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Vol. 58 No. 55

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Wednesday  
March 24, 1993

# Federal Register

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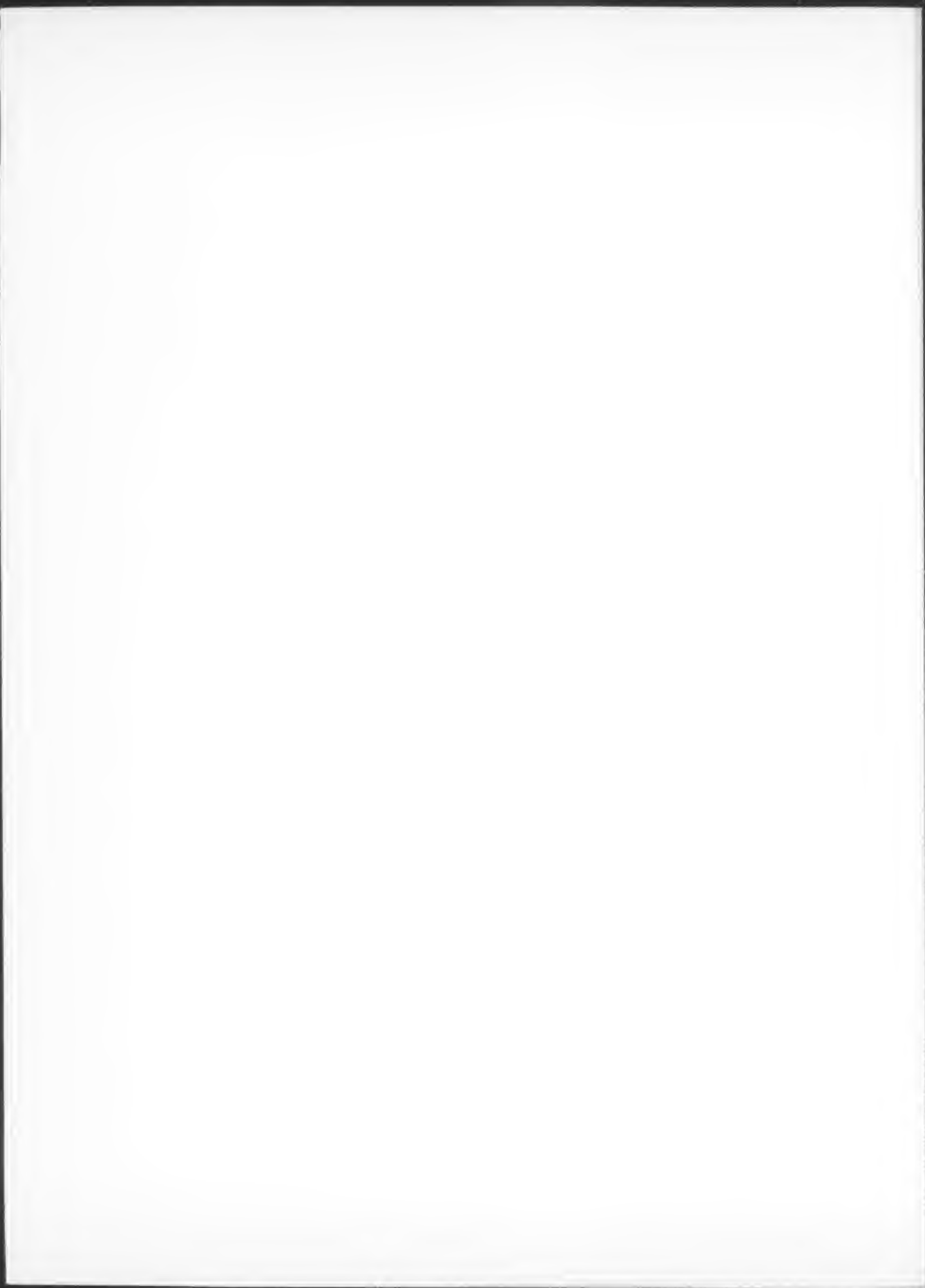
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Wednesday  
March 24, 1993

# Federal Register

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## THE FEDERAL REGISTER

### WHAT IT IS AND HOW TO USE IT

- FOR:** Any person who uses the Federal Register and Code of Federal Regulations.
- WHO:** The Office of the Federal Register.
- WHAT:** Free public briefings (approximately 3 hours) to present:
1. The regulatory process, with a focus on the Federal Register system and the public's role in the development of regulations.
  2. The relationship between the Federal Register and Code of Federal Regulations.
  3. The important elements of typical Federal Register documents.
  4. An introduction to the finding aids of the FR/CFR system.
- WHY:** To provide the public with access to information necessary to research Federal agency regulations which directly affect them. There will be no discussion of specific agency regulations.

### NEW YORK, NY

- WHEN:** March 26, at 12:30 pm
- WHERE:** 26 Federal Plaza  
Conference Room 305C  
New York, NY
- RESERVATIONS:** Federal Information Center  
1-800-347-1997

### LOS ANGELES, CA

- WHEN:** March 31, at 9:00 am
- WHERE:** 300 North Los Angeles Street  
Conference Room 8041  
Los Angeles, CA
- RESERVATIONS:** Federal Information Center  
1-800-726-4995

### INDEPENDENCE, MO

- WHEN:** April 27, at 9:30 am
- WHERE:** Harry S. Truman Library  
U.S. Highway 24 and Delaware St.  
Multipurpose Room  
Independence, MO
- RESERVATIONS:** Federal Information Center  
1-800-735-8004 or  
1-800-366-2998 for the St. Louis area.

### WASHINGTON, DC

- WHEN:** April 8 and May 12 at 9:00 am
- WHERE:** Office of the Federal Register, 7th Floor  
Conference Room, 800 North Capitol Street  
NW, Washington, DC (3 blocks north of  
Union Station Metro)
- RESERVATIONS:** 202-523-4538



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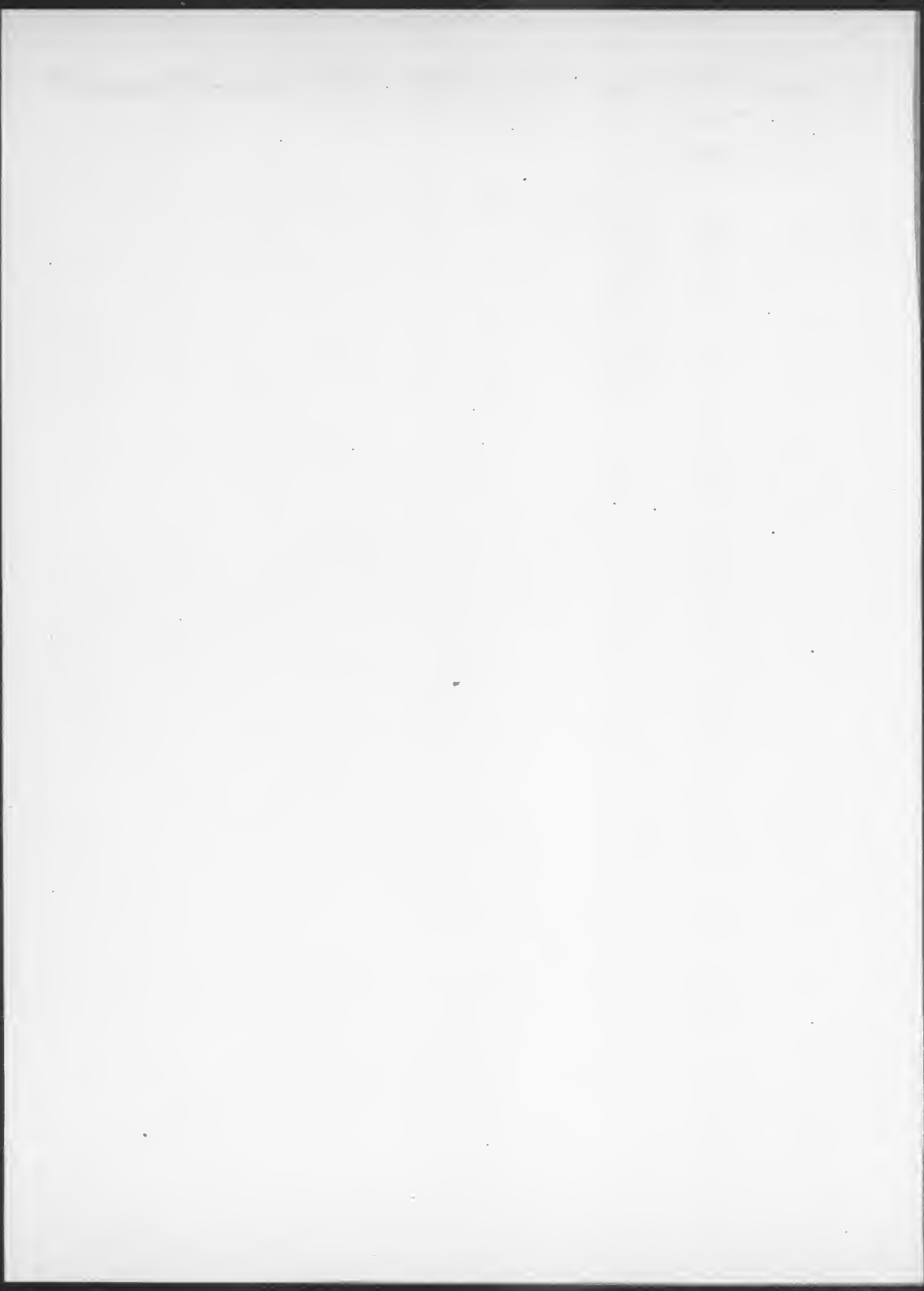
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Title 3—

Proclamation 6537 of March 19, 1993

The President

Women's History Month, 1993

By the President of the United States of America

**A Proclamation**

As we celebrate Women's History Month, we reflect on the American women who throughout history have proudly served in shaping the spirit of our Nation.

