral or practical test, an applicant for a certificate must handle complex equipment; a lack of knowledge about the use of that equipment could injure the applicant or others. Therefore, the FAA has clarified the current requirement by proposing amendatory language that would require all applicants, except students at an approved Part 147 aviation maintenance school, to pass all sections of the written test before applying for the oral and practical tests.

Recognition of New Written Testing Methods

In the area of written testing, the FAA recognizes recent developments in training and testing technology. Because the results of some written tests, such as those from recently approved computer-based testing, can be made immediately available to the applicant, the FAA proposes that a report of the written test be made available, as opposed to sent, to an applicant who has taken the examination using computer-based testing.

Specification of Experience Requirements in Hours

The FAA proposes that experience requirements for aviation maintenance personnel, currently expressed in months, be expressed in an equivalent number of hours. A change to the hourly experience requirements would give the FAA and the aviation industry a simpler method of measuring and verifying work experience. The proposed revision also would enable aviation maintenance personnel working in part-time positions to better quantify their work experience. FAA Order 8300.10, Airworthiness Inspector's Handbook, currently permits the practice of measuring part-time experience requirements in hours. The proposed rule would expand this current practice by measuring both part-time and full-time experience in hours. Equivalent

levels of full time experience are: 6 months/1000 hours; 18 months/3000 hours; 30 months/5000 hours.

Establishment of Basic Competency Requirements

Currently § 65.79, Skill requirements, requires an applicant for a mechanic certificate to pass an oral and practical test covering the applicant's skills in performing practical projects covered by the written test. Because of the complexity of current aviation maintenance operations, the FAA proposes to establish a broad-based competency requirement in § 66.79 that encompasses more than the skill requirements included in the current regulation.

Current interpretations of the existing regulation tend to emphasize the evaluation of basic skills that often concentrate solely on tasks involving manual dexterity. Although mastery of these basic skills is invaluable, the FAA asserts that a more comprehensive level of competency, based on current aviation maintenance practices, is required of aviation maintenance technicians. The proposed rule would expand the evaluation of aviation maintenance technician applicants to include a demonstration of competency in technical tasks and aircraft maintenance more appropriate to the current aviation environment and the certificate and rating sought.

Use of Equipment-Specific Training to Qualify for Certificate Privileges

Through the use of equipment-specific training, the proposal would provide the holder of an aviation maintenance technician certificate with an additional means to remain qualified to approve and return to service any aircraft, appliance, or part for which that person is rated and to supervise the maintenance, preventive maintenance, alteration, and return to service of these aircraft, appliances, and parts.

Under the current regulation, a certificate holder may supervise maintenance operations or approve and return to service an aircraft, appliance, or part if the certificate holder has: (1) previously performed the work; (2) performed the work to the satisfaction of the Administrator; or (3) performed the work under the direct supervision of a certificated mechanic or repairman who has had previous experience with that specific task.

The proposal would allow the aviation maintenance technician to use equipment-specific training to obtain the competency necessary to supervise these operations or approve an item for return to service without previously

having performed the work that is anticipated. Through the adoption of equipment-specific training to satisfy this experience requirement, the FAA recognized enhancements in aviation maintenance training that can provide the aviation maintenance technician with technical knowledge equal to knowledge gained in the work environment. However, in allowing training to replace actual work experience, the FAA would require a high level of specificity between the training and the actual work to be preformed or supervised. Therefore, the proposal would require that the training used to satisfy this requirement be unique to the specific equipment on which the work is to be performed. A course of instruction detailing the maintenance practices for the same make and model aircraft on which an aviation maintenance technician will perform work, or a course of instruction detailing the overhaul procedures for a specific part or appliance, for example, would satisfy the provisions of the proposed rule. Such courses may be provided by any manufacturer, individual, or organization whose training has been found acceptable to the Administrator.

Training of a more general nature, which may be used to satisfy currency requirements as proposed in § 66.83, may not be sufficiently specific to allow an aviation maintenance technician to perform work on a specific aircraft, part, or appliance. For example, a course in the FAR applicable to maintenance procedures would not satisfy the provisions of proposed § 66.81 but could be used to satisfy the provisions of proposed § 66.83.

The FAA also proposes to clarify the intent of the current regulation by proposing amendatory language that would allow a certificate holder, who desires to exercise supervisory, return to service, or approval responsibilities, to demonstrate the ability to perform the work to the satisfaction of the Administrator. The current regulation requires actual performance of the work.

Use of Instructional Time by Aviation Maintenance Instructors to Satisfy Currency Requirements

Under current § 65.83, there are no provisions for allowing individuals involved in aviation maintenance instruction to use that experience for maintaining the currency required to exercise the privileges of their certificate and ratings. The FAA recognizes that the experience gained while providing aviation maintenance instruction or directly supervising other aviation maintenance instructors is

commensurate with the experience obtained while directly performing aviation maintenance. The FAA already recognizes this experience in current § 65.91(c)(2). Within that section the phrase "actively engaged" includes instructors who are exercising the privileges of their certificate and ratings at an aviation maintenance school certificated under Part 147 of this chapter. Therefore, the FAA proposes to allow the use of instructional time also to satisfy currency requirements.

Under the proposed rule, a certificate holder would qualify to maintain currency by serving as an aviation maintenance instructor or by directly supervising other aviation maintenance instructors under his or her certificate or rating. The instruction concerned would have to be directly related to aviation maintenance and acceptable to the Administrator, so that the time an individual spends providing instruction or directly supervising other instructors is equivalent to the experience gained while performing aviation maintenance tasks. For example, instructional time provided at Part 147 aviation maintenance technician schools or under an approved air carrier maintenance training program would be acceptable and would meet the intent of the proposed rule.

The purpose of currency requirements is to ensure that all aviation maintenance technicians are familiar with current maintenance practices and the applicable FAR. The aviation maintenance instructor must keep abreast of current maintenance practices in a wide variety of disciplines to provide the high quality instruction required. Aviation maintenance instructors perform a critical function in the aviation maintenance education process, and the FAA believes that the adoption of the proposed rule would recognize this importance.

Establishment of Training Requirements for Certificated Aviation Maintenance Technicians Exercising the Privileges of their Certificates for Compensation or Hire

Under current Part 65, there are no specific provisions that require the training of certificated mechanics. Current regulations ensure that certificated aviation maintenance technicians supporting operations under Parts 121, 127, 135, and 145.2(a) are informed fully about procedures, techniques, and new equipment in use through participation in maintenance and preventive maintenance training programs. In an effort to ensure that all aviation maintenance technicians are informed of current maintenance

practices in the rapidly changing aviation maintenance environment, the FAA proposes the adoption of refresher training, requalification training, and other training appropriate to the duties of the aviation maintenance technician, for aviation maintenance technicians who use their certificates for compensation or hire and do not participate in the maintenance and preventive maintenance training programs referenced above. This proposal would ensure that all aviation maintenance technicians who exercise the privileges of their certificates for compensation or hire and have the sole responsibility for ensuring the airworthiness of the equipment on which they perform maintenance meet training requirements similar to those currently in place for aviation maintenance technicians supporting operations under Parts 121, 127, 135, and 145.2(a). In addition, this proposal would also ensure that aviation maintenance technicians who support U.S. certificated repair stations that do not have maintenance and preventive maintenance training programs receive comparable training.

Under the proposed rule, an aviation maintenance technician who meets the prescribed work experience requirements and wishes to exercise the privileges of the certificate or rating for compensation or hire would be required to complete refresher training or other training appropriate to the duties of an aviation maintenance technician.

An aviation maintenance technician refresher course, inspection authorization refresher course, or a series of such courses that are acceptable to the Administrator and consist of a total of not less than 16 hours of instruction within a 24-month period could be used to satisfy the refresher training requirement. The completion of an inspection authorization refresher course by an aviation maintenance technician who does not hold a current inspection authorization would also constitute completion of the mandatory aviation maintenance technician training requirement. Adoption of such a provision would increase the range of training options available to the aviation maintenance technician and would enhance the individual's understanding of the inspection authorization process.

As an alternative to refresher training, an aviation maintenance technician wishing to exercise the privileges of the certificate and ratings for compensation or hire may complete other training appropriate to the duties of an aviation maintenance technician. This training may be broad based and would consist

of a course or courses of instruction, acceptable to the Administrator, of not less than 16 hours within a 24-month period. Completion of courses dealing with general maintenance practices or regulations applicable to maintenance operations, for example, would satisfy the intent of this proposed rule.

The FAA recognizes that many certificated aviation maintenance technicians, who support Part 91 operations or other maintenance facilities without maintenance or preventive maintenance training programs in place, receive periodic maintenance training. For example, these aviation maintenance technicians may receive training through aviation training centers or manufacturer's courses. The proposed rule would permit this type of maintenance instruction to be credited toward the hours needed to complete the proposed training requirements, provided the instruction is acceptable to the Administrator.

The training required under this provision, as set forth in proposed § 66.83, encompasses more types of training than the training that may be used to satisfy the provision of the proposed § 66.81. Therefore, compliance with proposed § 66.83 does not automatically authorize the aviation maintenance technician to perform a specific task. Additionally, equipment-specific training is encompassed within the concept of "training appropriate to the duties of an aviation maintenance technician." Equipment-specific training used by the aviation maintenance technician to satisfy the requirements of proposed § 66.81 also may be used to satisfy the proposed currency requirements. For example, an aviation maintenance technician who received maintenance training on a Gulfstream IV aircraft that enabled the aviation maintenance technician to perform work on that specific aircraft may credit the hours of instruction received toward the training required in proposed § 66.83.

An individual who exercises the privileges of the certificate, but not for compensation or hire, would not need to complete these training requirements. Many of the individuals who do not exercise their privileges for compensation or hire perform only limited work on aircraft that they own or on a limited range of aeronautical equipment. In such cases, knowledge of a broad range of current maintenance technologies is not necessarily required. Although the FAA encourages these personnel to attend refresher training, the FAA has determined that a

mandatory training requirement for these individuals is not warranted.

The proposal also sets forth a provision that would permit an aviation maintenance technician who has not exercised the privileges of the certificate within the preceding 24 months to exercise the privileges of the certificate including for compensation or hire by completing requalification training acceptable to the Administrator. A specific minimum time for requalification training has not been specified in the proposed regulation in order to provide instructors and examiners with greater flexibility in assisting non-current aviation maintenance technicians to achieve the required proficiency.

An additional change to the current rule would enhance the ability of non-current aviation maintenance technicians to regain the currency required to exercise the privileges of their certificate and ratings. The proposed rule would allow these individuals to credit the time they work under the supervision of a certificated aviation maintenance technician toward currency requirements.

The holder also may continue to exercise the privileges of the certificate and associated ratings if the Administrator finds that the aviation maintenance technician is competent to exercise those privileges. Passing an oral and practical test with a designated aviation maintenance technician examiner (currently, a designated mechanic examiner (DME)) would satisfy this requirement.

Sections 121.375, 127.137, and 135.433 require that an operator have a training program to ensure that persons performing maintenance or preventive maintenance functions are informed fully about procedures and techniques and new equipment in use. Additionally, § 145.2(a) requires that repair stations performing maintenance for a Part 121 or 127 operator comply with either Part 121, Subpart L (which includes the requirements of § 121.375) or Part 127, Subpart I (which includes the requirements of § 127.137). Compliance with any of these sections meets the intent of the proposed rule. Individuals exercising the privileges of their certificates under the provisions of these sections, therefore, need not comply with the training requirements set forth in the proposed rule.

In addition, an aviation maintenance instructor teaching under an aviation maintenance training program acceptable to the Administrator need not comply with these proposed training requirements. As a result of their position as aviation maintenance

instructors, these individuals continually are exposed to current maintenance practices and often disseminate information about new practices, techniques, and equipment to the aviation maintenance community. The intent of the proposed rule would be satisfied because their position requires these individuals to be fully informed about current maintenance practices.

In recognition of enhancements in training technology, the proposed rule also requires successful completion of these courses rather than attendance and successful completion. Therefore, the Administrator may find home study or video courses acceptable for fulfilling the requirements specified in the proposed § 66.83. However, any training should include a substantial review of regulations pertinent to the exercise of the privileges and limitations of the aviation maintenance technician certificate.

This proposal for continued aviation maintenance training addresses concerns such as those expressed in recent proposals to require formal training for all aircraft mechanic applicants. In conjunction with the issuance of a proposed final rule, the FAA will develop policy on the content and conduct of any aviation maintenance technician refresher course, other training appropriate to the duties of the aviation maintenance technician (including equipment-specific training), and requalification training.

Extension of Inspection Authorization Duration

Under the proposed rule, the duration of an inspection authorization would be extended from the current 12 months to 24 months. Extending the duration of the inspection authorization would make the authorization consistent with FAA practices regarding the issuance of other renewable certificates, such as the flight instructor certificate, which is renewed every 24 months. A 24-month renewal cycle would relieve the public of a significant regulatory burden and FAA Flight Standards District Offices of a considerable administrative burden without compromising safety. Modifying the existing training and currency requirements to coincide with the adoption of a 24-month renewal cycle would give holders greater flexibility in meeting regulatory requirements.

Expansion of Inspection Authorization Renewal Options

The proposal would permit the holder of an inspection authorization to use a

combination of annual inspections, inspections of major repairs or major alterations, and progressive inspections to satisfy the renewal requirements for the inspection authorization. Such a provision would give the holder of an inspection authorization much greater flexibility in meeting renewal requirements. To better facilitate the combination of these inspections for the purpose of certificate renewal with other inspection periods currently designated in months, the proposal would change the currently specified 90-day periods for inspections to 3-month periods.

The proposed rule would also permit the holder of an inspection authorization to use participation in current inspection programs recommended by the manufacturer or other inspection programs established by the registered owner or operator under § 91.409(f)(3) or (4) to satisfy renewal requirements. Although an inspection authorization is not required by an aviation maintenance technician in order to participate in these inspection programs, the FAA asserts that the experience gained through participation in such inspection programs is commensurate with the experience currently accepted to obtain the inspection authorization renewal. This proposal would benefit holders of an inspection authorization who are employed by operators that maintain aircraft under a current inspection program yet also maintain an insufficient number of aircraft under other annual inspection programs to provide the holder of the inspection authorization with sufficient renewal options under the current rule. The proposed rule would neither change the privileges of the inspection authorization nor compromise safety because the types of aircraft normally maintained under a current inspection program are often more complex than those maintained under an annual inspection program.

Under the current regulation, the holder of an inspection authorization may renew the inspection authorization by attending and successfully completing a refresher course, acceptable to the Administrator, of not less than 8 hours during the 12-month period preceding the application for renewal. Because the proposal would modify the duration of the inspection authorization to 24 months, it would require that an inspection authorization refresher course or series of courses consisting of a total of not less than 16 hours be taken in the 24 months preceding the application for renewal. The proposed rule would not change the

total amount of instruction an applicant is required to complete in the 24-month period preceding the application for renewal.

Section-by-Section Analysis

Part 65

Under the proposal, the title of Part 65 would be amended to reflect the removal of Subparts D (Mechanics) and E (Repairmen) from this part. The proposal would amend the title of Part 65 by revising the title of the part and would specifically list airmen whose certification would continue to be regulated by this part. The title would be changed from "Certification: Airmen Other than Flight Crewmembers" to "Certification: Air-Traffic Control Tower Operators, Aircraft Dispatchers, and Parachute Riggers."

Section 65.1

Section 65.1 currently states that Part 65 is applicable to air traffic control tower operators, aircraft dispatchers, mechanics, repairmen, and parachute riggers. Under the proposal, certification of mechanics and repairmen (aviation maintenance technicians and aviation repair specialists) under the proposed rule would be regulated by Part 66. The proposal would revise § 65.1 by limiting the applicability of this part to air traffic control tower operators, aircraft dispatchers, and parachute riggers.

Section 65.3

Section 65.3 prescribes the certification requirements for foreign mechanics. Because the proposal would place the certification for all mechanics under Part 66, this section would be removed from Part 65 and reserved. An equivalent section, § 66.3, is proposed for inclusion in Part 66.

Section 65.11

Currently, § 65.11(d)(2) prohibits a person whose repairman or mechanic certificate is revoked from applying for either of those kinds of certificates for 1 year after the date of revocation, unless the order of revocation provides otherwise. Because the proposal would place the certification of all mechanics and repairmen under Part 66, this paragraph would be removed from Part 65; an equivalent paragraph, § 66.11(d), has been proposed for inclusion in Part 66.

Part 65 Subpart D and Subpart E

The proposal would completely remove Subpart D (Mechanics) and Subpart E (Repairmen) from Part 65 and would establish Subpart B (Aviation Maintenance Technicians) and Subpart C (Aviation Repair Specialists) under

Part 66. The new subparts would be based upon the subparts originally found in Part 65.

Part 66

Under the proposal, a new Part 66 prescribing the certification requirements solely for aviation maintenance personnel would be created. Part 66 would include Subpart A (General), Subpart B (Aviation Maintenance Technicians), and Subpart C (Aviation Repair Specialists). Subpart A (General) would be based on Part 65, Subpart A and modified to address regulatory concerns applicable to aviation maintenance technicians and aviation repair specialists. The proposal would establish the new part under the title "Certification: Aviation Maintenance Technicians and Aviation Repair Specialists."

Section 66.1

The proposed § 66.1 sets forth the applicability of Part 66. This proposed section is based upon § 65.1 of the current FAR. This section would limit the applicability of this new part to aviation maintenance technicians and aviation repair specialists.

Section 66.3

The proposed § 66.3 prescribes the certification requirements for foreign aviation maintenance technicians. This proposed section is based on § 65.3 of the current FAR. There are no substantive differences between the proposed section and the current § 65.3.

Section 66.11

The proposed § 66.11 prescribes the application and issuance procedures for a certificate and ratings under this part. This proposed section is based on § 65.11 of the current FAR. There are no substantive differences between paragraphs (a) through (c) of the proposed section and the current § 65.11. Paragraph (d) of the proposed rule would not change the substantive provisions of § 65.11 as it applies to aviation maintenance personnel; however, it differs from the current § 65.11 in that it removes provisions that are only applicable to air traffic control operators, aircraft dispatchers, and parachute riggers.

Sections 66.12, 66.13

The proposed §§ 66.12 and 66.13 are based on current §§ 65.12 and 65.13. These sections refer to offenses involving alcohol or drugs and temporary certificates. There are no substantive differences between these proposed sections for Part 66 and

current corresponding sections in Part 65.

Section 66.15

The proposed § 66.15 is based upon the current § 65.15 and establishes the duration of certificates issued under this part. The proposed rule corrects an earlier omission by including the aviation repair specialist certificate (experimental aircraft builder) among those certificates that are effective until surrendered, suspended, or revoked.

Section 66.16

The proposal would revise current procedures by permitting an airman who has lost a certificate issued under Part 66 to request a facsimile of the certificate from the FAA as confirmation of the certificate's original issuance. The proposal also would allow any request to the FAA to be made by facsimile and would permit the FAA to send directly to the airman a facsimile that may be carried by the airman, for a period not to exceed 60 days, as proof of the original certificate's issuance.

Sections 66.17, 66.18, 66.19, 66.20, 66.21, 66.23

The proposed §§ 66.17, 66.18, 66.19, 66.20, 66.21, and 66.23 are based on current §§ 65.17, 65.18, 65.19, 65.20, 65.21, and 65.23. These sections refer to written test general procedures, cheating or other unauthorized conduct on written tests, retesting after failure, falsification of documents, changes of address, and the refusal to submit to a drug test. There are no substantive differences between these proposed sections for Part 66 and current corresponding sections in Part 65.

Part 66 Subpart B

The structure of Part 66, Subpart B, is based upon the current structure of Part 65, Subpart D. Under the proposed rule, the title of Part 66, Subpart B, would become "Aviation Maintenance Technicians."

Section 66.71

The proposed § 66.71 is based upon the current § 65.71 and differs from that section solely in the language of subparagraph (a)(2). The proposal differs from current § 65.71, because in addition to requiring an applicant for an aviation maintenance technician certificate to read, write, speak, and understand the English language, as is currently required, it would require the applicant to demonstrate this knowledge by reading and explaining appropriate maintenance publications and by writing defect and repair statements. The proposal also differs

from the current section in that it would eliminate the issuance of certificates to individuals who cannot meet this requirement and who are employed solely outside the United States by a U.S. air carrier.

Section 66.73

The proposed § 66.73 would establish the ratings issued under this subpart. This proposed section is based on current § 65.73. The proposal would revise current paragraph (b), to establish the equivalency of the current mechanic certificate and the proposed aviation maintenance technician certificate. The proposal also provides for the exchange of corresponding certificates and ratings.

Section 66.75

The proposed § 66.75 would establish the knowledge requirements for certificates and ratings issued under this part.

This proposed section is based on current § 65.75. The proposed revisions to the current knowledge requirements encompass the current requirement that the applicant be tested in the applicable provisions of Parts 43 and 91 of this chapter and also expand the knowledge required of an applicant by requiring the applicant to pass a written test that includes material on all applicable provisions of this chapter.

To clarify the existing language of § 65.75, the proposed revisions would require the applicant to pass all sections of the written test (as opposed to each section) before applying for the oral and practical tests for the certificate or rating sought.

Because of the increased use of computer-based testing, the proposal would require a report of the written test to be made available to the applicant upon completion of the test. The current section requires the FAA to send the applicant a report.

Section 66.77

The proposed § 66.77 would establish the experience requirements for certificates and ratings issued under this part. This proposed section is based on current § 65.77. The proposed revisions to the current experience requirements would result in experience requirements being specified in hours instead of months. All proposed experience requirements are approximate equivalents of the current full-time experience requirements.

Section 66.79

The proposed § 66.79 would establish the competency requirements for applicants attempting to obtain a

certificate or rating under this part. This proposed section is based on current § 65.79. The proposed revisions to the current section establish a basic competency requirement for an aviation maintenance technician by requiring the applicant to demonstrate competency in performing tasks appropriate to the rating sought. The proposal would also clarify the existing regulation to ensure that an applicant passes both an oral and a practical test appropriate to the rating sought.

Section 66.80

The proposed § 66.80 prescribes specific requirements for the testing of certified aviation maintenance technician school students. This proposed section is based on current § 65.80 with no substantive differences.

Section 66.81

The proposed § 66.81, based on current § 65.81, would define the privileges and limitations of a certificate holder under this part. The proposed revision to the current privileges and limitations of certificate holders would clarify and expand the manner in which an aviation maintenance technician may become qualified to supervise the maintenance, preventive maintenance, or alteration of any aircraft, or approve and return to service any aircraft or appliance, or part thereof, for which that person is rated. The proposal would provide the holder of an aviation maintenance technician certificate with additional means to qualify for the exercise of these privileges. In addition to the means specified in the current § 65.81, the holder may exercise the privileges mentioned above if the aviation maintenance technician has received the equipment-specific training or has performed the work under the direct supervision of a certificated and appropriately rated aviation maintenance technician or certificated aviation repair specialist who has also received equipment-specific training.

Additionally, the proposal would clarify § 65.81 by permitting the holder of an aviation maintenance technician certificate to exercise the privileges of the certificate and ratings by demonstrating the ability to perform the work to the satisfaction of the Administrator. The current regulation requires actual performance of the work.

The proposed regulation would require that the work recognized under proposed § 66.81 be performed after the individual has been certificated as an aviation maintenance technician. Work performed while an individual is in training for certification as an aviation maintenance technician may not

necessarily be of the same quality required for the return to service of an article, and therefore would not be credited toward satisfying the requirements specified in § 66.81.

The proposal also would require that a certificated aviation maintenance technician understand all current maintenance instructions (as opposed to maintenance manuals) for the specific operation concerned in order to exercise the privileges of the certificate and rating.

Section 66.83

The proposed § 66.83 would prescribe the specific currency requirements for aviation maintenance technicians. This proposed section is based on current § 65.83, Recent experience requirements. The proposal would provide the holder of an aviation maintenance technician certificate with additional means to maintain the currency required to exercise the privileges of the certificate and ratings. In addition to the means currently specified in § 65.83(a), the proposal would allow the aviation maintenance technician to maintain the currency required to exercise the privileges of the certificate, if the person served as an aviation maintenance instructor under an aviation maintenance training program acceptable to the Administrator, directly supervised other aviation maintenance instructors, who are serving under an aviation maintenance training program acceptable to the Administrator, or served under the supervision of a certificated aviation maintenance technician. The proposal also would allow the use of any combination of the proposed and current methods to maintain currency.

The proposal would create a new subparagraph that would require the successful completion of refresher training or training appropriate to the duties of an aviation maintenance technician if the individual desires to exercise the privileges of the certificate or ratings for compensation or hire. The refresher training may consist of an aviation maintenance technician refresher course, an inspection authorization course, or a series of courses, acceptable to the Administrator, of not less than 16 hours of instruction. Training appropriate to the work to be performed must also be acceptable to the Administrator and consist of not less than 16 hours of instruction.

The proposal would not require all aviation maintenance technicians to complete the new training requirements. An aviation maintenance technician,

who within the preceding 24 months exercised the privileges of the certificate and ratings for a certificate holder authorized to operate under the provisions of Parts 121, 127, 135, or for a U.S.-certificated repair station that performed work in accordance with § 145.2(a) or conducted a maintenance and preventive maintenance training program, would not be subject to the proposed training requirements. Additionally, aviation maintenance instructors teaching under an aviation maintenance training program that is acceptable to the Administrator need not complete the proposed training requirements.

The proposal sets forth an additional provision that would permit the aviation maintenance technician to exercise the privileges of the certificate for compensation or hire if the certificate holder successfully completes a requalification course acceptable to the Administrator.

The proposed revision to the current regulation would change the 6-month currency requirement to be specified in hours instead of months. The 1,000 hours of experience specified in the proposal approximately equal the current 6-month full-time experience requirement.

Sections 66.85, 66.87, 66.89, 66.91

The proposed §§ 66.85, 66.87, 66.89, and 66.91 are based on current §§ 65.85, 65.87, 65.89, and 65.91, respectively. These sections refer to the additional privileges of the airframe rating, the powerplant rating, the display of certificates, and the inspection authorization, respectively. There are no substantive differences between these proposed sections for Part 66 and current corresponding sections in Part 65.

Section 66.92

The proposed § 66.92 prescribes the duration of an inspection authorization. This proposed section is based on § 65.92 of the current FAR. There is one substantive difference between the proposed section and the current § 65.92. Under the proposal, the expiration date of the inspection authorization would be extended to March 31 of the second year after its issuance. Under the current regulation, the inspection authorization expires on March 31 of each year.

Section 66.93

The proposed § 66.93 prescribed the renewal procedures for an inspection authorization and is based on current § 65.93. The proposed section would extend the inspection authorization

renewal requirement to every 2 years so that it would correspond to the extension of the inspection authorization as proposed in § 66.92 above.

The proposal would permit the holder of an inspection authorization to use a combination of annual inspections, inspections of major repairs on major alterations, and progressive inspections to satisfy the renewal requirements for the inspection authorization. Participation in current inspection programs recommended by the manufacturer of other inspection programs established by the registered owner or operator under § 91.409(f)(3) or (4) now also may be used to satisfy renewal requirements. To better facilitate the combination of these inspections, the proposal would change the currently specified 90-day period to a 3-month period.

Under the current regulation, the holder of an inspection authorization may renew the authorization by attending and successfully completing a refresher course of not less than 8 hours, acceptable to the Administrator, during the 12-month period preceding the application for renewal. Because the proposal would change the duration of the inspection authorization to 24 months, the proposal would require that an inspection authorization refresher course or series of course consisting of a total of not less than 16 hours be taken in the 24 months preceding the application for renewal. The proposed rule does not change the total amount of instruction the applicant must complete in the 24-month period preceding the application for renewal. The proposed rule also differs from the current regulation in that it only requires successful completion (as opposed to attendance and successful completion) of an inspection authorization refresher course. The proposal recognizes recent developments in instructional techniques and permits instruction methods, acceptable to the Administrator, that may differ from the standard classroom or lecture format.

Section 66.95

The proposed § 66.95 prescribes the privileges and limitations of an inspection authorization and is based on current § 65.95 with no substantive differences.

Part 66 Subpart C

The structure of part 66, Subpart C, is based upon the current structure of Part 65, Subpart D. Under the proposed rule, the title of Part 66, Subpart C, would become "Aviation Repair Specialists"

Section 66.101

The proposed § 66.101 would prescribe the general eligibility requirements for the aviation repair specialist certificate. This proposed section is based on current § 65.101. The proposal would specify the current 18-month experience requirement in hours instead of months. The 3,000 hours of experience specified in the proposal approximately equal the current full-time 18-month experience requirement.

The proposal differs from the current § 65.101 in the language of paragraph (a)(6). The proposal would not only require an applicant for an aviation repair specialist certificate to read, write, speak, and understand the English language, as is currently required, but also would require the applicant to demonstrate this knowledge by reading and explaining appropriate maintenance publications and by writing defect and repair statements. The proposal also differs from the current section in that it would eliminate the issuance of certificates to individuals who cannot meet this requirement and who are employed solely outside the United States by a certificated U.S. repair station, a certificated U.S. commercial operator, or a certificated U.S. air carrier. The language in this portion of the proposed rule corresponds with the language proposed in § 66.71(a)(2), which similarly amends the eligibility requirements for the aviation maintenance technician certificate.

The proposal adds to this section paragraph (c), which establishes the equivalency of the current repairman certificate and the proposed aviation repair specialist certificate. The proposal also provides for the exchange of corresponding certificates and ratings.

Section 66.103, 66.104, 66.105

The proposed §§ 66.103, 66.104, and 66.105 are based on current §§ 65.103, 65.104, and 66.105, respectively. These sections refer to aviation repair specialist certificate privileges and limitations, the experimental aircraft builder privileges and limitations, and the display of certificates, respectively. There are no substantive differences between these proposed sections for Part 66 and current corresponding sections in Part 65.

Paperwork Reduction Act

The information collection requirements in the proposed amendment to Part 65 and the newly established Part 66 have previously been approved by the Office of

Management and Budget (OMB) under provisions of the Paperwork Reduction Act of 1990 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120-0022.

Regulatory Evaluation Summary

Executive Order 12866 dated September 30, 1993, directs Federal agencies to promulgate new regulations and maintain current regulations only if they are required by law, are necessary to interpret the law, or are made necessary by a "compelling public need." The order also requires that agencies assess all costs and benefits of available regulatory alternatives and select the alternative that maximizes the net benefits and imposes the least burden on society.

Additionally, the order requires agencies to submit a list of all rules, except those specifically exempted by the Office of Information and Regulatory Affairs (OIRA) because they respond to emergency situations or other narrowly defined exigencies, to determine whether any rule is a "significant regulatory action."

"Significant regulatory action" means an action that is likely to result in a rule that may: (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. A "significant regulatory action" is submitted for centralized regulatory review by OIRA. OIRA and the FAA have determined that this rule is not a "significant regulatory action."

This section contains the benefits and costs analyzed in the preliminary regulatory evaluation. In addition, it includes an initial regulatory flexibility determination required by the 1980 Regulatory Flexibility Act and an international trade impact assessment. The complete regulatory evaluation, which contains more detailed economic information that this summary provides, is available in the docket.

This proposed rule change would revise the regulations that prescribe the certification and training requirements for mechanics and repairmen. The

proposal would enhance the professionalism of the aviation maintenance workforce by expanding the means for aviation maintenance personnel to satisfy training, experience, and currency requirements. Employers would also benefit from the increased supply of potential employees who are expected to maintain their currency because of the wider range of options for achieving this objective that would be permitted under the proposal. Another benefit for employers is expected to be an increase in the quality of new hires, thereby lessening the need for initial training to assure that these employees have basic skills and knowledge. Recurrent training is also expected to assist aviation maintenance personnel in staying abreast of the rapid changes in technology that are expected to occur. The expected magnitude of these benefits cannot be quantified with any certainty, however, because of their intangible nature.

Only one of the provisions would impose significant costs on the industry. This provision would require mechanics who use their certificates for compensation or hire to receive refresher or requalification training. At present, certified mechanics working under Parts 121, 127, and 135 and § 145.2(a) must be fully informed about procedures, techniques, and new equipment in use through participation in maintenance and preventive maintenance training programs. These mechanics are, therefore, already in compliance with the proposed rule. This proposed requirement for recurrent training would primarily affect those mechanics who work on general aviation aircraft rather than aircraft used by the air carriers. The FAA estimates that this proposed rule would affect from 14,000 to 23,000 mechanics of a total workforce of about 145,000.

Taking an Aviation Maintenance Technician (AMT) refresher course, an inspection authorization refresher course, or a series of such courses that are acceptable to the Administrator, would satisfy the requirements of this proposed rule. However, the course or courses taken within a 2-year time period must consist of a total of not less than 16 hours of instruction. This training may be broad based or narrowly focused but must be acceptable to the Administrator. For example, courses dealing with general maintenance practices of regulations applicable to maintenance operations as well as equipment-specific training would be acceptable. Some home study or video courses may also be acceptable for fulfilling this requirement.

The FAA estimates that the total expected cost of recurrent training over a 10-year period would range between \$37.28 million and \$66.53 million on an undiscounted basis and between \$25.94 million and \$46.48 million on a discounted basis. The midpoints of these ranges are \$51.91 million (undiscounted) and \$36.21 million (discounted).

The bulk of the expected benefits are expected to accrue from productivity gains. Productivity is expected to increase because recurrent training in troubleshooting techniques or general maintenance practices should reduce the amount of time required to diagnose problems and lower the incidence of unnecessary repairs, which inflate repair costs. The lack of information regarding the prevalence of inefficient or ineffective repairs makes it difficult to project the potential magnitude of the benefits expected to result from this factor. The adoption of the conservative assumption that productivity would increase by only .5 percent per year, however, would result in an annualized benefit range (undiscounted) of \$4.17 million to \$6.39 million, the midpoint of which (\$5.28 million) would exceed the expected magnitude of undiscounted annual costs, making the rule change cost beneficial.