Women like Harriet Tubman, Harriet Beecher Stowe, and Sojourner Truth embraced the struggle for human freedom, dignity, and justice. They opposed slavery and inequality at critical moments in history. Their courageous leadership helped pave the way for future generations who would strive to secure equal rights for women.

We are inspired by women like Jane Addams, the first female Nobel prize winner, who at the turn of the century founded Chicago's Hull House to help newly arrived immigrants adapt to a foreign culture. We admire women such as Belva Lockwood, who became the first woman admitted to practice before the United States Supreme Court in 1879. And we cannot forget the long struggle of women like Frances Perkins, whose work to protect the health and safety of America's workers culminated in her service as Secretary of Labor, the Nation's first woman Cabinet officer.

These courageous and pioneering women worked tirelessly to achieve new opportunities for all. Today, empowered by this great legacy, American women serve in every aspect of American life, from social services to space exploration. The opportunities for American women are growing, and their efforts as mothers and volunteers, corporate executives and senators, police officers and administrators, construction workers and cab drivers, and teachers and scientists enrich all of us and make our country great. Women continue to strengthen our Nation's social fabric as leaders in the home, the community, the workplace, and the government.

The challenges facing women in the next century are many. Families are increasingly called upon to care for their grown children and elderly relatives. Many women are compelled to support families as single parents. The social stresses of our era demand the incredible resourcefulness, devotion, and energy of millions of women. Through their endeavors, women are producing a heightened national consciousness and more responsive public policies that meet the needs of our people.

As we honor the courageous legacy of our Nation's women, we celebrate the diversity of their backgrounds, their talents, and their contributions, which breathe life into our democracy and sustain our prosperity.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, by the authority vested in me by the Constitution and laws of the United States, do hereby proclaim March 1993 as Women's History Month. I invite all Americans to observe this month with appropriate programs, ceremonies, and activities.

IN WITNESS WHEREOF, I have hereunto set my hand this nineteenth day of March, in the year of our Lord nineteen hundred and ninety-three, and of the Independence of the United States of America the two hundred and seventeenth.

*William J. Clinton*

[FR Doc. 93-6909

Filed 3-22-93; 2:23 pm]

Billing code 3195-01-M

## Presidential Documents

Proclamation 6538 of March 20, 1993

### National Agriculture Day, 1993

By the President of the United States of America

#### A Proclamation

On this first day of spring, it is appropriate that we reflect on America's agricultural heritage. Our history and our future are intertwined with the farmland and the farmers who help nourish and clothe us. Farming, an integral and pervasive aspect of our economy, is critically important in the daily lives of all Americans.

In our markets, farmers offer us the world's safest and most diverse food supply. But agriculture also touches every other facet of our lives: from shirts to schoolbooks, from prescription drugs to the lumber in our homes. The quality of our lives is due in large measure to the efficient productivity of agricultural workers.

Agriculture, America's number one industry, provides 21 million jobs and is the single largest contributor to our net trade balance. The average American farmer produces enough every year to feed and clothe 129 other people.

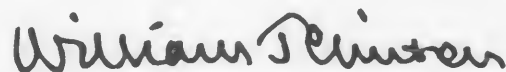
As efficient and productive as they are in meeting our citizens' basic needs, our farmers have contributed just as much to our culture. They helped found and build our Nation, and our calendar and holidays still reflect the seasons around which they weave their lives. When American food alleviates the hunger of starving children at home or abroad, we are all enriched. Farmers and farmworkers have always exemplified the virtues of patient hard work, of respect for the land, with an understanding of our responsibility as stewards of the Earth, of careful management of limited resources, and of resiliency in the face of natural disasters.

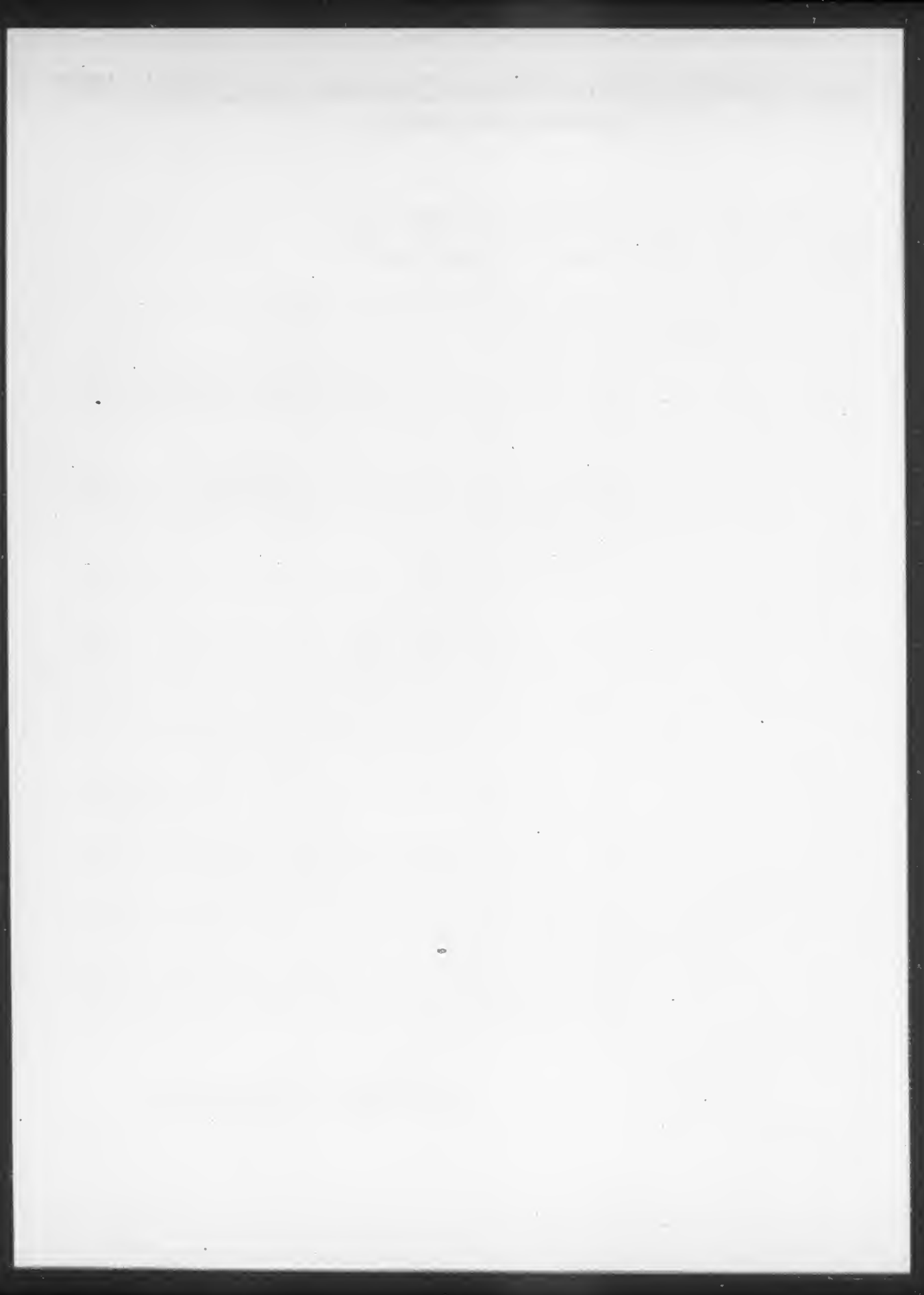
On this day, I ask all Americans to consider our reliance on agriculture—the farmers, scientists, processors, shippers, grocers, and others who spend their days providing us with the basics of a good life.

The Congress, by Senate Joint Resolution 36, has designated March 20, 1993, as "National Agriculture Day" and has authorized and requested the President to issue a proclamation in observance of this day.

NOW, THEREFORE, I, WILLIAM J. CLINTON, President of the United States of America, do hereby proclaim March 20, 1993, as National Agriculture Day. I urge the people of the United States to observe this day with appropriate ceremonies and activities.

IN WITNESS WHEREOF, I have hereunto set my hand this twentieth day of March, in the year of our Lord nineteen hundred and ninety-three, and of the Independence of the United States of America the two hundred and seventeenth.





# Rules and Regulations

Federal Register

Vol. 58, No. 55

Wednesday, March 24, 1993

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

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

## DEPARTMENT OF AGRICULTURE

### Commodity Credit Corporation

#### 7 CFR Parts 1413 and 1427

RIN 0560-AC63

#### 1993 Upland Cotton Program

AGENCY: Commodity Credit Corporation, USDA.

ACTION: Final rule.

**SUMMARY:** On September 29, 1992, the Commodity Credit Corporation (CCC) issued a proposed rule with respect to the 1993 Upland Cotton Production Adjustment Program, which is conducted by the CCC in accordance with the Agricultural Act of 1949 (1949 Act), as amended. The 1993 upland cotton Acreage Reduction Program (ARP) percentage has been determined to be 7.5 percent. This final rule amends the regulations to set forth the ARP and the price support rate for the 1993 crop of upland cotton. No paid land diversion (PLD) program will be implemented for the 1993 crop of upland cotton. These actions are required by section 103B of the 1949 Act, as amended.

**EFFECTIVE DATE:** March 24, 1993.

**FOR FURTHER INFORMATION CONTACT:** Janise Zygmunt, Fibers and Rice Analysis Division, Agricultural Stabilization and Conservation Service, United States Department of Agriculture, room 3754-S, PO Box 2415, Washington, DC 20013-2415 or call 202-720-6734.

#### SUPPLEMENTARY INFORMATION:

##### Executive Order 12291 and Departmental Regulation 1512-1

This rule has been reviewed under USDA procedures established in accordance with Executive Order 12291 and provisions of Departmental Regulation 1512-1 and has been

classified as "major." It has been determined that an annual effect on the economy of \$100 million or more may result from implementing of the provisions of this final rule.