Administrative cost savings are expected to add to the benefits. The most substantial component of these savings should result from reducing the current annual requirement for IA renewal to a biennial one. The FAA estimates that these cost savings for the FAA would amount to \$.71 million on a discounted basis over a 10-year period. A provision that would allow mechanics to substitute a requalification course for the requirement to work at least 6 months over the previous 2 years in order to maintain one's currency would benefit employers by not only increasing the pool of available qualified mechanics, but also by saving them the administrative costs involved in checking an applicant's qualifications for the job. These benefits could not be quantified.

Regulatory Flexibility Determination

The Regulatory Flexibility Act of 1980 (RFA) was enacted by Congress to ensure that small entities are not unnecessarily and disproportionately burdened by government regulations. The RFA requires agencies to review rules which may have a "significant economic impact on a substantial number of small entities." Small entities include businesses, nonprofit organizations, and government jurisdictions.

The proposed regulation will affect individuals only and is, therefore, not expected to have a significant impact on a substantial number of small businesses.

International Trade Impact

The proposed rule would have a negligible impact on trade opportunities for U.S. firms doing business overseas or on foreign firms doing business in the United States. The proposed rule primarily affects individuals, not businesses involved in the sale of aviation products or services.

Federalism Implications

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

Conclusion

For the reasons discussed in the preamble, and based on the findings in the Regulatory Flexibility Determination and the International Trade Impact Analysis, the FAA has determined that this proposed regulation is not a significant regulatory action under Executive Order 12866. In addition, the FAA certifies that this proposal, if adopted, would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. This proposal is not considered significant under DOT Order 2100.5, Policies and Procedures for Simplification, Analysis, and Review of Regulations. A draft regulatory evaluation of the proposal, including an initial Regulatory Flexibility Determination and International Trade Impact Analysis, has been placed in the docket. A copy may be obtained by contacting the person identified under FOR FURTHER INFORMATION CONTACT.

List of Subjects

14 CFR Part 65

Air safety, Air transportation, Aircraft, Airmen, Aviation safety, Drug abuse, Narcotics, Parachutes, Transportation.

14 CFR Part 66

Air safety, Air transportation, Aircraft, Airmen, Aviation safety, Drug abuse, Narcotics, Transportation.

The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend part 65 of the Federal Aviation Regulations (14 CFR part 65) and to add part 66 (14 CFR part 66) as follows:

PART 65—CERTIFICATION: AIRMEN OTHER THAN FLIGHT CREWMEMBERS

1. The authority citation for part 65 continues to read as follows:

Authority: 49 U.S.C. App. 1354(a), 1355, 1421, 1422, and 1427; 49 U.S.C. 106(g) (Revised 56 FR 27163, 56 FR 65653).

2. The title of part 65 is revised to read as follows:

PART 65—CERTIFICATION: AIR TRAFFIC CONTROL TOWER OPERATORS, AIRCRAFT DISPATCHERS, AND PARACHUTE RIGGERS

3. Section 65.1 is amended by removing paragraphs (c) and (d) and redesignating paragraph (e) as paragraph (c).

§ 65.3 [Removed and Reserved]

4. Section 65.3 is removed and reserved.

5. Section 65.11 is amended by revising paragraphs (c) and (d) to read as follows:

§ 65.11 Application and issue.

* * * * *

(c) Unless authorized by the Administrator, a person whose air traffic control tower operator or parachute rigger certificate is suspended may not apply for any rating to be added to that certificate during the period of suspension.

(d) Unless the order of revocation provides otherwise, a person whose air traffic control tower operator, aircraft dispatcher, or parachute rigger certificate is revoked may not apply for the same kind of certificate for 1 year after the date of revocation.

6. Section 65.15 is revised to read as follows:

§ 65.15 Duration of certificates.

(a) A certificate or rating issued under this part is effective until it is surrendered, suspended, or revoked.

(b) The holder of a certificate issued under this part that is suspended, revoked, or no longer effective shall return it to the Administrator.

7. Part 65, subpart D consisting of §§ 65.71 through 65.95, is removed and reserved.

Subpart D [Reserved]

8. Part 65, subpart E consisting of §§ 65.101 through 65.105 is removed and reserved.

Subpart E [Reserved]

9. Part 66 is added to read as follows:

PART 66—CERTIFICATION: AVIATION MAINTENANCE TECHNICIANS AND AVIATION REPAIR SPECIALISTS

Subpart A—General

Sec.

- 66.1 Applicability.
- 66.3 Certification of foreign aviation maintenance technicians.
- 66.11 Application and issue.
- 66.12 Offenses involving alcohol or drugs.
- 66.13 Temporary certificate.
- 66.15 Duration of certificates.
- 66.16 Change of name: Replacement of lost or destroyed certificate.
- 66.17 Tests: General procedure.
- 66.18 Written tests: Cheating or other unauthorized conduct.
- 66.19 Retesting after failure.
- 66.20 Applications, certificates, logbooks, reports and records: Falsification, reproduction, or alteration.
- 66.21 Change of address.
- 66.23 Refusal to submit to a drug test.

Subpart B—Aviation Maintenance Technicians

- 66.71 Eligibility requirements: General.
- 66.73 Ratings.
- 66.75 Knowledge requirements.
- 66.77 Experience requirements.
- 66.79 Competency requirements.
- 66.80 Certificated aviation maintenance technician school students.
- 66.81 General privileges and limitations.
- 66.83 Currency requirements.
- 66.85 Airframe rating; additional privileges.
- 66.87 Powerplant rating; additional privileges.
- 66.89 Display of certificate.
- 66.91 Inspection authorization.
- 66.92 Inspection authorization: Duration.
- 66.93 Inspection authorization: Renewal.
- 66.95 Inspection authorization: Privileges and limitations.

Subpart C—Aviation Repair Specialists

- 66.101 Eligibility requirements: General.
- 66.103 Aviation repair specialist certificate: Privileges and limitations.
- 66.104 Aviation repair specialist certificate—experimental aircraft builder—Eligibility, privileges and limitations.
- 66.105 Display of certificate.

Authority: 49 U.S.C. App. 1354(a), 1355, 1421, 1422, and 1427; 49 U.S.C. 106(g) (Revised 56 FR 27163, 56 FR 65653).

Subpart A—General**§ 66.1 Applicability.**

(a) This part prescribes the requirements for issuing the following certificates and associated ratings and the general operating rules for the holders of those certificates and ratings:

(1) Aviation Maintenance Technicians.

(2) Aviation Repair Specialists.

(b) [Reserved]

§ 66.3 Certification of foreign aviation maintenance technicians.

A person who is neither a U.S. citizen nor a resident alien is issued a certificate under subpart B of this part, outside the United States, only when the Administrator finds that the certificate is needed for the operation or continued airworthiness of a U.S.-registered civil aircraft.

§ 66.11 Application and issue.

(a) Application for a certificate and rating, or for an additional rating, under this part must be made on a form and in a manner prescribed by the Administrator. Each person who is neither a U.S. citizen nor a resident alien and who applies for a written or practical test to be administered outside the United States or for any certificate or rating issued under this part must show evidence that the fee prescribed in Appendix A of part 187 of this chapter has been paid.

(b) An applicant who meets the requirements of this part is entitled to an appropriate certificate and rating.

(c) Unless authorized by the Administrator, a person whose aviation maintenance technician certificate is suspended may not apply for any rating to be added to that certificate during the period of suspension.

(d) Unless the order of revocation provides otherwise, a person whose aviation maintenance technician or aviation repair specialist certificate is revoked may not apply for either of those kinds of certificates for 1 year after the date of revocation.

§ 66.12 Offenses involving alcohol or drugs.

(a) A conviction for the violation of any Federal or state statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, marijuana, or depressant or stimulant drugs or substances is grounds for:

(1) Denial of an application for any certificate or rating issued under this part for a period of up to 1 year after the date of final conviction; or

(2) Suspension or revocation of any certificate or rating issued under this part.

(b) The commission of an act prohibited by § 91.19(a) of this chapter is grounds for:

(1) Denial of an application for a certificate or rating issued under this

part for a period of up to 1 year after the date of the act; or

(2) Suspension or revocation of any certificate or rating issued under this part.

§ 66.13 Temporary certificate.

A certificate and ratings effective for a period of not more than 120 days may be issued to a qualified applicant, pending review of his or her application and supplementary documents and the issue of the certificate and ratings for which the applicant applied.

§ 66.15 Duration of certificates.

(a) An aviation maintenance technician certificate, an aviation repair specialist certificate issued to an experimental aircraft builder, or any rating issued under this part is effective until it is surrendered, suspended, or revoked.

(b) Unless it is sooner surrendered, suspended, or revoked, an aviation repair specialist certificate issued to an individual other than an experimental aircraft builder is effective until the holder is relieved from the duties for which the holder was employed and certificated.

(c) The holder of a certificate issued under this part that is suspended, revoked, or no longer effective shall return it to the Administrator.

§ 66.16 Change of name: Replacement of lost or destroyed certificate.

(a) An application for a change of name on a certificate issued under this part must be accompanied by the applicant's current certificate and the marriage license, court order, or other document verifying the change. The documents are returned to the applicant after inspection.

(b) An application for a replacement of a lost or destroyed certificate is made by letter to the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, Post Office Box 25082, Oklahoma City, Oklahoma 73125. The letter must:

(1) Contain the name in which the certificate was issued, the permanent mailing address (including zip code), social security number (if any), and date and place of birth of the certificate holder and any available information regarding the grade, number, and date of issue of the certificate, and the ratings on it; and

(2) Be accompanied by a check or money order for \$2, payable to the Federal Aviation Administration.

(c) A person whose certificate issued under this part has been lost may obtain a telegram or facsimile from the FAA

confirming that it was issued. The telegram or facsimile may be carried as a certificate for a period not to exceed 60 days pending the receipt of a duplicate certificate under paragraph (b) of this section, unless the airman has been notified that the certificate has been suspended or revoked. The request for such a telegram or facsimile may be made by prepaid telegram or facsimile, stating the date upon which a duplicate certificate was requested, or including the request for a duplicate and a money order for the necessary amount. The request for a telegraphic or facsimile certificate should be sent to the office prescribed in paragraph (b) of this section.

§ 66.17 Tests: General procedure.

(a) Tests prescribed by or under this part are given at times and places, and by persons, designated by the Administrator.

(b) The minimum passing grade for each test is 70 percent.

§ 66.18 Written tests: Cheating or other unauthorized conduct.

(a) Except as authorized by the Administrator, no person may:

- (1) Copy, or intentionally remove, a written test under this part;
- (2) Give to another, or receive from another, any part or copy of that test;
- (3) Give help on that test to, or receive help on that test from, any person during the period that test is being given;
- (4) Take any part of that test in behalf of another person;
- (5) Use any material or aid during the period that test is being given; or
- (6) Intentionally cause, assist, or participate in any act prohibited by this paragraph.

(b) No person who commits an act prohibited by paragraph (a) of this section is eligible for any airman or ground instructor certificate or rating under this chapter for a period of 1 year after the date of that act. In addition, the commission of that act is a basis for suspending or revoking any airman or ground instructor certificate or rating held by that person.

§ 66.19 Retesting after failure.

An applicant for a written, oral, or practical test for a certificate and rating, or for an additional rating under this part, may apply for retesting:

- (a) After 30 days after the date the applicant failed the test; or
- (b) Before the 30 days have expired if the applicant presents a signed statement from an airman holding the certificate and rating sought by the applicant, certifying that the airman has

given the applicant additional instruction in each of the subjects failed and that the airman considers the applicant ready for retesting.

§ 66.20 Applications, certificates, logbooks, reports, and records: Falsification, reproduction, or alteration.

(a) No person may make or cause to be made:

(1) Any fraudulent or intentionally false statement on any application for a certificate or rating under this part;

(2) Any fraudulent or intentionally false entry in any logbook, record, or report that is required to be kept, made, or used, to show compliance with any requirement for any certificate or rating under this part;

(3) Any reproduction, for fraudulent purposes, of any certificate or rating under this part; or

(4) Any alteration of any certificate or rating under this part.

(b) The commission by any person of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any airman certificate or rating held by that person.

§ 66.21 Change of address.

Within 30 days after any change of permanent mailing address, the holder of a certificate issued under this part shall notify the Department of Transportation, Federal Aviation Administration, Airman Certification Branch, Post Office Box 25082, Oklahoma City, OK 73125, in writing, of the new address.

§ 66.23 Refusal to submit to a drug test.

(a) This section applies to:

(1) An employee who performs a function listed in Appendix I to part 121 of this chapter for a part 121 certificate holder or a part 135 certificate holder;

(2) An employee who performs a function listed in Appendix I to part 121 of this chapter for an operator as defined in § 135.1(c) of this chapter. An employee of a person conducting operations of foreign civil aircraft navigated within the United States pursuant to part 375 or emergency mail service operations pursuant to section 405(h) of the Federal Aviation Act of 1958 is excluded from the requirements of this section.

(b) Refusal by the holder of a certificate issued under this part to take a test for a drug specified in Appendix I to part 121 of this chapter, when requested by an employer as defined in that appendix or an operator as defined in § 135.1(c) of this chapter, under the circumstances specified in that appendix is grounds for:

(1) Denial of an application for any certificate or rating issued under this

part for a period of up to 1 year after the date of that refusal; and

(2) Suspension or revocation of any certificate or rating issued under this part.

Subpart B—Aviation Maintenance Technicians

§ 66.71 Eligibility requirements: General.

(a) To be eligible for an aviation maintenance technician certificate and associated ratings, a person must:

- (1) Be at least 18 years of age;
- (2) Demonstrate the ability to read, write, speak, and understand the English language by reading and explaining appropriate maintenance publications and by writing defect and repair statements;
- (3) Have passed all of the prescribed tests within a period of 24 months; and
- (4) Comply with the sections of this subpart that apply to the rating the applicant seeks.

(b) A certificated aviation maintenance technician who applies for an additional rating must meet the requirements of § 66.77 and, within a period of 24 months, pass the tests prescribed by §§ 66.75 and 66.79 for the additional rating sought.

§ 66.73 Ratings.

(a) The following ratings are issued under this subpart:

- (1) Airframe.
- (2) Powerplant.
- (b) A mechanic certificate with an aircraft or aircraft engine rating or both, or with an airframe or powerplant rating or both, that was issued before, and was valid on, [effective date of final rule], is equal to an aviation maintenance technician certificate with an airframe or powerplant rating, or both, as the case may be, and may be exchanged for such a corresponding certificate and rating or ratings.

§ 66.75 Knowledge requirements.

(a) Each applicant for an aviation maintenance technician certificate or rating must, after meeting the applicable requirements of § 66.77, pass a written test covering the construction and maintenance of aircraft appropriate to the rating sought, the regulations in this subpart, and the applicable provisions of this chapter. The basic principles covering the installation and maintenance of propellers are included in the powerplant test.

(b) The applicant must pass all sections of the written test before applying for the oral and practical tests prescribed by § 66.79. A report of the written test will be made available to the applicant.

§ 66.77 Experience requirements.

Each applicant for an aviation maintenance technician certificate or rating must present either an appropriate graduation certificate or a certificate of completion from a certificated aviation maintenance technician school or documentary evidence, acceptable to the Administrator, of—

(a) At least 3,000 hours of practical experience with the procedures, practices, materials, tools, machine tools, and equipment generally used in constructing, maintaining, or altering airframes, or powerplants appropriate to the rating sought; or

(b) At least 5,000 hours of practical experience concurrently performing the duties appropriate to both the airframe and powerplant ratings.

§ 66.79 Competency requirements.

Each applicant for an aviation maintenance technician certificate or rating must demonstrate competency in performing tasks appropriate to the rating sought by passing both an oral and a practical test. These tests will be based upon the subjects covered by the written test for that rating. An applicant for a powerplant rating must show the ability to make satisfactory minor repairs to, and minor alterations of, propellers.

§ 66.80 Certificated aviation maintenance technician school students

Whenever an aviation maintenance technician school certificated under part 147 of this chapter demonstrates to an FAA inspector that one of its students has made satisfactory progress at the school and is prepared to take the oral and practical tests prescribed by § 66.79, that student may take those tests during the final subjects of that student's training in the approved curriculum before meeting the applicable experience requirements of § 66.77 and before passing each section of the written test prescribed by § 66.75.

§ 66.81 General privileges and limitations.

(a) A certificated aviation maintenance technician may perform or supervise the maintenance, preventive maintenance, or alteration of an aircraft or appliance, or a part thereof, for which that person is rated (excluding major repairs to, and major alterations of propellers and any repair to, or alteration of, instruments) and may perform additional duties in accordance with §§ 66.85, 66.87, and 66.95.

(b) A certificated aviation maintenance technician may supervise the maintenance, preventive maintenance or alteration of, or approve

and return to service, any aircraft or appliance, or part hereof, for which the person is rated, provided the aviation maintenance technician has:

(1) Satisfactorily performed the work concerned at an earlier date; or

(2) Demonstrated the ability to perform the work to the satisfaction of the Administrator; or

(3) Received training acceptable to the Administrator on the specific equipment on which the work is to be performed; or

(4) Performed the work while working under the direct supervision of a certificated and appropriately rated aviation maintenance technician or certificated aviation repair specialist, who has:

(i) Had previous experience in the specific operation concerned; or

(ii) Received training acceptable to the Administrator on the specific equipment on which the work is to be performed.

(c) A certificated aviation maintenance technician may not exercise the privileges of the certificate and rating unless the aviation maintenance technician understands the current instructions of the manufacturer and the maintenance instructions for the specific operation concerned.

§ 66.83 Currency requirements.

(a) Except as provided in paragraphs (b), (c), and (d) of this section, a certificated aviation maintenance technician may not exercise the privileges of the certificate and rating unless, within the preceding 24 months:

(1) The aviation maintenance technician has for at least 1,000 hours:

(i) Served as an aviation maintenance technician under his or her certificate and rating; or

(ii) Served under the supervision of a certificated aviation maintenance technician; or

(iii) Technically supervised other aviation maintenance technicians; or

(iv) Served as an aviation maintenance instructor under an aviation maintenance training program acceptable to the Administrator; or

(v) Directly supervised other aviation maintenance instructors, who are serving under an aviation maintenance training program acceptable to the Administrator; or

(vi) Supervised, in an executive capacity, the maintenance or alteration of aircraft; or

(vii) Been engaged in any combination of paragraphs (a)(1) (i) through (vi) of this section; and

(2) successfully completed:

(i) An aviation maintenance technician refresher course, inspection

authorization refresher course, or a series of such courses, acceptable to the Administrator, consisting of a total of not less than 16 hours of instruction; or

(ii) A course or courses of instruction, appropriate to the duties of an aviation maintenance technician and acceptable to the Administrator, consisting of a total of not less than 16 hours of instruction;

(b) A certificated aviation maintenance technician who has not met the requirements of paragraph (a) of this section may exercise the privileges of the certificate and rating including for compensation or hire if, within the preceding 24 months the aviation maintenance technician has:

(1) Successfully completed a requalification course acceptable to the Administrator; or

(2) The Administrator has found that the aviation maintenance technician is competent to exercise the privileges of the certificate and rating.

(c) A certificated aviation maintenance technician who has not completed the training specified in paragraph (a)(2) of this section but has otherwise met the requirements of paragraph (a)(1) of this section may exercise the privileges of the certificate and rating but not for compensation or hire.

(d) Paragraph (a)(2) of this section does not apply to an aviation maintenance technician who within the preceding 24 months exercised the privileges of the certificate and ratings—

(1) for a certificate holder authorized to operate under the provisions of parts 121, 127, or 135 of this chapter; or

(2) for a U.S.-certificated repair station that performs work in accordance with § 145.2(a), or for a U.S.-certificated repair station that conducts a maintenance and preventive maintenance training program; or

(3) as an aviation maintenance instructor for an aviation maintenance training program acceptable to the Administrator.

§ 66.85 Airframe rating; additional privileges.

A certificated aviation maintenance technician with an airframe rating may approve and return to service an airframe, or any related part or appliance, after the aviation maintenance technician has performed, supervised, or inspected its maintenance or alteration (excluding major repairs and major alterations). In addition, the aviation maintenance technician may perform the 100-hour inspection required by part 91 of this chapter on an airframe, or any related

part or appliance, and approve and return it to service.

§ 66.87 Powerplant rating; additional privileges.

A certificated aviation maintenance technician with a powerplant rating may approve and return to service a powerplant or propeller or any related part or appliance, after the aviation maintenance technician has performed, supervised, or inspected its maintenance or alteration (excluding major repairs and major alterations). In addition, the aviation maintenance technician may perform the 100-hour inspection required by part 91 of this chapter on a powerplant or propeller, or any part thereof, and approve and return it to service.

§ 66.89 Display of certificate.

Each person who holds an aviation maintenance technician certificate shall keep it within the immediate area where the aviation maintenance technician normally exercises the privileges of the certificate and shall present it for inspection upon the request of the Administrator or an authorized representative of the National Transportation Safety Board, or of any Federal, State, or local law enforcement officer.

§ 66.91 Inspection authorization.

(a) An application for an inspection authorization is made on a form and in a manner prescribed by the Administrator.

(b) An applicant who meets the requirements of this section is entitled to an inspection authorization.

(c) To be eligible for an inspection authorization, an applicant must:

(1) Hold a currently effective aviation maintenance technician certificate with both an airframe rating and a powerplant rating, each of which is currently effective and has been in effect for a total of at least 3 years;

(2) Have been actively engaged, for at least the 2-year period before the date of application, in maintaining aircraft certificated and maintained in accordance with this chapter;

(3) Have a fixed base of operations at which the applicant may be located in person or by telephone during a normal working week but it need not be the place where the applicant will exercise inspection authority;

(4) Have available the equipment, facilities, and inspection data necessary to properly inspect airframes, powerplants, propellers, or any related part or appliance; and

(5) Pass a written test demonstrating the ability to inspect according to safety

standards for returning aircraft to service after major repairs, major alterations, annual inspections, and progressive inspections performed under part 43 of this chapter.

(d) An applicant who fails the test prescribed in paragraph (c)(5) of this section may not apply for retesting until at least 90 days after the date of the test.

§ 66.92 Inspection authorization: Duration.

(a) Each inspection authorization expires on March 31 of the second year after its issuance. However, the holder may exercise the privileges of that authorization only while holding a currently effective aviation maintenance technician certificate with both a currently effective airframe rating and a currently effective powerplant rating.

(b) An inspection authorization ceases to be effective whenever any of the following occurs:

(1) The authorization is surrendered, suspended, or revoked.

(2) The holder no longer has a fixed base of operation.

(3) The holder no longer has the equipment, facilities, and inspection data required by § 66.91(c) (3) and (4) for issuance of the authorization.

(c) The holder of an inspection authorization that is suspended or revoked shall, upon the Administrator's request, return it to the Administrator.

§ 66.93 Inspection authorization: Renewal.

(a) To be eligible for renewal of an inspection authorization for a 2-year period, an applicant must present biennially, during the month of March, at an FAA Flight Standards District Office or an International Field Office, evidence that the applicant still meets the requirements of § 66.91(c)(1) through (4) and must show that, during the current period that the applicant held the inspection authorization, the applicant—

(1) Has performed at least one annual inspection for each 3 months that the applicant held the current authority; or

(2) Has performed inspections of at least two major repairs or major alterations for each 3 months that the applicant held the current authority; or

(3) Has performed or supervised and approved at least one progressive inspection in accordance with standards prescribed by the Administrator for each 12 months that the applicant held the current authority; or

(4) Has maintained an aircraft pursuant to an inspection program specified under § 91.409(f) (3) or (4) during each month that the applicant held the current authority; or

(5) Has performed any combination of (a) (1) through (4); or

(6) Has successfully completed an inspection authorization refresher course or series of courses, acceptable to the Administrator, consisting of a total of not less than 16 hours of instruction during the 24-month period preceding the application for renewal; or

(7) Has passed an oral test by an FAA inspector to determine that the applicant's knowledge of applicable regulations and standards is current.

(b) The holder of an inspection authorization that has been in effect for less than 90 days before the expiration date need not comply with subparagraphs (a) (1) through (7) of this section.

§ 66.95 Inspection authorization: Privileges and limitations.

(a) The holder of an inspection authorization may:

(1) Inspect and approve for return to service any aircraft or related part or appliance (except any aircraft maintained in accordance with a continuous airworthiness program under part 121 or part 127 of this chapter) after a major repair or major alteration to it in accordance with part 43 of this chapter, if the work was done in accordance with technical data approved by the Administrator; and

(2) Perform an annual, or perform or supervise a progressive inspection according to §§ 43.13 and 43.15 of this chapter.

(b) When exercising the privileges of an inspection authorization, the holder shall keep it available for inspection by the aircraft owner and the aviation maintenance technician submitting the aircraft, repair, or alteration for approval (if any), and shall present it upon the request of the Administrator or an authorized representative of the National Transportation Safety Board, or of any Federal, State, or local law enforcement officer.

(c) If the holder of an inspection authorization changes his or her fixed base of operation, the holder may not exercise the privileges of the authorization until he or she has notified the FAA Flight Standards District Office or International Field Office for the area in which the new base is located, in writing, of the change.

Subpart C—Aviation Repair Specialists

§ 66.101 Eligibility requirements: General.

(a) Except as provided in paragraph (b) of this section, to be eligible for an aviation repair specialist certificate a person must:

(1) Be at least 18 years of age;

(2) Be specially qualified to perform maintenance on aircraft, or components

thereof, appropriate to the job for which that person is employed;

(3) Be employed for a specific job, requiring those special qualifications, by a certificated repair station, or by a certificated commercial operator or certificated air carrier, that is required by its operating certificate or approved operations specifications to provide a continuous airworthiness maintenance program according to its maintenance manuals;

(4) Be recommended for certification by his or her employer, to the satisfaction of the Administrator, as able to satisfactorily maintain aircraft or components, appropriate to the job for which the person is employed;

(5) Have either:

(i) At least 3000 hours of practical experience in the procedures, practices, inspection methods, materials, tools, machine tools, and equipment generally used in the maintenance duties of the specific job for which the person is to be employed and certificated; or

(ii) Completed formal training that is acceptable to the Administrator and is specifically designed to qualify the applicant for the job in which the applicant is to be employed; and

(6) Demonstrate the ability to read, write, speak, and understand the English language by reading and explaining appropriate maintenance publications and by writing defect and repair statements.

(b) This section does not apply to the issuance of aviation repair specialist certificates (experimental aircraft builder) under § 66.104.

(c) A valid repairman certificate is equal to an aviation repair specialist certificate and may be exchanged for such a corresponding certificate.

§ 66.103 Aviation repair specialist certificate: Privileges and limitations.

(a) A certificated aviation repair specialist may perform or supervise the maintenance, preventive maintenance, or alteration of aircraft or aircraft components appropriate to the job for which the aviation repair specialist was employed and certificated but only in connection with duties for the certificate holder by whom the aviation repair specialist was employed and recommended.

(b) A certificated aviation repair specialist may not perform or supervise duties under the aviation repair specialist certificate unless the individual understands the current instructions of the certificate holder by whom the aviation repair specialist is employed and the manufacturer's instructions for continued airworthiness relating to the specific operations concerned.

§ 66.104 Aviation repair specialist certificate—experimental aircraft builder—eligibility, privileges and limitations.

(a) To be eligible for an aviation repair specialist certificate (experimental aircraft builder), an individual must—

(1) Be at least 18 years of age;

(2) Be the primary builder of the aircraft to which the privileges of the certificate are applicable;

(3) Show to the satisfaction of the Administrator that the individual has the requisite skill to determine whether the aircraft is in a condition for safe operations; and

(4) Be a citizen of the United States or an individual citizen of a foreign country who has lawfully been admitted for permanent residence in the United States.

(b) The holder of an aviation repair specialist certificate (experimental aircraft builder) may perform condition inspections on the aircraft constructed by the holder in accordance with the operating limitations of that aircraft.

(c) Section 66.103 does not apply to the holder of an aviation repair specialist certificate (experimental aircraft builder) while performing under that certificate.

§ 66.105 Display of certificate.

Each person who holds an aviation repair specialist certificate shall keep it within the immediate area where the individual normally exercises the privileges of the certificate and shall present it for inspection upon the request of the Administrator or an authorized representative of the National Transportation Safety Board, or of any Federal, State, or local law enforcement officer.

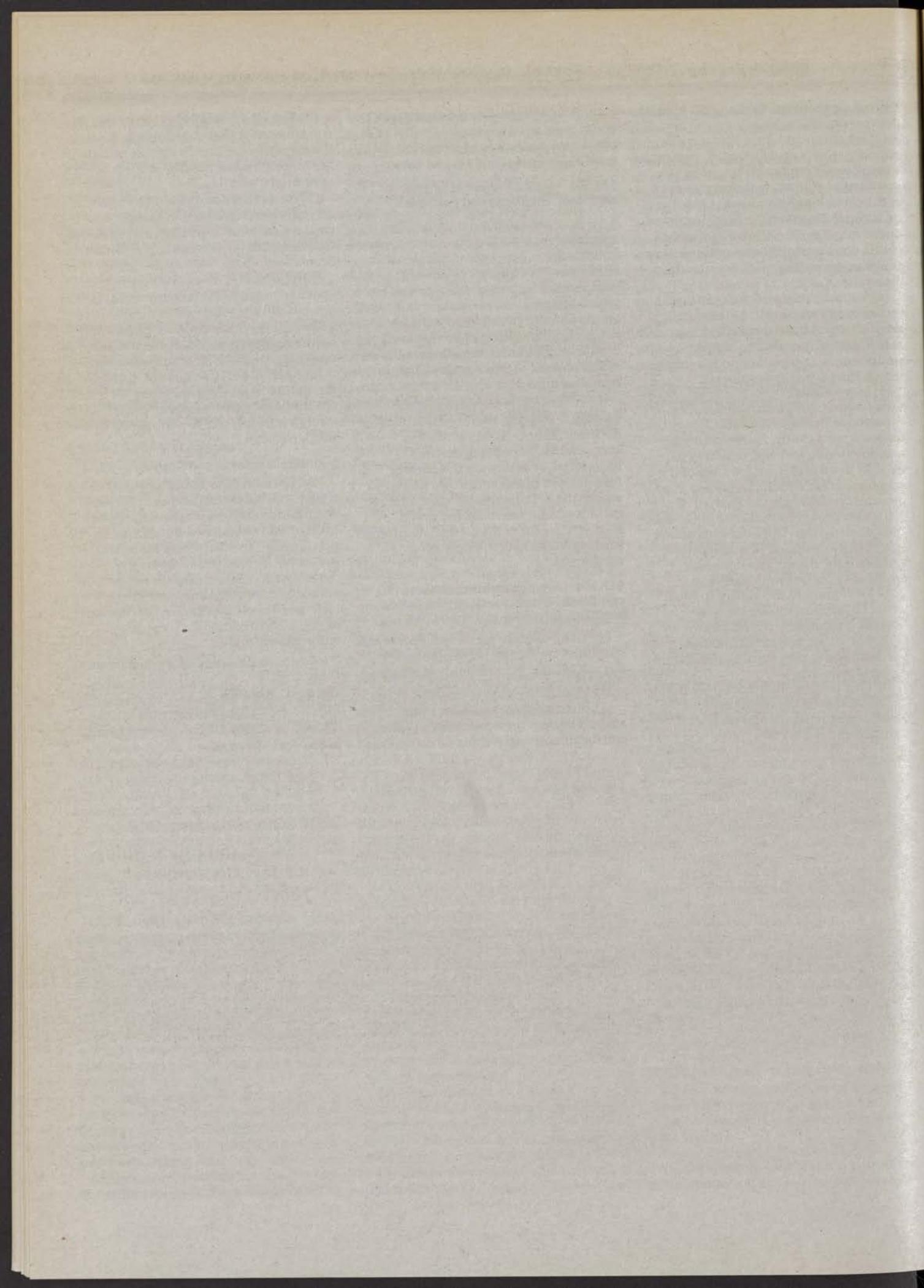
Issued in Washington, DC on August 10, 1994.

Thomas C. Accardi,

Director, Flight Standards Service.

[FR Doc. 94-20004 Filed 8-16-94; 8:45 am]

BILLING CODE 4910-13-M



17 CFR Parts 228, 229, 240 and 249

Wednesday
August 17, 1994

Part VII

**Securities and
Exchange
Commission**

17 CFR Parts 228, 229, 240 and 249
Employee Benefit Plan Exemptive Rules
Under Section 16 of the Securities
Exchange Act of 1934; Final Rule and
Ownership Reports and Trading by
Officers, Directors and Principal Security
Holders; Proposed Rule

**SECURITIES AND EXCHANGE
COMMISSION**

17 CFR Part 240

[Release Nos. 34-34513; 35-26099; IC-20466]

RIN 3235-AB14

**Employee Benefit Plan Exemptive
Rules Under Section 16 of the
Securities Exchange Act of 1934**

AGENCY: Securities and Exchange
Commission.

ACTION: Extension of Phase-In Period for
§ 240.16b-3.

SUMMARY: The Commission today is extending the phase-in period for compliance with the substantive conditions of new Rule 16b-3 regarding employee benefit plan transactions under the Securities Exchange Act of 1934 pending further notice and rulemaking under the provision.

DATES: Effective August 17, 1994. The phase-in period for compliance with new § 240.16b-3, which previously has been extended to September 1, 1994, is extended until September 1, 1995, or such different date as set in further rulemaking under Section 16.

FOR FURTHER INFORMATION CONTACT:
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Counsel, Division of Corporation
Finance, at (202) 942-2900.

SUPPLEMENTARY INFORMATION: On February 8, 1991, the Commission adopted comprehensive revisions to the rules under Section 16¹ of the Securities Exchange Act of 1934 ("Exchange Act").² The new regulatory scheme generally became effective on May 1, 1991, but a 16 month phase-in period was provided with respect to specified rules affecting employee benefit plans, in order to give registrants ample time to review the rule changes and amend their plans accordingly.³ The Adopting Release provided that registrants could continue to rely on the exemptions from Section 16(b) of the Exchange Act⁴ afforded by former Rules 16a-8(b),⁵ 16a-8(g)(3),⁶ and 16b-3⁷ after May 1,

¹ 15 U.S.C. 78p (1988).

² 15 U.S.C. 78a *et seq.* (1988).

³ Exchange Act Release No. 28869 (February 8, 1991) [56 FR 7242] ("Adopting Release"). See Section VII of the Adopting Release for transition provisions generally and Section VII.C for transition provisions relating to employee benefit plans.

⁴ 15 U.S.C. 78p(b).

⁵ 17 CFR 240.16a-8(b).

⁶ 17 CFR 16a-8(g)(3).

⁷ 17 CFR 240.16b-3 (1990)

1991, but would be required to adopt the substantive conditions of new Rule 16b-3⁸ by September 1, 1992.⁹

The Rule 16b-3 phase-in period was extended until September 1, 1994, in contemplation of further rulemaking under Section 16 with regard to employee benefit plans.¹⁰ Because the Commission currently is engaging in such rulemaking,¹¹ the Commission is extending the phase-in period for new Rule 16b-3 until September 1, 1995, or such different date as is set by the Commission.

Dated: August 10, 1994.

By the Commission.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 94-20123 Filed 8-16-94; 8:45 am]

BILLING CODE 8010-01-P

⁸ 17 CFR 240.16b-3 (1991).

⁹ The phase-in period applies only to the exemption from Section 16(b), not to the revised reporting requirements under Section 16(a) that became effective on May 1, 1991.

¹⁰ See Exchange Act Release No. 32574 (July 2, 1993) [58 FR 36866].

¹¹ See Exchange Act Release No. 34514 (August 10, 1994).

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 228, 229, 240 and 249

[Release Nos. 34-34514; 35-26100; IC-20467; File No. S7-21-94]

RIN 3235-AF66

Ownership Reports and Trading by Officers, Directors and Principal Security Holders

AGENCY: Securities and Exchange Commission.

ACTION: Proposed Rule.

SUMMARY: The Commission today is proposing amendments to its rules and forms regarding the filing of ownership reports by officers, directors, and principal security holders, and the exemption of certain transactions by those persons from the short-swing profit recovery provisions of Section 16 of the Securities Exchange Act of 1934 ("Exchange Act") and related provisions of the Investment Company Act of 1940 ("Investment Company Act") and the Public Utility Holding Company Act of 1935. The proposed rules are intended to streamline the Section 16 regulatory scheme, particularly with respect to employee benefit plans; broaden exemptions from short-swing profit recovery where consistent with the statutory purposes; and codify several staff interpretive positions.

DATES: Comments should be received on or before October 17, 1994.

ADDRESSES: Comments should be submitted in triplicate to Jonathan G. Katz, Secretary, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549. Comment letters should refer to File No. S7-21-94. All comments received will be available for public inspection and copying in the Commission's Public Reference Room, 450 Fifth Street, N.W., Washington, D.C., 20549.

FOR FURTHER INFORMATION CONTACT: Anne M. Krauskopf, Special Counsel, Office of Chief Counsel, at (202) 942-2900, or Elizabeth M. Murphy, Special Counsel, Office of Disclosure Policy, at (202) 942-2910, Division of Corporation Finance, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549.

SUPPLEMENTARY INFORMATION: The Commission is proposing amendments to Rules 16a-1, 16a-2, 16a-3, 16a-4, 16a-6, 16a-8, 16a-9, 16b-3, and 16b-5¹ promulgated under Section 16² of the

Exchange Act.³ In addition, the Commission is proposing revisions to Item 405 of Regulation S-K⁴ and Regulation S-B,⁵ as well as to Forms 3, 4, and 5.⁶

I. Executive Summary and Background

In February 1991, in response to developments in the trading of derivative securities, the growth of complex and diverse employee benefit plans, and substantial filing delinquencies, the Commission adopted extensive changes to the beneficial ownership and short-swing profit recovery rules and forms applicable to insiders⁷ pursuant to Section 16.⁸ After three years of experience, unanticipated practical difficulties still arise in applying the new Section 16 rules, particularly with respect to thrift and similar employee benefit plans.⁹ The rule changes proposed today address these practical problems and further streamline the rules, to the extent consistent with the purposes of Section 16.

A. Employee Benefit Plan Transactions

The focus of the proposed rules is the treatment of employee benefit plan transactions. In particular, the proposals would:

- Exempt from short-swing profit recovery all purchase transactions in thrift and other broad-based, tax-qualified plans, other than those involving transfers to and from an employer securities fund;
- Exempt from short-swing profit recovery transfers to and from employer securities funds in thrift and other plans that are effected either during a quarterly window period or pursuant to a diversification election under the Internal Revenue Code;

³ 15 U.S.C. 78a et seq.

⁴ 17 CFR 229.405.

⁵ 17 CFR 228.405.

⁶ 17 CFR 249.103, 104 and 105.

⁷ The term "insider," as used in this release, refers to officers, directors, and holders of more than ten percent of a class of equity securities who are subject to Section 16.

⁸ Release No. 34-28869 (February 8, 1991) [56 FR 7242] ("Adopting Release"). The rules generally became effective on May 1, 1991, except for the phase-in period for compliance with the substantive conditions of new Rule 16b-3. The phase-in period has been extended until September 1, 1995 or such different date as may be set in further rulemaking (Release No. 34-34513 (August 10, 1994)). See Section VI, below.

⁹ Following the Adopting Release, the Commission issued two other releases relating to the revised rules: one set forth the Commission's interpretive views regarding shareholder approval for amendments to employee benefit plans under Rule 16b-3, as well as certain technical amendments (Release No. 34-29131 (April 26, 1991) [56 FR 19925]), while the other adopted a technical amendment to Form 4 (Release No. 34-28869B (April 10, 1991) [56 FR 14467]).

- Expand exemptions for plan distributions in connection with retirement or specified transactions authorized by the Internal Revenue Code;

- Provide that exempt dispositions within six months of an exempt grant would not destroy the exemption for the grant;

- Exclude from the definition of "derivative security" cash-only instruments issued as compensation by an employer to an employee;

- Exclude from the definition of "derivative security" rights that include non-market price based conditions;

- Exclude from the definition of "derivative security" rights to withhold (or to deliver securities already owned) to satisfy tax or exercise price obligations, and exempt cash settlement of such rights where granted pursuant to exempt employee benefit plans;

- Eliminate the transferability restrictions applicable to derivative securities issued under an employee benefit plan.

B. Reporting

The proposal also would simplify and clarify the reporting requirements by:

- Permitting joint and group reporting where more than one person is deemed to be a beneficial owner of the same securities;

- Providing that Section 16 applies to a trust only if the trust beneficially owns more than ten percent of a class of registered equity securities;

- Eliminating officers' and directors' post-termination reporting obligations with respect to exempt transactions and other transactions that are not matchable with a pre-termination transaction;

- Requiring a discrete caption for the disclosure about delinquent Section 16(a) reports required by Item 405 of Regulations S-K and S-B.

The Release also solicits comment on a variety of approaches to simplify the reporting of exempt transactions, including elimination of the total holdings column in Forms 4 and 5, proposals to replace Form 5 with alternative reporting schemes (including a Form 10-K summary of insider transactions), and elimination of the requirement to report exempt employee benefit plan transactions.

C. Other Issues

Finally, the proposal would codify certain staff interpretive positions, and would establish new categories of transactions exempt from short-swing recovery by:

- Exempting the disposition of securities pursuant to a qualified

¹ 17 CFR 240.16a-1, 16a-2, 16a-3, 16a-4, 16a-6, 16a-8, 16a-9, 16b-3, and 16b-5.

² 15 U.S.C. 78p (1982).

domestic relations order, whether or not the securities are held by a Rule 16b-3 employee benefit plan;

- Revising the exemption for stock splits and stock dividends to include pro rata stock dividends in which securities of a different issuer are distributed.

II. Employee Benefit Plans

A. Expanded Exemptions for Broad-Based Plan Transactions and Intra-Plan Transactions

The principal objection raised to the amended Section 16 rules has been that the treatment of thrift, stock purchase and other broad-based, tax-qualified plans is unduly cumbersome, presents significant record-keeping problems, and discourages insiders from participation in plan funds holding employer securities. These plans are subject to significant restrictions under both the Internal Revenue Code¹⁰ and the Employee Income Retirement Security Act of 1974 ("ERISA"),¹¹ which establish an objective framework for the treatment of compensatory transactions and impose extensive administrative requirements, thereby making plan transactions less vulnerable to the abuses that the short-swing recovery provision of Section 16(b) was designed to prevent. Accordingly, the proposed rules would streamline the conditions necessary to exempt transactions in such plans from short-swing profit recovery. Comment is solicited not only on the proposals set forth, but also on whether there is any other aspect of the treatment of employee benefit plans that should be modified, either in Rule 16b-3 or any other rule relating to employee transactions.

As discussed below, the revised rule would exempt, without conditions as to timing, any purchase transaction arising under a broad-based nondiscriminatory tax-qualified plan, other than an intra-plan transfer to or from an employer securities fund.¹² The proposed exemption would have a broader scope than the current rule, since it would be available not only to participant-directed contributory plans, but also would apply specifically to related "excess benefit" or "mirror" plans and noncontributory plans such as many employee stock ownership plans

("ESOPs").¹³ The timing restrictions governing the exemption for transfers to or from an employer stock fund in any thrift, stock purchase or similar plan, whether or not broad-based, nondiscriminatory and tax-qualified, would be more flexible.

1. Purchases Under Employee Benefit Plans

In adopting the current exemption for transactions in a thrift, stock purchase, or similar ongoing securities acquisition plan,¹⁴ the Commission reasoned that "wide participation and equal treatment of all participating employees limits insiders' opportunities to engage in short-swing speculation."¹⁵ This reasoning may support a broader exemption.

Under the proposal,¹⁶ all purchase transactions in a thrift, stock purchase or similar securities acquisition plan would be exempt if the plan provides for broad-based employee participation, does not discriminate in favor of highly compensated employees, and is qualified under the Internal Revenue Code.¹⁷ In light of the requirement for broad-based participation, the proposed rule would exempt one-time acquisitions, as well as ongoing acquisitions (such as regular purchases by payroll deduction pursuant to a thrift plan).¹⁸ The exemption would apply whether the transaction results from an employer or an employee contribution.

The proposal would eliminate the exemptive requirement that insider participants who withdraw from a fund holding equity securities of the employer ("employer securities fund")¹⁹ either cease further employer securities fund purchases for six months or hold the securities distributed for six months.²⁰ Similarly, insider participants who stop participating in an employer

securities fund no longer would be required to refrain from further participation for six months.²¹ The six-month holding period for securities offered without a fixed price under a stock purchase plan or similar plan also would be eliminated.²² The tax law restrictions applicable to broad-based, tax-qualified plans, such as plan contribution limits, plan benefit limits and nondiscrimination rules,²³ should be sufficient to deter insiders from using such plans as vehicles for short-term speculation.

Finally, the proposed rule would provide an explicit exemption for purchase transactions pursuant to an "excess benefit" or "mirror" plan,²⁴ defined as a plan, operated in conjunction with a tax-qualified plan, that provides only the benefits or contributions that would be provided under a tax-qualified plan but for the limitations imposed by the Internal Revenue Code.²⁵ Although such plans technically are outside the scope of the ERISA regulatory scheme, they are operated in a manner that replicates plans that are so regulated, and accordingly are unlikely to be vehicles for speculative abuse.

Commenters are requested to address whether it is necessary to limit the proposed purchase exemption to plans that are qualified pursuant to the Internal Revenue Code. Are the conditions of the proposed rule that a plan be broad-based and non-discriminatory sufficient safeguards? Does satisfaction of the minimum participation, minimum funding, non-discrimination and vesting standards

¹⁰ Rule 16b-3(d)(2)(i)(C) [17 CFR 240.16b-3(d)(2)(i)(C)].

¹¹ Rule 16b-3(d)(2)(i)(D) [17 CFR 240.16b-3(d)(2)(i)(D)].

¹² See I.R.C. Section 401(a) (contribution limits applicable to both mandatory and voluntary contributions); I.R.C. Section 415 (limitation on "maximum annual benefits" for defined benefit plans and "maximum annual additions" for defined contribution plans); I.R.C. Section 401(m) (nondiscrimination tests comparing the contribution percentage for highly compensated employees to that of all other employees); I.R.C. Section 416 ("top heavy" rules providing rank and file employees with minimum benefits and more rapid vesting if plan benefits inure disproportionately to key employees); and I.R.C. Section 423 (prohibiting a grant to any employee who would own five percent of the stock following such grant).

¹³ Proposed Rule 16b-3(d)(1)(ii).

¹⁴ See, e.g., I.R.C. Sections 401(a)(17) and 415. See also Thacher Proffitt & Wood (Dec. 20, 1991) Q. 2 and Thacher Proffitt & Wood (Feb. 11, 1992) (excess benefit plans may be considered together with related tax-qualified plans for purposes of satisfying the broad-based participation and non-discrimination requirements of the current rules); and Sonnenschein, Nath & Rosenthal (July 6, 1992) Q. 4 (excess benefit plans may be implemented without shareholder approval although they are not organized in trust form).

¹⁵ See I.R.C. Sections 401(a) and 409.

¹⁶ Rule 16b-3(d)(2)(i)(A) [17 CFR 240.16b-3(d)(2)(i)(A)].

¹⁷ Adopting Release at Section IV.D, text following n. 201.

¹⁸ Proposed Rule 16b-3(d)(1)(i).

¹⁹ I.R.C. Section 401 establishes conditions for the tax qualification of pension, profit-sharing and stock bonus plans; and I.R.C. Section 423 establishes conditions for the tax qualification of employee stock purchase plans.

²⁰ Conforming changes are proposed to Rule 16b-3(c)(2)(i)(B) [17 CFR 240.16b-3(c)(2)(i)(B)], transaction code B in Forms 4 and 5, and General Instruction 4(a)(ii) to Form 5 to reflect deletion of the requirement that the plan be "ongoing."

²¹ Such funds would include both funds composed entirely of equity securities of the employer and mixed equity funds (except for mixed equity funds where employer equity securities do not exceed 20 percent of fund assets as of the end of the plan's latest fiscal year; see American Bar Association (June 28, 1993)).

²² Rule 16b-3(d)(2)(i)(B) [17 CFR 240.16b-3(d)(2)(i)(B)].

¹⁰ 26 U.S.C. et seq. (1986) ("I.R.C.").

¹¹ 29 U.S.C. 1001 et seq. (1986).

¹² Proposed Rule 16b-3(d) would replace Rule 16b-3(d)(2) [17 CFR 240.16b-3(d)(2)] in its entirety. Other transactional exemptions currently available to participant-directed plans would continue to be available. Current Rules 16b-3(d)(1)(i) and (ii) [17 CFR 240.16b-3(d)(1)(i) and (ii)] are proposed to be moved to Rules 16b-3(h) and (g), respectively. See Sections II.B. and II.H. below.

specifically imposed by the Internal Revenue Code provide additional assurance that transactions pursuant to a plan will not be subject to abuse? Is the proposed exemption for excess benefit plan transactions consistent with the theory that wide participation and equal treatment of all participating employees limits insiders' opportunities to engage in short-swing speculation?

2. Intra-Plan Transfers

The proposed rule would simplify and shorten the timing restriction that conditions the exemption for transfers of funds in an employee plan to or from an employer securities fund ("fund-switching transaction"). As proposed, any fund-switching transaction effected pursuant to an election made during any quarterly "window period" would be exempt.²⁶ Moreover, the exemption no longer would be limited to transfers at least six months apart. The requirement that the election occur in the "window period" following the release of quarterly and annual financial data should provide an adequate safeguard.²⁷ As under the current rules, the exemption would be available whether or not the plan is broad-based, tax-qualified and nondiscriminatory.²⁸ Finally, because of changes to the basic exemption for plan purchases discussed above, transferring assets out of an employer securities fund would no longer trigger the requirement that the insider cease plan purchases for six months.²⁹

Comment is requested as to whether the six month timing restriction between transfers should be retained, and, if so, whether it should be limited to opposite way transactions, such as a transfer into an employer securities fund followed by a transfer out of an employer securities fund. In addition, commenters should address whether requiring that transactions be limited to every other window period, even if separated by a few days less than six

months—rather than requiring the transactions themselves to be six months apart—would alleviate difficulties in administering the requirement while preventing opportunities for speculative abuse. Comment also is requested whether it would be consistent with the statutory purpose to exempt fund-switching transactions without any timing restrictions. In addressing these issues, commenters are asked to consider the manner in which the rule, as proposed, would function in tandem with concurrently applicable provisions of the Internal Revenue Code and ERISA regarding transfers.³⁰

In addition, the proposed rule would exempt any fund-switching transaction that results from a diversification election satisfying the provisions of the Internal Revenue Code, without regard to the "window period" timing restriction.³¹ This would maintain the utility of the 90-day period following the close of the plan year specifically provided for such transactions by the Internal Revenue Code³² in order to facilitate proper planning for retirement. Distributions to participants pursuant to such diversification elections also are proposed to be exempted, as discussed below.³³ Comment is requested as to whether such fund-switching transactions also should be subject to the "window period" requirement or any further timing restriction other than that imposed by the Internal Revenue Code.

B. Participant-Directed Transactions—Six Month Advance Election

The rule currently exempts participant-directed transactions made at least six months in advance of the effective date of the transaction. This exemption³⁴ would be clarified by

³⁰ Commenters' attention is directed particularly to the rules that became effective January 1, 1994 under Section 404(c) of ERISA (29 USC 1104(c)) that specify circumstances in which employee plan sponsors will not be subject to fiduciary responsibility because investment decisions are made by plan participants. In order to benefit from the rules, a plan must make a variety of investment vehicles available to plan participants and permit participants to switch their investments among the different vehicles at a rate of frequency related to the volatility of the investment. The latter requirement may dictate that a plan permit fund-switching transactions more frequently than every six months. See 29 CFR 2550.404c-1.

³¹ Proposed Rule 16b-3(d)(2)(iii).

³² I.R.C. Section 401(a)(28), which requires an ESOP to permit a participant who has attained age 55 and has participated in the ESOP for 10 years to elect, within 90 days after the close of the plan year, to direct the diversification of at least 25 percent of the participant's account in the plan.

³³ See Section II.H, below.

³⁴ This provision, now Rule 16b-3(d)(1)(i), would be moved to proposed Rule 16b-3(h).

codifying the staff's interpretation that a subsequent election that does not take effect for six months does not destroy the exemption.³⁵

C. Compensatory Cash-Only Instruments

Under the proposed rules, the derivative security definition would be modified to provide a more expansive exclusion for compensatory instruments that can be redeemed or exercised solely for cash ("cash-only instruments"),³⁶ such as phantom stock. The proposed exclusion would apply to all cash-only instruments issued in the context of an employer-employee compensation arrangement,³⁷ including compensation arrangements between a company and its non-employee directors.³⁸ Historically the purpose of such plans has been to provide performance-based cash compensation to employees, using stock price as a measure of company performance, rather than to provide employees with an equity interest in the employer.

Commentators have cited a number of problems with using these types of performance-based plans arising from the 1991 rule changes. For example, change-in-control provisions and hardship withdrawal provisions could render the current exclusion unavailable because the rights would not be redeemable only on a fixed date or dates at least six months following the award. Given the difficulties that have arisen, and recognizing the historic role of stock return as a measure for long-term cash-based incentive plans, the proposals would restore these plans to a status similar to that which existed pre-1991.³⁹

Comment is requested on the necessity or appropriateness of the proposed exclusion for compensatory cash-only instruments. Is there any basis for according disparate treatment, for reporting and/or short-swing profit purposes, to equity-based securities depending on whether they are settled exclusively in cash or stock (or in either stock or cash), where both types of derivative securities provide identical

³⁵ See *Philip Morris Companies, Inc.* (June 26, 1992).

³⁶ Proposed Rule 16a-1(c)(3). Insider or employer discretion to require settlement in stock rather than cash would preclude reliance on the exclusion. See *Thacher Proffitt & Wood* (Dec. 20, 1991) Q. 1.

³⁷ For example, cash-settled put options written by a financial institution or cash-only securities awarded to shareholders in the context of a tender offer would not satisfy the exclusion. See *Sullivan & Cromwell* (Apr. 30, 1991); and *Marion Merrell Dow, Inc.* (Jan. 24, 1992), respectively.

³⁸ See *Anheuser-Busch Companies, Inc.* (Jul. 29, 1991).

³⁹ Proposed Rule 16a-1(c)(3).

²⁶ Proposed Rule 16b-3(d)(2)(i). See Rule 16b-3(e)(3) [17 CFR 240.16b-3(e)(3)], defining the "window period" as the period beginning on the third business day following the date of release of quarterly and annual summary statements of sales and earnings, and ending on the twelfth business day following such date.

²⁷ Although the window period requirement reduces the likelihood that an insider possesses material information that is not publicly available, the window period should not be considered a safe harbor from the prohibitions of Exchange Act Section 10(b) and Rule 10b-5 thereunder [15 U.S.C. 78j(b) and 17 CFR 240.10b-5].

²⁸ Plan participants also would continue to be able to effect fund-switching transactions by means of a six month advance election. See Section II.B, below.

²⁹ This would change the result in *Crawth, Swaine & Moore* (Oct. 22, 1991) Q. 4. See Section II.A.1, above.

opportunities for profit predicated on the underlying stock price movement? Commenters should focus in particular on the need for retention of one or both of the current, alternative conditions to the availability of the exclusion (compliance with specified requirements of Rule 16b-3; fixed-date redemption or exercise).⁴⁰ Alternatively, should the current exclusion for cash-only instruments be retained, with some relief provided for hardship withdrawals or other specified exceptions? What impact, if any, would the proposed exclusion have on executive and director stock-ownership programs that seek to align shareholder and managerial interests through awards of issuer stock or derivative securities payable in stock?⁴¹

D. Value Derived from Market Price of an Equity Security

Numerous interpretive questions, particularly in the employee benefit area, have been raised concerning the treatment of performance units and similar instruments as derivative securities. To provide clarification, the proposed rules would revise the definition of derivative security to codify the staff interpretive view that an instrument is not within the scope of Section 16 if it includes a material non-market price based condition (such as return on equity) to exercise or settlement.⁴² As proposed, rights under which benefits are subject to a material condition (other than the passage of time or continued employment) not tied to the market price of an equity security of the issuer would be excluded from the definition of derivative security for purposes of Section 16.⁴³ Commenters are requested to address whether the proposed rule sets forth an appropriate standard for exclusion, and whether the language of the proposed rule articulates the standard in a workable manner.

⁴⁰ Rule 16a-1(c)(3)(i) and (ii) [17 CFR 240.16a-1(c)(3)(i) and (ii)].

⁴¹ Commenters should consider in this regard the possibility that the Financial Accounting Standards Board may adopt uniform accounting treatment of compensatory fixed-price stock options, stock appreciation rights and other equity-based compensation that may reduce current incentives to use fixed-price stock options.

⁴² See *General Mills, Inc.* (Jan. 31, 1992); and *Certilman Balin Adler & Hyman* (April 20, 1992). See also *Boston Edison Company* (Mar. 19, 1992); *Merrill Lynch & Co.* (Aug. 28, 1992) Q. 4. (Registrant discretion to adjust the applicable performance measure, as to either duration or level) of performance, excludes a performance unit from being a derivative security.)

⁴³ Proposed Rule 16a-1(c)(9).

E. Surrender and Withholding Rights in Connection With Exercise or Tax Withholding

Employee benefit plans commonly provide participants with the right to have securities withheld, or to deliver securities already owned, either in payment of the exercise price of an option or to satisfy the tax withholding consequences of an option exercise or the vesting of restricted securities. While a tax withholding right currently is treated as a derivative security separate from the equity or derivative security to which it relates,⁴⁴ it appears that this right, as well as the right to have securities withheld in satisfaction of an exercise price, properly may be viewed as an integral feature of the related security.⁴⁵ Accordingly, a newly proposed rule would exclude from the definition of "derivative security" these withholding rights, as well as rights to surrender previously owned securities in satisfaction of either a tax obligation or an exercise price.⁴⁶

Today, when withholding rights are exercised or securities delivered, the exemptive treatment of the exercise transactions differs, depending on whether securities are withheld by or tendered to the employer. The delivery of previously owned shares with respect to shares of the same class is exempt without further conditions except for compliance with the general plan requirements of Rule 16b-3.⁴⁷ In contrast, the withholding of an equity security is exempt only when additional conditions applicable to stock appreciation rights—information about the issuer, plan administration requirements, window period restrictions and a six-month holding period—are met.⁴⁸

Consistent with the view that each such right functions as an integral feature of the security to which it relates, the proposal would make the

⁴⁴ As an alternative to separate reporting, a tax withholding right currently may be noted as a feature of the equity or derivative security to which it relates. See *The Clorox Company* (Mar. 27, 1992). A failure to report such right does not give rise to a disclosure obligation under Item 405 of Regulation S-B or Regulation S-K. See *Skadden, Arps, Slate, Meagher & Flom* (June 8, 1992).

⁴⁵ Cf. *Xerox Corporation* (Jul. 7, 1992) (the staff reached this conclusion with respect to a mandatory tax withholding feature).

⁴⁶ Proposed Rule 16a-1(c)(8). Of course, when the related derivative security is exercised, the surrender or withholding of shares would continue to be reported in connection with the exercise. See *Kirkpatrick & Lockhart* (Feb. 11, 1992). See Section III.B. below, regarding reporting of cashless exercises.

⁴⁷ Rule 16b-3(f)(2) [17 CFR 240.16b-3(f)(2)] (exercise price). See also *Simpson Thacher & Bartlett* (Apr. 29, 1991) Q. 4 (c) (tax withholding).

⁴⁸ Rule 16b-3(e) [17 CFR 240.16b-3(e)].

exemption for surrender transactions available to withholding transactions as well.⁴⁹

Comment is requested as to whether this approach, if adopted, also should be applied to withholding and surrender transactions that occur in the employer-employee context but outside Rule 16b-3 plans. If so, commenters should describe the situations in which such an exemption would be useful.

F. Stock Appreciation Rights

In addition to deletion of the clause that deems the cash settlement of a tax withholding right to be a stock appreciation right,⁵⁰ the rule would be amended so that it would not preclude insiders of newly public companies from relying on the exemption for the cash settlement of stock appreciation rights.

The current rule requires the issuer of the stock appreciation right to have been subject to the reporting requirements of Section 13(a) of the Exchange Act for at least a year prior to the transaction, and to have filed all reports and statements thereby required. Under the proposal, a one-year reporting history no longer would be required. Instead, the issuer simply would have to have filed all required reports and statements for a year prior to the transaction, or such shorter time as the issuer had been subject to Section 13(a).

G. Grant and Award Transactions

1. Disinterested Administration

Two amendments are proposed to the exemption of grant and award transactions based on disinterested administration of the employee benefit plan.⁵¹ First, the provision that permits a director to remain disinterested although he or she elects to receive in securities "an annual retainer fee" would be changed to permit receipt of "a director's fee," thus broadening the

⁴⁹ Rule 16b-3(e) would be amended to delete the clause that deems the cash settlement of a tax withholding right to be a stock appreciation right. Rule 16b-3(f)(2) would be amended to exempt withholding by the issuer, as well as surrender or delivery to the issuer, of shares of its stock as payment for the exercise of a derivative security. Similarly, proposed Rule 16b-3(f)(3) would be added to exempt the cash settlement of a tax withholding right, either by withholding shares or the surrender of shares previously owned. The tax withholding right could be in connection with an option exercise or the vesting of restricted shares. Transaction Code F would continue to be used for withholding transactions, and would be expanded to cover the withholding and surrender of securities in connection with the vesting of restricted shares. Proposed Rule 16b-3(f)(3) would be substituted for current Rule 16b-3(f)(3) [17 CFR 240.16b-3(f)(3)], which would be replaced substantively by proposed Rule 16b-5(b), as discussed in Section IV.A. below.

⁵⁰ See Section I.E. above.

⁵¹ See also n. 18, above.

term to clarify that a meeting fee or other director's fee would be included.⁵² Second, the requirement that the securities elected to be received constitute an "equivalent amount" to the cash would be deleted.⁵³ The current requirement could impair companies' ability to provide directors with an adequate incentive to elect the receipt of compensation in securities. Comment is requested, however, as to whether some limitation should remain in order to assure that the director's receipt of stock is adequately linked to the fee, rather than a separate stock grant.

2. Formula Plans

To assure that objective criteria govern the making of awards under formula plans, the rule currently requires that the plan itself restrict the frequency with which the terms of the formula may be amended to not more than once every six months, with limited exceptions.⁵⁴ Under the proposal, no written restriction would need to be placed in the plan. Instead, the rule would require that the plan not be amended periodically and in no event more often than every six months, with the same exceptions as currently permitted.⁵⁵ In addition, a reference to the automatic nature of a formula plan would be added to clarify that the rule does not permit discretionary awards.⁵⁶

3. Six Month Holding Period

Under the proposal, the six-month holding period for securities obtained in a grant and award transaction would not apply to securities disposed of in a transaction that is exempted by rule from Section 16(b), such as a bona fide gift.⁵⁷ In addition, it is proposed that the six-month holding period for dividend equivalent rights ("DERs") and shares purchased pursuant to the reinvestment of dividends should be deemed to commence on the date of acquisition of the shares on which the DERs or dividends are paid.⁵⁸ If adopted, should

this treatment apply only to dividends and DERs paid at a rate that does not exceed dividends paid on the issuer's common stock? Moreover, should this treatment be limited to dividends paid on a broadly held class of securities, so that neither the timing nor the amount of dividend paid would be subject to manipulation by insiders?

H. Exemptions for Distributions

Currently, distributions to plan participants of securities acquired in an exempt manner under Rule 16b-3 are also exempt.⁵⁹ As proposed, this exemption would be broadened so it would apply to all distributions of plan securities, whether those securities were acquired pursuant to Rule 16b-3, an exemption under the former rules, or in a nonexempt manner.⁶⁰ Such an exemption appears appropriate where these distributions merely change the form of the participant's beneficial ownership, not its extent. Of course, if the participant then sells the securities, the sale would be subject to Section 16.

When a plan distributes the cash value of securities in participants' accounts, rather than the securities themselves, such a distribution would be viewed as a sale. As proposed, the rule would expand the categories of exempt cash distributions to plan participants.

First, distributions of securities and cash, or the deferral of such distributions, incident to death, retirement, disability or termination of employment, would be exempt.⁶¹ Such distributions and deferrals currently are exempt if effected by means of a participant-directed election.⁶² The proposed rule would codify the staff's interpretation that the exemption is available even when the transaction is not made pursuant to a participant's election.⁶³

This new exemption also would apply to distributions of securities and cash pursuant to ESOP diversification elections permitted by the Internal Revenue Code.⁶⁴ In addition, the proposed rule⁶⁵ would provide that any involuntary distribution of securities or cash (including cash in lieu of fractional shares) for the purpose of satisfying the

limitations on employee elective contributions and employer matching contributions imposed by the Internal Revenue Code is exempt.⁶⁶ Comment is requested as to whether distributions of securities or cash mandated by the Internal Revenue Code⁶⁷ to begin following the participant's attainment of age 70½ years, whether or not the participant has retired or otherwise terminated employment, also should be exempted.

I. Maximum Number of Shares Requirement

In order for a plan transaction to be exempt, the current rule requires that the plan set forth in writing the basis for determining insider eligibility to participate, and either the price at which securities may be offered and the amount of securities to be awarded or the method by which such price and amount are to be determined. Under the proposal,⁶⁸ application of this exemptive condition would be restricted to plans subject to the shareholder approval requirement, as was the case under former Rule 16b-3.

Additionally, it appears that the manner in which shares are counted in any Rule 16b-3 plan appropriately may be specified in the plan, or, to the extent not so specified, left to the discretion of plan administrators. Accordingly, effective as of the date of publication of this release, the staff no longer will answer interpretive requests regarding share counting, and the interpretive letters addressing this subject⁶⁹ no longer will be required to be followed. Of course, the maximum number of shares issuable under a plan will be subject to disclosure in the course of obtaining shareholder approval for the plan.

J. Transferability Restriction

Currently, the availability of exemptions is conditioned on a written specification, in the plan or other written agreement, that a derivative security awarded under the plan may not be transferred by the participant other than by will or the laws of descent

⁵² Proposed Rule 16b-3(c)(2)(i)(C). See *General Signal Corporation* (Feb. 5, 1993).

⁵³ The term "equivalent amount" has been construed to include the number of shares computed applying a price discount of five or ten percent of the fee. See *Bowater Incorporated* (Aug. 16, 1991) and *General Signal Corporation* (Feb. 5, 1993), respectively.

⁵⁴ The terms of the formula may be amended to comport with changes in the Internal Revenue Code, ERISA, or the rules thereunder.

⁵⁵ Proposed Rule 16b-3(c)(2)(i)(B).

⁵⁶ Proposed Rule 16b-3(c)(2)(i)(A).

⁵⁷ Proposed Rule 16b-3(c)(1).

⁵⁸ *Id.* Under current interpretation, the six-month holding period is deemed to commence on the date the dividend or DER is granted or allocated to the participant. See *Hewitt Associates* (Apr. 30, 1991) Q. 2(b); and *Davis Polk & Wardwell* (Aug. 13, 1991).

Of course, *pro rata* dividends paid in stock with respect to all securities of the same class would continue to be exempt pursuant to Rule 16a-9.

⁵⁹ Rule 16b-3(g) [17 CFR 240.16b-3(g)].

⁶⁰ This revised provision would be redesignated as Rule 16b-3(g)(3). This would change the result in *Cravath, Swaine & Moore* (May 6, 1991) Q. 8, and *Cravath, Swaine & Moore* (Oct. 22, 1991) Q. 5.

⁶¹ Proposed Rule 16b-3(g)(1).

⁶² Rule 16b-3(d)(1)(i).

⁶³ See *Merrill Lynch & Co.* (Sept. 1, 1992) Q. 7.

⁶⁴ See Section II.A.2. above.

⁶⁵ Proposed Rule 16b-3(g)(2).

⁶⁶ The proposed rule would expand the staff's interpretive position in *Health Management Associates, Inc.* (Mar. 6, 1992), which provides that distributions of securities or cash to satisfy such I.R.C. limitations are not withdrawals for purposes of Rule 16b-3(d)(2)(i)(B), and that an associated cash-out of fractional shares is exempt from short-selling profit recovery if the acquisition of the shares was exempt under Rule 16b-3.