#### Regulatory Flexibility Act

It has been determined that the Regulatory Flexibility Act is not applicable to this final rule since the CCC is not required by 5 U.S.C. 553 or any other provision of law to publish a notice of proposed rulemaking with respect to the subject matter of these determinations.

#### Environmental Evaluation

It has been determined by an environmental evaluation that this action will not have a significant impact on the quality of the human environment. Therefore, neither an Environmental Assessment nor an Environmental Impact Statement is needed.

#### Federal Assistance Program

The title and number of the Federal Assistance Program, as found in the Catalog of Federal Domestic Assistance, to which this rule applies are: Cotton Production Stabilization—10.052.

#### Executive Order 12778

This final rule has been reviewed in accordance with Executive Order 12778. The provisions of the final rule do not preempt State laws, are not retroactive, and do not involve administrative appeals.

#### Executive Order 12372

This program/activity is not subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials. See notice related to 7 CFR part 3015, subpart V, published at 48 FR 29115 (June 24, 1983).

#### Paperwork Reduction Act

The amendments to 7 CFR parts 1413 and 1427 set forth in this final rule do not contain information collections that require clearance by the Office of Management and Budget under the provisions of 44 U.S.C. Chapter 35.

#### Final Regulatory Impact Analysis

The Final Regulatory Impact Analysis describing the options considered in developing this final rule and the

impact of the implementation of the selected options is available on request from the above-named individual.

#### Background

This final rule amends 7 CFR part 1413 to set forth determinations on the 1993 ARP and PLD programs, and 7 CFR part 1427 to set forth the determination of the 1993 price support level. General descriptions of the statutory basis for the 1993 upland cotton ARP percentage determination in this final rule were set forth at 57 FR 44709 (September 29, 1992).

Fifteen comments about the ARP level were received during the comment period. Seven respondents recommended that the ARP be set at no greater than 5 percent, and another specified 5 percent. One farm organization representative recommended that the ARP be set at zero. Another individual representing a farming firm recommended that it be set as high as possible. Two respondents recommended a 15-percent ARP, two recommended 5 to 10 percent, and one recommended 10 percent.

Seven respondents commented on the price support level. Five favored a price support level based on spot market prices while two supported determining a price support level based on the Northern Europe price formula.

After considering these comments, the Secretary of Agriculture (Secretary) on November 2, 1992, announced a 7.5-percent ARP level and a price support level of 52.35 cents per pound for the 1993 marketing year. On January 5, 1993, a final ARP requirement of 7.5 percent was announced for the 1993 crop of upland cotton. The Secretary determined that, based upon the most recent projection of carryover and total disappearance, a 7.5-percent ARP would result in a ratio of carryover to total disappearance of 30 percent.

**Acreage Reduction.** In accordance with section 103B(c)(1) of the 1949 Act, an ARP of 7.5 percent has been established for the 1993 crop of upland cotton. Accordingly, producers will be required to reduce their 1993 acreage of upland cotton for harvest from the crop acreage based established for upland cotton by at least this established percentage in order to be eligible for price support loans and payments.

**Paid Land Diversion.** In accordance with 103B(e)(5) of the 1949 Act, a PLD

program will not be implemented for the 1993 crop of upland cotton.

**Price Support Rate.** In accordance with section 103B(a)(1)-(3) of the 1949 Act, the price support rate has been established with respect to the 1993 crop of upland cotton at 52.35 cents per pound.

#### List of Subjects

##### 7 CFR Part 1413

Cotton, Feed grains, Price support programs, Rice, Wheat.

##### 7 CFR Part 1427

Cotton, Loan programs/agriculture, Packaging and containers, Price support programs and recordkeeping requirements, Surety bonds, Warehouses.

Accordingly, 7 CFR parts 1413 and 1427 are amended as follows:

#### PART 1413—FEED GRAIN, RICE UPLAND AND EXTRA LONG STAPLE COTTON, WHEAT AND RELATED PROGRAMS

1. The authority citation for 7 CFR part 1413 continues to read as follows:

**Authority:** 7 U.S.C. 1308, 1308a, 1309, 1441-2, 1444-2, 1444f, 1445b-3a, 1461-1469; 15 U.S.C. 714b and 714c.

2. Section 1413.54 is amended by:

- A. Revising paragraph (a)(3)(ii),
- B. Adding paragraph (a)(3)(iii),
- C. Revising paragraph (d)(3)(iv), and
- D. Adding paragraph (d)(3)(v) to read as follows:

##### § 1413.54 Acreage reduction program provisions.

(a) \* \* \*

(3) \* \* \*

- (ii) 1992 upland cotton, 10 percent; and
- (iii) 1993 upland cotton, 7.5 percent.

\* \* \* \* \*

(d) \* \* \*

(3) \* \* \*

- (iv) Shall not be made available to producers of rice, and
- (v) Shall not be made available to producers of upland cotton.

\* \* \* \* \*

#### PART 1427—COTTON

3. The authority citation for 7 CFR part 1427 continues to read as follows:

**Authority:** 7 U.S.C. 1421, 1423, 1425, 1444, and 1444-2; 15 U.S.C. 714b and 714c.

4. Section 1427.8(a)(1) is amended by:

- A. Revising paragraph (a)(1)(ii), and
- B. Adding paragraph (a)(1)(iii) to read as follows:

##### § 1427.8 Amount of loan.

(a) \* \* \*

(1) \* \* \*

(ii) 1992 upland cotton, 52.35 cents per pound, and

(iii) 1993 upland cotton, 52.35 cents per pound.

\* \* \* \* \*

—Signed at Washington, DC, on March 17, 1993.

**Bruce R. Weber,**

*Acting Executive Vice President, Commodity Credit Corporation.*

[FR Doc. 93-6737 Filed 3-23-93; 8:45 am]

BILLING CODE 3410-06-M

#### SMALL BUSINESS ADMINISTRATION

##### 13 CFR Part 108

#### Loans to State and Local Development Companies; CDC Designations and Valuation of Land

**AGENCY:** Small Business Administration.  
**ACTION:** Final rule.

**SUMMARY:** The rule gives SBA the right to approve the name of new 503 companies and proposed name changes for existing 503 companies. This rule also allows the use of land with improvements as a 503 company's injection. Until now, only unimproved land could be used for this purpose. This rule change allows real estate owned by a borrower or 503 company to serve as the injection even if there is a structure present, so long as it is valued at the price of the improved land.

**EFFECTIVE DATE:** March 24, 1993.

#### FOR FURTHER INFORMATION CONTACT:

LeAnn M. Oliver, Deputy Director, Office of Rural Affairs and Economic Development, Small Business Administration, 409 3rd Street SW., suite 8300, Washington, DC 20416, telephone (202) 205-6485.

**SUPPLEMENTARY INFORMATION:** On September 18, 1992 (at 57 FR 43157) a proposed rule including the changes listed in the summary above was published. The only comment received was supportive of both items although it raised the issue of how long a CDC must wait for approval of a proposed name change. The current regulatory scheme does not provide deadlines, but SBA has not experienced backlogs in processing other CDC requests. Therefore, no undue delays are expected in this context and no deadlines are imposed by regulation. Standard operating procedures do set time frames for responding to 503 companies and they will be amended to include this procedure.

By this final rule, 13 CFR 108.4 is amended by adding a new paragraph to

give SBA the right to approve the names of new 503 companies and proposed name changes for existing 503 companies. This rule is necessary because many 503 companies across the country are selecting identical designations such as "Small Business Finance Corporation". This increases the chance of posting and other errors in administering the program. In order to avert a growing problem, the rule is amended to allow for approval of 503 company designations. SBA will use this authority to require that local identification, such as city, country or region, be made part of CDCs' names where necessary to avoid confusion.

This final rule also allows the use of land with improvements as a 503 company's injection. Until now, only unimproved land could be used for this purpose. This rule change allows real estate owned by a borrower or 503 company to serve as the injection even if there is a structure present, so long as it is valued at the price of unimproved land.

The market value of commercial structures is frequently difficult to determine with accuracy. Therefore SBA has not permitted either land or building(s) to be counted as part of the owner's equity injection when a building is present. SBA is narrowing the exclusion in order to accommodate such cases, while protecting the government against the risk of overvaluation of commercial structures.

#### Compliance With Executive Orders 12291, 12612, and 12778, the Regulatory Flexibility Act and the Paperwork Reduction Act

SBA has determined that this rule does not constitute a major rule for the purposes of Executive Order 12291. The annual effect of this rule on the national economy cannot attain \$100 million because the first item is administrative and the second has no monetary consequences because the injection is and will continue to be the borrower's responsibility in all transactions. While adoption of this rule gives the borrower more flexibility in providing the injection the net effect on SBA's loan making is neutral.

This rule does not result in a major increase in costs or prices to consumers, individual industries, Federal, state and local government agencies or geographic regions, and does not have adverse effects on competition, employment, investment productivity, or innovation.

SBA certifies that this rule does not warrant the preparation of a Federalism Assessment in accordance with Executive Order 12612.



For purposes of Executive Order 12778, SBA certifies this rule is drafted, to the extent practicable, in accordance with the standards set forth in Section 2 of that Order.

For the purpose of compliance with the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, SBA certifies that this rule does not have a significant economic impact on a substantial number of small entities for the same reason that it is not a major rule.

For purposes of the Paperwork Reduction Act, Public Law 98-115, 44 U.S.C. ch. 35, SBA certifies that this rule imposes no new reporting or recordkeeping requirements.

#### List of Subjects in 13 CFR Part 108

Loan programs—business, Small businesses.

For the reasons set forth above, part 108 of title 13 of the Code of Federal Regulations is amended as follows:

#### PART 108—[AMENDED]

1. The authority citation for part 108 continues to read as follows:

**Authority:** 15 U.S.C. 687(c), 695, 696, 697a, 697b, 697c.

2. Section 108.4 is amended by redesignating paragraphs (c) through (e) as paragraphs (d) through (f), respectively, and adding new paragraph (c) to read as follows:

##### § 108.4 Operational requirements.

\* \* \* \* \*

(c) *Name of 503 development company.* In order to avoid confusion caused by identical designations, the name of each development company and/or any subsequent request for name change is subject to prior approval by SBA.