⁶⁷ I.R.C. Section 401(a)(9).

⁶⁸ Proposed Rule 16b-3(a)(1).

⁶⁹ *Palmer & Dodge* (Oct. 2, 1991); *Frederic W. Cook & Co., Inc.* (May 15, 1992); *Merrill Lynch & Co.* (Aug. 28, 1992) Q. 1 and 2; and *Merrill Lynch & Co.* (Sept. 1, 1992) Q. 1.

and distribution, or pursuant to a qualified domestic relations order.⁷⁰ The restriction on transferability initially was derived from the Internal Revenue Code as a reflection of prior business practice and was designed to limit opportunities for the speculative abuse of options.

However, questions have been raised about whether this restriction needs to be retained, given the presence of other safeguards in Rule 16b-3 and given the fact that the current Section 16 regulatory framework generally recognizes economic parity between derivative securities and their underlying equity securities. Accordingly, the proposed amendments to Rule 16b-3 would delete the transferability restriction.⁷¹ Commenters are asked to address whether there is any continuing need for this restriction, either in whole or in part, and should address the extent to which nontransferability may act as a safeguard, both in Rule 16b-3 and in the context of compensatory cash-only instruments as discussed above.

Assuming the restriction is retained but modified, would it be appropriate to recast it as a transactional requirement, so that only derivative securities for which the exemption is claimed would need to satisfy this requirement?⁷² Comment also is solicited on whether, if the restriction is retained, additional kinds of transfers should be permitted, such as transfers to family members of insiders, family partnerships, charitable institutions, and trusts whose beneficiaries are insiders and their families, or transfers by a non-employee director to a third party entity (such as the director's law firm) without consideration pursuant to an agreement that provides that any compensation received for the director's services is received for the benefit of that entity. Comment also is solicited on whether the rule should permit only transfers that are exempt from short-swing profit recovery, such as bona fide gifts.

⁷⁰ Rule 16b-3(a)(2) [17 CFR 240.16b-3(a)(2)]. By interpretation, plans that are not subject to I.R.C. Section 401(a) have been allowed to permit transfers of derivative securities pursuant to "domestic relations orders" that satisfy the requirements of I.R.C. Sections 414(p)(1)(A) and (B). See *Premark International, Inc.* (Mar. 6, 1992).

⁷¹ Of course, in many cases transferability restrictions would continue to exist because of Internal Revenue Code requirements or companies' policies.

⁷² Options that satisfy the transferability restrictions currently may be issued on an exempt basis pursuant to a plan that also issues on a non-exempt basis options that may be transferred, without consideration, to family members, family trusts and family partnerships. See *Time Warner Inc.* (Dec. 18, 1992) Q. 1.

If transfers to family members and family entities are permitted, should these be limited to transfers for estate planning purposes? Should such transfers be limited to persons or entities composed of persons who are members of the insider's immediate family sharing the same household, such that the insider will retain an indirect pecuniary interest in the derivative securities following the transfer,⁷³ and any subsequent disposition by the transferee would be attributed to the insider? Finally, comment is solicited on the combined effect of liberalizing or eliminating transferability restrictions and the proposal, discussed above, to provide that securities obtained in an exempt grant may be disposed of within six months if the disposition is a gift or otherwise exempt from short-swing profit recovery. Should the rules provide that the six-month holding period would continue to run in the hands of the transferee?

III. Revisions to Reporting System

A. Reporting of Exempt Transactions

The Commission is reconsidering its approach to the reporting of transactions pursuant to the Section 16 regulatory scheme. Under the current rules, transactions exempt from short-swing profit recovery (other than exempt exercises and conversions of derivative securities) must be reported annually.⁷⁴ Reporting of exempt transactions has been required to provide interested parties with the opportunity to evaluate insiders' claims to exemptions; facilitate reconciliation of insiders' holdings at the end of the fiscal year; and provide indications of insiders' views of their corporations' prospects, although annual reporting generally is permitted since these transactions are viewed as having less potential than non-exempt transactions to reflect insiders' investment assessments of their corporations.

The Commission has received various suggestions that would further streamline Section 16(a) reporting. These proposals seek to simplify reporting through different basic approaches. One approach would delete or substantially reduce the reporting of exempt transactions. A second approach would not reduce significantly the reportable transactions, but rather

⁷³ Rule 16a-1(a)(2)(ii)(A) [17 CFR 240.16a-1(a)(2)(ii)(A)] provides a rebuttable presumption that an insider has an "indirect pecuniary interest" in securities held by members of the insider's family sharing the same household.

⁷⁴ The report would be on Form 5, or, at the option of the reporting person, on a Form 4 filed before the Form 5 would be due.

would reduce the flexibility provided insiders with respect to using Form 4 or Form 5 to report a number of exempt transactions. A third approach would introduce issuer annual reporting of insider holdings and information as to transactions during the fiscal year. These proposals highlight several questions as to what extent, if at all, investors need information with respect to exempt transactions and whether investors need a reconciliation of insiders' equity holdings from year to year.

The suggestions received by the Commission include:

1. Elimination of the requirement to report exempt transactions, or certain classes of exempt transactions, such as exempt employee benefit plan transactions;⁷⁵
 2. Replacement of annual reporting on Form 5 with a table to be included in the issuer's Form 10-K annual report disclosing and reconciling transactions and insiders' holdings;
 3. Replacement of annual reporting on Form 5 with a requirement that each Form 4 filed include information (as a separate line item, in a footnote or in a reconciliation column) with respect to exempt transactions that had occurred since the last Form 4;
 4. Replacement of annual reporting on Form 5 with a requirement that each Form 4 filed include information with respect to exempt transactions that had occurred since the last Form 4, except that broad-based plan transactions would continue to be reportable annually (either on Form 5 or on Form 4); and
 5. Elimination of the total holdings column in Forms 4 and 5 (which the current rules limit to the class of securities with respect to which a transaction is reported), or simplification of the reconciling data for such columns.
- The Commission is interested in obtaining the least burdensome reporting system that will effectively achieve the disclosure purposes of

⁷⁵ Many of these transactions currently may be reported on an aggregated basis, as of the most recent date for which plan information is available. Aggregated reporting also is permitted, by staff interpretation, for acquisitions and holdings resulting from reinvestment of dividends or interest in exempt transactions, and acquisitions of dividend equivalent rights in exempt employee benefit plan transactions. *Palmer & Dodge* (Jan. 31, 1992) and *Skadden, Arps, Slate, Meagher & Flom* (Jun. 23, 1992). This result would be codified by proposed amendments to Instructions 4(a)(ii) and (iv) to Form 5 and the Note to Instruction 4(a)(ii) to Form 4. Aggregated reporting is not available for additional securities acquired through voluntary cash contributions under dividend or interest reinvestment plans. See n. 89 of the Adopting Release.

Section 16(a), and therefore solicits comment on each of the above proposals. While the above changes are not included in the text of the proposals published today, the Commission may adopt any of the alternatives specified above, or a combination of those alternatives, and also may in the final rule amendments incorporate any one or more of the approaches discussed above. Comment is solicited as to whether each of these suggested changes would simplify the reporting obligations on insiders without materially reducing the flow of information that is significant to investors. If the total holdings column is retained, comment also is requested as to whether any reconciling information could be eliminated. Additionally, comment is solicited as to whether a new column should be added to Forms 4 and 5 requiring insiders to reconcile their current holdings with those reported on the previous report. Would this reconciliation requirement be appropriate only if reporting of exempt transactions were eliminated?

In addition, commenters recommending the elimination of Form 5 should address the mechanism by which information that currently is reportable only on an annual basis should be reported. Commenters also are asked to address whether Form 5 has continuing usefulness in reducing reporting delinquencies,⁷⁶ and, if so, what mechanism could serve this purpose if Form 5 were rescinded. In particular, what mechanism would enable issuers to determine, in connection with their disclosure obligations under Item 405 of Regulation S-K and S-B, whether all required Section 16(a) reports had been filed?⁷⁷

Although the current reporting scheme generally requires transactions exempt from short-swing profit recovery to be reported annually, certain transactions, such as stock splits and stock dividends, are exempt from the reporting requirement. The Commission proposes to eliminate the reporting requirement for the exempt cancellation or expiration of a long derivative security where no value is received.⁷⁸ Comment is requested as to whether this reporting requirement should be retained, and whether there are other limited classes of exempt transactions that could be exempted from reporting

without impairing the ability of the public to obtain useful information.

Finally, a new transaction code K would be added to Forms 4 and 5 to report any transaction that changes only the form of beneficial ownership and not the extent of a reporting person's pecuniary interest in the subject securities. Such transactions are reportable on Form 5, but the code also would be added to Form 4 so it could be used for voluntary reporting on that form. Comment is requested as to whether any additional codes need to be added, or whether any existing codes may be deleted, consistent with the informational needs of persons who use Section 16(a) disclosure.

B. Reporting of Small Acquisitions and Option Exercises

At present, small acquisitions of equity securities and exercises and conversions of derivative securities are reported on an insider's next otherwise required Form 4 or Form 5, whichever is earlier.⁷⁹ No change currently is proposed to the existing system of reporting these transactions, other than amendment of the small acquisitions reporting rule⁸⁰ to exclude from the \$10,000 threshold acquisitions occurring within the prior six months of the current acquisition that were exempted by rule from Section 16(b) or previously reported on Form 4 or 5, and to clarify that the current acquisition cannot be disregarded in calculating the \$10,000 threshold. Comment also is solicited as to whether reporting would be made more convenient for insiders, consistent with the informational needs of other investors, by permitting small acquisitions and exempt exercises and conversions to be reported solely on Form 5; or by providing that small acquisitions be reported on Form 5 and exempt exercises and conversions be reported on Form 4.

Currently, when an insider exercises an option acquired pursuant to a Rule 16b-3 plan and immediately sells a portion of the shares to pay the exercise price under a cashless exercise program, the transaction generally is reported on Form 4 or 5 as the exercise of a

derivative security and sale of a non-derivative security.⁸¹ Comment is solicited as to whether insiders should be either required or permitted to reflect the sale of the portion of shares necessary to satisfy the exercise price by using the transaction code for payment of an option exercise price by delivery or withholding of securities,⁸² rather than the general sale of security code currently used, since all of these transactions constitute cashless exercises. In addition, comment is solicited as to whether this transaction code also should be used in connection with the exercise of stock appreciation rights.

C. Joint and Group Reporting

Currently, when more than one person subject to Section 16 is deemed to be a beneficial owner of the same equity securities, all such persons must report as beneficial owners and file separate reports. To reduce this duplicative reporting, the proposed rules would permit such persons to file their reports either separately or jointly.⁸³

Under the proposal, where persons in a group have reporting obligations, the filing of collective reports on behalf of all group members would be permitted.⁸⁴ Such joint and group filings, and any amendments, could be submitted by any designated constituent beneficial owner. Required information would have to be given for each beneficial owner, and such filings would have to be signed by, or on behalf of, each beneficial owner by an authorized person, with statements confirming the delegation of signature authority attached to the filing. Beneficial owners making a joint or group filing could authorize one of the beneficial owners or a third party to sign on their behalf, provided that confirming statements are attached to

⁸¹ Transaction code "M" is used to reflect the exercise and code "S" is used to reflect the sale of the underlying shares.

⁸² Transaction code "F." The proposed amendments would clarify that code "F" also should be used to report the withholding of securities incident to vesting of a restricted security to satisfy tax liabilities.

⁸³ Proposed Rules 16a-3(i) and 16a-1(a)(3) would reflect this change. Forms 3, 4 and 5 and the Instructions thereto also would be modified to permit joint and group filings.

⁸⁴ Joint and group filings could be used, for example, by parents and subsidiaries, partnerships, or Schedule 13D groups [17 CFR 240.13d-101]. The group itself is not a reporting person for Section 16 purposes; however, under the proposed rules, group members could choose to file collective reports to satisfy their individual filing obligations. A group member is not required to report transactions by another group member, however, unless he or she has or shares a pecuniary interest in the securities acquired or disposed of by such other member.

⁷⁶ See Rule 16a-3(f)(1)(ii) [17 CFR 240.16a-3(f)(1)(ii)].

⁷⁷ See Section III.F below for discussion of Item 405.

⁷⁸ Proposed Rule 16a-4(e). See Rule 16b-6(d) [17 CFR 240.16b-6(d)].

⁷⁹ The timing for reporting exercises and conversions was expedited from the proposed annual reporting in response to commenters' concerns, particularly the concerns of individual investors that option exercises represent important indicia of insiders' views of their companies' prospects. If a derivative security is exercised or converted before its exempt grant otherwise must be reported, the grant should be reported at the same time as the exercise or conversion.

⁸⁰ Proposed Rule 16a-6. This rule provides only a deferral, not an exemption from reporting. All small acquisitions, unless otherwise exempt, must be reported on Form 4 or 5 as specified in the rule.

the filing, or are provided by amendment as soon as practicable, with respect to each owner delegating signature authority, unless such a confirmation still in effect is on file with the Commission.⁸⁵ Of course, to the extent a sufficiently broad power of attorney previously had been filed, such as with a Schedule 13D, that power of attorney could be incorporated by reference in a Section 16(a) filing. Each beneficial owner would, of course, retain individual liability for compliance with the filing requirements, including the obligation to assure that the filing is timely and accurately made.⁸⁶ Comment is solicited as to whether, in the alternative, authority to make a group Section 16 filing could be presumed based on the filing of a group Schedule 13D,⁸⁷ such that all group members thereby would be deemed to have granted authority to any group member to file a Section 16 form.

D. Trust Transactions

Today, a trust is subject to Section 16 not only if it beneficially owns more than ten percent of a class of registered equity securities,⁸⁸ but also if the trustee otherwise is an insider and has investment control over the issuer's securities held by the trust, and the trustee or a member of the trustee's immediate family has a pecuniary interest in such securities, except in limited circumstances. This dual standard, newly established under the rules adopted in 1991, created a new reporting obligation for some trusts, particularly family trusts where the insiders already were required to report most of the trust transactions involved.⁸⁹

Since the primary effect of the new standard was to create duplicative

reporting obligations, imposing independent Section 16 obligations on the trusts does not appear necessary. Accordingly, the proposed rules would eliminate these overlapping obligations by subjecting a trust to Section 16 only if it holds more than ten percent of a class of registered equity securities of the issuer.⁹⁰

Duplicative reporting also can result because in certain instances the trust and a trust beneficiary must report separately with respect to the same transaction. Accordingly, a proposed new note would provide that transactions attributed to a trust beneficiary may be reported by the trustee on behalf of the beneficiary.⁹¹

E. Post-Termination Reporting

Under the current rules, any transaction following the cessation of director or officer status is required to be reported, if executed within six months of a transaction that occurred while the person was a director or officer. However, it appears that the record-keeping burdens of tracking post-termination transactions should be imposed only with respect to those transactions where short-swing profit liability is likely. Accordingly, the proposal would eliminate insiders' post-termination reporting obligations with respect to post-termination transactions that are exempt and thus not subject to matching with pre-termination transactions.⁹² Similarly, a post-termination transaction would not be required to be reported unless it occurred within six months of an opposite (purchase vs. sale), non-exempt transaction that was effected while the reporting person was an officer or director.⁹³ Comment is requested as to the continuing need to report these transactions. In particular, is it necessary to continue to require reporting of exempt post-termination transactions to assure that an exemption properly may be claimed?

F. Compliance With the Reporting Requirements

Since the adoption of the 1991 revisions to the Section 16 rules and forms, including issuer disclosure concerning insider compliance and annual reporting of exempt transactions, compliance with Section 16(a) reporting obligations generally has improved

substantially.⁹⁴ Accordingly, the Commission does not propose to change the disclosure requirements of Item 405 of Regulations S-B and S-K, which requires issuer disclosure concerning insider compliance with these reporting obligations, except that registrants would be required to set off any disclosure of non-compliance under an appropriate and discrete caption.⁹⁵ This should enable interested parties to locate quickly this disclosure, which often consists of only a sentence or two, and to prevent it from being buried among unrelated disclosure.

In addition, Item 405 would be revised to clarify the nature of the issuer's obligation to review insiders' filings in order to determine whether there are any delinquent reports that must be disclosed. The issuer is entitled to rely on the Forms 3, 4, and 5 furnished to it, as well as written representations by the insider that no Form 5 is required. New language would be added to make it clear that the issuer is obligated to consider the absence of certain forms.⁹⁶ The absence of a Form 3 from an insider is an indication that disclosure is required. Similarly, the absence of a Form 5 from an insider is an indication that disclosure is required, unless the issuer has received a written representation that no Form 5 is required,⁹⁷ or the issuer otherwise knows that no such filing is required.

Further, comment is solicited on whether Item 405 should be revised to require issuers to include in their filings an affirmative statement that there were no Section 16(a) delinquencies required to be reported, if such is the case.⁹⁸ It has been suggested that there are instances where required disclosures are not made because Item 405 is overlooked. An affirmative statement of the absence of reportable delinquencies has been proposed to the Commission as a potential tool for minimizing this

⁸⁵ General Instruction 7 to Forms 3, 4 and 5 permits a form filed for an individual to be signed on behalf of the individual by an authorized person. General Instruction 5 to Form 3 and General Instruction 4 to Forms 4 and 5 would be amended to specify the means of reporting the pecuniary interest of multiple beneficial owners. A corresponding amendment also would be made to General Instruction 6 to each Form.

⁸⁶ Cf. *In the Matter of Bettina Bancroft*, Release No. 34-32033, AP 3-7999 (Mar. 23, 1993).

⁸⁷ A group's Schedule 13D filing obligation may be satisfied either by a single joint filing or by each of the group's members making an individual filing. The Schedule 13D must be signed by each person on whose behalf the statement is filed or his or her authorized representative.

⁸⁸ See *Proskauer Rose Goetz & Mendelsohn* (Apr. 29, 1991) (a trust that holds more than ten percent of a class of equity securities registered under Section 12 is the beneficial owner of those securities for purposes of Section 16.)

⁸⁹ See *D'Ancona & Pflaum* (Feb. 18, 1992); *Sonnenschein Nath & Rosenthal* (Mar. 23, 1992) (easing compliance with the reporting requirements for certain types of family trusts).

⁹⁰ Proposed Rule 16a-8(a)(1). A conforming amendment to Rule 16a-2(d)(2) [17 CFR 240.16a-2(d)(2)] would reflect the proposed rescission of Rule 16a-8(a)(1)(ii) [17 CFR 240.16a-8(a)(1)(ii)].

⁹¹ Proposed note to Rule 16a-8(b)(3).

⁹² Proposed Rule 16a-2(b)(2).

⁹³ Proposed Rule 16a-2(b)(1).

⁹⁴ During 1990, the year before the new rules were adopted, approximately 21 percent of the reportable market transactions were reported more than three days following the due date. From May 1991 through March 1994, the comparable figure was approximately five percent.

⁹⁵ The caption would read: "Section 16(a) Reporting Delinquencies." Additionally, a technical amendment to Item 405 of Regulation S-B would correct the reference to Rule 16a-3(d) [17 CFR 240.16a-3(d)] by replacing it with a reference to Rule 16a-3(e) [17 CFR 240.16a-3(e)].

⁹⁶ Proposed Item 405(a)(2) of Regulations S-K and S-B. See Adopting Release, n. 231 and surrounding text.

⁹⁷ A "safe harbor" from disclosure is available for an issuer who receives a written representation and keeps it for two years. See Item 405(b)(2).

⁹⁸ If this requirement were adopted, registrants with no delinquencies to report would be permitted to use the caption "Compliance with the Reporting Requirements of Section 16(a)."

problem. Commenters should address whether the problem suggested does in fact exist, and, if so, whether the proposed solution would be effective.

Finally, the Commission is aware of and encourages the practice of many issuers to assist their officers and directors in complying with their Section 16(a) reporting obligations. Since the use of powers of attorney is permitted, it is also possible for an issuer to coordinate the filing of its officers' and directors' reports by having the corporate secretary or other agent obtain powers of attorney from these reporting persons, and act on their behalf to collect information every month about their transactions subject to Section 16 and make the filings by the due date.⁹⁹

G. Equity Swaps

Questions have been asked concerning the proper method of reporting equity swaps for purposes of Section 16. Equity swaps are individually negotiated contracts in which the specific terms may vary from agreement to agreement. For instance, an equity swap may take the form of an agreement in which one party holding shares of equity securities agrees to pay, or "swap," the return¹⁰⁰ on those securities in exchange for the return on an equity index, basket of equities, or an interest rate-based cash flow. Section 16 consequences would arise from such a transaction where either party to the transaction is a Section 16 insider with respect to a security to which the swap agreement relates.¹⁰¹

In order to demonstrate how Section 16 would apply,¹⁰² assume that an insider agrees to pay to the counterparty for a period of three years the value of dividend payments on 100,000 shares of issuer common stock, in exchange for

payment of a fixed interest rate based on the market value of the 100,000 shares of stock at the commencement of the swap term. The parties also agree that at the end of the swap term, the insider will pay to the counterparty the cash value of any appreciation on the shares during the term, or, conversely, the counterparty will pay to the insider the cash value of any depreciation. The insider retains title to and any voting rights in the securities.¹⁰³

It appears that the following reporting scheme appropriately reflects the economic impact of the transaction on the insider. The insider should report entering into the swap on Form 4 as (i) the sale or writing of a stock appreciation right ("SAR"), and (ii) the purchase of a stock depreciation right ("SDR").¹⁰⁴ This result would reflect the fact that the insider has locked in the value of the 100,000 shares during the swap term to the same extent as if the shares had been sold.¹⁰⁵

The manner in which an insider reports the closing of the swap would depend on the change in price of the underlying securities during the swap term.¹⁰⁶ If the price increases, so that the insider must pay cash to the counterparty, the insider should report the exempt expiration without value of the SDR.¹⁰⁷ The insider also should report on Form 4 the exempt exercise by the counterparty of the SAR, the insider's exempt deemed disposition of the underlying securities to the counterparty pursuant to the SAR, and the insider's non-exempt deemed re-

acquisition of the underlying securities.¹⁰⁸

If the price decreases, so that the insider receives cash from the counterparty, the insider should report the expiration of the SAR.¹⁰⁹ The insider also should report on Form 4 the exercise of the SDR as the simultaneous exempt disposition of a put derivative security as a result of its exercise, the exempt deemed disposition of the underlying securities as a result of the exercise, and the non-exempt deemed acquisition of the underlying securities.¹¹⁰

Comment is requested as to whether the derivative security analysis described above accurately reflects the economic substance of the swap transaction described, or whether there is a more appropriate analysis for purposes of Section 16. Comment also is solicited as to whether there are other common forms of equity swaps for which a different Section 16 analysis may be appropriate. In setting forth the analysis above, the Commission does not wish to suggest that previously filed Forms reporting swap transactions in another manner need to be revised, or that swap transactions reported differently are subject to disclosure pursuant to Item 405 of Regulations S-B and S-K. Finally, comment is requested as to whether there is a need for separate reporting codes for these transactions.

IV. Additional Exemptions and Revisions

A. New Exemption for Qualified Domestic Relations Orders

The current rules limit the exemption for the disposition of securities pursuant to a qualified domestic relations order ("QDRO"), as defined in the Internal Revenue Code or Title I of ERISA, and the rules thereunder, to employee plan securities. Since such dispositions are unlikely to be influenced by access to

⁹⁹ It is not necessary, however, that either party to any equity swap have direct ownership of the underlying equity securities, index or basket. Rather, equity swaps may provide insiders with a synthetic means of realizing any changes in the value of the equity securities to which the swap agreement relates. For example, an insider may engage in a swap in which the insider contracts to receive any change in value of the issuer's common stock without making any direct investment in such stock.

¹⁰⁰ If the counterparty is an insider, it would report the same swap as (i) the purchase of an SAR, and (ii) the sale or writing of an SDR.

¹⁰¹ The result would be a sale of the underlying securities pursuant to Rule 16b-6(a) [17 CFR 240.16b-6(a)] because the insider engaging in the swap has an increase in a put equivalent position.

¹⁰² To the extent settlement of the parties' obligations occurs on an interim basis during the term of the swap, such as quarterly, the insider's Section 16 obligations would arise with respect to each settlement.

¹⁰³ Because the SDR would be a long derivative security in the hands of the insider as holder, this expiration would be exempt from short-swing profit recovery pursuant to Rule 16b-6(d). Although proposed Rule 16a-4(e), discussed above in the text accompanying note 78, would exempt the expiration from reporting as well, in the context of an equity swap such an expiration should be reported because it is an integral component of the overall transaction.

¹⁰⁴ Rule 16b-6(b) [17 CFR 240.16b-6(b)] would exempt the first two components of the exercise of the SAR because the deemed sale would have taken place at the time the SAR was sold by the insider; however, the deemed acquisition that occurs simultaneously would not be exempt.

¹⁰⁵ With respect to the insider as the writer, rather than the buyer, of the SAR, Rule 16b-6(d) provides that upon any cancellation or expiration within six months of writing the option, profit recovery shall not exceed the premium received for writing the option. See also Sullivan & Cromwell (Nov. 17, 1993) regarding exemption for the writer of option cancellation or expiration more than six months following writing the option.

¹⁰⁶ Rule 16b-6(b) would exempt the first two components of the exercise of the SDR because the deemed sale would have taken place at the time the SDR was acquired by the insider; however, the deemed acquisition that occurs simultaneously would not be exempt.

⁹⁹ Of course, insiders giving powers of attorney would still retain individual liability for compliance. See n. 86 above and accompanying text.

¹⁰⁰ For purposes of this analysis, "return" may include dividends paid on the equity instrument, as well as change in market value.

¹⁰¹ No Section 16 consequences would flow from the transaction to the extent that the swap relates solely to interests in securities comprising part of a broad-based, publicly traded market basket or index of stocks, approved for trading by the appropriate federal governmental authority, that are deemed not to confer beneficial ownership for purposes of Section 16 pursuant to Rule 16a-1(a)(5)(iii) [17 CFR 240.16a-1(a)(5)(iii)] and/or are excluded from the definition of "derivative securities" pursuant to Rule 16a-1(c)(4) [17 CFR 240.16a-1(c)(4)].

¹⁰² This analysis addresses solely the application of Section 16 to these transactions to the extent that they are engaged in by insiders. The discussion does not analyze the status of these transactions or the parties thereto under any other provision of the federal securities laws.

inside information, this limitation does not appear necessary. Accordingly, the proposal includes a general exemption for such dispositions.¹¹¹

By interpretation, the current exemption has been construed to permit the transfer of securities, issued under a plan that is not subject to Section 401(a) of the Internal Revenue Code, pursuant to a "domestic relations order" that satisfies certain conditions of the Internal Revenue Code,¹¹² but does not satisfy QDRO standards.¹¹³ Comment is requested as to whether the proposed exemption should require satisfaction of the QDRO standards in all circumstances, or whether satisfaction of the Internal Revenue Code "domestic relations order" standards would suffice.¹¹⁴

B. Exemption for Stock Dividend Transactions

As proposed, the exemption for stock splits and stock dividends would be expanded to include specifically a stock dividend in which equity securities of a different issuer are distributed.¹¹⁵ The primary application of this exemption would be to "spinoff" transactions, in which assets previously owned by the issuer are distributed *pro rata* to shareholders in the form of equity securities of another issuer.

The Division has interpreted the current rule to apply to stock splits or stock dividends involving the issuance, on a *pro rata* basis, of a different class of equity securities of the same issuer.¹¹⁶ The business purposes generally motivating spinoff transactions and the

fact that the securities distributed represent assets owned indirectly by shareholders appear to justify further expanding this exemption to securities of a different issuer.

C. Over-Allotment Options

Questions have arisen as to whether an over-allotment option written by an insider could be characterized as the establishment of a put equivalent position and deemed sale of the underlying stock. Subsequent expiration of the unexercised option arguably could constitute a purchase of the underlying security, matchable with the over-allotment option grant or other sales by the insider within a six-month period.

Recognizing that over-allotment options facilitate public offerings and do not lend themselves to the speculative abuse Section 16 was designed to prevent, the staff issued interpretive relief to prevent this unintended result.¹¹⁷ The proposal would codify this relief by explicitly excluding over-allotment options from the derivative security definition.¹¹⁸ Of course, a sale of securities to an underwriter upon exercise of the over-allotment option would remain a sale for Section 16 purposes. Comment is solicited on whether additional conditions should be placed on the exclusion, such as requiring that the option comply with all applicable regulations and policies of the National Association of Securities Dealers.

V. Request for Comment

Any interested person wishing to submit written comments on the proposed revisions to the Commission's Section 16 rules and forms, and compliance disclosure requirements, as well as on other matters that might have an impact on the proposals contained herein, is requested to do so. In addition, the Commission requests comment on whether any further changes to the Section 16 rules, particularly Rule 16b-3, are necessary or appropriate at this time. Comment is requested specifically from persons subject to Section 16; issuers whose officers, directors and ten percent shareholders are subject to Section 16; and persons using the information afforded by the Section 16(a) reports. The Commission also requests comment on whether the proposed rules, if adopted, would have an adverse impact on competition or would impose a

burden on competition that is neither necessary nor appropriate in furthering the purposes of the Exchange Act. Comments responsive to this inquiry will be considered by the Commission in complying with its responsibilities under Section 23(a) of the Exchange Act.¹¹⁹

VI. Transition to New Rules

If the proposed rule revisions are adopted, provisions for a transition from the current rules will be necessary, particularly with respect to proposed Rule 16b-3. Although the discussion below represents the Commission's current intent regarding transition to the proposed revised rules, this schedule is subject to modification.

The Commission intends to make the proposed rule amendments, other than those to Rule 16b-3, effective with respect to reports that are, or would have been, due on or after the 45th day following the date of adoption (the "Effective Date"), with earlier compliance permitted. Of course, to the extent that proposed rules codify interpretive positions, those positions continue to be valid before the Effective Date. Trusts currently subject to Section 16 that would be relieved of Section 16 obligations under the proposed rules would not be subject to any post-termination reporting obligations or required to file a final Form 5.

In extending the phase-in period for current Rule 16b-3, the Commission stated that this period would continue until September 1, 1994, or such earlier date as set in further rulemaking under Section 16. Given the timing of these rule proposals, the Commission is extending the phase-in date until September 1, 1995 or such different date as set in further rulemaking.¹²⁰ Current and former Rule 16b-3 would remain available until September 1, 1995,¹²¹ unless a different date is set by the Commission in the adopting release. Comment is solicited on how long a transition period issuers and insiders would need, assuming adoption of the proposals. Of course, issuers continue to be permitted to convert their plans to current Rule 16b-3 at any time, provided that all plans of the issuer are converted. After the phase-in date, issuers and insiders will no longer be able to rely on the former employee benefit plan exemptions, but instead will need to comply with current Rule 16b-3 (modified to the extent the

¹¹¹ Proposed Rule 16b-5(b), which would replace current Rule 16b-3(f)(3). Current Rule 16b-5 (17 CFR 240.16b-5), which exempts bona fide gifts and inheritance, would be redesignated as proposed Rule 16b-5(a). Transaction code Q, which is used for QDRO transactions, would be moved to the category "Other Section 16(b) Exempt Transactions and Small Acquisition Codes" in Forms 4 and 5.

¹¹² I.R.C. Sections 414(p)(1)(A) and (B). Among other things, the order must create or recognize an alternate payee's right to receive all or a portion of the benefits payable to a participant under a plan; relate to the provision of child support, alimony payments, or marital property rights to a spouse, former spouse, child, or other dependent of the participant; and be made pursuant to a State domestic relations law (including a community property law).

¹¹³ The order need not satisfy, among other things, conditions applicable to payments made after the participant's earliest retirement age, and requirements to treat the former spouse as surviving spouse for purposes of determining survivor benefits. See *Premark International, Inc.* (Mar. 6, 1992), which further provides that the plan may permit such transfers consistent with the transferability restriction of Rule 16b-3(a)(2).

¹¹⁴ Any revisions to the standards of the proposed exemption also would be reflected in the transferability restriction, if retained. See Section II, above.

¹¹⁵ Proposed Rule 16a-9(a).

¹¹⁶ See *Emergent Group, Inc.* (Apr. 6, 1992).

¹¹⁷ See *Video Technology (Overseas) Limited / Davis Polk & Wardwell* (June 17, 1992), and *Davis Polk & Wardwell* (July 16, 1992).

¹¹⁸ Proposed Rule 16a-1(c)(7).

¹¹⁹ 15 U.S.C. 78w(a).

¹²⁰ See Release No. 34-34513, also issued today.

¹²¹ The exemptions afforded by former Rules 16a-8(b) and (g)(3) also would remain available.

Commission adopts these rule proposals).

Because proposed Rule 16a-1(c)(8), which would exclude from the definition of "derivative security" the right or obligation to surrender a security or to have a security withheld in satisfaction of an exercise price or tax withholding obligation, is inextricably linked to the proposed amendment of Rule 16b-3(e), the Commission proposes to link the availability of proposed Rule 16a-1(c)(8) to conversion of the plan to proposed Rule 16b-3.

VII. Cost-Benefit Analysis

Commenters are requested to provide their views and data to assist the Commission in evaluating the costs and benefits associated with the proposed amendments. It is expected that the amendments would decrease significantly the compliance burden imposed on persons subject to Section 16 and attendant costs without undercutting the statutory objectives of disclosing information concerning insider trading and discouraging speculative short-term insider trading.

The proposed simplification of the treatment of employee benefit plan transactions would constitute the most important reduction in compliance burden. The proposed rules also would reduce compliance costs by: permitting joint and group reporting where more than one person is deemed to be a beneficial owner of the same securities; providing that Section 16 applies to a trust only if the trust beneficially owns more than ten percent of a class of registered equity securities; and limiting officers' and directors' post-termination reporting obligations.

Furthermore, the proposed rules would expand the exemption for stock splits and stock dividends to include stock dividends in which securities of a different issuer are distributed, and would provide a general exemption from reporting and short-swing profit recovery for the disposition of securities pursuant to a qualified domestic relations order.

VIII. Summary of Initial Regulatory Flexibility Analysis

An Initial Regulatory Flexibility Analysis has been prepared in accordance with 5 U.S.C. 603 concerning the proposed amendments. The analysis notes that the proposed amendments are intended to simplify the Section 16 regulatory scheme, particularly with respect to employee benefit plans, and codify several staff interpretive positions.

As discussed more fully in the analysis, most of the reporting persons

the proposed amendments would affect are small entities, as defined by the Commission's rules. The proposed amendments would decrease the reporting and compliance requirements imposed upon corporate insiders subject to Section 16.

The analysis discusses several possible alternatives to the proposed amendments including, among others, establishing different compliance or reporting requirements for small entities or exempting them from all or part of the proposed requirements. As discussed more fully in the analysis, implementation of any of these alternatives either would be duplicative of the proposed amendments or inconsistent with the Exchange Act.

Comments are encouraged on any aspect of the analysis. A copy of the analysis may be obtained by contacting Elizabeth Murphy, Office of Disclosure Policy, Division of Corporation Finance, Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. 20549.

IX. Statutory Basis

The amendments to Regulation S-B, Regulation S-K, and the Section 16 rules and forms are being proposed by the Commission pursuant to Exchange Act Sections 3(a)(11),¹²² 3(a)(12),¹²³ 3(b),¹²⁴ 9(b),¹²⁵ 10(a),¹²⁶ 12(h),¹²⁷ 13(a),¹²⁸ 14,¹²⁹ 16, and 23(a). As the Section 16 rules and forms relate to the Investment Company Act and the Public Utility Holding Company Act, they also are adopted pursuant to Investment Company Act Sections 30¹³⁰ and 38,¹³¹ and Public Utility Holding Company Act Sections 17¹³² and 20,¹³³ respectively.

List of Subjects in 17 CFR Parts 228, 229, 240, and 249

Reporting, recordkeeping requirements, and Securities.

Text of the Proposals

In accordance with the foregoing, Title 17, Chapter II of the Code of Federal Regulations is proposed to be amended as follows:

¹²² 15 U.S.C. 78c(a)(11).

¹²³ 15 U.S.C. 78c(a)(12).

¹²⁴ 15 U.S.C. 78c(b).

¹²⁵ 15 U.S.C. 78i(b).

¹²⁶ 15 U.S.C. 78j(a).

¹²⁷ 15 U.S.C. 78j(h).

¹²⁸ 15 U.S.C. 78m(a).

¹²⁹ 15 U.S.C. 78n.

¹³⁰ 15 U.S.C. 80a-29.

¹³¹ 15 U.S.C. 80a-37.

¹³² 15 U.S.C. 79q.

¹³³ 15 U.S.C. 79i.

PART 228—INTEGRATED DISCLOSURE SYSTEM FOR SMALL BUSINESS ISSUERS

1. The authority citation for part 228 continues to read as follows:

Authority: 15 U.S.C. 77e, 77f, 77g, 77h, 77j, 77k, 77s, 77aa(25), 77aa(26), 77ddd, 77eee, 77ggg, 77hhh, 77jjj, 77nnn, 77sss, 78l, 78m, 78n, 78o, 78w, 78ll, 80a-8, 80a-29, 80a-30, 80a-37, 80b-11, unless otherwise noted.

2. By amending § 228.405 by revising the reference to "Rule 16a-3(d)" in paragraph (a) to read "Rule 16a-3(e)" and by revising paragraphs (a)(1) and (a)(2) before the Note to read as follows:

§ 228.405 (Item 405) Compliance with section 16(a) of the Exchange Act.

(a) * * *

(1) Under the caption "Section 16(a) Reporting Delinquencies," identify each person who, at any time during the fiscal year, was a director, officer, beneficial owner of more than ten percent of any class of equity securities of the registrant registered pursuant to section 12 of the Exchange Act, or any other person subject to section 16 of the Exchange Act with respect to the registrant because of the requirements of section 30 of the Investment Company Act or section 17 of the Public Utility Holding Company Act ("reporting person") that failed to file on a timely basis, as disclosed in the above Forms, reports required by section 16(a) of the Exchange Act during the most recent fiscal year or prior fiscal years.

(2) For each such person, set forth the number of late reports, the number of transactions that were not reported on a timely basis, and any known failure to file a required Form. A known failure to file would include, but not be limited to, a failure to file a Form 3, which is required of all reporting persons, and a failure to file a Form 5 in the absence of the written representation referred to in paragraph (b)(2)(i) of this section, unless the registrant otherwise knows that no Form 5 is required.

* * * * *

PART 229—STANDARD INSTRUCTIONS FOR FILING FORMS UNDER SECURITIES ACT OF 1933, SECURITIES EXCHANGE ACT OF 1934 AND ENERGY POLICY AND CONSERVATION ACT OF 1975—REGULATION S-K

3. The authority citation for part 229 continues to read in part as follows:

Authority: 15 U.S.C. 77e, 77f, 77g, 77h, 77j, 77k, 77s, 77aa(25), 77aa(26), 77ddd, 77eee, 77ggg, 77hhh, 77iii, 77jjj, 77nnn, 77sss, 78c, 78l, 78j, 78l, 78m, 78n, 78o, 78w, 78ll(d), 79e

79n, 79t, 80a-8, 80a-29, 80a-30, 80a-37, 80b-11, unless otherwise noted.

4. By amending § 229.405 by revising paragraphs (a)(1) and (a)(2) before the Note to read as follows:

§ 229.405 (Item 405) Compliance with section 16(a) of the Exchange Act.

(1) Under the caption "Section 16(a) Reporting Delinquencies," identify each person who, at any time during the fiscal year, was a director, officer, beneficial owner of more than ten percent of any class of equity securities of the registrant registered pursuant to section 12 of the Exchange Act, or any other person subject to section 16 of the Exchange Act with respect to the registrant because of the requirements of section 30 of the Investment Company Act or section 17 of the Public Utility Holding Company Act ("reporting person") that failed to file on a timely basis, as disclosed in the above Forms, reports required by section 16(a) of the Exchange Act during the most recent fiscal year or prior fiscal years.

(2) For each such person, set forth the number of late reports, the number of transactions that were not reported on a timely basis, and any known failure to file a required Form. A known failure to file would include, but not be limited to, a failure to file a Form 3, which is required of all reporting persons, and a failure to file a Form 5 in the absence of the written representation referred to in paragraph (b)(2)(i) of this section, unless the registrant otherwise knows that no Form 5 is required.

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

5. The authority citation for part 240 continues to read in part as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78d, 78i, 78j, 78l, 78m, 78n, 78o, 78p, 78s, 78w, 78x, 78ll(d), 79g, 79t, 80a-20, 80a-23, 80a-29, 80a-37, 80b-3, 80b-4, 80b-11, unless otherwise noted.

6. By amending § 240.16a-1 by revising paragraphs (a)(3) and (c)(3), (c)(5) and (c)(6), and adding paragraphs (c)(7), (c)(8) and (c)(9) to read as follows:

§ 240.16a-1 Definition of Terms.

(3) Where more than one person subject to Section 16 of the Act is deemed to be a beneficial owner of the same equity securities, all such persons must report as beneficial owners of the

securities, either separately or jointly, as provided in § 240.16a-3(i). In such cases, the amount of short-swing profit recoverable shall not be increased above the amount recoverable if there were only one beneficial owner.

(3) Securities received pursuant to a compensation arrangement between the issuer and an employee or director that may be redeemed or exercised only for cash and do not permit the receipt of equity securities in lieu of cash;

(5) Interests or rights to participate in employee benefit plans of the issuer;

(6) Rights with an exercise or conversion privilege at a price that is not fixed;

(7) Options granted to an underwriter in a registered public offering for the purpose of satisfying over-allotments in such offering;

(8) The right or obligation to surrender a security, or have a security withheld, upon exercise of a derivative security or vesting of restricted shares to satisfy the exercise price or tax withholding consequences of exercise or vesting; or

(9) Rights under which the benefits are subject to a material condition (other than the passage of time or continued employment) not tied to the market price of an equity security of the issuer.

7. By amending § 240.16a-2 by revising paragraphs (b) and (d)(2) to read as follows:

§ 240.16a-2 Persons and transactions subject to section 16.

(b) A transaction(s) following the cessation of director or officer status shall be subject to Section 16 of the Act only if:

(1) Executed within six months of an opposite transaction subject to Section 16(b) of the Act that occurred while that person was a director or officer; and

(2) Not otherwise exempted from Section 16(b) of the Act pursuant to the provisions of this chapter.

Note: For purposes of this paragraph, a purchase and a sale each shall be an opposite transaction with respect to the other.

(2) Transactions by such person or entity acting in a capacity specified in paragraph (d)(1) of this section after the period specified in that paragraph shall be subject to Section 16 of the Act only where the estate, trust or other entity is a beneficial owner of more than ten percent of any class of equity security

registered pursuant to Section 12 of the Act.

8. By amending § 240.16a-3 by adding paragraph (i) to read as follows:

§ 240.16a-3 Reporting transactions and holdings.

(i) Where more than one person subject to Section 16 of the Act is deemed to be a beneficial owner of the same equity securities, all such persons must report as beneficial owners of the securities, either separately or jointly. Where persons in a group are deemed to be beneficial owners of equity securities pursuant to § 240.16a-1(a)(1) due to the aggregation of holdings, a single Form 3, 4 or 5 may be filed on behalf of all persons in the group. Joint and group filings must include all required information for each beneficial owner, and such filings must be signed by each beneficial owner, or on behalf of such owner by an authorized person.

9. By amending § 240.16a-4 by adding paragraph (e) before the Note to read as follows:

§ 240.16a-4 Derivative securities.

(e) The disposition or closing of a long derivative security position, as a result of cancellation or expiration, shall be exempt from Section 16(a) of the Act if exempt from Section 16(b) of the Act pursuant to § 240.16b-6(d).

10. By amending § 240.16a-6 by revising paragraph (a)(1) to read as follows:

§ 240.16a-6 Small acquisitions.

(1) Such acquisition, when aggregated with other acquisitions of securities of the same class (including securities underlying derivative securities, but excluding acquisitions exempted by rule from Section 16(b) or previously reported on Form 4 or Form 5) within the prior six months, does not exceed a total of \$10,000 in market value; and

11. By amending § 240.16a-8 by revising paragraph (a)(1) and adding a note at the end of paragraph (b)(3) to read as follows:

§ 240.16a-8 Trusts.

(a) Persons Subject to Section 16—(1) Trusts. A trust shall be subject to Section 16 of the Act with respect to securities of the issuer if the trust is a beneficial owner, pursuant to § 240.16a-1(a)(1), of more than ten percent of any class of equity securities of the issuer.

registered pursuant to Section 12 of the Act ("ten percent beneficial owner").

* * * * *
 (b) * * *
 (3) * * *

Note: Transactions attributed to a trust beneficiary may be reported by the trustee on behalf of the beneficiary.

* * * * *

12. By amending § 240.16a-9 by revising paragraph (a) to read as follows:

§ 240.16a-9 Stock splits, stock dividends, and pro rata rights.

* * * * *

(a) The increase or decrease in the number of securities held as a result of a stock split or stock dividend applying equally to all securities of that class, including a stock dividend in which equity securities of a different issuer are distributed; and

* * * * *

13. By amending § 240.16b-3 by revising paragraphs (a), (c)(1), (c)(2)(i)(B) and (C), (c)(2)(ii), (d), the introductory text of paragraph (e), paragraph (e)(1)(i), the heading for paragraph (f), paragraphs (f)(2), (f)(3) and (g), removing paragraph (a)(2), and adding paragraph (h) before the Note to read as follows:

§ 240.16b-3 Employee benefit plan transactions.

(a) *Plan Conditions.* A transaction by an officer or director shall be exempt from section 16(b) of the Act if it is pursuant to an employee benefit plan that satisfies the conditions of this paragraph and of paragraph (b) of this section, if applicable; and the transaction satisfies one of the transaction exemptions of paragraphs (c), (d), (e), (f), or (g) of this section. The plan shall set forth in writing the means or basis for determining eligibility to participate, as it relates to officers and directors, and either the price at which the securities may be offered and the amount of securities to be awarded or the method by which the price and the amount of the award are to be determined; *provided, however,* that plans for which paragraph (b)(3) of this section provides an exemption from the shareholder approval requirement of paragraph (b) of this section need not specify the amount of securities to be awarded.

* * * * *

(c) * * *

(1) *Six Month Holding Period.* The equity security is held for six months from the date of grant or, in the case of a derivative security, at least six months elapse from the date of acquisition of the derivative security to the date of disposition of the derivative security

(other than upon exercise or conversion) or its underlying equity security; *provided, however,* that compliance with this paragraph (c)(1) is not required with respect to a disposition by a plan participant that is exempted by rule from Section 16(b) of the Act. Dividend equivalent rights and stock acquired upon the reinvestment of dividends, other than stock dividends exempted pursuant to § 240.16a-9, shall be deemed to have been acquired as of the date of acquisition of the securities on which such dividends or dividend equivalent rights were paid.

(2) *Plan Administration.* * * *

(i) *Disinterested Administration.*
 * * *

(B) Participation in a securities acquisition plan meeting the conditions in paragraph (d)(1) of this section shall not disqualify a director from being a disinterested person;

(C) An election to receive a director's fee in either cash or securities, or partly in cash and partly in securities, shall not disqualify a director from being a disinterested person; and

* * * * *

(ii) *Formula Awards.* The grant or award is made pursuant to a plan that:
 (A) By its terms permits officers and/or directors to receive automatic awards; and either: states the amount and price of securities to be awarded to designated officers and directors or categories of officers and directors, though not necessarily to others who may participate in the plan, and specifies the timing of awards to officers and directors; or sets forth a formula that automatically determines the amount, price and timing, using objective criteria such as earnings of the issuer, value of the securities, years of service, job classification, and compensation levels; *provided that*

(B) Such terms are not amended periodically, and in no event more often than every six months, other than to comport with changes in the Internal Revenue Code, the Employee Retirement Income Security Act, or the rules thereunder.

* * * * *

(d) *Broad-Based Plans and Intra-Plan Transfers.* A transaction in a thrift, stock purchase or similar securities acquisition plan shall be exempt from Section 16(b) of the Act if the plan satisfies the conditions of paragraph (a) and paragraph (b) of this section, if applicable, and the transaction satisfies the conditions of either paragraph (d)(1) or (d)(2) of this section.

(1) For any purchase transaction resulting from an employee contribution and/or an employer contribution, other

than an intra-plan transfer, the transaction is pursuant to:

(i) A plan that provides for broad-based employee participation, by its terms does not discriminate in favor of highly compensated employees, and is qualified pursuant to Section 401 or Section 423 of the Internal Revenue Code; or

(ii) A plan that:

(A) Operates in conjunction with a plan that satisfies the requirements of paragraph (d)(1)(i) of this section; and

(B) Provides only the benefits or contributions that would be provided under a tax-qualified plan but for the limitations of Sections 401(a)(17), 415 and any other applicable contribution limitation set forth in the Internal Revenue Code.

(2) For intra-plan transfers between an equity securities of the issuer fund and another fund:

(i) The transaction is pursuant to an election made during a quarterly time period specified in paragraph (e)(3) of this section; or

(ii) The transaction results from a diversification election that satisfies the requirements of Section 401(a)(28) of the Internal Revenue Code.

(e) *Cash settlements of stock appreciation rights.* A transaction involving the exercise and cancellation of a stock appreciation right (whether or not the transaction also involves the related surrender and cancellation of a stock option), and the receipt of cash in complete or partial settlement of that right, shall be exempt from Section 16(b) of the Act if the plan satisfies the conditions of paragraph (a) and paragraph (b) of this section, if applicable, and the following conditions are met:

(1) *Information about the issuer.* (i) The issuer of the stock appreciation right has filed all reports and statements required pursuant to Section 13(a) of the Act for at least a year prior to the transaction or such shorter time as the issuer has been subject to that section; and

* * * * *

(f) *Cancellations, expirations, and surrenders.* * * *

(2) The surrender or delivery to the issuer, or the withholding by the issuer, of shares of its stock as payment for the exercise of an option, warrant or right with respect to shares of the same class; and

(3) The surrender or delivery to the issuer, or the withholding by the issuer, of an equity security to satisfy the tax withholding consequences of either the receipt or vesting of the equity security or the exercise of a derivative security related to the equity security.

(g) *Distributions of plan securities or cash.* The following distributions are exempt from Section 16(b) of the Act; provided that paragraphs (g)(1) and (g)(2) of this section shall be available only if the plan pursuant to which the distribution is made satisfies the conditions of paragraph (a) and paragraph (b) of this section, if applicable, and the securities with respect to which the distribution is made were acquired in a transaction exempt pursuant to § 240.16b-3:

(1) A distribution of either securities or cash; or a deferral of a distribution of securities or cash in whole or in part, provided such distribution or deferral is incident to death, retirement, disability, termination of employment, or a diversification election permitted by Section 401(a)(28) of the Internal Revenue Code;

(2) An involuntary distribution of either securities or cash, including cash in lieu of fractional shares, for the purpose of satisfying the limitations on employee elective contributions and employer matching contributions imposed by the Internal Revenue Code; and

(3) Any other distribution to a participant of securities that have been held pursuant to any employee benefit plan for the benefit of that participant.

(h) *Participant-directed transactions.* A participant-directed transaction and any related employer matching contribution shall be exempt from Section 16(b) of the Act if the plan satisfies the conditions of paragraph (a) and paragraph (b) of this section, if applicable, and the transaction is pursuant to an election made by the participant at least six months in advance of the effective date of the transaction; provided that such election is irrevocable or may be revoked or changed only by means of a subsequent election that shall not take effect until six months elapse from the date of such subsequent election.

14. By amending § 240.16b-5 by revising the section heading, redesignating the existing text as paragraph (a) and adding new paragraph (b) to read as follows:

§ 240.16b-5 Bona fide gifts, inheritance and qualified domestic relations orders.

(b) The disposition of equity securities pursuant to a qualified domestic relations order, as defined in the Internal Revenue Code or Title I of the Employee Retirement Income Security Act, or the rules thereunder,

shall be exempt from the operation of section 16(b) of the Act.

PART 249—FORMS, SECURITIES EXCHANGE ACT OF 1934

15. The authority citation for Part 249 continues to read in part as follows:

Authority: 15 U.S.C. 78a, *et seq.*, unless otherwise noted;

16. By amending Form 3 (referenced in § 249.103) and the General Instructions thereto by adding paragraph (b)(v) to General Instruction 5, by revising the first sentence of General Instruction 6, and by revising Item 1 and adding Item 7 to the information preceding Table I to read as follows:

Note—The text of Form 3 does not and this amendment will not appear in the Code of Federal Regulations.

Form 3—Initial Statement of Beneficial Ownership of Securities

General Instructions

5. Holdings Required to be Reported

(b) Beneficial Ownership Reported (Pecuniary Interest).

(v) Where more than one person beneficially owns the same equity securities, such owners may file Form 3 individually or jointly. Joint and group filings may be made by any designated constituent beneficial owner. Indicate only the name and address of the designated filer in Item 1 of Form 3 and attach a listing of the names and IRS or social security numbers (or addresses in lieu thereof) of each other reporting person and number the listing as part of the Form 3 report. Joint and group filings must include all required information for each beneficial owner, and such filings must be signed by each beneficial owner, or on behalf of such owner by an authorized person. If the space provided for signatures is insufficient, attach a signature page and number it as part of the Form 3 report.

6. Additional Information

If the space provided in the line items of this Form or space provided for additional comments is insufficient, attach another Form (or copy of the Form) completed as appropriate (except for the listing and additional signature pages required by General Instruction

5(b)(v), which may be attached on 8½ by 11 inch white paper). * * *

1. Name and Address of Reporting Person*

(Last) (First) (Middle)
(Street)
(City) (State) (Zip)

7. Individual or Joint/Group Filing (Check applicable line)

Form filed by One Reporting Person
Form Filed by More than One Reporting Person

16. By amending Form 4 (referenced in § 249.104) and the General Instructions thereto by revising the Note following General Instruction 4(a)(ii) and adding paragraph (b)(v) to General Instruction 4; by revising the first sentence of General Instruction 6; by revising General Instruction 8; and by revising Item 1 and adding Item 7 to the information preceding Table I to read as follows:

Note—The text of Form 4 does not and this amendment will not appear in the Code of Federal Regulations.

Form 4—Statement of Changes in Beneficial Ownership of Securities

General Instructions

4. Transactions and Holdings Required To Be Reported

(a) General Requirements.

(ii) * * *
Note: Transactions reportable on Form 5 may, at the option of the reporting person, be reported on a Form 4 filed before the due date of the Form 5, and may be aggregated to the extent permitted by Instruction 4(a)(ii) to Form 5. Exercises or conversions of derivative securities and small acquisitions specified in Rule 16a-6(a) must be reported on the next required Form 4 or Form 5 but may be reported voluntarily on Form 4 at an earlier date. (See Instruction 8 for the code for voluntarily reported transactions.)

(b) Beneficial Ownership Reported (Pecuniary Interest).

(v) Where more than one beneficial owner of the same equity securities must report transactions on Form 4, such owners may file Form 4 individually or jointly. Joint and group

*If the Form is filed by more than one Reporting Person, see Instruction 5(b)(v).

filings may be made by any constituent beneficial owner. Indicate only the name and address of the designated filer in Item 1 of Form 4 and attach a listing of the names and IRS or social security numbers (or addresses in lieu thereof) of each other reporting person and number the listing as part of the Form 4 report. Joint and group filings must include all required information for each beneficial owner, and such filings must be signed by each beneficial owner, or on behalf of such owner by an authorized person. If the space provided for signatures is insufficient, attach a signature page and number it as part of the Form 4 report.

6. Additional Information

If space provided in the line items of this Form or space provided for additional comments is insufficient, attach another Form (or copy of the Form) completed as appropriate (except for the listing and additional signature pages required by General Instruction 4(b)(v), which may be attached on 8½ by 11 inch white paper). * * *

8. Transaction Codes

Use the codes listed below to indicate in Table I, Column 3 and Table II, Column 4 the character of the transaction reported. Use the code that most appropriately describes the transaction. If the transaction is not specifically listed, use transaction Code "J" and describe the nature of the transaction in the space for explanation of responses. If a transaction is voluntarily reported earlier than required, place "V" in the appropriate column to so indicate; otherwise the column should be left blank.

General Transaction Codes

- P—Open market or private purchase of non-derivative or derivative security
- S—Open market or private sale of non-derivative or derivative security
- V—Transaction voluntarily reported earlier than required

Employee Benefit Plan Transaction Codes

- A—Grant or award transaction pursuant to Rule 16b-3(c)
- M—Exercise of in-the-money or at-the-money derivative security acquired pursuant to Rule 16b-3 plan
- B—Transaction in acquisition plan pursuant to Rule 16b-3(d)(1)
- N—Participant-directed transaction pursuant to Rule 16b-3(f)(4)
- F—Payment of option exercise price or tax liability by delivering or withholding securities incident to

exercise of a derivative security or vesting of a restricted security issued in accordance with Rule 16b-3

- I—Intra-plan transfer in accordance with Rule 16b-3(d)(2) resulting in acquisition or disposition of issuer securities
- T—Acquisition or disposition transaction under an employee benefit plan other than pursuant to Rule 16b-3

Derivative Securities Codes

- C—Conversion of derivative security
- E—Expiration of short derivative position
- H—Expiration (or cancellation) of long derivative position
- O—Exercise of out-of-the-money derivative security
- X—Exercise of in-the-money or at-the-money derivative security

Other Section 16(b) Exempt Transactions and Small Acquisition Codes (Except for Employee Benefit Plan Codes Above)

- G—Bona fide gift
- R—Acquisition pursuant to reinvestment of dividends or interest (DRIPS)
- W—Acquisition or disposition by will or the laws of descent and distribution
- L—Small acquisition under Rule 16a-6
- Q—Transfer pursuant to a qualified domestic relations order
- Z—Deposit into or withdrawal from voting trust
- K—Exempt change in form of beneficial ownership

Other Transaction Codes

- J—Other acquisition or disposition (describe transaction)
- U—Disposition pursuant to a tender of shares in a change of control transaction

* * * * *

1. Name and Address of Reporting Person*

(Last) (First) (Middle)
(Street)
(City) (State) (Zip)

* * * * *

7. Individual or Joint/Group Filing

(Check applicable line)

- ____ Form filed by One Reporting Person
- ____ Form Filed by More than One Reporting Person

* * * * *

17. By amending Form 5 (referenced in § 249.105) and the General

* If the Form is filed by more than one Reporting Person, see Instruction 4(b)(v).

Instructions thereto by revising General Instructions 4(a)(ii), 4(a)(iv) and adding paragraph (b)(v) to General Instruction 4; by revising the first sentence of General Instruction 6; by revising General Instruction 8; and by revising Item 1 and adding Item 7 to the information preceding Table I to read as follows:

Note.—The text of Form 5 does not and this amendment will not appear in the Code of Federal Regulations.

Form 5—Annual Statement of Beneficial Ownership of Securities

* * * * *

General Instructions

* * * * *

4. Transactions and Holdings Required To Be Reported

(a) General Requirements

* * * * *

(ii) Report transactions and holdings in Rule 16b-3(d) securities acquisition plans, acquisitions and holdings resulting from reinvestment of dividends or interest in transactions that were exempt from Section 16(b) pursuant to Rule 16b-2 or 16b-3, and acquisitions of dividend equivalent rights in transactions exempt pursuant to Rule 16b-3, as of the most recent date for which the information is reasonably available, specifying the date of the information. Also, report transactions and holdings in such securities acquisition plans, acquisitions and holdings through such reinvestment of dividends or interest, and acquisitions of such dividend equivalent rights, for the portion of the prior fiscal year not included on the Form 5 for the prior year, specifying the date of the information, or, alternatively, this information may be included on a Form 4 or an amendment to the Form 5 filed promptly. Such acquisitions, but not dispositions, may be presented on an aggregate basis for the period reported. If reported on an aggregate basis, disclose the range of prices paid.

* * * * *

(iv) Except for transactions noted in (ii) above, every transaction shall be reported even though acquisitions and dispositions with respect to a class of securities are equal, or the change involves only the nature of ownership, such as a change from indirect ownership through a trust or corporation to direct ownership by the reporting person. Report total beneficial ownership as of the end of the issuer's fiscal year for all classes of securities in which a transaction was reported.

(b) Beneficial Ownership Reported (Pecuniary Interest).
* * * * *

(v) Where more than one beneficial owner of the same equity securities must report on Form 5, such owners may file Form 5 individually or jointly. Joint and group filings may be made by any constituent beneficial owner. Indicate only the name and address of the designated filer in Item 1 of Form 5 and attach a listing of the names and IRS or social security numbers (or addresses in lieu thereof) of each other reporting person and number the listing as part of the Form 5 report. Joint and group filings must include all required information for each beneficial owner, and such filings must be signed by each beneficial owner, or on behalf of such owner by an authorized person. If the space provided for signatures is insufficient, attach a signature page and number it as part of the Form 5 report.
* * * * *

6. Additional Information

If the space provided in the line items of this Form or space provided for additional comments is insufficient, attach another Form (or copy of the Form) completed as appropriate (except for the listing and additional signature pages required by General Instruction 4(b)(v), which may be attached on 8 1/2 by 11 inch white paper). * * *

8. Transaction Codes

Use the codes listed below to indicate in Table I, Column 3 and Table II, Column 4 the character of the transaction reported. Use the code that most appropriately describes the transaction. If the transaction is not specifically listed, use transaction Code "J" and describe the nature of the transaction in the space for explanation of responses.

General Transaction Codes

- P—Open market or private purchase of non-derivative or derivative security
- S—Open market or private sale of non-derivative or derivative security

Employee Benefit Plan Transaction Codes

- A—Grant or award transaction pursuant to Rule 16b-3(c)
- M—Exercise of in-the-money or at-the-money derivative security acquired pursuant to Rule 16b-3 plan
- B—Transaction in acquisition plan pursuant to Rule 16b-3(d)(1)
- N—Participant-directed transaction pursuant to Rule 16b-3(f)(4)
- F—Payment of option exercise price or tax liability by delivering or withholding securities incident to exercise of a derivative security or vesting of a restricted security issued in accordance with Rule 16b-3
- I—Intra-plan transfer in accordance with Rule 16b-3(d)(2) resulting in acquisition or disposition of issuer securities
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Other Section 16(b) Exempt Transactions and Small Acquisition Codes (Except for Employee Benefit Plan Codes Above)

- G—Bona fide gift
- R—Acquisition pursuant to reinvestment of dividends or interest (DRIPS)
- W—Acquisition or disposition by will or laws of descent and distribution
- L—Small acquisition under Rule 16a-6
- Q—Transfer pursuant to a qualified domestic relations order
- Z—Deposit into or withdrawal from voting trust
- K—Exempt change in form of beneficial ownership

Other Transaction Codes

- J—Other acquisition or disposition (describe transaction)
- U—Disposition pursuant to a tender of shares in a change of control transaction

Form 3, 4 or 5—Holdings or Transactions Not Previously Reported

To indicate that a holding should have been reported previously on Form 3, place a "3" in Table I, column 3 or Table II, column 4, as appropriate. Indicate in the space provided for explanation of responses the event triggering the Form 3 filing obligation. To indicate that a transaction should have been reported previously on Form 4, place a "4" next to the transaction code reported in Table I, column 3 or Table II, column 4 (e.g. an open market purchase of a non-derivative security that should have been reported previously on Form 4 should be designated as "P4"). To indicate that a transaction should have been reported on a previous Form 5, place a "5" in Table I, column 3 or Table II, column 4, as appropriate. In addition, the appropriate box on the front page of the Form should be checked.
* * * * *

1. Name and Address of Reporting Person*

(Last) (First) (Middle)
(Street)
(City) (State) (Zip)
* * * * *

7. Individual or Joint/Group Filing

(Check applicable line)
 Form filed by One Reporting Person
 Form Filed by More than One Reporting Person
 * * * * *

Dated: August 10, 1994.
By the Commission.

Margaret H. McFarland,
Deputy Secretary.

[FR Doc. 94-20124 Filed 8-16-94; 8:45 am]
BILLING CODE 8010-01-P

*If the Form is filed by more than one Reporting Person, see Instruction 4(b)(v).

Federal Register

Wednesday
August 17, 1994

Part VIII

Department of Transportation

Maritime Administration

Voluntary Intermodal Sealift Agreement;
Notice

DEPARTMENT OF TRANSPORTATION

Maritime Administration

Voluntary Intermodal Sealift Agreement

AGENCY: Maritime Administration, Department of Transportation.

ACTION: Notice of Voluntary Intermodal Sealift Agreement (VISA).

SUMMARY: The Maritime Administration (MARAD) announces establishment of the Voluntary Intermodal Sealift Agreement (VISA), pursuant to section 708 of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2158). This is a new voluntary agreement and is issued in accordance with the provisions of 44 CFR part 332. The purpose of VISA is to make intermodal shipping services/systems, including ships, ships' space, intermodal equipment and related management services, available to the Department of Defense as required to support the emergency deployment and sustainment of U.S. military forces through cooperation among the maritime industry, the Department of Transportation and the Department of Defense. Through advance arrangements in joint planning it is intended that the participants will provide capacity to support a significant portion of surge and sustainment requirements in dry cargo or intermodal equipment emergencies.

FOR FURTHER INFORMATION CONTACT: Mr. Thomas M.P. Christensen, Director, Office of National Security Plans, Room Pl-1303, Maritime Administration, 400 Seventh Street SW., Washington DC 20590, (202) 366-5900, Fax (202) 488-0941.

SUPPLEMENTARY INFORMATION: The complete, draft text of VISA is published below. Copies of VISA and the associated application form are being sent, unsolicited, to U.S.-owned companies which provide intermodal shipping services/systems. Copies also are available to the public upon request.

NOTICE OF MEETING: An open meeting for the purpose of developing the final text of VISA will convene at 2 p.m., Wednesday, August 31, 1994, in Room 10234, Nassif Building, U.S. Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590. Representatives of the maritime and intermodal transportation industry and interested members of the public are invited to attend. Telephonic or facsimile notice of intent to attend, given to the point of contact above, will assure adequate seating and more

convenient access at security-controlled entrances.

TEXT OF THE VOLUNTARY INTERMODAL SEALIFT AGREEMENT: Standby Voluntary Agreement under Public Law 774, 81st Congress, as amended; "Voluntary Intermodal Sealift Agreement" (VISA).

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ABBREVIATIONS

- "USCINTRANS"—Commander-in-Chief, United States Transportation Command
- "DOD"—Department of Defense
- "DOT"—Department of Transportation
- "FEMA"—Federal Emergency Management Agency
- "FTC"—Federal Trade Commission
- "MARAD"—Maritime Administration, DOT
- "MSC"—Military Sealift Command
- "NDRF"—National Defense Reserve Fleet maintained by MARAD

- "RRF"—Ready Reserve Force component of the NDRF
- "SecDef"—Secretary of Defense
- "USTRANSCOM"—United States Transportation Command

DEFINITIONS

- "Administrator"—Maritime Administrator.
- "Attorney General"—Attorney General of the United States.
- "Chairman"—Chairman of the FTC.
- "Committee"—Intermodal Sealift Coordinating Committee
- "Controlling interest"—more than a 50 percent interest by stock ownership or otherwise.
- "Director"—Director of FEMA.
- "Intermodal equipment"—containers (including flat racks and seasheds), chassis, trailers, tractors, lifts, cranes and other ancillary items.
- "Intermodal shipping services/systems"—includes ships, ship's space, intermodal equipment, terminals, related management services, and any parts of the foregoing.
- "Management services"—management expertise and experience, intermodal terminal management, information resources and control and tracking systems.
- "Participant"—a signatory party to this Agreement, and otherwise as defined in this Agreement, III.C.
- "Representative of SecDef"—USTRANSCOM.
- "Secretary"—Secretary of Transportation.

Preface

Pursuant to the authority contained in section 708 of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2158) (Section 708), the Administrator, after consultation with representatives of ocean carriers providing intermodal shipping services/systems and with representatives of companies which lease containers, chassis and other intermodal equipment, has developed this standby agreement for voluntary contribution of intermodal shipping services/systems needed to meet national defense requirements.