\* \* \* \* \*

3. Section 108.503-5(d)(2) is amended by adding a new sentence immediately following the second sentence and by republishing the first two sentences to read as follows:

##### § 108.503-5 Eligible and ineligible uses of 503 loan proceeds.

\* \* \* \* \*

(d) *Expenditures made in anticipation of a 503 loan.* \* \* \* \*

(2) Land previously acquired by the small concern or the 503 company may be contributed as the 503 company's injection in a project involving new construction. The value of the contribution shall be the contributor's equity in such land. The value of any structure on such land shall not be considered for purposes of this paragraph. \* \* \*

\* \* \* \* \*

(Catalog of Federal Domestic Assistance 59.036 Certified Development Company Loans (503 Loans); 59.041 Certified Development Company Loans (504 Loans))

Dated: February 16, 1993.

Dayton J. Watkins,

Acting Administrator.

[FR Doc. 93-6544 Filed 3-23-93; 8:45 am]

BILLING CODE 8025-01-M

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 90-ASW-42; Amendment 39-8401; AD 92-23-01]

#### Airworthiness Directives; Bell Helicopter Textron, Inc. Model 204B, 205A, 205A-1, 205B, 212, and Restricted Category Military Model UH-1B, UH-1F and UH-1H Helicopters

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to Bell Helicopter Textron, Inc. (BHTI) Model 204B, 205A, 205A-1, 205B, 212, and restricted category military Model UH-1B, UH-1F, and UH-1H helicopters, that requires establishing a mandatory replacement schedule for the main rotor pillow block bolts, washers, and nuts. This amendment is prompted by reports of five cases of main rotor pillow block bolt fatigue cracks. The actions specified by this AD are intended to prevent failure and separation of the main rotor hub assembly, which could result in loss of the main rotor and subsequent loss of control of the helicopter.

**EFFECTIVE DATE:** April 23, 1993.

**ADDRESSES:** The service information referenced in this AD may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101. This information may be examined at the Federal Aviation Administration (FAA), Office of the Assistant Chief Counsel, 4400 Blue Mound Road, Bldg. 3B, Room 158, Fort Worth, Texas.

**FOR FURTHER INFORMATION CONTACT:** Mr. Tom Henry, Rotorcraft Directorate, Rotorcraft Certification Office, ASW-170, FAA, Southwest Region, Fort Worth, Texas 76193-0170, telephone (817) 624-5168, fax (817) 740-3394.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to BHTI Model 204B, 205A,

205A-1, 205B, 212, and restricted category military Model UH-1B, UH-1F and UH-1H helicopters was published in the *Federal Register* on February 5, 1991 (56 FR 4581). That action proposed to require a retirement life of 1,200 hours time in service for the main rotor pillow block bolts, washers, and nuts. That Notice of Proposed Rulemaking (NPRM) was prompted by reports of at least five cases of pillow block bolt fatigue cracks on BHTI Model 205A-1 and 212 helicopters. Failure of all four bolts will allow separation of the main rotor from the helicopter.

As a result of comments received on the NPRM, a Supplemental Notice of Proposed Rulemaking (SNPRM) was published in the *Federal Register* on January 2, 1992 (57 FR 18). The SNPRM revised the NPRM to further propose that the bolts and associated hardware from the pillow blocks be removed and replaced with new bolts, washers, and nuts within 300 hours time in service, but not later than the next scheduled replacement of the hub retention straps, and thereafter at each strap replacement or overhaul of the hub assembly. Also, additional bolt torque requirements were detailed in the SNPRM.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the later proposal or the FAA's determination of the cost to the public. However, two small editorial changes have been made: Paragraphs (d) and (e) have been reversed, and a Note has been added to paragraph (d). The FAA has determined that air safety and the public interest require the adoption of the rule as proposed with the two editorial changes. The FAA has determined that these changes will neither increase the economic burden on the operator nor increase the scope of the AD.

The FAA estimates that approximately 1,250 helicopters of U.S. registry will be affected by this AD, that it will take approximately 1/4 of a work hour per helicopter to accomplish the required actions, and that the average labor rate is \$55 per work hour. Required parts will cost approximately \$130 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$179,688.

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

not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### Adoption of the Amendment

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

#### PART 39—AIRWORTHINESS DIRECTIVES

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

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

#### § 39.13 [Amended]

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

**AD 92-23-01.** Bell Helicopter Textron, Inc. (BHTI); California Department of Forestry; Carlick Helicopters; Hawkins and Powers Aviation, Inc.; International Helicopters, Inc.; Pilot Personnel International, Inc.; Southern Aero Corporation; and Southwest Florida Aviation: Amendment 39-8401. Docket No. 90-ASW-42.

**Applicability:** All BHTI Model 204B, 205A, 205A-1, 205B, and 212 helicopters, certificated in any category, and military Model UH-1B, UH-1F, and UH-1H helicopters, certificated in the restricted category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent separation of the main rotor pillow blocks from the hub assembly as a result of bolt cracking, which could result in loss of the main rotor and subsequent loss of control of the helicopter, accomplish the following:

(a) Within the next 300 hours time in service after the effective date of this AD; or at the next main rotor hub retention strap change; or at the next hub assembly overhaul;

whichever occurs first, remove the four bolts, part number (P/N) 204-011-171-003, joining the two pillow blocks to the main rotor yoke assembly. Reinstall the pillow blocks using new (zero time) bolts, P/N 204-011-171-003; nuts, P/N EB080 or 42FLW-820; and washers, P/N 140-007-33S28-3 as follows:

(1) Coat the shank of the bolts with corrosion prevention compound, such as MIL-C-16173 Grade 1, and dry torque the bolts and nuts 65 to 79 foot-pounds. Retorque nuts within 15 to 30 hours time in service after the initial installation. If the torque has reduced below the minimum value of 65 foot-pounds, repeat the torque check at intervals of 15 to 30 hours time in service until the torque remains at or above 65 foot-pounds or until the torque check has been accomplished four times. If during the fourth check the torque has reduced below 65 foot-pounds, remove and replace the bolts, washers, and nuts and repeat the torque check procedure of this paragraph.

(2) After initial installation or retorquing, apply sealant, such as BHTI P/N 299-947-107 TYIII CL7, to the four bolt heads, washers, nuts and yoke mating surfaces to prevent moisture from entering the pillow block retention area.

(b) Thereafter, remove the bolts and associated hardware from the pillow block and replace with new bolts, washers, and nuts as described in paragraph (a) of this AD at each hub assembly overhaul, at each change of the main rotor hub retention strap, or whenever the bolts are removed for any reason.

**Note:** Bell Helicopter Textron, Inc., Alert Service Bulletins 204-90-27, Revision A; 205-90-38, Revision A; and 212-90-62, Revision A, all dated October 11, 1990, pertain to this AD. A copy of the service bulletins may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101.

(c) Rework or repair of the bolts, P/N 204-011-171-003; nuts, P/N EB080 or 42FLW-820; and washers, P/N 140-007-33S28-3, is not authorized.

(d) An alternative method of compliance or adjustment of the compliance times, which provides an acceptable level of safety, may be used when approved by the Manager, Rotorcraft Certification Office, ASW-170, Federal Aviation Administration, Fort Worth, Texas 76193-0170. Operators shall submit their request through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Rotorcraft Certification Office.

**Note:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Manager, Rotorcraft Certification Office.

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

(f) This amendment becomes effective April 23, 1993.

Issued in Fort Worth, Texas, on March 4, 1993.

**James D. Erickson,**  
Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 93-6667 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-10-P

#### 14 CFR Part 39

[Docket No. 92-NM-155-AD; Amendment 39-8519; AD 93-05-15]

#### Airworthiness Directives; Cessna Citation Model 500/501 and 550/551 Series Airplanes, Equipped With Thrust Reversers; and Model S550, 560, and 650 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Cessna Citation Model 500/501, 550/551, S550, 560, and 650 series airplanes, that requires modification of the thrust reverser throttle load limiter. This amendment is prompted by an incident in which crew members attempted to advance the throttle control levers during transition of the thrust reverser, which resulted in activation of the spring-loaded limiter device in the power control system and subsequent displacement of the load limiter to a position that severely reduced engine power control authority. The actions specified by this AD are intended to prevent severely reduced engine power control authority.

**DATES:** Effective April 23, 1993.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 23, 1993.

**ADDRESSES:** The service information referenced in this AD may be obtained from Cessna Aircraft Company, Citation Marketing Division, P.O. Box 7706, Wichita, Kansas 67277. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Jack Pearson, Aerospace Engineer, Propulsion Branch, ACE-140W, FAA, Wichita Aircraft Certification Office,

1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4140; fax (316) 946-4407.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations to include an airworthiness directive (AD) that is applicable to certain Cessna Citation Model 500/501, 550/551, S550, 560, and 650 series airplanes was published in the *Federal Register* on December 1, 1992 (57 FR 56873). That action proposed to require modification of the thrust reverser throttle load limiter.

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

The commenter requests that the words "as revised" be added after the Cessna service bulletins referenced in the AD. The commenter notes that since the service bulletins will most probably be revised sometime in the future, those future revisions of the service bulletins should also suffice as additional sources of service information. The FAA does not concur. Where a service bulletin is referenced in an AD (or incorporated by reference), the use of the term "as revised" to connote later revisions of the service bulletin violates Federal Register regulations and is not acceptable, since revisions often include new repairs or inspection requirements. This practice may add new requirements to the AD, or may be relaxatory in nature, and, thus, would constitute "rulemaking" action without prior notice and opportunity for public comment. However, affected operators may request approval to use a later revision of the referenced service bulletin as an alternative method of compliance, under the provisions of paragraph (b) of the final rule.

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

There are approximately 433 Model 500/501 series airplanes, 412 Model 550/551 series airplanes, 160 Model S550 series airplanes, 118 Model 560 series airplanes, and 217 Model 650 series airplanes of the affected design in the worldwide fleet, a total of 1,340 airplanes.

The FAA estimates that 301 Model 500/501 series airplanes, 246 Model 550/551 series airplanes, 126 Model S550 series airplanes, 66 Model 560

series airplanes, and 168 Model 650 series airplanes, a total of 907 airplanes of U.S. registry, will be affected by this AD.

The FAA estimates that it will take approximately 2.5 work hours per airplane to accomplish the required actions, and that the average labor rate is \$55 per work hour. Required parts will cost approximately \$114 per airplane. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$228,111, or \$252 per airplane.

The FAA has been advised that the required modification has already been accomplished on 599 affected airplanes. Therefore, the future economic cost impact of this rule on U.S. operators is now only \$77,616.

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

For the reasons discussed above, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

#### List of Subjects in 14 CFR Part 39

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

#### Adoption of the Amendment

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

#### PART 39—AIRWORTHINESS DIRECTIVES

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

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

#### §39.13 [Amended]

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

**93-05-15. Cessna Aircraft Company:**  
Amendment 39-8519. Docket 92-NM-155-AD.

**Applicability:** Citation Model 500/501 series airplanes, unit numbers -0001 through -0689, inclusive, equipped with thrust reversers; Citation Model 550/551 series airplanes, unit numbers -0002 through -0678, inclusive, equipped with thrust reversers; Citation Model S550 series airplanes, unit numbers -0001 through -0160, inclusive; Citation Model 560 series airplanes, unit numbers -071A, -092A, -109A, and -0001 through -0118, inclusive; Citation Model 650 series airplanes, serial numbers -0001 through -0217, inclusive; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent severely reduced controllability of engine power authority, accomplish the following:

(a) Within 150 hours time-in-service after the effective date of this AD, modify the thrust reverser throttle load limiter in accordance with Cessna Citation Service Bulletin SB500-78-11, dated September 13, 1991 (for Model 500/501 series airplanes); Cessna Citation Service Bulletin SB550-78-03, dated September 13, 1991 (for Model 550/551 series airplanes); Cessna Citation Service Bulletin SBS550-78-04, dated September 13, 1991 (for Model S550 series airplanes); Cessna Citation Service Bulletin SB560-78-02, dated September 13, 1991 (for Model 560 series airplanes); or Cessna Citation Service Bulletin SB650-78-05, Revision 1, dated June 12, 1992 (for Model 650 series airplanes); as applicable.

(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, Wichita Aircraft Certification Office (ACO), FAA, Small 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, Wichita ACO.

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

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

(d) The modification shall be done in accordance with the following Cessna Citation Service Bulletins, as applicable, which contain the specified effective pages:

Service bulletin referenced and date	Page No.	Revision level shown on page	Shown on page
500-78-11, September 13, 1991 .....	1-7	Original .....	Sept. 13, 1991.
SBS550-78-04, September 13, 1991 .....	1-7	Original .....	Sept. 13, 1991.
SB550-78-03, September 13, 1991 .....	1-7	Original .....	Sept. 13, 1991.
SB560-78-02, September 13, 1991 .....	1-7	Original .....	Sept. 13, 1991.
SB650-78-05, Revision 1, June 12, 1992 .....	1-3	1 .....	June 12, 1992.
	4-6	Original .....	Feb. 14, 1992.

This incorporation by reference was approved by the Director of the **Federal Register** in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Cessna Aircraft Company, Citation Marketing Division, P.O. Box 7706, Wichita, Kansas 67277. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the **Federal Register**, 800 North Capitol Street, NW., suite 700, Washington, DC.

(e) This amendment becomes effective on April 23, 1993.

Issued in Renton, Washington, on March 15, 1993.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 93-6650 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-13-M

#### 14 CFR Part 39

[Docket No. 92-NM-142-AD; Amendment 39-8520; AD 93-05-16]

**Airworthiness Directives; McDonnell Douglas Model DC-9 and Model DC-9-80 Series Airplanes, Model MD-88 Airplanes, and C-9 (Military) Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment supersedes an existing airworthiness directive (AD), applicable to certain McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes, that currently requires inspection of the rudder power control valve to determine if a lockwire is installed and, if not installed, adjustment of the retention nut and installation of a lockwire. That action was prompted by reports of loss of rudder control on final approach and landing. This amendment adds airplanes to the applicability statement of the rule; these additional airplanes are also subject to the addressed unsafe condition. The actions specified by this AD are intended to prevent loss of rudder control.

**DATES:** Effective April 23, 1993.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 23, 1993.

**ADDRESSES:** The service information referenced in this AD may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90846-1771, Attention: Business Unit Manager, Technical Publications—Technical Administrative Support, C1-L5B. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office (ACO), 3229 E. Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. **FOR FURTHER INFORMATION CONTACT:** Mr. Walter Eierman, Aerospace Engineer, Los Angeles Aircraft Certification Office, ANM-131L, FAA, Transport Airplane Directorate, 3229 East Spring Street, Long Beach, California 90806-2425; telephone (310) 988-5336; fax (310) 988-5210.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations by superseding AD 91-18-03, Amendment 39-8006 (56 FR 41058, August 19, 1991), which is applicable to certain McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes, was published in the Federal Register on October 2, 1992 (57 FR 45586). The action proposed to continue to require inspection of the rudder power control valve to determine if a lockwire is installed and, if not installed, adjustment of the retention nut and installation of a lockwire. It also proposed to add additional airplanes to the applicability statement of the rule.

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

One commenter supports the proposed rule.

The Air Transport Association (ATA) of America, on behalf of two of its

member operators, requests that the FAA clarify the requirements for terminating action of this proposal. One member comments that, as the proposal is currently written, an operator may assume that modification of the rudder power control valve is the final terminating action, to be accomplished after installation of a lockwire. However, ATA believes that lockwire installation alone is a safe and effective method for ensuring retention of the nut. The FAA concurs that clarification is warranted. The FAA has determined that either installation of a lockwire or modification of the rudder power control valve would adequately ensure the proper operation of the rudder pedal and would constitute terminating action for the requirements of this AD. Therefore, once the requirements of paragraph (a)(2), which includes installation of a lockwire, have been accomplished, no further action is required by this AD. Paragraph (a)(2) of the final rule has been revised to include this clarification.

McDonnell Douglas and ATA request that the requirement for retightening the end cap to a specified torque, as required by paragraph (b) of the proposal, be deleted. The commenter maintains that opening the end cap to inspect for the presence of a lockwire on the control valve slide and nut introduces the possibility of insufficient torque being applied during reassembly, due to incorrect torque specifications that were listed in the original issues of McDonnell Douglas DC-9 Alert Service Bulletin A27-327 and MD-80 Alert Service Bulletin A27-317. The commenter does not believe that a loose cap and the subsequent potential fluid loss would result in a hazardous condition, since fluid loss would be readily detected and would not be related to the unsafe condition identified in the notice as loss of rudder control. After consideration of this data provided by the commenter, the FAA concurs, and has removed the end cap retightening requirement from the final rule. Further, the economic impact information, below, has been revised to exclude the labor costs associated with the end cap retightening procedure.

One commenter requests that the installation of cotterpins be accepted as an alternative replacement to replacement of lockwire with a locking tab washer. The commenter asserts that both stainless steel and nickel-copper cotterpins are readily available. The FAA does not concur, since there is no evidence that cotterpins may be adjusted to proper torque settings. However, the FAA may consider approval of an alternative method of compliance, in accordance with paragraph (b) of this AD, if such data were provided to justify the request.

Two commenters note that 226 U.S. registered airplanes have already been inspected in accordance with McDonnell Douglas DC-9 Alert Service Bulletin A27-327, Revision 1, dated March 9, 1992. One commenter notes that its entire fleet of 153 airplanes has been inspected. The other commenter notes that 73 of its airplanes have been inspected. The FAA has taken this updated information into consideration and has noted it in the economic impact information, below.

Paragraph (d) of the final rule has been revised to specify that airplanes on which the retention nut on the slide assembly of the rudder power control valve has been inspected previously in accordance with McDonnell Douglas DC-9 Alert Service Bulletin A27-327, Revision 1, dated March 9, 1992, or Revision 2, dated July 14, 1992, do not need to be reinspected. Reference to the later revisions of that service bulletin had been omitted inadvertently from paragraph (a) of the NPRM.

Paragraph (c) of the final rule has been revised to clarify the procedure for requesting alternative methods of compliance with this AD.

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

There are approximately 1,950 McDonnell Douglas Model DC-9 and Model DC-9-80 series airplanes, Model MD-88 airplanes, and C-9 (Military) airplanes of the affected design in the worldwide fleet. (The existing AD affected 101 McDonnell Douglas Model DC-9-80 series airplanes and Model MD-88 airplanes.) The FAA estimates that 1,150 airplanes of U.S. registry will be affected by this AD. (The existing AD affected 60 U.S.-registered airplanes.) The FAA estimates that it will take approximately 1 work hour per airplane

to accomplish the inspection requirement. The average labor rate is \$55 per work hour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$63,250.

However, the FAA has been advised that 226 U.S.-registered airplanes already have been inspected in accordance with the requirements of this AD. Therefore, the future economic impact of this AD on U.S. operators is actually only \$50,820.