USTRANSCOM procures commercial shipping capacity to meet normal peacetime requirements for ships and intermodal shipping services/systems through arrangements with common carriers (including services contracts), with contract carriers and by charter. DOD, through USTRANSCOM, maintains and operates a fleet of ships owned by or under charter to the Federal government, in sufficient numbers to meet those logistic needs of the military services which cannot be met by commercial service. Ships of the RRF may be selectively activated for peacetime military tests and exercises, and to satisfy military surge operational requirements which cannot be met by

commercial shipping in time of war, national emergency, or military contingency. Foreign-flag shipping may be used if no U.S.-flag ships can meet the operational requirement. Through advance arrangements in joint planning described in IX. of this Agreement, it is intended that Participants will provide capacity to support a significant portion of surge and sustainment requirements in dry cargo and intermodal equipment emergencies.

In time of war or national emergency, ships may be requisitioned under authority of section 902 of the Merchant Marine Act, 1936, as amended (46 App. U.S.C. 1242) (Section 902).

In some military contingency operations, more shipping capacity and related services may be required than are available under peacetime arrangements, but general mobilization of shipping by requisition may not be appropriate. This Agreement provides for the voluntary contribution of intermodal shipping services/systems in such a way as to distribute the burden of such contributions in proportion to the capacity owned and controlled by each Participant.

This Agreement will provide DOD with access to privately-owned intermodal shipping services/systems, will provide door-to-door intermodal capacity, will create a pool of vessels, vessel capacity and intermodal equipment needed in support of national defense activities and will provide Participants a defense to civil and criminal action for violation of antitrust laws in carrying out this Agreement.

This Agreement establishes the terms, conditions and general procedures under which each Participant agrees voluntarily to make intermodal shipping services/systems available at the request of the Administrator.

This Agreement is designed to create close working relationships among the Administrator, USTRANSCOM and Participants through which military needs and the needs of the civil economy can be met by cooperative action. Participants are allowed maximum flexibility to adjust commercial operations by cooperation, rationalization of services and pooling of vessels, vessel capacity and intermodal equipment. *Provided*, such measures are approved, in advance, by the Administrator.

The shipping capacity made available voluntarily under this Agreement may be supplemented by ships requisitioned, under Section 902, from non-Participants in this Agreement and from Participants.

The containers and chassis made available voluntarily under this Agreement may be supplemented by services and equipment accessed by the Administrator through the provisions of 46 CFR Part 340.

The SecDef will be asked to concur in this Agreement at the appropriate stage. SecDef will be asked to approve this Agreement as a sealift readiness program for the purpose of section 909 of the Merchant Marine Act, 1936, as amended (46 App. U.S.C. 1248) (Section 909). Withdrawal from or termination of participation in this Agreement does not excuse a Participant from Section 909 or any other provision of law if said withdrawn or terminated Participant is otherwise subject thereto.

The Director, after consultation with the Attorney General and the Chairman, has concurred in this Agreement.

Voluntary Intermodal Sealift Agreement

I. Purpose

This Agreement establishes procedures for the contribution of intermodal shipping services/systems to satisfy DOD needs. This Agreement will change from standby to active status upon a joint determination by the Secretary and SecDef that a dry cargo shipping capacity emergency or an intermodal equipment emergency affecting the national defense exists; that the defense requirement cannot be met by voluntary arrangements other than this Agreement; and that the requirement can be met more efficiently by activating this Agreement than by requisitioning ships under Section 902.

This Agreement includes all intermodal shipping services/systems and all intermodal ship types, including container, partial container, container/bulk, container/roll-on/roll-off, roll-on/roll-off and barge carrier (LASH, SeaBee, etc.). Breakbulk ships may be enrolled in this Agreement at the discretion of the Administrator. When consideration is being given to diverting intermodal shipping services/systems from commercial to defense use, an ocean carrier's entire contribution will be considered. The object of this Agreement is to promote and facilitate the use of entire intermodal transportation systems and to maximize DOD's use of commercial transportation resources while at the same time attempting to minimize disruption to commercial operations. The Agreement does, however, provide for the utilization of components of such systems (e.g., particular ship types) as necessary. Through advanced arrangements developed during

peacetime joint planning described in section IX of this Agreement, it is intended that Participants will provide capability to support a significant portion of surge and sustainment requirements in dry cargo intermodal equipment emergencies.

II. Authorities

Section 708 of the Defense Production Act, as amended (50 U.S.C. App. 2158); Executive Order 12919, 59 FR 29525, June 7, 1994; Executive Order 12148, 3 CFR 1979 Comp., p. 412, as amended; 44 CFR Part 332; DOT Order 1900.8; 46 CFR Part 340.

Section 501 of Executive Order 12919 delegated the authority of the President under Section 708 to the Secretary, among others. By DOT Order 1900.8, the Secretary delegated to the Administrator the authority under which this Agreement is sponsored.

III. General

A. *Need for this Agreement*—1. The Administrator has found, in accordance with Section 708(c)(1), that conditions exist which may pose a direct threat to the national defense of the United States or its preparedness programs and, under the provisions of Section 708, has certified to the Attorney General that a standby voluntary agreement for utilization of intermodal shipping services/systems is necessary for the national defense.

2. The quantity of military dry cargo (unit equipment, sustaining supplies and ammunition) to be moved for support of a military contingency, national emergency, or war in a foreign area could exceed the shipping capacity normally available for charter or use from the commercial sector. It is desirable to avoid the disruptive effects of ship requisition and of intermodal equipment allocation so long as military requirements can be met by voluntary cooperation between the maritime industry and the Federal government. The Attorney General, in consultation with the Chairman, has issued a finding that dry cargo capacity to meet national defense requirements cannot be provided by the industry through a voluntary agreement having less anti-competitive effects or without a voluntary agreement.

B. *History of this Agreement*—The concept of this Agreement originated in discussions between MARAD and DOD officials on arrangements to promote timely availability of ships, equipment and management services needed to operate them. Most U.S.-flag shipping companies operate ships as part of an integrated land/ocean transportation system. In times of emergency, DOD

needs not only vessels and intermodal equipment, but also the management expertise to operate such assets as transportation systems.

It is anticipated that the Merchant Marine Act, 1936, as amended (46 App. U.S.C. 1101 *et seq.*) will be amended in accordance with H.R. 4003 to provide for operating agreements between vessel owners or operators and the Secretary. This Agreement will constitute an Emergency Preparedness Program within the meaning of the amended Title VI of the Act proposed in H.R. 4003. This Agreement will constitute a sealift readiness program when approved by the SecDef and will meet all the conditions set forth under Section 909. An ocean carrier which is a Participant in this Agreement is eligible for award of a Shipping Agreement or a Container Agreement from MSC without enrollment in any other program. An ocean carrier eligible to participate in this Agreement but which elects not to do so is subject to enrollment in the MSC Sealift Readiness Program (SRP) if it (1) receives operating-differential subsidy or construction-differential subsidy or (2) wishes to carry DOD cargo. A carrier, while a Participant in this Agreement, will be subject only to the provisions of this Agreement and not to the provisions of the SRP.

C. Participation—1. An ocean carrier may become a Participant by submitting an executed copy of the form referenced in XI. below. Any ocean carrier organized under the laws of a State of the United States, or the District of Columbia, may be a Participant.

2. A company which owns, or has obtained through lease, intermodal equipment may become a Participant by submitting an executed copy of the form referenced in XI. below. Such a company must be organized under the laws of a State of the United States or the District of Columbia.

3. The term "Participant" includes the entity signing this Agreement and all United States subsidiaries and affiliates of that entity which own, operate, charter, or lease ships and intermodal equipment in the regular course of their business and in which the entity holds a controlling interest.

4. The term "Participant" also includes the controlled non-domestic subsidiaries and affiliates of the entity signing this Agreement; *Provided*, that the Administrator grants specific approval for their inclusion.

5. An entity having an operating agreement with the Secretary shall be a "Participant."

6. An entity electing to place itself in a readiness program, such as Section

909 or Section 1202(c) of the Merchant Marine Act, 1936, as amended (46 App. U.S.C. 1282(c)), shall, upon signing this Agreement, be a "Participant."

7. Periodically, a list of Participants will be published in the **Federal Register**.

D. Effective Date and Duration of Participation—Participation in this Agreement is effective upon execution of the application form by both the Participant and the Administrator, or their designees, and remains in effect until terminated by the Administrator, the Attorney General, or the Director, on due notice by letter, telegram, or publication in the **Federal Register**, or until the Participant withdraws.

E. Withdrawal from this Agreement—A Participant may withdraw from this Agreement, subject to fulfillment of obligations incurred under this Agreement prior to the date such withdrawal becomes effective, by giving 30 days written notice to the Administrator; *Provided however*, that a Participant having an operating agreement with the Secretary will not withdraw from this Agreement during the period the operating agreement is in effect. Withdrawal from this Agreement will not deprive a Participant of an antitrust defense otherwise available to it in accordance with Section 708. Withdrawal by a Participant subject to authorities referred to in C.6. above merely revives direct application of those authorities to the Participant at withdrawal.

F. Standby Period—The "standby period" is the interval between the effective date of the Administrator's acceptance of an application and the date of activation of this Agreement as prescribed in VIII. below. The Administrator's acceptance of an application does not have or imply any constraint or other effect on the Participant's business operations during the standby period.

G. Rules and Regulations—A Participant acknowledges and agrees to abide by all provisions of Section 708, and regulations related thereto which are promulgated by the Secretary, the Attorney General, the Chairman and the Director. Standards and procedures pertaining to voluntary agreements have been promulgated in 44 CFR Part 332. Note is taken that 46 CFR Part 340 establishes procedures for assigning the priority for use and the allocation of shipping services, containers and chassis. The Administrator will inform Participants of new and amended rules and regulations as they are issued.

H. Modification/Amendment of this Agreement—The Attorney General may modify this Agreement, in writing, after

consultation with the Chairman and the Administrator. The Administrator may modify this Agreement, in writing, with the concurrence or at the direction of the Director after consultation with the Attorney General and the Chairman. Modifications initiated by the Administrator will be submitted to the Director with the concurrence of the representative of SecDef. If modification of IX. below is proposed, the Administrator will also seek the concurrence of USTRANSCOM. USTRANSCOM or a Participant may propose amendments to this Agreement at any time.

I. Administrative Expenses—Administrative and out-of-pocket expenses incurred by a Participant during the standby period shall be borne solely by the Participant. Such expenses may include, among other things, traveling to meetings, making reports of owned, chartered and leased intermodal ships and equipment as contemplated in VI.E. below and keeping records as contemplated in III.J. below.

J. Record Keeping—1. MARAD and USTRANSCOM have primary responsibility for maintaining records in accordance with 44 CFR Part 332.

2. The Director of MARAD's Office of National Security Plans shall be the official custodian of records related to the carrying out of this Agreement.

3. In accordance with 44 CFR 332.3(d), a Participant shall maintain for five (5)-years all minutes of meetings, transcripts, records, documents and other data, including any communications with other Participants or with any other member of the industry or their representatives, related to the carrying out of this Agreement. Each Participant agrees to make available to the Administrator, the Attorney General, the Director and the Chairman for inspection and copying at reasonable times and upon reasonable notice any item that the Participant is required hereby to maintain. Any record maintained by MARAD or USTRANSCOM under this subsection shall be available for public inspection and copying unless exempted on the grounds specified in 5 U.S.C. 552(b) (1), (3) and (4) or identified as privileged and confidential information in accordance with Section 708(e).

K. Requisition of Ships of Non-Participants—The Administrator may requisition ships of non-Participants to supplement capacity made available under this Agreement and to balance the economic burden of defense support among ocean carriers.

L. Plan of Action—The Participants, under the leadership of the Administrator, or the Administrator's

designee, shall adopt one or more documents to implement this Agreement. Documents to implement this Agreement shall be styled "Plan of Action."

IV. Antitrust Defense

A. Under the provisions of Section 708, each Participant in this Agreement shall have available as a defense to any civil or criminal action brought under the antitrust laws (or any similar law of any State) with respect to any action taken to develop or carry out this Agreement or a Plan of Action, that such act was taken in the course of developing or carrying out this Agreement or a Plan of Action and that the Participant complied with the provisions of Section 708 and any regulation thereunder, and acted in accordance with the terms of this Agreement or a Plan of Action.

B. This defense shall not be available to the Participant for any action occurring after termination of this Agreement. Nor shall it be available upon the modification of this Agreement with respect to any subsequent action that is beyond the scope of the modified text of this Agreement, except that no such modification shall be accomplished in a way that will deprive the Participant of antitrust defense for the fulfillment of obligations incurred.

C. The defense shall be available only if and to the extent that the person asserting it demonstrates that the action was within the scope of this Agreement or a Plan of Action.

D. The person asserting the defense bears the burden of proof.

E. The defense shall not be available if the person against whom it is asserted shows that the action was taken for the purpose of violating the antitrust laws.

F. As appropriate, the Administrator will support applications by Participants to the Federal Maritime Commission or the Interstate Commerce Commission to exempt this Agreement and any Plan of Action from the operation of statutes administered by either agency.

V. Breach of Contract Defense

Under the provisions of Section 708, in any action in any Federal or State court for breach of contract, there shall be available as a defense that the alleged breach of contract was caused predominantly by action taken by a Participant during an emergency to carry out this Agreement or a Plan of Action. Such defense shall not release the party asserting it from any obligation under applicable law to mitigate damages to the greatest extent possible.

VI. Terms and Conditions

A. *Agreement by Participant*—1. Each Participant agrees to contribute intermodal shipping services/systems in accordance with this Agreement and any Plan of Action applicable to the Participant and at such times and in such amounts as the Administrator shall determine to be necessary to meet essential needs of DOD for transportation of military supplies and equipment during the period this Agreement is activated.

2. Participant agrees to provide all necessary elements to operate the intermodal transportation services/systems it contributes.

3. Each participant agrees to provide, on request, management services needed to operate the contributed intermodal transportation services/systems; including inland container and trailer and other services, for the movement to and from ports of equipment which is owned, operated, or controlled by a Participant.

4. Whenever possible, the Participant which owns, operates, or controls a ship or ship capacity contributed will provide the intermodal equipment and management services needed to utilize the ship at full efficiency. However, upon the recommendation of the Committee and at the Administrator's discretion, the ships and intermodal equipment of a Participant may be placed under the operational management and control of another Participant.

B. *Pooling Resources*—Each Participant agrees to make intermodal shipping services/systems and intermodal equipment available to other Participants when requested by the Administrator, on the advice of the Committee. Such requests will be made in order to meet the defense requirement, to ensure that overall contributions are made on a proportionate basis, and to assure that no Participant is unduly hampered in meeting the needs of the civil economy consistent with priorities established by the President.

Participants may agree to cooperate, to rationalize services and to pool intermodal assets in order to meet the defense requirement, equalize the burden of the contribution and insure continued support to the civil economy; *Provided*, however, that such activities involving Participants in the normal course of business when this Agreement has not been activated and not to facilitate meeting requirements or requests of the Administrator are not covered by this Agreement.

C. *Equitable Contribution of Shipping Capacity*—1. Each Participant agrees to contribute ships and ship's space under this Agreement in accordance with VIII.B.1. and 2. below. The contribution should be in the proportion of its "controlled tonnage" in each shipping capacity category to the total "controlled tonnage" of all Participants in each such category. Because exact proportions may not be feasible, and because unique requirements for a particular category of ships or capacity may arise, each Participant agrees that variations are permissible at the discretion of the Administrator. Any Participant may offer to increase its contribution.

2. "Controlled tonnage" consists of:

a. Ships which are owned or chartered in by a Participant and documented under United States law;

b. *PLUS* non-U.S.-documented feeder ships, in which a Participant or any of its subsidiaries or controlled affiliates has a controlling interest and which are operated as an extension of U.S.-flag line haul service;

c. *PLUS* any other non-U.S.-flag ships which a Participant may offer to designate as "controlled tonnage" and to which the Administrator agrees; and

d. *LESS* ships owned or controlled by a Participant which are chartered, leased, or contracted out to others for remaining periods of at least six months from the effective date of activation of this Agreement and for which there is no termination clause for war, national emergency, or military contingency.

3. The laws of the country of documentation may require the approval of that government before ships on its register can be covered by this Agreement. The Participant agrees to make a good faith effort to obtain the required approval.

4. The categories of ships are:

a. Roll-on/roll-off (RO/RO) ships. RO/RO ships which do not have installed ramps should be supplied with portable ramps, to the extent practicable, by the Participant.

b. Combination container-RO/RO ships.

c. Barge carriers (LASH, SeaBee, etc.) The appropriate number of lighters should be supplied to operate the vessel at full efficiency.

d. Containerships, both self-sustaining and non-self-sustaining. Three containers should be provided per container space.

e. Partial containerships and container bulk. Three containers should be provided per container space.

f. Breakbulk ships.

5. The contribution of each Participant shall be calculated by the

Administrator as soon as possible after this Agreement is activated. The following standards will be used to determine proportionate contributions of "controlled tonnage":

a. *RO/RO ships*—Square feet (meters) of cargo deck area.

b. *Combination container—RO/RO*—Square feet (meters) and container capacity (expressed in twenty-foot equivalent units).

c. *Barge Carrier*—Cargo deadweight capacity.

d. *Partial containerships and container bulk*—Cargo deadweight.

e. *Self-sustaining containerships*—Total below deck and on deck container capacity (expressed in twenty-foot equivalent units).

f. *Non-self-sustaining containerships*—Total below deck and on deck container capacity (expressed in twenty-foot equivalent units).

g. *Breakbulk ships*—Cargo deadweight.

6. A ship on charter to a Participant shall not be subject to contribution under this Agreement in the case where the period of contribution would be longer than the remaining term of the Participant's charter or in a case where the contribution would otherwise breach the terms of the charter party, but such tonnage shall be included in the calculation of the Participant's controlled tonnage.

7. The "controlled tonnage" of each Participant shall be divided into two categories:

a. *Level I*—Vessels of the Participant which are:

i. Subject to Title VI of the Merchant Marine Act, 1936, as amended (46 App. U.S.C. 1171 *et seq.*) It is anticipated that Title VI will be amended in accordance with H.R. 4003 to provide for operating agreements between vessel owners or operators and the Secretary. Vessels covered by an operating agreement are in Level I.

ii. Otherwise required by law to be made available to meet national defense requirements.

b. *Level II*—All other vessels of the Participant.

Level I vessels shall be provided immediately in response to the call of the Administrator and instructions of the Administrator are to be observed with the utmost dispatch. Level I vessels will be called into service before Level II vessels.

Level II vessels shall be provided according to the schedule set forth in the call of the Administrator. Level II vessels will be called into service if and when Level I vessels actually provided are not sufficient to meet the emergency.

A Participant may offer Level II vessels for service as Level I vessels.

8. Other than the specific use of ships described in VI.C.2.b. (foreign-flag feeder vessels), it is expected that vessels covered by an operating agreement will be utilized to the maximum extent possible for line haul service to meet DOD requirements. When a specific ship covered by an operating agreement is removed from regular service to meet DOD requirements, a foreign-flag ship may be employed to replace the ship taken from regular service.

9. The Administrator retains the right under law to requisition ships of Participants. A Participant's ships which are directly requisitioned by the United States or which are under other U.S. Government voluntary arrangements shall be credited against the Participant's proportionate contribution under this Agreement. Ships on charter to DOD when this Agreement is activated shall not be so credited.

D. *Equitable Contribution of Intermodal Equipment*—

1. "Controlled intermodal equipment" shall mean such equipment as is needed in the operation of a Participant's intermodal shipping system and which a Participant owns or leases.

2. During the standby period, the Administrator shall determine the inventory of controlled intermodal equipment as of a specific date each year.

3. When an ocean carrier Participant contributes containerships or partial containerships, or capacity, it will provide containers in accordance with VI.C.4. above and chassis as specified in a Plan of Action.

4. Each Participant agrees to contribute intermodal equipment as provided in a Plan of Action, which may require contribution in the proportion of its inventory of each type of equipment to the total inventory of that type held by all Participants; *Provided*, that, at the discretion of the Administrator, on the advice of the Committee, when a Participant contributes specialized equipment which is not available from all Participants, its proportionate share of common types of equipment may be adjusted so that its overall contribution is in approximately the same proportion to its total available inventory as are the overall contributions of other Participants to their available inventories.

5. Prior to calls for contributions of intermodal equipment, the Administrator, on the advice of the Committee, will determine the portion

and types of equipment to be acquired from the ship operating companies and the portion and types of equipment to be acquired from leasing companies.

6. A Participant may contribute intermodal equipment in excess of its proportionate share with the approval of the Administrator, after consultation with the Committee.

E. *Enrollment of Ships and Equipment*—

1. The Administrator will maintain a record of ships and equipment enrolled under this Agreement according to a Plan of Action. A schedule of ships and equipment which are owned and which are controlled by an applicant and which the applicant proposes for enrollment will be attached to the form referenced in VIII. below. Ships and equipment will be enrolled on the date this Agreement becomes effective for the Participant. Participants will notify the Administrator of all changes to the schedule semi-annually on June 30 and December 31.

2. The Administrator will make the enrollment data available to USTRANSCOM.

3. Information which a Participant identifies as privileged and confidential shall be withheld from public disclosure in accordance with Section 708(h)(3) and section 705(e) of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2155), and 44 CFR Part 332.

4. Enrolled ships are required to comply with 46 CFR Part 307, Establishment of Mandatory Position Reporting System for Vessels.

F. *Compensation*—1. The Administrator shall, in consultation with Participants and with the concurrence of USTRANSCOM, promulgate a methodology for determining rates of compensation under this Agreement. The methodology will be developed as a separate Plan of Action.

2. Employing the forms, including terms and conditions, found in the Plan of Action developed under this Agreement, and the compensation determined in accordance with the rate methodology (VI.F.1 and implementing Plan of Action), the Administrator or his designee, or USTRANSCOM or its designee, shall execute charters, leases and other contractual arrangements which implement this Agreement upon its activation.

G. *War Risk Insurance*—

1. SecDef will either reimburse for additional commercial war risk insurance or provide no-premium government war risk insurance, subject to the provisions of Section 1205 of the Merchant Marine Act, 1936, as amended

(46 App.U.S.C. 1285(a)) upon activation of this Agreement.

2. Each ship enrolled under this Agreement shall be eligible for U.S. Government war risk insurance and for an interim insurance binder under the provisions of 46 CFR Part 308, notwithstanding restrictions on eligibility set out in Subpart A thereof.

VII. Intermodal Sealift Coordinating Committee

There shall be an Intermodal Sealift Coordinating Committee comprising the Administrator or his designee, USCINCTRANS or his designee and a representative from each of the Participants. The functions of the Committee are described in VIII and IX below.

VIII. Activation of This Agreement

A. *Determination of Necessity*—This Agreement shall be activated upon a joint determination by the Secretary and SecDef that a dry cargo shipping capacity emergency or an intermodal equipment emergency affecting the national defense exists, and that the defense requirements cannot be met more effectively and timely without activation of this Agreement. A dry cargo shipping capacity emergency and an intermodal equipment emergency will be deemed to exist when dry cargo shipping capacity and intermodal equipment required to support operations of U.S. Forces outside the continental United States cannot be supplied through the commercial market or other voluntary arrangements. The Administrator shall notify the Attorney General and the Chairman when such a determination is made.

B. Intermodal Sealift Coordinating Committee—

1. The Administrator or his designee shall chair the Committee, and will be assisted by a USTRANSCOM staff member. Upon activation of this Agreement, the Administrator or his designee shall convene a meeting of the Committee for the purposes of advising participants of DOD requirements, soliciting recommendations regarding the implementation of this Agreement in accordance with previous joint planning, and identifying any special circumstances affecting participants' contributions. The Administrator or his designee will administer this Agreement and will apportion the contributions of dry cargo capacity and management services by the Participants to meet DOD requirements.

2. If any necessary Plan of Action has not been adopted at the time of activation of this Agreement, the Administrator shall assure completion

of such Plan of Action in order to meet DOD requirements.

3. The Committee Chair shall:

a. Notify the Attorney General, the Chairman, the Director and all Participants of the time, place and nature of each meeting and of the proposed agenda of each meeting to be held to implement this Agreement;

b. Provide for publication in the *Federal Register* of a notice of the time, place and nature of each such meeting. If a meeting is open, a *Federal Register* notice will be published reasonably in advance of the meeting. If a meeting is closed, a *Federal Register* notice will be published within ten (10) days after the meeting and will include the reasons for closing the meeting;

c. Establish the agenda for each meeting and be responsible for adherence to the agenda;

d. Provide for a full and complete transcript or other record of each meeting and provide one copy each of transcript or other record to the Attorney General, the Chairman, the Director, all Participants and the designated staff member of DOD; and

e. Take necessary action to protect confidentiality of data discussed with or obtained from Participants.

C. *The Representative of the Secretary of Defense*—USTRANSCOM is the SecDef's representative in the implementation of this Agreement.

D. *Ship and Space Chartering*—Charters or other agreements for ships, ship space or intermodal shipping services/systems will be executed, as specified in the relevant Plan of Action.

E. *Leases of Intermodal Equipment*—Lease agreements for intermodal equipment will be executed, as specified in the relevant Plan of Action.

F. *Management Service Contracts*—Management service contracts will be executed, as specified in the relevant Plan of Action.

G. *Termination of Charters, Leases and Other Contractual Arrangements*

1. USTRANSCOM will notify the Administrator as far in advance as possible of the prospective termination of charters, leases, management service contracts or other contractual arrangements under this Agreement.

2. If this Agreement is superseded by the general requisitioning of ships, the Administrator, as a matter of discretion, may replace charters made under this Agreement with charters made under requisition.

IX. Joint Planning in the Standby Period

A. *Chairmanship*—During the standby period, when engaged in the planning described in IX.B., the Committee will

be co-chaired by MARAD and USTRANSCOM.

B. Planning—

1. During the standby period the Committee may be convened to:

a. Develop a Plan of Action to implement this Agreement;

b. Consider amendments to this Agreement or a Plan of Action;

c. Engage in joint planning to meet military requirements for intermodal shipping services/systems;

d. Test readiness under this Agreement to meet requirements by participating in exercises, including military-sponsored exercises;

e. Evaluate capabilities under this Agreement to meet requirements; and

f. Discuss methods for improving procedures under this Agreement in order to meet requirements.

2. Meetings for joint planning will be convened annually during the standby period, or more frequently if the co-Chairmen so determine.

C. *Security Measures*—The Administrator, in cooperation with USTRANSCOM and with appropriate security measures, will provide for sharing of wartime planning information with Participants, to enable Participants to plan their wartime commitment.

X. Plan of Action: Development Meeting

The Administrator shall convene the Committee within ninety days of the effective date of the first Participant's VISA. The purpose shall be to develop a Plan of Action to implement this Agreement.

XI. Application and Agreement

The Administrator has adopted a form on which intermodal ship operators and intermodal equipment leasing companies may apply to become a Participant in this Agreement ("Application and Agreement to Participate in the Voluntary Intermodal Sealift Agreement"). The form incorporates by reference the terms of this Agreement.

By order of the Maritime Administrator.

Date: August 12, 1994.

James E. Saari,

Acting Secretary, Maritime Administration.

United States of America Department of Transportation Maritime Administration

Application and Agreement to Participate in the Voluntary Intermodal Sealift Agreement

The applicant identified below hereby applies to participate in the Maritime Administration's voluntary agreement entitled "Voluntary Intermodal Sealift

Agreement." The text of said Agreement is published in _____ Federal Register _____, 19____. This Agreement is authorized under Section 708 of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2158). Regulations governing this Agreement appear at 44 CFR Part 332 and are reflected at 49 CFR Subtitle A.

The Applicant hereby acknowledges and agrees to the incorporation by reference into this Application and Agreement of the entire text of the Voluntary Intermodal Sealift Agreement published in _____ Federal Register _____, 19____, as though said text were physically recited herein.

The Applicant, as a Participant, agrees to comply with the provisions of

Section 708 of the Defense Production Act of 1950, as amended, the regulations at 44 CFR Part 332 and as reflected at 49 CFR Subtitle A, and the terms of the Voluntary Intermodal Sealift Agreement. Further, the Applicant, as a Participant, subject to the request of the Maritime Administrator, hereby agrees to voluntarily make vessels, intermodal equipment and management of intermodal transportation systems available for use by the Department of Defense and to other Participants in this Agreement for the purpose of meeting national defense requirements.

Attest: _____
(Applicant-Corporate Name)

(CORPORATE SEAL)
Effective Date: _____

(Secretary)
(SEAL)

(Applicant-Corporate Name)
By: _____
(Signature)

(Position Title)
UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
MARITIME ADMINISTRATION

By: _____
(Maritime Administrator)

[FR Doc. 94-20196 Filed 8-16-94; 8:45 am]
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Federal Register

Wednesday
August 17, 1994

Part IX

**Department of the
Interior**

Fish and Wildlife Service

50 CFR Part 20
Migratory Bird Hunting; Final Frameworks
for Early-Season Migratory Bird Hunting
Regulations; Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 20

RIN 1018-AA24

Migratory Bird Hunting; Final Frameworks for Early-Season Migratory Bird Hunting Regulations

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: This rule prescribes final early-season frameworks from which States, Puerto Rico, and the Virgin Islands may select season dates, limits, and other options for the 1994-95 migratory bird hunting season. These early seasons may open prior to October 1, 1994. The effect of this final rule is to facilitate the selection of hunting seasons by the States and Territories to further the annual establishment of the early-season migratory bird hunting regulations. These selections will be published in the *Federal Register* as amendments to §§ 20.101 through 20.107, and § 20.109 of title 50 CFR part 20.

EFFECTIVE DATE: This rule takes effect on August 17, 1994.

ADDRESSES: Season selections from States and Territories are to be mailed to: Chief, Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of the Interior, ms 634—ARLSQ, 1849 C Street, NW., Washington, DC 20240. Comments received are available for public inspection during normal business hours in room 634, Arlington Square Building, 4401 N. Fairfax Drive, Arlington, Virginia.

FOR FURTHER INFORMATION CONTACT: Paul R. Schmidt, Chief, Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of the Interior, ms 634—ARLSQ, NW., 1849 C Street, Washington, DC 20240. (703) 358-1714.

SUPPLEMENTARY INFORMATION:**Regulations Schedule for 1994**

On April 7, 1994, the Service published for public comment in the *Federal Register* (59 FR 16762) a proposal to amend 50 CFR part 20, with comment periods ending July 21, 1994, for early-season proposals and August 29, 1994, for late-season proposals. On June 8, 1994, the Service published for public comment a second document (59 FR 29700) which provided supplemental proposals for early- and late-season migratory bird hunting regulations frameworks.

On June 23, 1994, a public hearing was held in Washington, DC, as announced in the April 7 and June 8 *Federal Registers* to review the status of migratory shore and upland game birds. Proposed hunting regulations were discussed for those species and for other early seasons.

On July 12, 1994, the Service published in the *Federal Register* (59 FR 35566) a third document in the series of proposed, supplemental, and final rulemaking documents which dealt specifically with proposed early-season frameworks for the 1994-95 season. This rulemaking is the fourth in the series, and establishes final frameworks for early-season migratory bird hunting regulations for the 1994-95 season.

Review of Public Comments and the Service's Response

As of July 25, 1994, the Service had received 36 written comments; 28 of these specifically addressed early-season issues. The Service also received recommendations from all four Flyway Councils. Early-season comments are summarized and discussed in the order used in the April 7 *Federal Register*. Only the numbered items pertaining to early seasons for which comments were received are included.

General

Written Comments: The Humane Society of the United States recommended that all seasons open at noon, mid-week, to reduce the large kills associated with the traditional Saturday openings. They recommend special seasons be discontinued for the same purpose. One individual from California suggested that the waterfowl bag limits and seasons should be established on a flyway basis. Two local sportsmen's organization from Massachusetts requested that shooting hours remain one-half hour before sunrise to sunset.

1. Ducks

The categories used to discuss issues related to duck harvest management are as follows: (A) General Harvest Strategy, (B) Framework Dates, (C) Season Length, (D) Closed Seasons, (E) Bag Limits, (F) Zones and Split Seasons, and (G) Special Seasons/Species Management. Only those categories containing substantial recommendations are included below.

G. Special Seasons/Species Management**i. September Teal Seasons**

Council Recommendations: The Central Flyway Council recommended

that September teal season shooting hours begin one-half hour before sunrise to sunset without further evaluation for all non-production Central Flyway States.

The Central Flyway Council recommended that the Service review the guidelines for establishing a September teal season for any new requests for seasons.

The Upper-Region and Lower-Region Regulations Committees of the Mississippi Flyway Council recommended that Michigan be permitted to hold an experimental September teal season in southeastern portions of the State.

The Lower-Region Regulations Committee of the Mississippi Flyway Council requested that September teal season shooting hours beginning one-half hour before sunrise be made operational and that no further evaluation of shooting hours be required.

Written Comments: An individual representing a group of duck hunters from Wisconsin expressed concern that some States with a September teal season are allowed shooting hours that begin one-half hour before sunrise. He believes that hunters are unable to identify ducks and that most crippling loss occurs prior to sunrise.

The Michigan Department of Natural Resources requested that Michigan be allowed to conduct a teal season in areas where teal concentrate. They proposed limiting the season to no more than 2,000 hunters and believed that hunters' skills at identifying waterfowl are better now than they were during initial evaluations of teal seasons in the 1960's. Four individuals from Michigan supported the proposed September teal season for portions of Michigan.

Service Response: Breeding population information for 1994 and harvest and band-recovery information from the 1993-94 waterfowl season indicate that a September teal season can be offered to nonproduction States of the Central and Mississippi Flyways in 1994.

During their 1993-94 teal seasons, the States of Colorado, Kansas, New Mexico, Oklahoma and Texas in the Central flyway and Alabama, Louisiana, and Mississippi in the Mississippi Flyway participated in a study that indicated that shooting hours beginning at one-half hour before sunrise during teal seasons have a negligible impact on nontarget duck species in those States. The Service believes the data are sufficient to address its concern about the potential harvest of nontarget species during the presunrise period, and will permit those States that

participated in the study to have presunrise shooting hours during the 1994 teal season, without further evaluation. Other States that are permitted a teal season (Arkansas, Illinois, Indiana, Missouri, and Ohio), but did not participate in the study, must begin shooting hours at sunrise.