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

For the reasons discussed above, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

#### List of Subjects in 14 CFR Part 39

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

#### Adoption of the Amendment

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

#### PART 39—AIRWORTHINESS DIRECTIVES

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

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

#### § 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-8006 (56 FR 41058, August 19, 1991), and by adding

a new airworthiness directive (AD), amendment 39-8520, to read as follows:

**93-05-16. McDonnell Douglas:** Amendment 39-8520. Docket 92-NM-142-AD. Supersedes AD 91-18-03, Amendment 39-8006.

**Applicability:** Model DC-9 and C-9 (Military) airplanes; as listed in McDonnell Douglas DC-9 Alert Service Bulletin A27-327, Revision 1, dated March 9, 1992; and Model DC-9-80 series airplanes and Model MD-88 airplanes; as listed in McDonnell Douglas MD-80 Alert Service Bulletin A27-317, Revision 2, dated May 22, 1992; certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent loss of rudder control, accomplish the following:

(A) For airplanes on which the retention nut on the slide assembly of the rudder power control valve has not been inspected in accordance with McDonnell Douglas DC-9 Alert Service Bulletin A27-327, dated December 2, 1991, or Revision 1, dated March 9, 1992, or Revision 2, dated July 14, 1992; or McDonnell Douglas MD-80 Alert Service Bulletin A27-317, dated June 17, 1991, or Revision 1, dated January 14, 1992, or Revision 2, dated May 22, 1992: Within 90 days after the effective date of this AD, inspect the retention nut on the rudder power control valve slide assembly to determine if a lockwire is installed, in accordance with McDonnell Douglas DC-9 Alert Service Bulletin A27-327, Revision 1, dated March 9, 1992; or McDonnell Douglas MD-80 Alert Service Bulletin A27-317, Revision 2, dated May 22, 1992; as applicable.

(1) If a lockwire is installed, no further action is required by this AD.

(2) If a lockwire is not installed, prior to further flight, adjust the retention nut, install a lockwire, and functionally check the rudder power control valve in accordance with the applicable service bulletin. No further action is required by this AD.

(b) Modification of the rudder power control valve by replacing the lockwire with a locking tab washer, in accordance with McDonnell Douglas Service Bulletin 27-321, dated May 18, 1992, constitutes terminating action for the requirements of this AD.

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

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

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

(e) The inspection, installation, and functional check shall be done in accordance

with McDonnell Douglas DC-9 Alert Service Bulletin A27-327, Revision 1, dated March 9, 1992; or McDonnell Douglas MD-80 Alert Service Bulletin A27-317, Revision 2, dated May 22, 1992; as applicable. The modification shall be done in accordance with McDonnell Douglas Service Bulletin 27-321, dated May 18, 1992. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90846-1771, Attention: Business Unit Manager, Technical Publications—Technical Administrative Support, C1-L5B. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles ACO, 3229 E. Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 23, 1993.

Issued in Renton, Washington, on March 15, 1993.

**Darrell M. Pederson,**  
Acting Manager, Transport Airplane  
Directorate, Aircraft Certification Service.  
[FR Doc. 93-6651 Filed 3-23-93; 8:45 am]

BILLING CODE 4610-13-M

## 14 CFR Part 71

[Airspace Docket No. 92-ANE-45]

### Alteration of VOR Federal Airways, Control Areas and Jet Routes; MA

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment modifies the descriptions of various Federal airways, control areas, and jet routes in the Hyannis, MA, area. The action is necessary because of the decommissioning of the Hyannis (HYA) very high frequency omnidirectional range/tactical air navigation (VORTAC) and the commissioning of the Marconi, MA (LFV), VORTAC in North Truro, MA.

**EFFECTIVE DATE:** 0901 U.T.C., May 27, 1993.

**FOR FURTHER INFORMATION CONTACT:** Patricia P. Crawford, Airspace and Obstruction Evaluation Branch (ATP-240), Airspace-Rules and Aeronautical Information Division, Air Traffic Rules and Procedures Service, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-9255.

## SUPPLEMENTARY INFORMATION:

### History

On January 21, 1993, the FAA proposed to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) to alter various Federal airways, control areas, and jet routes in the Hyannis, MA, area (58 FR 5301). Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No comments objecting to the proposal were received. Except for editorial changes, this amendment is the same as that proposed in the notice. The coordinates for this airspace docket are based on North American Datum 83. Domestic VOR Federal airways, control areas, and jet routes are published, respectively, in §§ 71.123, 71.161, and 71.607 of FAA Order 7400.7A dated November 2, 1992, and effective November 27, 1992, which is incorporated by reference in 14 CFR 71.1. The Federal airways, control areas, and jet routes listed in this document will be published subsequently in the Order.

### The Rule

This amendment to part 71 of the Federal Aviation Regulations alters various VOR Federal airways, control areas, and jet routes in the Hyannis, MA, area. The alterations are necessary because the Hyannis VORTAC was decommissioned and relocated to North Truro, MA. The commissioning of the new navigational aid, Marconi VORTAC in North Truro, MA, necessitate the changes to VOR Federal airways, control areas, and jet routes in that airspace.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 71

Aviation safety, Control areas, Domestic VOR Federal airways, Incorporation by reference, Jet routes.

## Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

### PART 71—[AMENDED]

1. The authority citation for part 71 continues to read as follows:

**Authority:** 49 U.S.C. app. 1348(a), 1354(a), 1510; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389; 49 U.S.C. 106(g); 14 CFR 11.69.

#### § 71.1 [Amended]

2. The incorporation by reference in 14 CFR 71.1 of the Federal Aviation Administration Order 7400.7A, Compilation of Regulations, dated November 2, 1992, and effective November 27, 1992, is amended as follows:

#### Section 71.123 Domestic VOR Federal Airways

\* \* \* \* \*

#### V-141 [Revised]

From Nantucket, MA; INT Nantucket 334° and Boston, MA 138° radials; to Boston. From Manchester, NH; Concord, NH; Lebanon, NH; Burlington, VT; to Massena, NY.

\* \* \* \* \*

#### V-151 [Revised]

From INT Nantucket, MA, 334° and Providence, RI, 079° radials; Providence; Putnam, CT; Gardner, MA; Keene, NH; Lebanon, NH; Montpelier, VT; Burlington, VT.

\* \* \* \* \*

#### V-167 [Revised]

From Hancock, NY; INT Hancock 117° and Kingston, NY, 270° radials; Kingston; INT Kingston 095° and Hartford, CT, 269° radials; Hartford; Providence, RI; INT Providence 101° and Marconi, MA, 211° radials; Marconi; INT Marconi 346° and Kennebunk, ME, 161° radials; to Kennebunk. The airspace outside the United States below 2,000 feet MSL, including the portion within Warning Area W-103, is excluded.

\* \* \* \* \*

#### Section 71.161 Control Areas Associated With Jet Routes Outside the Continental Control Area

\* \* \* \* \*

#### J-150 [Revised]

From Robbinsville, NJ, via Hampton, NY; Marconi, MA; to the INT of Marconi 082° and Boston, MA, 097° radials.

\* \* \* \* \*

\* \* \* \* \*

#### J-174 [Revised]

From Snow Hill, MD, via Hampton, NY; Marconi, MA; to HERIN INT. Airspace below FL 240 is excluded between Snow Hill and lat. 38°45'00" N., long. 74°43'59" W. Airspace

above FL 410 is excluded between Snow Hill and Hampton.

\* \* \* \* \*

*Section 71.607 Jet Routes*

\* \* \* \* \*

**J-79 [Revised]**

From Key West, FL, via Miami, FL; Palm Beach, FL; Vero Beach, FL; Ormond Beach, FL; INT Ormond Beach 360° and Charleston, SC, 210° radials; Charleston; Tar River, NC; Franklin, VA; Salisbury, MD; INT Salisbury 018° and Kennedy, NY, 218° radials; Kennedy; INT Kennedy 080° and Nantucket, MA, 254° radials; INT Nantucket 254° and Marconi, MA, 205° radials; Marconi; INT Marconi 006° and Bangor, ME, 206° radials; Bangor.

\* \* \* \* \*

**J-150 [Revised]**

From Gordonsville, VA; Nottingham, MD; INT Nottingham 061° and Woodstown, NJ, 225° radials; Woodstown; Coyle, NJ; INT Coyle 075° and Hampton, NY, 231° radials; Hampton; INT Hampton 069° and Marconi, MA, 228° radials; Marconi; to the INT Marconi 082° and Boston, MA, 097° radials.

\* \* \* \* \*

**J-174 [Revised]**

From Craig, FL, via INT Craig 020° and Charleston, SC, 210° radials; Charleston; Wilmington, NC; Dixon NDB, NC; Norfolk, VA; INT Norfolk 023° and Snow Hill, MD, 211° radials; Snow Hill; Hampton, NY; INT Hampton 069° and Marconi, MA, 228° radials; Marconi, to the INT of Marconi 090° and Nantucket, MA, 066° radials. Airspace below FL 240 is excluded between Snow Hill and lat. 38°45'00" N., long. 74°43'59" W. Airspace above FL 410 is excluded between Snow Hill and Hampton.

\* \* \* \* \*

Issued in Washington, DC, on March 17, 1993.

**Harold W. Becker,**

*Manager, Airspace-Rules and Aeronautical Information Division.*

[FR Doc. 93-6721 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-13-M

**14 CFR Part 71**

[Airspace Docket No. 92-ASW-38]

**Establishment of Jet Route J-590; LA**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment establishes Jet Route J-590 located in the vicinity of Lake Charles, LA. The new jet route provides a more efficient routing for aircraft en route to northeastern destinations. Also, the jet route eliminates the opposite direction traffic now encountered by departure and arrival traffic in the Houston, TX, terminal area. This action also reduces controller workload.

**EFFECTIVE DATE:** 0901 U.T.C., May 27, 1993.

**FOR FURTHER INFORMATION CONTACT:**

Lewis W. Still, Airspace and Obstruction Evaluation Branch (ATP-240), Airspace-Rules and Aeronautical Information Division, Air Traffic Rules and Procedures Service, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267-9250.

**SUPPLEMENTARY INFORMATION:**

**History**

On December 1, 1992, the FAA proposed to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) to establish J-590 between Lake Charles, LA, and Montgomery, AL (57 FR 56875). Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No comments objecting to the proposal were received. Except for editorial changes, this amendment is the same as that proposed in the notice. Jet routes are published in § 71.607 of FAA Order 7400.7A dated November 2, 1992, and effective November 27, 1992, which is incorporated by reference in 14 CFR 71.1. The jet route listed in this document will be published subsequently in the Order.