The Service recognizes the value of these September teal seasons in providing additional hunting opportunity but remains concerned about the potential impacts of these seasons on non-target species in certain areas. The Service strategy regarding use of teal seasons specifies that teal seasons can be offered only to nonproduction States of the Central and Mississippi Flyways. Because Michigan is considered a production State and was not part of the original, comprehensive evaluation, the Service does not support the requests for a teal season. Although the definitions of production and nonproduction States may need to be reviewed, the Service has stated in the August 23, 1993, *Federal Register* (58 FR 44577) that it prefers a Flyway-wide approach to assess whether expansion of teal seasons to areas beyond those currently allowed is permissible. The Michigan proposal does not meet this criterion. The Service also notes that such expansions would require a reevaluation of the entire teal season, including an analysis of information from areas currently permitted teal seasons as well as areas into which teal seasons might be expanded.

ii. September Duck Seasons

Council Recommendations: The Upper-Region and Lower-Region Regulations Committees of the Mississippi Flyway Council recommended that Iowa be permitted to hold a portion of their regular duck season in September to increase harvest opportunity on blue-winged teal.

Written Comments: Several individuals and petitions with 4,697 signatures requested nine additional days of duck hunting in Wisconsin. The request notes that the efforts of duck hunters, the Wisconsin Department of Natural Resources, Ducks Unlimited, and various sportsmen's organizations have resulted in record levels of duck production. The additional nine days of duck hunting would make Wisconsin's season equal in length to certain other States in the Mississippi Flyway that are permitted a September teal season.

Service Response: The Service previously determined in the "Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (SEIS 88)"

that the extension of framework dates into September for Iowa's September duck season was a type of special season. The Service further acknowledges that the 1990 assessment of special September teal seasons included data from Iowa's September duck season segments during 1979-87. As such, the effects of Iowa's special seasons were taken into account when determining the appropriateness of September teal seasons as a harvest-management tool. Iowa's data also suggested little impact on other duck species during this season. Therefore, the Service believes that Iowa's September duck season segment, as conducted during 1979-87, is consistent with the Service's policy regarding the use of special seasons. Current status information for the blue-winged teal supports Iowa's request for a September duck season in 1994. The Service stated in SEIS 88 that special seasons should be re-evaluated periodically to assess potential changes in impacts to the waterfowl resource. The Service notes that more than a decade has passed since Iowa conducted its evaluation of this season and requests that Iowa collect information documenting the effect of this season on other duck species in Iowa.

Regarding the requests for additional days of duck hunting in Wisconsin, an important consideration in the establishment of hunting regulations is the distinction between regular hunting seasons and special seasons. Regular seasons are developed by Flyway/management unit, and the same season length, bag limit, etc. are provided for all States in that Flyway/management unit. Special seasons, however, usually involve additional harvest opportunity and are focused on a single species or group of species. Because of this, the use of these seasons is limited to times and areas where the species or group is sufficiently isolated to minimize impacts on other species/groups. This limitation increases the likelihood that in some cases a special season or some compensating increase in other harvest opportunity cannot be available to all States. The September teal season is an example. Wisconsin is one of nine States in the Mississippi and Central Flyways that are not eligible for this special season.

3. Sea Ducks

Council Recommendations: The Atlantic Flyway Council recommended that the 1994 sea duck season frameworks remain the same as the 1993-94 frameworks.

Written Comments: The Humane Society of the United States (Humane Society) opposed this season in the Atlantic Flyway because they believe crippling and wanton waste occur, information is insufficient to justify a season, and available data indicate possible declines for certain sea duck species. They believe that season length and bag limits in the Atlantic Flyway should be reduced substantially until more complete information on biology and population status is available. They repeat their concern regarding seasons and limits on sea ducks which are deemed too liberal, considering the quality and quantity of data on population status and trends, and recommend reductions in those regulations. The Humane Society notes that apparently the Pacific Flyway Council has not completed a comparable evaluation of its sea duck harvests and believes such seasons should be closed until necessary data are obtained. Two local organizations from Massachusetts requested a continuation of the 107-day sea duck season, with a 7-bird bag limit to include scoters.

Service Response: The Service continues to be concerned about the status of sea ducks and the potential impact that increased hunting activity could have on these species. In recognition of the need for additional information on these species, the Service prepared a report (dated June, 1993) on sea duck and merganser hunting seasons, status, and harvests in Alaska and the Pacific Flyway coastal states. This document was prepared for use by the Service and the Pacific Flyway Council in evaluating the effects of seasons on these ducks. There is no special season on sea ducks in the Pacific Flyway; however, Alaska has a sea duck limit that is additional to the limit on other ducks. In the Atlantic Flyway, a report was recently completed (dated April, 1994) and distributed, describing the status of sea ducks in that portion of the continent. Cooperative efforts are ongoing to summarize additional information on sea ducks, however the Service continues to emphasize the importance of completing the sea duck management plan. Furthermore, the Service considers improvements in survey capabilities for these species to be extremely important for future management actions. In 1993, the Service reduced bag limits on scoters from 7 to 4 within an overall 7-bird sea duck limit. The Service will continue to monitor these species and notes that

further harvest restrictions may be necessary.

4. Canada Geese

A. Special Seasons

Council Recommendations: The Atlantic Flyway Council recommended that West Virginia be permitted to initiate a 3-year experimental resident Canada goose season during September 1-15.

The Atlantic Flyway Council recommended modifications to hunt zones for September seasons on resident Canada geese in Maryland, North Carolina, Pennsylvania (Northwestern and Southeastern Zones), and Virginia. These proposed changes would be experimental.

The Upper-Region Regulations Committee of the Mississippi Flyway Council made the following recommendations pertaining to special Canada goose seasons:

In Indiana, expand the September season hunting area to Statewide with a September 1-15 framework. The proposed changes would not be experimental.

In Michigan, extend the seasons in the northern Lower Peninsula and Upper Peninsula for 2 additional years and expand the zone in the Upper Peninsula to approximately the eastern half of the Peninsula; change the season length in the southern part of the Lower Peninsula from 10 to 15 days (September 1-15) for 3 years and include the southern portions of Tuscola and Huron Counties. The proposed changes would be experimental.

In Minnesota, expand the Fergus Falls/Alexandria Zone and extend the framework for the 10-day season to September 1-16 for 3 years. The proposed changes would be experimental.

In Ohio, expand the September-season hunting area to Statewide with a September 1-15 framework. The proposed changes would not be experimental.

In Wisconsin, enlarge the size of the Southeastern Wisconsin Zone and continue as a special season with a September 1-13 framework. The proposed changes would not be experimental.

The Lower-Region Regulations Committee of the Mississippi Flyway Council requested that the Service closely monitor all Canada goose seasons and fully analyze data from existing special or experimental seasons before expanding seasons that cumulatively might increase harvest of the Southern James Bay Population.

Also, current special seasons should adhere to present criteria designed by the Service.

The Lower-Region Regulations Committee of the Mississippi Flyway Council also requested that a 3-year experimental, 10-day September Canada goose season be permitted in the eastern portion of Tennessee.

The Pacific Flyway Council recommended that there be no change in frameworks in the experimental goose zone in Oregon or in the operational status in Washington. They also recommended no change in frameworks for Wyoming.

Written Comments: The Wisconsin Department of Natural Resources expressed concern that all of their special September Canada goose zone would return to experimental status, rather than just the expanded portion. They also indicated that they wish to delay the zone expansion and later season dates until next year.

Service Response: The Service agrees with the proposed changes to resident Canada goose seasons in Maryland, North Carolina, Pennsylvania, Virginia, Indiana, Michigan, Minnesota, Ohio, and Wisconsin and the new seasons in Tennessee and West Virginia. All of these proposed changes are considered experimental and subject to evaluation.

The Service notes that all of the seasons proposed in the Mississippi Flyway, except those for Michigan, Minnesota and Tennessee, were not proposed as experimental. The Service remains committed to population-specific management of Canada geese. However, the Service believes that the contribution of different goose populations to the goose harvest during special seasons must be determined experimentally. For this reason, the Service has established criteria for special Canada goose seasons (58 FR 44578-44579), which clearly state the need for experimental evaluation of new seasons, including extensions of geographic areas or times. Therefore, the Service agrees to the changes proposed by the Mississippi Flyway Council, but on an experimental basis and provided an approved evaluation is conducted as specified in the existing criteria.

B. Regular Seasons.

Council Recommendations: The Upper-Region Regulations Committee of the Mississippi Flyway Council recommended that the early-season frameworks provide for the opening of regular goose seasons in Wisconsin and the Upper Peninsula of Michigan as early as September 24.

The Lower-Region Regulations Committee of the Mississippi Flyway

Council requested that the Service closely monitor all Canada goose seasons and fully analyze data from existing special or experimental seasons before expanding seasons that cumulatively might increase harvest of the Southern James Bay Population of Canada geese.

The Pacific Flyway Council seeks a limited resumption of cackling Canada goose hunting throughout their range and recommends that the Service provide an expedited review of their recommended changes in cackling Canada goose regulations for impacts on Aleutian Canada geese under the Section 7 consultation process.

Written Comments: The Michigan Department of Natural Resources believes that regular goose seasons should be allowed to open as early as September 24 in the Upper Peninsula of Michigan. They noted that significant numbers of migrant geese begin arriving in the Upper Peninsula during September 20-24 in most years. They anticipate that harvest in this region would remain small compared to the rest of the State. They also believe that nearly all Canada geese harvested in this region are of the giant subspecies or the Mississippi Valley Population. Finally, they noted that allowing a September 24 opening would provide equitable hunting opportunity compared to other areas because most geese leave this region by early November.

The Association of Village Council Presidents, representing Native American interests in the Yukon-Kuskokwim Delta area of Alaska, supported modest liberalizations of white-fronted goose seasons in Alaska and Washington. However, they did not support further liberalizations in Oregon or California, noting that liberalizations occurred during each of the preceding years and that it was difficult to measure the effects of these incremental changes.

Service Response: The Service concurs with the September 24 opening of regular Canada goose seasons in Wisconsin and in Michigan's Upper Peninsula. The Service routinely monitors Canada goose seasons for impacts on the Southern James Bay Population through its harvest surveys and reviews of State evaluation reports on special seasons.

The population index for cackling Canada geese was 164,300 geese in 1993, which was 10 percent above the 1992 index and the largest since this special survey was initiated in 1979. The Service supports the Pacific Flyway Council's recommendation for a resumption of the season on these geese and frameworks described herein reflect

that change. Section 7 consultation is an integral part of the season-setting process.

The population index for the Pacific Population of white-fronted geese was 295,000 in November 1993 and near the population objective of 300,000. The Service concurs with the Association of Village Council Presidents for increased limits on white-fronted geese in western Alaska and frameworks, herein, reflect that change. A decision regarding frameworks affecting white-fronted goose harvests in Washington, Oregon, and California, however, will be deferred to the late-season process.

9. Sandhill Cranes

Council Recommendations: The Central and Pacific Flyway Councils recommended no changes in the Federal frameworks for the hunting of sandhill cranes during the 1994-95 seasons.

Written Comments: The Texas Parks and Wildlife Department responded to statements in the April 7, 1994, Federal Register (59 FR 16765) which indicated that there should be no increase or shift in crane harvest toward the Gulf Coast Subpopulation of Mid-Continent Sandhill Cranes and especially the greater-sandhill-crane component. They noted that the Central Flyway Council did not propose any framework changes for the 1994-95 seasons and asked for clarification of the reasons for this concern, especially since the population remains stable. In this regard, they suggested that the Service provide a harvest objective, rationale and method of evaluation of any harvest reduction proposed. Furthermore, the appropriate level of management should be clearly identified, i.e. population, subpopulation, or subspecies level. Although biologists working in Texas support management at the population or subpopulation level, they indicated that zoning for the hunting of cranes could not be attempted until these issues had been resolved.

Service Response: In 1993, the Central and Pacific Flyways completed a revision of the Cooperative Management Plan for the Mid-Continent Population of sandhill cranes. This revision established a goal of a stable population at levels observed during the 1982-92 period and removed the harvest threshold (25,000) that had been in place since 1981. The Service believes that future management actions for Mid-Continent cranes should be based on the recognition of biologically discrete subpopulations, which would necessitate the development of certain data collection efforts at the subspecies level. In the April 9, 1993, Federal Register (59 FR 16765), the Service

reiterated its concern that overall harvest levels should not be increased and that there should be no increase or shift in harvest toward the Gulf Coast Subpopulation or to the greater sandhill crane component. The Service supports continuation of last year's frameworks but remains extremely concerned about possible increases or shifts in harvest toward the Gulf Coast subpopulation, especially the greater-sandhill-crane component. The Service considers a harvest threshold to be an integral component of the Cooperative Management Plan for the Mid-Continent Population and hopes that the newly-formed crane working group, appointed by the Central Flyway Council, will strongly reconsider the need for a harvest threshold in the development of a harvest strategy for this population.

11. Moorhens & Gallinules

Written Comments: The Humane Society of the United States believes the bag limits for moorhens are extremely high.

Service Response: The Service is not aware of any information indicating that the current bag limits have had any adverse impact on moorhen populations. Since these bag limits have been the same for a number of years, the Service believes they are appropriate.

12. Rails

Written Comments: The Humane Society of the United States believes that bag limits for rails are extremely high and that they are not consistent with wise use and conservation of the resource.

Service Response: Available information indicates that harvest pressure on rails is relatively light and there is no evidence to suggest that the frameworks provided herein are not appropriate.

13. Snipe

Council Recommendations: The Pacific Flyway Council recommends no change in frameworks.

Written Comments: The Humane Society of the United States believes the bag limits for common snipe are extremely high.

Service Response: The Service believes that frameworks provided herein are appropriate, considering the relatively light harvest pressure on snipe.

14. Woodcock

Council Recommendations: The Lower-Region Regulations Committee of the Mississippi Flyway Council requested that Tennessee be allowed to

divide the State into 2 zones (East and West) for woodcock hunting.

Service Response: The Service is concerned about the gradual long-term declines in woodcock populations in both the Eastern and Central management regions. Although habitat changes appear to be the primary factor in the declines, adjustment of harvest opportunities may be appropriate in light of current population trends. The Service will work with the Atlantic and Mississippi Flyway Councils to review the status of woodcock and cooperatively develop a harvest-management strategy. The Service believes that zoning has the potential to increase the harvest of woodcock. Therefore, the Service does not support a zoned woodcock season at a time when woodcock populations are declining and restrictive harvest regulations are being considered to bring harvest opportunities to levels commensurate with current populations.

15. Band-Tailed Pigeon

Council Recommendations: The Pacific Flyway Council recommended no change in the band-tailed pigeon frameworks for the Pacific Coast and Four Corners populations.

Service Response: The Service supports the continuation of seasons on both the Coastal and Interior Populations. Regarding the Coastal Population, the Service has reviewed recent population status and harvest information provided by the States. This information indicates that the Coastal Population probably numbers between 2 and 3 million birds and that the 1993 harvest did not exceed 16,000 band-tails. However, the Service remains concerned about the long-term decline of this population and continues to support restrictive harvest regulations. Again this year, all States having band-tailed pigeon hunting seasons must require band-tailed pigeon hunters to obtain mandatory State permits (or participate in the nationwide Migratory Bird Harvest Information Program) to provide a sampling frame for obtaining more precise estimates of band-tailed pigeon harvest. Those States not participating in the Migratory Bird Harvest Information Program will be required to conduct a harvest survey and provide the results to the Service by June 1, 1995.

16. Mourning Doves

Council Recommendations: The Central Flyway Council recommended that Texas be allowed an increase in the number of segments from 2 to 3 in 2 of

the 3 mourning dove hunting zones now offered to Texas.

The Pacific Flyway Council recommended that there be no change in the frameworks for mourning doves.

Service Response: The Service denies the request pertaining to Texas. In the August 23, 1993, **Federal Register** (58 FR 44581), the Service noted that the proliferation of zones and split seasons is contrary to the preferred alternative in the "1988 Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (FSES 88-14)." In regard to Texas, the Service noted that no other States are allowed to select both 3 zones and 3 splits for any species; in fact, no State other than Texas is allowed to select 3 zones for doves. The Service also expressed concern about the ability to detect and measure possible changes in harvest that may result from those additional splits.

Additionally, the Service is concerned about changes in the schedule for inclusion of States in the Harvest Information Program. It emphasizes the need for full implementation of this program to gain accurate harvest estimates for mourning doves and other migratory game birds. This information is needed to evaluate changes in hunting seasons such as the proposed change in Service policy governing zones and splits in Texas.

17. White-winged and White-tipped doves

Council Recommendations: The Central Flyway Council recommended that the number of white-winged doves allowed in the 12-bird aggregate bag limit during the mourning dove season be increased from 2 to 6 in the Texas Counties of Cameron, Hidalgo, Starr, and Willacy.

The Pacific Flyway Council recommended no change in the frameworks.

Service Response: The Service approves the request to increase the bag limit in Texas. The whitewing population in the four-county area of South Texas has improved dramatically from past years and has apparently recovered from significant population decreases due to habitat degradation caused by drought and freezing temperatures.

18. Alaska

Council Recommendations: The Pacific Flyway Council recommended that Alaska be allowed no more than 1 Canada goose in the daily bag for Unit 9E and the western portions of Unit 18. The Council also recommended that the

Statewide closure on cackling Canada geese be removed.

The Pacific Flyway Council recommended removal of restrictive bag limits for white-fronted geese in Units 1-9 and 14-18 in Alaska. The goose limit would be 6 daily and 12 in possession, of which no more than 4 daily and 8 in possession could be any combination of Canada or white-fronted geese.

The Pacific Flyway Council recommended no change in frameworks for tundra swans.

Written Comments: The Association of Village Council Presidents, representing Native American interests in the Yukon-Kuskokwim Delta area of Alaska, supported modest liberalizations of white-fronted goose seasons in Alaska and Washington.

The Humane Society of the United States recommends that the opening date for all seasons in Alaska be delayed by two weeks so that young birds are able to leave natal marshes before being subjected to hunting pressure.

Service Response: The Service concurs with the Pacific Flyway Council's recommendations for one Canada goose in the daily limit in those areas in western Alaska previously closed to protect cackling Canada geese and agrees with eliminating the statewide closure on cackling Canada geese. The frameworks herein reflect those changes.

The Service supports the Association for Village Council Presidents' recommendation for increased limits on white-fronted geese in portions of western Alaska; and frameworks herein reflect that change. A decision regarding seasons in Washington will be deferred until the late-season process. It is important to note that in Alaska, hunting pressure on migratory birds is comparatively light. Many northern species will have migrated from the State before seasons open there in September and there is no evidence to indicate that regulated hunting has adversely impacted local populations.

22. Falconry

Council Recommendations: The Pacific Flyway Council recommends no change in frameworks.

Written Comments: The Minnesota Department of Natural Resources supported the Service policy regarding exceptions to the 3-split limit.

Service Response: The Service appreciates the support for the frameworks contained in this document.

NEPA Consideration

NEPA considerations are covered by the programmatic document, "Final

Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (FSES 88-14)," filed with EPA on June 9, 1988. Notice of Availability was published in the **Federal Register** on June 16, 1988 (53 FR 22582). The Service's Record of Decision was published on August 18, 1988 (53 FR 31341). Copies of these documents are available from the Service at the address indicated under the caption ADDRESSES.

Endangered Species Act Consideration

In August 1994, the Division of Endangered Species concluded that the proposed action is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of their critical habitats. Hunting regulations are designed, among other things, to remove or alleviate chances of conflict between seasons for migratory game birds and the protection and conservation of endangered and threatened species and their habitats. The Service's biological opinions resulting from its consultation under section 7 are considered public documents and are available for inspection in the Division of Endangered Species and the Office of Migratory Bird Management.

Regulatory Flexibility Act; Executive Order (E.O.) 12866 and the Paperwork Reduction Act

In the **Federal Register** dated April 7, 1994 (59 FR 16762), the Service reported measures it had undertaken to comply with requirements of the Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq) and Executive Order 12866. These included preparing an Analysis of Regulatory Effects, preparing a Small Entity Flexibility Analysis under the Regulatory Flexibility Act, and publishing a summary of the latter. This rule was not subject to review by the Office of Management and Budget under Executive Order 12866. This rule does not contain any information collection requiring approval by the Office of Management and Budget under 44 U.S.C. 3504.

Authorship

The primary author is Robert J. Blohm, Office of Migratory Bird Management.

Regulations Promulgation

The rulemaking process for migratory bird hunting regulations must, by its nature, operate under severe time

constraints. However, the Service is of the view that every attempt should be made to give the public the greatest possible opportunity to comment on the regulations. Thus, when the proposed early-season rulemaking was published on July 13, the Service established what it believed was the longest period possible for public comment. In doing this, the Service recognized that, at the close of the comment period, time would be of the essence. That is, if there were a delay in the effective date of these regulations after this final rulemaking, the Service is of the opinion that the States would have insufficient time to select season dates and limits; to communicate those selections to the Service; and to establish and publicize the necessary regulations and procedures that implement their decisions.

Therefore, the Service, under authority of the Migratory Bird Treaty Act (July 3, 1918), as amended, (16 U.S.C. 703-712), prescribes final frameworks setting forth the species to be hunted, the daily bag and possession limits, the shooting hours, the season lengths, the earliest opening and latest closing season dates, and hunting areas, from which State and Territory conservation agency officials may select hunting season dates and other options. Upon receipt of season and option selections from these officials, the Service will publish in the *Federal Register* a final rulemaking amending 50 CFR part 20 to reflect seasons, limits, and shooting hours for the contiguous United States, Alaska, Hawaii, Puerto Rico, and the Virgin Islands, for the 1993-94 season.

The Service therefore finds that "good cause" exists, within the terms of 5 U.S.C. 553(d)(3) of the Administrative Procedure Act, and these frameworks will, therefore, take effect immediately upon publication.

List of Subjects in 50 CFR Part 20

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

The rules that eventually will be promulgated for the 1993-94 hunting season are authorized under the Migratory Bird Treaty Act (July 3, 1918), as amended, (16 U.S.C. 703-712); the Fish and Wildlife Improvement Act (November 8, 1978), as amended, (16 U.S.C. 742); and the Fish and Wildlife Act of 1956 (August 8, 1956), as amended, (16 U.S.C. 742 a-j).

Dated: August 8, 1994

George T. Frampton, Jr.

Assistant Secretary for Fish and Wildlife and Parks

Final Regulations Frameworks for 1994-95 Early Hunting Seasons on Certain Migratory Game Birds

Pursuant to the Migratory Bird Treaty Act and delegated authorities, the Director approved the following proposed frameworks which prescribe season lengths, bag limits, shooting hours, and outside dates within which States may select seasons for certain migratory game birds between September 1, 1994, and March 10, 1995.

General

Dates: All outside dates noted below are inclusive.

Shooting and Hawking (taking by falconry) Hours: Unless otherwise specified, from one-half hour before sunrise to sunset daily.

Possession Limits: Unless otherwise specified, possession limits are twice the daily bag limit.

Area, Zone, and Unit Descriptions: Geographic descriptions that differ from those published in the August 23, 1993, *Federal Register* (58 FR 44576) are contained in a later portion of this document.

Special September Teal Season

Outside Dates: Between September 1 and September 30, an open season on all species of teal may be selected by Alabama, Arkansas, Colorado (Central Flyway portion only), Illinois, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, New Mexico (Central Flyway portion only), Ohio, Oklahoma, Tennessee, and Texas in areas delineated by State regulations.

Hunting Seasons and Daily Bag Limits: Not to exceed 9 consecutive days, with a daily bag limit of 4 teal.

Shooting Hours: One-half hour before sunrise to sunset, except in Arkansas, Illinois, Indiana, Missouri, and Ohio, where the hours are from sunrise to sunset.

Special September Duck Seasons

Florida: An experimental 5-consecutive-day season may be selected in September. The daily bag limit may not exceed 4 teal and wood ducks in the aggregate.

Kentucky and Tennessee: In lieu of a special September teal season, an experimental 5-consecutive-day season may be selected in September. The daily bag limit may not exceed 4 teal and wood ducks in the aggregate, of which no more than 2 may be wood ducks.

Iowa: Iowa may hold up to 5 days of its regular duck hunting season in September. All ducks which are legal during the regular duck season may be taken during the September segment of the season. The September season segment may commence no earlier than the Saturday nearest September 20 (September 17, 1994), with daily bag and possession limits being the same as those in effect during the 1994 regular duck season. The remainder of the regular duck season may not begin before October 15.

Scoter, Eider, and Oldsquaw Ducks (Atlantic Flyway)

Outside Dates: Between September 15 and January 20.

Hunting Seasons and Daily Bag Limits: Not to exceed 107 days, with a daily bag limit of 7, singly or in the aggregate of the listed sea-duck species, of which no more than 4 may be scoters.

Daily Bag Limits During the Regular Duck Season: Within the special sea duck areas, during the regular duck season in the Atlantic Flyway, States may choose to allow the above sea duck limits in addition to the limits applying to other ducks during the regular duck season. In all other areas, sea ducks may be taken only during the regular open season for ducks and must be included in the regular duck season daily bag and possession limits.

Areas: In all coastal waters and all waters of rivers and streams seaward from the first upstream bridge in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, and New York; in any waters of the Atlantic Ocean and in any tidal waters of any bay which are separated by at least 1 mile of open water from any shore, island, and emergent vegetation in New Jersey, South Carolina, and Georgia; and in any waters of the Atlantic Ocean and in any tidal waters of any bay which are separated by at least 800 yards of open water from any shore, island, and emergent vegetation in Delaware, Maryland, North Carolina and Virginia; and provided that any such areas have been described, delineated, and designated as special sea-duck hunting areas under the hunting regulations adopted by the respective States.

Special Early Canada Goose Seasons

Atlantic Flyway

Hunting Seasons: Experimental Canada goose seasons may be selected by Maryland, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Virginia, and West Virginia. Areas open to the hunting of Canada geese must be described.

delineated, and designated as such in each State's hunting regulations.

Outside Dates: Between September 1 and September 10, except that the closing date is September 15 in Maryland, Massachusetts, New Jersey, New York, southeastern Pennsylvania, Virginia, and West Virginia and September 30 in North Carolina.

Daily Bag Limits: Not to exceed 5 Canada geese.

Mississippi Flyway

Hunting Seasons: Canada goose seasons may be selected by Indiana, Michigan, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin. Seasons in all States except Wisconsin are experimental. Areas open to the hunting of Canada geese must be described, delineated, and designated as such in each State's hunting regulations.

Outside Dates: September 1-10 in Wisconsin and in the Upper Peninsula and Northern Lower Peninsula Zones in Michigan; September 1-15 in Indiana, Ohio, and the South Zone in Michigan; September 1-16 in Minnesota; September 1-30 in Tennessee; and October 1-15 in Missouri.

Season Length: Not to exceed 10 days except in Indiana, Ohio, and the South Zone in Michigan, where the season may extend for 15 days.

Daily Bag Limits: Not to exceed 5 Canada geese.

Pacific Flyway

Wyoming may select a September season on Canada geese subject to the following conditions:

1. The season must be concurrent with the September portion of the sandhill crane season.
2. Hunting will be by State permit.
3. No more than 150 permits, in total, may be issued.
4. Each permittee may take no more than 2 Canada geese per season.

Oregon, in the Lower Columbia River Zone, may select a season on Canada geese subject to the following conditions:

1. The season length is 12 days during September 1-12.
2. The daily bag limit is 3 Canada geese.

Oregon, in the Northwest Zone, may select an experimental season on Canada geese subject to the following conditions:

1. The season length is 12 days during September 1-12.
2. Hunting will be by State permit.
3. Each permittee may take no more than 2 Canada geese per day.

Washington may select a season on Canada geese, subject to the following

conditions, in the Lower Columbia River Zone:

1. The season length is 12 days during September 1-12.
2. The daily bag limit is 3 Canada geese.

Regular Goose Seasons

Regular goose seasons in Wisconsin and the Upper Peninsula of Michigan may open as early as September 24. Season lengths and bag and possession limits will be established during the late-season regulations process.

Sandhill Cranes

Regular Seasons in the Central Flyway:

Outside Dates: Between September 1 and February 28.

Hunting Seasons: Seasons not to exceed 58 consecutive days may be selected in designated portions of the following States: Colorado, Kansas, Montana, North Dakota, South Dakota, and Wyoming. Seasons not to exceed 93 consecutive days may be selected in designated portions of the following States: New Mexico, Oklahoma, and Texas.

Daily Bag Limits: 3 sandhill cranes.

Permits: Each person participating in the regular sandhill crane seasons must have a valid Federal sandhill crane hunting permit in his possession while hunting.

Special Seasons in the Central and Pacific Flyways:

Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming may select seasons for hunting sandhill cranes within the range of the Rocky Mountain Population subject to the following conditions:

Outside Dates: Between September 1 and January 31.

Hunting Seasons: The season in any State or zone may not exceed 30 days.

Bag limits: Not to exceed 3 daily and 9 per season.

Permits: Participants must have a valid permit, issued by the appropriate State, in their possession while hunting.

Other provisions: Numbers of permits, open areas, season dates, protection plans for other species, and other provisions of seasons must be consistent with the management plan and approved by the Central and Pacific Flyway Councils. All hunts except those in Arizona, New Mexico, Utah, and Wyoming will be experimental.

Common Moorhens and Purple Gallinules

Outside Dates: Between September 1 and January 20 in the Atlantic, Mississippi, and Central Flyways. States

in the Pacific Flyway have been allowed to select their hunting seasons between the outside dates for the season on ducks; therefore, they are late-season frameworks and no frameworks are provided in this document.

Hunting Seasons and Daily Bag Limits: Seasons may not exceed 70 days in the Atlantic, Mississippi, and Central Flyways. Seasons may be split into two segments. The daily bag limit is 15 common moorhens and purple gallinules, singly or in the aggregate of the two species.

Rails

Outside Dates: States included herein may select seasons between September 1 and January 20 on clapper, king, sora, and Virginia rails.

Hunting Seasons: The season may not exceed 70 days, and may be split into two segments.

Daily Bag Limits: Clapper and King Rails - In Rhode Island, Connecticut, New Jersey, Delaware, and Maryland, 10, singly or in the aggregate of the two species. In Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, and Virginia, 15, singly or in the aggregate of the two species.

Sora and Virginia Rails - In the Atlantic, Mississippi, and Central Flyways and the Pacific-Flyway portions of Colorado, Montana, New Mexico, and Wyoming, 25 daily and 25 in possession, singly or in the aggregate of the two species. The season is closed in the remainder of the Pacific Flyway.

Common Snipe

Outside Dates: Between September 1 and February 28. Except, in Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, and Virginia, the season must end no later than January 31.

Hunting Seasons and Daily Bag Limits: Seasons may not exceed 107 days and may be split into two segments. The daily bag limit is 8 snipe.

American Woodcock

Outside Dates: States in the Atlantic Flyway may select hunting seasons between October 1 and January 31. States in the Central and Mississippi Flyways may select hunting seasons between September 1 and January 31.

Hunting Seasons and Daily Bag Limits: In the Atlantic Flyway, seasons may not exceed 45 days, with a daily bag limit of 3; in the Central and Mississippi Flyways, seasons may not exceed 65 days, with a daily bag limit

of 5. Seasons may be split into two segments.

Zoning: New Jersey may select seasons in each of two zones. The season in each zone may not exceed 35 days.

Band-tailed Pigeons

Pacific Coast States (California, Oregon, Washington, and Nevada)

Outside Dates: Between September 15 and January 1.

Hunting Seasons and Daily Bag Limits: Not more than 9 consecutive days, with bag and possession limits of 2 and 2 band-tailed pigeons, respectively.

Permit Requirement: The appropriate State agency must issue permits, and report on harvest and hunter participation to the Service by June 1 of the following year, or participate in the Migratory Bird Harvest Information Program.

Zoning: California may select hunting seasons not to exceed 9 consecutive days in each of two zones. The season in the North Zone must close by October 7.

Four-Corners States (Arizona, Colorado, New Mexico, and Utah)

Outside Dates: Between September 1 and November 30.

Hunting Seasons and Daily Bag Limits: Not more than 30 consecutive days, with a daily bag limit of 5 band-tailed pigeons.

Permit Requirement: The appropriate State agency must issue permits, and report on harvest and hunter participation to the Service by June 1 of the following year, or participate in the Migratory Bird Harvest Information Program.

Zoning: New Mexico may select hunting seasons not to exceed 20 consecutive days in each of two zones. The season in the South Zone may not open until October 1.

Mourning Doves

Outside Dates: Between September 1 and January 15, except as otherwise provided, States may select hunting seasons and daily bag limits as follows:

Eastern Management Unit (All States east of the Mississippi River, and Louisiana)

Hunting Seasons and Daily Bag Limits: Not more than 70 days with a daily bag limit of 12, or not more than 60 days with a daily bag limit of 15.

Zoning and Split Seasons: States may select hunting seasons in each of two zones. The season within each zone may be split into not more than three

periods. The hunting seasons in the South Zones of Alabama, Florida, Georgia, Louisiana, and Mississippi may commence no earlier than September 20. Regulations for bag and possession limits, season length, and shooting hours must be uniform within specific hunting zones.

Central Management Unit (Arkansas, Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming)

Hunting Seasons and Daily Bag Limits: Not more than 70 days with a daily bag limit of 12, or not more than 60 days with a daily bag limit of 15.

Zoning and Split Seasons: States may select hunting seasons in each of two zones. The season within each zone may be split into not more than three periods. Texas may select hunting seasons for each of three zones subject to the following conditions:

A. The hunting season may be split into not more than two periods, except in that portion of Texas in which the special white-winged dove season is allowed, where a limited mourning dove season may be held concurrently with that special season (see white-winged dove frameworks).

B. A season may be selected for the North and Central Zones between September 1 and January 25; and for the South Zone between September 20 and January 25.

C. Each zone may have a daily bag limit of 12 doves (15 under the alternative) in the aggregate, no more than 6 of which may be white-winged doves and no more than 2 of which may be white-tipped doves, except that during the special white-winged dove season, the daily bag limit may not exceed 10 white-winged, mourning, and white-tipped doves in the aggregate, of which no more than 5 may be mourning doves and 2 may be white-tipped doves.