**The Rule**

This amendment to part 71 of the Federal Aviation Regulations establishes J-590 between Lake Charles, LA, and Montgomery, AL. This new jet route provides a more efficient routing for traffic departing the Houston, TX, terminal area, to destinations in the northeastern United States. Currently, northeastbound Houston departures conflict with southwestbound New Orleans traffic. The new jet route provides an alternative routing for Houston area traffic. This route will be 12 miles shorter than the current route. This action will also reduce controller workload.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a "major rule" under Executive Order 12291; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it

is certified that this rule will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 71**

Aviation safety, Incorporation by reference, Jet routes.

**Adoption of the Amendment**

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

**PART 71—[AMENDED]**

1. The authority citation for part 71 continues to read as follows:

**Authority:** 49 U.S.C. app. 1348(a), 1354(a), 1510; E.O. 10854, 24 FR 9565, 3 CFR, 1959-1963 Comp., p. 389; 49 U.S.C. 106(g); 14 CFR 11.69.

**§ 71.1 [Amended]**

2. The incorporation by reference in 14 CFR 71.1 of the Federal Aviation Administration Order 7400.7A, Compilation of Regulations, dated November 2, 1992, and effective November 27, 1992, is amended as follows:

*Section 71.607 Jet Routes*

\* \* \* \* \*

**J-590 [New]**

From Lake Charles, LA; INT Lake Charles 081° and Greene County, MS, 252° radials; Greene County; to Montgomery, AL.

\* \* \* \* \*

Issued in Washington, DC, on March 17, 1993.

**Harold W. Becker,**

*Manager, Airspace-Rules and Aeronautical Information Division.*

[FR Doc. 93-6722 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-13-M

**FEDERAL TRADE COMMISSION**

**16 CFR Parts 4 and 5**

**Miscellaneous Rules; Standards of Conduct**

**AGENCY:** Federal Trade Commission.

**ACTION:** Final rule.

**SUMMARY:** This document amends 16 CFR part 4 (Miscellaneous Rules) and 16 CFR part 5 (Standards of Conduct). This action is necessary because portions of 16 CFR part 5 have been superseded by regulations on "Financial Disclosure, Qualified Trusts, and Certificates of Divestiture for Executive Branch Employees" that were issued by the Office of Personnel Management (OPM) and the Office of Government Ethics

(OGE), and by the "Standards of Ethical Conduct for Employees of the Executive Branch" that were issued by OGE. The Standards establish uniform standards of ethical conduct that are applicable to all executive branch personnel. This action, in turn, requires 16 CFR part 4 to be amended in order to conform to the new provisions under the Standards of Conduct.

**EFFECTIVE DATE:** February 8, 1993.

**FOR FURTHER INFORMATION CONTACT:**

Kathleen A. Rittner (202) 326-2498 or Ira S. Kaye (202) 326-2426, Office of General Counsel, Federal Trade Commission, 6th and Pennsylvania Avenue NW., Washington, DC 20580.

**SUPPLEMENTARY INFORMATION:**

**I. Analysis of Regulation**

On April 7, 1992, the United States Office of Government Ethics (OGE) published interim rules pertaining to, *inter alia*, the public and confidential financial disclosure systems applicable to executive branch employees. 57 FR 11800 ("interim regulation"). The interim regulation combines the requirements for both the public and confidential financial disclosure system into a single rule that is codified at 5 CFR part 2634, and supersedes individual agency regulations based on earlier versions of the financial disclosure rules. The interim regulation contemplates that agencies will promulgate internal written procedures and guidelines for filing, as required by the Ethics in Government Act. Accordingly, the FTC is revising part 5 (Standards of Conduct) of its Rules of Practice, 16 CFR, to reflect this change and will publish its procedures and guidelines for filing in the FTC Administrative Manual.

The Office of Government Ethics also published, on August 7, 1992, a Final Rule entitled "Standards of Ethical Conduct for Employees of the Executive Branch" (Standards) at 57 FR 35006 (to be codified at 5 CFR part 2635). The Standards, effective February 3, 1993, establish uniform standards of ethical conduct that are applicable to all executive branch personnel, and supersede portions of the Federal Trade Commission's Standards of Conduct found at 16 CFR part 5. Accordingly, the FTC is further revising part 5 to cross-reference the Standards, and to remove, reserve, and/or redesignate affected portions of part 5. Finally, conforming corrections are made to part 4 (Miscellaneous Rules) of the Commission's Rules of Practice.

**II. Matters of Regulatory Procedure**

**Regulatory Flexibility Act**

The Commission has determined under the Regulatory Flexibility Act (5 U.S.C. chapter 6) that this regulation will not have a significant economic impact on a substantial number of small business entities because it affects only Federal employees.

**Paperwork Reduction Act**

The Commission has determined that the Paperwork Reduction Act (44 U.S.C. chapter 35) does not apply because this regulation does not contain any information collection requirements that require the approval of the Office of Management and Budget.

**List of Subjects in 16 CFR Parts 4 and 5**

Administrative practice and procedure, Conflicts of interest.

For the reasons set forth in the preamble, Parts 4 and 5 of Title 16 of the Code of Federal Regulations are amended to read as follows:

**PART 4—MISCELLANEOUS RULES**

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

**Authority:** Sec. 6, 38 Stat. 721; 15 U.S.C. 46

2: Section 4.9 is amended by revising paragraph (a)(2) to read as follows:

**§ 4.9 Public records.**

(a) *General.*  
(2) Records that are exempt from disclosure or are otherwise not available from the Commission's public record may be made available for inspection and copying only upon request under the procedures set forth in § 4.11 of this part, or as provided in §§ 4.10 (d) through (g), 4.13, and 4.15(b)(3) of this part, or by the Commission.

3. In § 4.11, paragraph (g) is added to read as follows:

**§ 4.11 Requests for disclosure of records.**

(g) Employees are encouraged to engage in teaching, lecturing, and writing that is not prohibited by law, Executive order, or regulation. However, an employee shall not use information obtained as a result of his Government employment, except to the extent that such information has been made available to the general public or will be made available on request, or when the General Counsel gives written authorization for the use of nonpublic information on the basis that the use is in the public interest.

**PART 5—STANDARDS OF CONDUCT**

1. The table of contents and authority citation for part 5 are revised to read as follows:

**PART 5—STANDARDS OF CONDUCT**

**Subpart A—Employee Conduct Standards and Financial Conflicts of Interest**

**Sec.**

- 5.1 Cross-reference to executive branch-wide regulations.  
5.2 Exemption of insubstantial financial conflicts.

**Subpart B—Financial Disclosure Requirements**

- 5.10 Cross-reference to executive branch-wide regulations.

**Subpart C—[Reserved]**

**Subpart D—[Reserved]**

**Subpart E—Disciplinary Actions Concerning Postemployment Conflict of Interest**

- 5.51 Scope and Applicability.  
5.52 Nonpublic proceedings.  
5.53 Initiation of investigation.  
5.54 Referral to the Office of Government Ethics and to the Department of Justice.  
5.55 Conduct of investigation.  
5.56 Disposition.  
5.57 Order to show cause.  
5.58 Answer and request for a hearing.  
5.59 Presiding official.  
5.60 Scheduling of hearing.  
5.61 Prehearing procedures; motions; interlocutory appeals; summary decision; discovery; compulsory process.  
5.62 Hearing rights of respondent.  
5.63 Evidence; transcript; in camera orders; proposed findings of fact and conclusions of law.  
5.64 Initial decisions.  
5.65 Review of initial decision.  
5.66 Commission decision and reconsideration.  
5.67 Sanctions.  
5.68 Judicial review.

**Authority:** 5 U.S.C. 7301; 5 U.S.C. App. (Ethics in Government Act of 1978); 15 U.S.C. 46(g); E.O. 12674, 54 FR 15159, 3 CFR, 1989 Comp., p. 215, as modified by E.O. 12731, 55 FR 42547, 3 CFR, 1990 Comp., p. 306; 5 CFR Part 2635, unless otherwise noted.

2. Subpart A of part 5 is revised to read as follows:

**Subpart A—Employee Conduct Standards and Financial Conflicts of Interest**

**§ 5.1 Cross-reference to executive branch-wide regulations.**

Commissioners and employees, including special government employees, of the Federal Trade Commission (FTC) are subject to and should refer to the "Standards of Ethical Conduct for Employees of the Executive Branch" at 5 CFR part 2635 ("executive



branch-wide Standards of Conduct") and to the FTC regulations at 5 CFR 5701.101 that supplements the executive branch-wide Standards of Conduct.

#### §5.2 Exemption of insubstantial financial conflicts.

(a) An employee or special Government employee will not be subject to remedial or disciplinary action or to criminal prosecution under 18 U.S.C. 208(a), if he makes a full disclosure in writing to the official responsible for his appointment of the nature and circumstances of the particular matter involved and of his conflicting financial interest relating thereto, and receives in advance a written determination made by such official that the interest is not so substantial as to be deemed likely to affect the integrity of the services which the Government may expect from the employee or special Government employee.

(b) For the purposes of paragraph (a) of this section, the "official responsible for appointment" shall be the Executive Director in all cases where the employee is classified at grade GS-15 or below, or at a comparable pay level, except that each Commissioner shall be the "official responsible for appointment" of advisors in the Commissioner's immediate office.

(c) In all other cases, the Chairman shall be the "official responsible for appointment."

(d) The financial interests described below are exempted from the provisions of 18 U.S.C. 208(a) as being too remote or too inconsequential to affect the integrity of an employee's services: Stocks and bonds of a diversified mutual fund or investment company *Provided*, that the fair market value of the employee's holdings in the fund or company does not exceed one percent of the value of its reported assets.