D. Except as noted above, regulations for bag and possession limits, season length, and shooting hours must be uniform within each hunting zone.

Western Management Unit (Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington)

Hunting Seasons and Daily Bag Limits:

Idaho, Nevada, Oregon, Utah, and Washington - Not more than 30 consecutive days with a daily bag limit of 10 mourning doves (in Nevada, the daily bag limit may not exceed 10 mourning and white-winged doves in the aggregate).

Arizona and California - Not more than 60 days which may be split

between two periods, September 1-15 and November 1-January 15. In Arizona, during the first segment of the season, the daily bag limit is 10 mourning and white-winged doves in the aggregate, of which no more than 6 may be white-winged doves. During the remainder of the season, the daily bag limit is restricted to 10 mourning doves. In California, the daily bag limit may not exceed 10 mourning and white-winged doves in the aggregate.

White-Winged and White-Tipped Doves

Hunting Seasons and Daily Bag Limits:

Except as shown below, seasons in Arizona, California, Florida, Nevada, New Mexico, and Texas must be concurrent with mourning dove seasons.

Arizona may select a hunting season of not more than 30 consecutive days, running concurrently with the first segment of the mourning dove season. The daily bag limit may not exceed 10 mourning and white-winged doves in the aggregate, of which no more than 6 may be white-winged doves.

In Florida, the daily bag limit may not exceed 12 mourning and white-winged doves (15 under the alternative) in the aggregate, of which no more than 4 may be white-winged doves.

In the Nevada Counties of Clark and Nye, and in the California Counties of Imperial, Riverside, and San Bernardino, the daily bag limit may not exceed 10 mourning and white-winged doves in the aggregate.

In New Mexico, the daily bag limit may not exceed 12 mourning and white-winged doves (15 under the alternative) in the aggregate.

In Texas, the daily bag limit may not exceed 12 mourning, white-winged, and white-tipped doves (15 under the alternative) in the aggregate, of which not more than 6 may be white-winged doves and not more than 2 may be white-tipped doves.

In addition, Texas may also select a hunting season of not more than 4 days for the special white-winged dove area of the South Zone between September 1 and September 19. The daily bag limit may not exceed 10 white-winged, mourning, and white-tipped doves in the aggregate, of which no more than 5 may be mourning doves and 2 may be white-tipped doves.

Alaska

Outside Dates: Between September 1 and January 26.

Hunting Seasons: Alaska may select 107 consecutive days for waterfowl, sandhill cranes, and common snipe in

each of five zones. The season may be split without penalty in the Kodiak Zone. The seasons in each zone must be concurrent.

Closures: The season is closed on Canada geese from Unimak Pass westward in the Aleutian Island chain. The hunting season is closed on Aleutian Canada geese, emperor geese, spectacled eiders, and Steller's eiders.

Daily Bag and Possession Limits: Ducks—Except as noted, a basic daily bag limit of 5 and a possession limit of 15 ducks. Daily bag and possession limits in the North Zone are 8 and 24, and in the Gulf Coast Zone they are 6 and 18, respectively. The basic limits may include no more than 2 pintails daily and 6 in possession, and 1 canvasback daily and 3 in possession.

In addition to the basic limit, there is a daily bag limit of 15 and a possession limit of 30 scoter, common and king eiders, oldsquaw, harlequin, and common and red-breasted mergansers, singly or in the aggregate of these species.

Geese—A basic daily bag limit of 6, of which not more than 4 may be greater white-fronted or Canada geese, singly or in the aggregate of these species, except that the daily bag limit on Canada geese in Game Management Units 9E and 18 is 1.

Brant—A daily bag limit of 2.
Common snipe—A daily bag limit of 8.
Sandhill cranes—A daily bag limit of 3.

Tundra swans—Open seasons for tundra swans may be selected subject to the following conditions:

1. No more than 300 permits may be issued in GMU 22, authorizing each permittee to take 1 tundra swan per season.
2. No more than 500 permits may be issued during the experimental season in GMU 18. No more than 1 tundra swan may be taken per permit.
3. The seasons must be concurrent with other migratory bird seasons.
4. The appropriate State agency must issue permits, obtain harvest and hunter-participation data, and report the results of this hunt to the Service by June 1 of the following year.

Hawaii

Outside Dates: Between September 1 and January 15.

Hunting Seasons: Not more than 60 days (70 under the alternative) for mourning doves.

Bag Limits: Not to exceed 15 (12 under the alternative) mourning doves.

Note: Mourning doves may be taken in Hawaii in accordance with shooting hours and other regulations set by the State of Hawaii, and subject to the applicable provisions of 50 CFR part 20.

Puerto Rico

Doves and Pigeons:

Outside Dates: Between September 1 and January 15.

Hunting Seasons: Not more than 60 days.

Daily Bag and Possession Limits: Not to exceed 10 Zenaida, mourning, and white-winged doves in the aggregate. Not to exceed 5 scaly-naped pigeons.

Closed Areas: There is no open season on doves or pigeons in the following areas: Municipality of Culebra, Desecheo Island, Mona Island, El Verde Closure Area, and Cidra Municipality and adjacent areas.

Ducks, Coots, Moorhens, Gallinules, and Snipe:

Outside Dates: Between October 1 and January 31.

Hunting Seasons: Not more than 55 days may be selected for hunting ducks, common moorhens, and common snipe. The season may be split into two segments.

Daily Bag Limits:

Ducks—Not to exceed 3.

Common moorhens—Not to exceed 6.

Common snipe—Not to exceed 6.

Closed Seasons: The season is closed on the ruddy duck, white-cheeked pintail, West Indian whistling duck, fulvous whistling duck, and masked duck, which are protected by the Commonwealth of Puerto Rico. The season also is closed on the purple gallinule, American coot, and Caribbean coot.

Closed Areas: There is no open season on ducks, common moorhens, and common snipe in the Municipality of Culebra and on Desecheo Island.

Virgin Islands

Doves and Pigeons:

Outside Dates: Between September 1 and January 15.

Hunting Seasons: Not more than 60 days for Zenaida doves.

Daily Bag and Possession Limits: Not to exceed 10 Zenaida doves.

Closed Seasons: No open season is prescribed for ground or quail doves, or pigeons in the Virgin Islands.

Closed Areas: There is no open season for migratory game birds on Ruth Cay (just south of St. Croix).

Local Names for Certain Birds: Zenaida dove, also known as mountain dove; bridled quail-dove, also known as Barbary dove or partridge; Common ground-dove, also known as stone dove, tobacco dove, rola, or tortolita; scaly-naped pigeon, also known as red-necked or scaled pigeon.

Ducks:

Outside Dates: Between December 1 and January 31.

Hunting Seasons: Not more than 55 consecutive days.

Daily Bag Limits: Not to exceed 3 ducks.

Closed Seasons: The season is closed on the ruddy duck, white-cheeked pintail, West Indian whistling duck, fulvous whistling duck, and masked duck.

Special Falconry Regulations

Falconry is a permitted means of taking migratory game birds in any State meeting Federal falconry standards in 50 CFR 21.29(k). These States may select an extended season for taking migratory game birds in accordance with the following:

Extended Seasons: For all hunting methods combined, the combined length of the extended season, regular season, and any special or experimental seasons shall not exceed 107 days for any species or group of species in a geographical area. Each extended season may be divided into a maximum of 3 segments.

Framework Dates: Seasons must fall between September 1 and March 10.

Daily Bag and Possession Limits: Falconry daily bag and possession limits for all permitted migratory game birds shall not exceed 3 and 6 birds, respectively, singly or in the aggregate, during extended falconry seasons, any special or experimental seasons, and regular hunting seasons in all States, including those that do not select an extended falconry season.

Regular Seasons: General hunting regulations, including seasons and hunting hours, apply to falconry in each State listed in 50 CFR 21.29(k). Regular-season bag and possession limits do not apply to falconry. The falconry bag limit is not in addition to gun limits.

Area, Unit, and Zone Descriptions

Central Flyway portion of the following States consists of:

Colorado: That area lying east of the Continental Divide.

Montana: That area lying east of Hill, Chouteau, Cascade, Meagher, and Park Counties.

New Mexico: That area lying east of the Continental Divide but outside the Jicarilla Apache Indian Reservation.

Wyoming: That area lying east of the Continental Divide.

The remaining portions of these States are in the Pacific Flyway.

Mourning and White-Winged Doves

Alabama

South Zone—Baldwin, Barbour, Coffee, Covington, Dale, Escambia, Geneva, Henry, Houston, and Mobile Counties.

North Zone—Remainder of the State.

California

White-winged Dove Open Areas—Imperial, Riverside, and San Bernardino Counties.

Florida

Northwest Zone—The Counties of Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Liberty, Okaloosa, Santa Rosa, Walton, Washington, Leon (except that portion north of U.S. 27 and east of State Road 155), Jefferson (south of U.S. 27, west of State Road 59 and north of U.S. 98), and Wakulla (except that portion south of U.S. 98 and east of the St. Marks River).

South Zone—Remainder of State.

Georgia

Northern Zone—That portion of the State lying north of a line running west to east along U.S. Highway 280 from Columbus to Wilcox County, thence southward along the western border of Wilcox County; thence east along the southern border of Wilcox County to the Ocmulgee River, thence north along the Ocmulgee River to Highway 280, thence east along Highway 280 to the Little Ocmulgee River; thence southward along the Little Ocmulgee River to the Ocmulgee River; thence southwesterly along the Ocmulgee River to the western border of the Jeff Davis County; thence south along the western border of Jeff Davis County; thence east along the southern border of Jeff Davis and Appling Counties; thence north along the eastern border of Appling County, to the Altamaha River; thence east to the eastern border of Tattnall County; thence north along the eastern border of Tattnall County; thence north along the western border of Evans to Candler County; thence west along the southern border of Candler County to the Ochopee River; thence north along the western border of Candler County to Bulloch County; thence north along the western border of Bulloch County to U.S. Highway 301; thence northeast along U.S. Highway 301 to the South Carolina line.

South Zone—Remainder of the State.

Louisiana

North Zone—That portion of the State north of Interstate Highway 10 from the Texas State line to Baton Rouge, Interstate Highway 12 from Baton Rouge to Slidell and Interstate Highway 10 from Slidell to the Mississippi State line.

South Zone—The remainder of the State.

Mississippi

South Zone—The Counties of Forrest, George, Greene, Hancock, Harrison, Jackson, Lamar, Marion, Pearl River, Perry, Pike, Stone, and Walthall.

North Zone—The remainder of the State.

Nevada

White-winged Dove Open Areas—Clark and Nye Counties.

Texas

North Zone—That portion of the State north of a line beginning at the International Bridge south of Fort Hancock; north along FM 1088 to TX 20; west along TX 20 to TX 148; north along TX 148 to I-10 at Fort Hancock; east along I-10 to I-20; northeast along I-20 to I-30 at Fort Worth; northeast along I-30 to the Texas-Arkansas State line.

South Zone—That portion of the State south and west of a line beginning at the International Bridge south of Del Rio, proceeding east on U.S. 90 to San Antonio; then east on I-10 to Orange, Texas.

Special White-winged Dove Area in the South Zone—That portion of the State south and west of a line beginning at the International Bridge south of Del Rio, proceeding east on U.S. 90 to Uvalde; south on U.S. 83 to TX 44; east along TX 44 to TX 16 at Freer; south along TX 16 to TX 285 at Hebbronville; east along TX 285 to FM 1017; southwest along FM 1017 to TX 186 at Linn; east along TX 186 to the Mansfield Channel at Port Mansfield; east along the Mansfield Channel to the Gulf of Mexico.

Area with additional restrictions—Cameron, Hidalgo, Starr, and Willacy Counties.

Central Zone—That portion of the State lying between the North and South Zones.

Band-Tailed Pigeons

California

North Zone—Alpine, Butte, Del Norte, Glenn, Humboldt, Lassen, Mendocino, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, and Trinity Counties.

South Zone—The remainder of the State.

New Mexico

North Zone—North of a line following U.S. 60 from the Arizona State line east to I-25 at Socorro and then south along I-25 from Socorro to the Texas State line.

South Zone—Remainder of the State.

Washington

Western Washington—The State of Washington excluding those portions lying east of the Pacific Crest Trail and east of the Big White Salmon River in Klickitat County.

Woodcock

New Jersey

North Zone—That portion of the State north of NJ 70.

South Zone—The remainder of the State.

Special September Goose Seasons

Atlantic Flyway

Maryland

Open Area—Counties of Allegany, Anne Arundel, Baltimore, Calvert, Charles, Carroll, Dorchester, Frederick, Garret, Harford, Howard, Montgomery, Prince George's, St. Mary's, Somerset, Washington, Wicomico, and Worcester.

Massachusetts

Western Zone—That portion of the State west of a line extending from the Vermont line at I-91, south to Route 9, west on Route 9 to Route 10, south on Route 10 to Route 202, south on Route 202 to the Connecticut line.

New Jersey

Open Area—That portion of New Jersey within a continuous line that runs east along the New York State boundary line to the Hudson River; then south along the New York State boundary to its intersection with Route 440 at Perth Amboy; then west on Route 440 to its intersection with the Garden State Parkway; then south on the Parkway to its intersection with Route 70; then west on Route 70 to its intersection with Route 206; then south on Route 206 to its intersection with Route 54; then south on Route 54 to its intersection with Route 40; then west on Route 40 to its intersection with the New Jersey Turnpike; then south on the Turnpike to the Delaware State boundary line; then north on the Delaware State boundary line to its intersection with the Pennsylvania State boundary; then north on the Pennsylvania boundary in the Delaware River to its intersection with the New York State boundary.

New York

Northern Area—All or portions of St. Lawrence County; see State hunting regulations for area descriptions.

Western Area—Counties of Erie, Cattaraugus, Chautauqua, Niagara, Orleans, and Genesee, and portions of Wyoming, Livingston, Allegany and Steuben Counties.

Southeastern Area—All of Rockland, Westchester, Orange, Putnam, Dutchess, Columbia, and Rensselaer Counties, and portions of Sullivan, Delaware, Ulster, Greene, Albany, Schenectady, Saratoga, Warren, and Washington Counties.

North Carolina

Early-season Canada Goose Area—The special early Canada goose resident

season may be held in all areas of the State, except the Counties of Bertie, Beaufort, Camden, Chovan, Currituck, Dare, Gates, Hartford, Hyde, Northampton (East of I-95), Pamlico, Pasquotank, Perquimans, Tyrrell, and Washington.

Pennsylvania

Northwestern Early-Season Goose Area—Counties of Allegheny, Armstrong, Beaver, Butler, Cambria, Crawford, Erie, Greene, Fayette, Indiana, Lawrence, Mercer, Somerset, Venango, Washington, and Westmoreland.

Southeastern Early-Season Goose Area—Counties of Berks, Bucks, Chester, Delaware, Lehigh, Monroe, Montgomery, Northampton, Pike and Wayne.

Virginia

Open Area—Counties of Accomack, Albemarle, Alleghany, Amelia, Amherst, Appomattox, Augusta, Bath, Bedford, Buckingham, Caroline, Charles City, Chesterfield, Clarke, Culpeper, Cumberland, Fairfax, Fauquier, Frederick, Fluvanna, Goochland, Greene, Hanover, Henrico, Highland, Isle of Wight, James City, King William, Loudoun, Louisa, Madison, Nelson, New Kent, Northampton, Orange, Page, Powhatan, Prince George, Prince William, Rappahannock, Rockbridge, Rockingham, Shenandoah, Spotsylvania, Stafford, Surry, Warren and York.

Mississippi Flyway

Michigan

Upper Peninsula Zone—That portion of the Upper Peninsula outside the AuTrain Basin Waterfowl Project in Alger County (described below) and east of a line described as follows: Beginning at the point where the meridian line 87°30' intersects the United States-Canada border, then south along the 87°30' meridian line to the 47°00' parallel, west along the 47°00' parallel to a point directly north of County Road 550 in the village of Big Bay in Marquette County, southerly along this line and County 550 through Big Bay to County 510, southerly along County 510 to Michigan Highway 28/U.S. Highway 41, westerly along M-28/U.S. 41 to M-35, southerly along M-35 to the Delta County line, westerly and southerly along the Delta County line to the Lake Michigan shoreline, then southeasterly along the Central-Eastern time zone boundary to the Wisconsin border in Green Bay. The AuTrain Basin Waterfowl Project is bounded on the north by M-94, on the south by Trout Lake Road, on the east by County 509 (Rapid River Truck Trail), and on the west by M-67.

Northern Lower Peninsula Zone—Bay, Isabella, Mecosta, Midland, Newaygo, and Oceana Counties and all counties north thereof.

Southern Lower Peninsula Zone—The remainder of the Lower Peninsula, excluding Huron, Saginaw, and Tuscola Counties.

Minnesota

Twin Cities Metro Zone—All of Hennepin and Ramsey Counties.

In Anoka County; the municipalities of Andover, Anoka, Blaine, Centerville, Circle Pines, Columbia Heights, Coon Rapids, Fridley, Hilltop, Lexington, Lino Lakes, Ramsey, and Spring Lake Park; that portion of Columbus Township lying south of County State Aid Highway (CSAH) 18; and all of the municipality of Ham Lake except that portion described as follows:

Beginning at the intersection of CSAH 18 and U.S. Highway 65, then east along CSAH 18 to the eastern boundary of Ham Lake, north along the eastern boundary of Ham Lake to the north boundary of Ham Lake, west along the north boundary of Ham Lake to U.S. 65, and south along U.S. 65 to the point of beginning.

In Carver County; the municipalities of Carver, Chanhassen, Chaska, and Victoria; the Townships of Chaska and Laketown; and those portions of the municipalities of Cologne, Mayer, Waconia, and Watertown and the Townships of Benton, Dahlgren, Waconia, and Watertown lying north and east of the following described line: Beginning on U.S. 212 at the southwest corner of the municipality of Chaska, then west along U.S. 212 to State Trunk Highway (STH) 284, north along STH 284 to CSAH 10, north and west along CSAH 10 to CSAH 30, north and west along CSAH 30 to STH 25, west and north along STH 25 to CSAH 10, north along CSAH 10 to the Carver County line, and east along the Carver County line to the Hennepin County line.

In Dakota County; the municipalities of Apple Valley, Burnsville, Eagan, Farmington, Hastings, Inver Grove Heights, Lakeville, Lilydale, Mendota, Mendota Heights, Rosemont, South St. Paul, Sunfish Lake, and West St. Paul; and the Township of Nininger.

In Scott County; the municipalities of Jordan, Prior Lake, Savage and Shakopee; and the Townships of Credit River, Jackson, Louisville, St. Lawrence, Sand Creek, and Spring Lake.

In Washington County; the municipalities of Afton, Bayport, Birchwood, Cottage Grove, Dellwood, Forest Lake, Hastings, Hugo, Lake Elmo, Lakeland, Lakeland Shores, Landfall, Mahtomedi, Marine, Newport, Oakdale,

Oak Park Heights, Pine Springs, St. Croix Beach, St. Mary's Point, St. Paul Park, Stillwater, White Bear Lake, Willernie, and Woodbury; the Townships of Baytown, Denmark, Grant, Gray Cloud Island, May, Stillwater, and West Lakeland; that portion of Forest Lake Township lying south of STH 97 and CSAH 2; and those portions of New Scandia Township lying south of STH 97 and a line due east from the intersection of STH 97 and STH 95 to the eastern border of the State.

Fergus Falls/Benson Zone—That area encompassed by a line beginning on State Trunk Highway (STH) 55 at the Minnesota border, then south along the Minnesota border to a point due south of the intersection of STH 7 and County State Aid Highway (CSAH) 7 in Big Stone County, north to the STH 7/CSAH 7 intersection and continuing north along CSAH 7 to CSAH 6 in Big Stone County, east along CSAH 6 to CSAH 21 in Big Stone County, south along CSAH 21 to CSAH 10 in Big Stone County, east along CSAH 10 to CSAH 22 in Swift County, east along CSAH 22 to CSAH 5 in Swift County, south along CSAH 5 to U.S. Highway 12, east along U.S. 12 to CSAH 17 in Swift County, south along CSAH 17 to the Swift County border, east along the south border of Swift County and north along the east border of Swift County to the south border of Pope County, east along the south border of Pope County and north along the east border of Pope County to STH 28, west along STH 28 to CSAH 33 in Pope County, north along CSAH 33 to CSAH 3 in Douglas County, north along CSAH 3 to CSAH 69 in Otter Tail County, north along CSAH 69 to CSAH 46 in Otter Tail County, east along CSAH 46 to the east border of Otter Tail County, north along the east border of Otter Tail County to CSAH 40 in Otter Tail County, west along CSAH 40 to CSAH 75 in Otter Tail County, north along CSAH 75 to STH 210, west along STH 210 to STH 108, north along STH 108 to CSAH 1 in Otter Tail County, west along CSAH 1 to CSAH 14 in Otter Tail County, north along CSAH 14 to CSAH 44 in Otter Tail County, west along CSAH 44 to CSAH 35 in Otter Tail County, north along CSAH 35 to STH 108, west along STH 108 to CSAH 19 in Wilkin County, south along CSAH 19 to STH 55, then west along STH 55 to the point of beginning.

Southwest Canada Goose Zone—All of Blue Earth, Cottonwood, Faribault, Jackson, LeSueur, Lincoln, Lyon, Martin, McLeod, Murray, Nicollet, Nobles, Sibley, Waseca, and Watonwan Counties; that portion of Brown County lying south and west of the following

described line: beginning at the junction of U.S. Highway 14, and the east of Brown County line; thence west on U.S. Highway 14 to Cobden; thence due west one mile on U.S. Highway 14 and the township road to the Brown County line; thence due west 12 miles along the county line to the west Brown County line; that portion of Renville County east of State Trunk Highway 4 (STH); that portion of Meeker County south of U.S. Highway 12; in Scott County, the Townships of Belle Plaine, Blakeley, and Helena, including the municipalities located therein; and that portion of Carver County lying west, of the following described line: beginning at the northeast corner of San Francisco Township, thence west along the San Francisco Township line to the east boundary of Dahlgren Township, thence north on the Dahlgren Township line to U.S. Highway 212, thence west on U.S. Highway 212 to STH 284, thence north on STH 284 to County State Aid Highway (CSAH) 10, thence north and west on CSAH 10 to CSAH 30, thence north and west on CSAH 30 the STH 25, thence east and north on STH 25 to CSAH 10, thence north on CSAH 10 to the Carver County line.

Missouri

Central Missouri Zone—Boone County and that portion of Callaway County west of U.S. Highway 54.

Tennessee

East Tennessee Zone—Anderson, Blount, Campbell, Claiborne, Knox, Loudon, Monroe, Roane, and Union Counties and those portions of Meigs and Rhea Counties north of Highway 68.

Wisconsin

Early-Season Subzone—That area encompassed by a line beginning at Lake Michigan in Port Washington and extending west along State Highway 33 to State 175, south along State 175 to State 83, south along State 83 to State 36, southwest along State 36 to State 120, south along State 120 to U.S. Highway 12, then southeast along U.S. 12 to the Illinois border.

Pacific Flyway

Oregon

Lower Columbia River Zone—Those portions of Clatsop, Columbia, and Multnomah Counties within the following boundary: beginning at Portland, Oregon, at the south end of the Interstate 5 Bridge; south on I-5 to Highway 30; west on Highway 30 to the town of Svensen; south from Svensen to Youngs River Falls; due west from Youngs River Falls to the Pacific Ocean coastline; north along the coastline to a point where Clatsop Spit and the South Jetty meet; due north to the Oregon-Washington border; east and south

along the Oregon-Washington border to the I-5 Bridge; south on the I-5 Bridge to the point of beginning.

Northwest Oregon Zone—All of Benton, Clackamas, Clatsop, Columbia, Lane, Lincoln, Linn, Marion, Polk, Multnomah, Tillamook, Washington, and Yamhill Counties; except for the Lower Columbia River Zone.

Washington

Lower Columbia River Zone—Beginning at the Washington-Oregon border on the I-5 Bridge near Vancouver, Washington; north on I-5 to Kelso; west on Highway 4 from Kelso to Highway 401; south and west on Highway 401 to Highway 101 at the Astoria-Megler Bridge; west on Highway 101 to Gray Drive in the City of Ilwaco; west on Gray Drive to Canby Road; southwest on Canby Road to the North Jetty; southwest on the North Jetty to its end; southeast to the Washington-Oregon border; upstream along the Washington-Oregon border to the point of origin.

Wyoming

Bear River Area—That portion of Lincoln County described in State regulations.

Salt River Area—That portion of Lincoln County described in State regulations.

Eden-Farson Area—Those portions of Sweetwater and Sublette Counties described in State regulations.

Sandhill Cranes

Central Flyway

Colorado

Regular-Season Open Area—The Central Flyway portion of the State except the San Luis Valley (Alamosa, Conejos, Costilla, Hinsdale, Mineral, Rio Grande and Saguache Counties east of the Continental Divide) and North Park (Jackson County).

Kansas

Regular Season Open Area—That portion of the State west of a line beginning at the Oklahoma border, north on I-35 to Wichita, north on I-135 to Salina, and north on U.S. 81 to the Nebraska border.

New Mexico

Regular-Season Open Area—Chaves, Curry, De Baca, Eddy, Lea, Quay, and Roosevelt Counties.

Middle Rio Grande Valley Area—The Central Flyway portion of New Mexico in Socorro and Valencia Counties.

Southwest Zone—Sierra, Luna, and Dona Ana Counties.

Oklahoma

Regular-Season Open Area—That portion of the State west of I-35.

Texas

Regular-Season Open Area—That portion of the State west of a line from

the International Toll Bridge at Brownsville along U.S. 77 to Victoria; U.S. 87 to Placedo; Farm Road 616 to Blessing; State 35 to Alvin; State 6 to U.S. 290; U.S. 290 to Austin; I-35 to the Texas-Oklahoma border.

North Dakota

Regular-Season Open Area—That portion of the State west of U.S. 281.

South Dakota

Regular-Season Open Area—That portion of the State west of U.S. 281.

Montana

Regular-Season Open Area—The Central Flyway portion of the State except that area south of I-90 and west of the Bighorn River.

Wyoming

Regular-Season Open Area—Campbell, Converse, Crook, Goshen, Laramie, Niobrara, Platte, and Weston Counties.

Riverton-Boysen Unit—Portions of Fremont County.

Pacific Flyway

Arizona

Special-Season Area—Game Management Units 30A, 30B, 31, and 32.

Montana

Special-Season Area—See State regulations.

Utah

Special-Season Area—Rich and Cache Counties.

Wyoming

Bear River Area—That portion of Lincoln County described in State regulations.

Salt River Area—That portion of Lincoln County described in State regulations.

Eden-Farson Area—Those portions of Sweetwater and Sublette Counties described in State regulations.

All Migratory Game Birds in Alaska North Zone—State Game Management Units 11-13 and 17-26.

Gulf Coast Zone—State Game Management Units 5-7, 9, 14-16, and 10 - Unimak Island only.

Southeast Zone—State Game Management Units 1-4.

Pribilof and Aleutian Islands Zone—State Game Management Unit 10 - except Unimak Island.

Kodiak Zone—State Game Management Unit 8.

All Migratory Birds in the Virgin Islands

Ruth Cay Closure Area—The island of Ruth Cay, just south of St. Croix.

All Migratory Birds in Puerto Rico Municipality of Culebra Closure Area—All of the Municipality of Culebra.

Desecheo Island Closure Area—All of Desecheo Island.

Mona Island Closure Area—All of Mona Island.

El Verde Closure Area—Those areas of the municipalities of Rio Grande and Loiza delineated as follows: (1) All lands between Routes 956 on the west and 186 on the east, from Route 3 on the north to the juncture of Routes 956 and 186 (Km 13.2) in the south; (2) all lands between Routes 186 and 966 from the juncture of 186 and 966 on the north, to the Caribbean National Forest Boundary on the south; (3) all lands lying west of Route 186 for one kilometer from the

juncture of Routes 186 and 956 south to Km 6 on Route 186; (4) all lands within Km 14 and Km 6 on the west and the Caribbean National Forest Boundary on the east; and (5) all lands within the Caribbean National Forest Boundary whether private or public.

Cidra Municipality and adjacent areas—All of Cidra Municipality and portions of Aguas, Buenas, Caguas, Cayer, and Comerio Municipalities as encompassed within the following boundary: beginning on Highway 172 as it leaves the Municipality of Cidra on

the west edge, north to Highway 156, east on Highway 156 to Highway 1, south on Highway 1 to Highway 765, south on Highway 765 to Highway 763, south on Highway 763 to the Rio Guavate, west along Rio Guavate to Highway 1, southwest on Highway 1 to Highway 14, west on Highway 14 to Highway 729, north on Highway 729 to Cidra Municipality boundary to the point of beginning.

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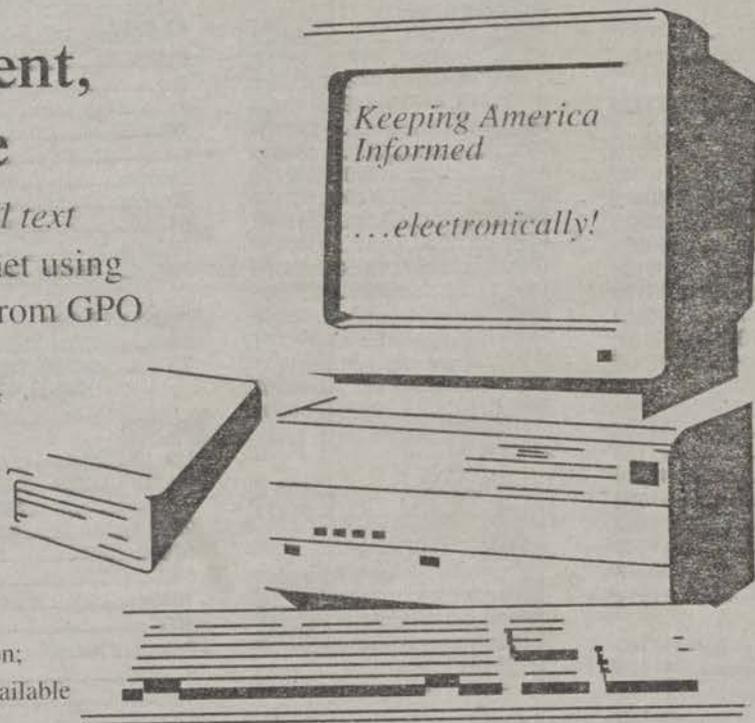
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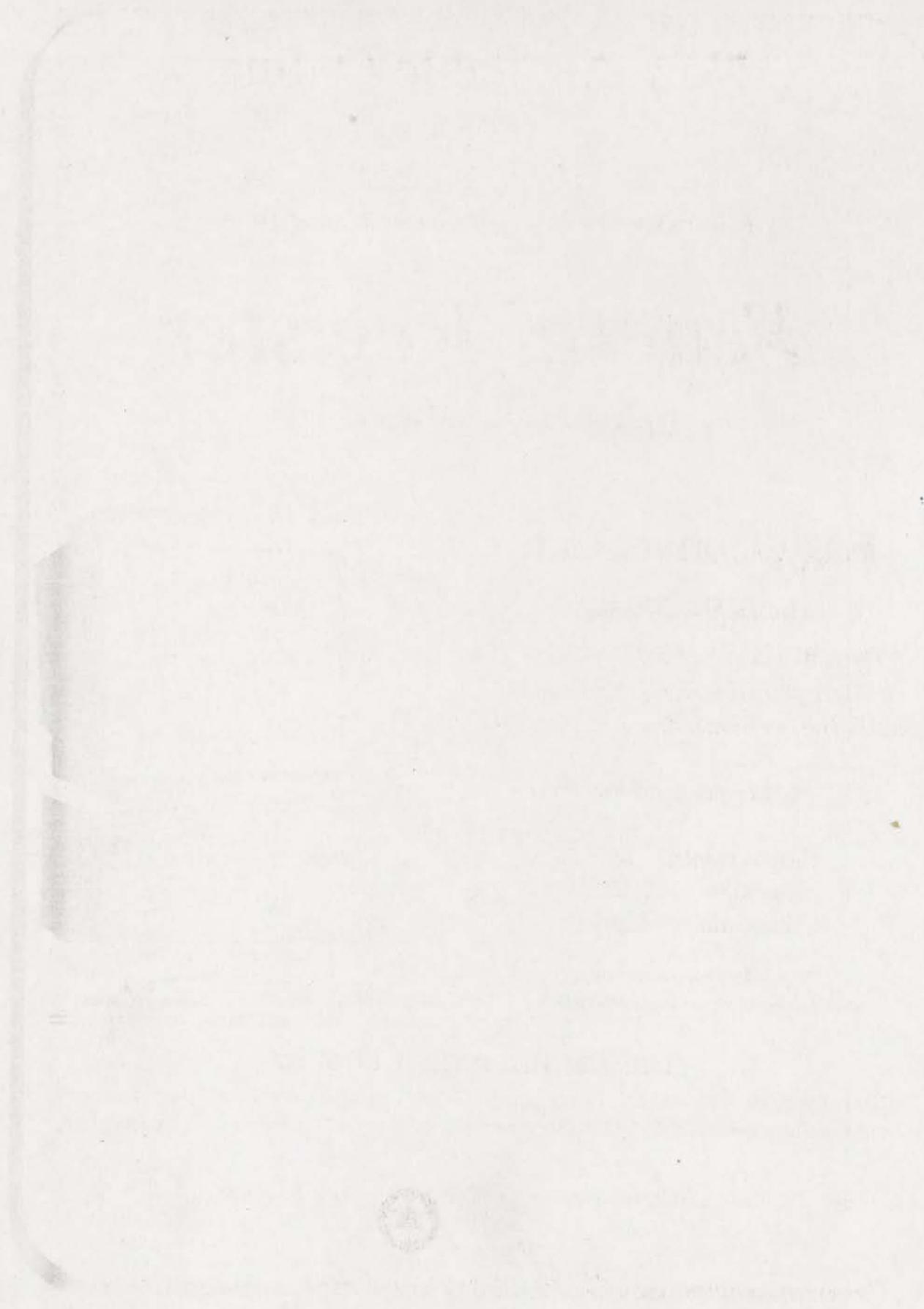


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