3. Subpart B of part 5 is revised to read as follows:

#### Subpart B—Financial Disclosure Requirements

##### §5.10 Cross-reference to executive branch-wide regulations.

Commissioners and employees, including special government employees, of the Federal Trade Commission are subject to and should refer to the executive branch-wide financial disclosure regulations at 5 CFR Part 2634, and to the procedures for filing and review of financial disclosure reports found in Chapter 3 of the *FTC Administrative Manual*.

#### Subparts C and D [Removed]

4. Subparts C through D of part 5 are removed and reserved.

5. Subpart E is amended by revising §5.51 to read as follows:

#### Subpart E—Disciplinary Actions Concerning Postemployment Conflict of Interest

**Authority:** 15 U.S.C. 41 *et seq.*

##### §5.51 Scope and applicability.

These regulations establish procedures for investigating and determining alleged violations of 18 U.S.C. 207 (postemployment restrictions applicable to federal employees) or regulations issued by the Office of Government Ethics, set forth in 5 CFR Parts 2637 and 2641, reflecting the views of the Office of Government Ethics and the Department of Justice as to the requirements of 18 U.S.C. 207.

By direction of the Commission.

**Donald S. Clark,**

*Secretary.*

[FR Doc. 93-6745 Filed 3-23-93; 8:45 am]

BILLING CODE 6750-01-M

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### 18 CFR Part 11

[Docket No. RM93-5-000; Order No. 551]

#### Revision of the Billing Procedures for Annual Charges for Administering Part I of the Federal Power Act

Issued March 18, 1993.

**AGENCY:** Federal Energy Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** The Federal Energy Regulatory Commission is revising the billing procedures for assessing annual charges for administering part I of the Federal Power Act to enable the Commission to fully recover its costs of administering that Part during the fiscal year in which they were incurred. The final rule also provides that in order to avoid undue burden in the transition period, the costs incurred by the Commission during fiscal year 1992 will be billed in fiscal year 1994, and the licensee may elect to be billed under a three-year installment plan. Finally, the Commission is also adopting a procedure of current-year billing of annual charges for the use of tribal land on Indian reservations.

**EFFECTIVE DATE:** April 23, 1993.

**FOR FURTHER INFORMATION CONTACT:** Barry Smoler, Office of the General Counsel, Federal Energy Regulatory Commission, 825 N. Capitol Street, NE., Washington, DC 20426. (202) 208-1269.

**SUPPLEMENTARY INFORMATION:** In addition to publishing the full text of this document in the *Federal Register*, the Commission also provides all interested persons an opportunity to inspect or copy the contents of this document during normal business hours in room 3104, 941 North Capitol Street, NE., Washington, DC 20426.

The Commission Issuance Posting System (CIPS), an electronic bulletin board service, provides access to the texts of formal documents issued by the Commission. CIPS is available at no charge to the user and may be accessed using a personal computer with a modem by dialing (202) 208-1397. To access CIPS, set your communications software to use 300, 1200, or 2400 bps, full duplex, no parity, 8 data bits, and 1 stop bit. CIPS can also be accessed at 9600 bps by dialing (202) 208-1781. The full text of this rule will be available on CIPS for 30 days from the date of issuance. The complete text on diskette in Wordperfect format may also be purchased from the Commission's copy contractor, La Dorn Systems Corporation, located in room 3104, 941 North Capitol Street, NE., Washington, DC 20426.

#### I. Introduction

On December 17, 1992, the Federal Energy Regulatory Commission issued a Notice of Proposed Rulemaking (NOPR)<sup>1</sup> in which it proposed to revise the billing procedures for assessing annual charges for administering Part I of the Federal Power Act (FPA).<sup>2</sup> Comments in response to the NOPR were received from 22 commenters.<sup>3</sup> The Commission has decided to implement the proposal in the NOPR, with certain modifications, as discussed below.

Under the revised procedures, the assessment of annual charges will be based on an estimate derived from the Commission's appropriation for that year of the costs that will be incurred by the Commission during the fiscal year in which the annual charges are assessed. After the end of the fiscal year, the assessment will be recalculated based on the costs that were actually incurred during that fiscal year; the actual costs will be compared to the estimated costs;

<sup>1</sup> 14 FERC Stats. & Regs. ¶32,492. The NOPR was published in the *Federal Register* on December 29, 1992 (57 FR 61850).

<sup>2</sup> 16 U.S.C. 792-823b.

<sup>3</sup> The commenters are identified in appendix A.

and the difference between the actual and estimated costs will be carried over as an adjustment to the assessment for the subsequent fiscal year. For the initial allocation of costs among the licensees, the Commission will use the authorized capacity to date and the data supplied by the licensees with respect to the preceding fiscal year. For the recalculation using actual costs, the Commission will use the authorized capacity and generation data for the year that corresponds to the year of actual costs. In order to avoid undue burden in the transition period, the costs incurred by the Commission in administering part I of the FPA during fiscal year 1992 will be billed in fiscal year 1994, but at the request of each licensee may be payable in three equal installments in fiscal years 1994, 1995 and 1996, with interest from 1994. Finally, the Commission is also adopting a procedure of current-year billing of annual charges for the use of tribal land on Indian reservations.

## II. Background

The Commission is required by section 10(e) of the FPA<sup>4</sup> to collect, among other things, annual charges for the cost of administering part I of the FPA. Part 11 of the Commission's regulations<sup>5</sup> provides the manner in which licensees are charged for such costs.<sup>6</sup> The reimbursable costs are determined on a fiscal year basis.

As discussed in the NOPR, the Commission's prior regulations did not specify how the reimbursable costs were to be determined, and neither did the FPA. The Commission's past practice has been to determine the annual charges billed to the licensees after the end of the fiscal year in which the costs were incurred. The total costs are then allocated among the licensees based on the amount of each licensee's horsepower, or horsepower and generation, during the preceding fiscal year. The allocation is based on the ratio of each licensee's horsepower (or horsepower and generation) to the total of all of the licensees' horsepower (or horsepower and generation).<sup>7</sup>

There was, however, a substantial lag between the time the costs were incurred and the time they were recovered. In addition, there was a variation from year to year in the costs incurred by the Commission in administering part I of the FPA. Therefore, in the NOPR the Commission proposed to revise its billing practices in such a manner as to enable it to fully recover its costs during the fiscal year in which those costs are incurred.

The NOPR proposed to achieve this objective by adding to § 11.1 of the current regulations a new paragraph (g). This provision adopts a practice of basing the assessments on an estimate of the costs that will be incurred by the Commission in the current fiscal year (rather than basing the assessments on the costs actually incurred in the preceding fiscal year). The estimate of costs will be based on the Commission's current-year budget appropriation, and will be assessed to the licensees using prior-year generation data from the licensees and authorized capacity to date.

The new paragraph (g), as adopted herein, also provides for an adjustment in the subsequent fiscal year. After the end of the current fiscal year, the estimated costs will be compared to the actual costs; the assessments will be recalculated based on the costs actually incurred, using actual generation data and capacity; and the difference between estimated and actual costs will be carried over as an adjustment to the assessment for the subsequent fiscal year.

In the NOPR, the Commission explained that it currently uses the same current-year billing procedures to recover the costs it incurs in administering the Natural Gas Act (NGA), the Natural Gas Policy Act (NGPA), the Interstate Commerce Act (ICA), and parts II and III of the FPA itself. Those costs are recovered through the assessment of annual charges against gas and oil pipelines and public utilities pursuant to the mandate of section 3401 of the Omnibus Budget Reconciliation Act of 1986 (OBRA),<sup>8</sup> which requires the Commission to recover all of its costs for the fiscal year through annual charges and fees.<sup>9</sup> The annual charges

assessed pursuant to OBRA are based on an estimate of the Commission's current-fiscal-year costs, with subsequent adjustments based on actual costs.<sup>10</sup>

Under the final rule, the bills issued by the Commission in fiscal year 1993 will assess annual charges for the costs incurred by the Commission (in administering part I of the FPA) in fiscal year 1993, the current year. The NOPR noted that the Commission also incurred costs in fiscal year 1992, which it will not be able to recover unless it also assesses charges for fiscal year 1992. In the NOPR, the Commission invited comments as to whether the billing of the costs for both fiscal years 1992 and 1993 in the same year would cause hardship for the hydropower industry, and if so, invited suggestions as to how to mitigate that hardship, consistent with law. The NOPR noted that one method under consideration was to bill fiscal year 1992 costs in three annual installments, starting in either fiscal year 1993 or 1994, and that this method would be consistent with the method used for phasing in U.S. lands charges in Order No. 469, issued May 8, 1987.<sup>11</sup>

The NOPR noted that in 1986 the Commission began including in its assessments of annual charges to licensees, the costs incurred by other federal agencies in the performance of their own responsibilities to administer part I of the FPA.<sup>12</sup> The NOPR also noted that Congress recently enacted section 1701(a) of the Energy Policy Act of 1992,<sup>13</sup> which provides for the recovery through annual charges of "any reasonable and necessary costs incurred by Federal and State fish and wildlife agencies and other natural and cultural resource agencies in connection with studies or other reviews carried out by such agencies for purposes of administering their responsibilities under" part I of the FPA. The NOPR stated that the Commission intends to address the implementation of section 1701(a) in a separate rulemaking, and that those issues are beyond the scope of this rulemaking.

Finally, the NOPR proposed to add a new paragraph (c) to § 11.4, to indicate

<sup>4</sup> 16 U.S.C. 803(e).

<sup>5</sup> 18 CFR part 11.

<sup>6</sup> Prior to the adoption of the current regulations in 1958 and 1963, administrative charges were in the nature of set fees that were billed for a calendar year. The present system of basing the annual charges on actual costs was adopted in Order No. 205, 19 F.P.C. 907 (1958) (with respect to municipal licensees only) and in Order No. 272, 30 F.P.C. 1333 (1963) (all other licensees); see also Order No. 272A, 31 F.P.C. 1555 (1964).

<sup>7</sup> The allocations are performed separately for municipal and non-municipal licensees. For municipal licensees, the allocation is based solely on the project's authorized horsepower. For non-

municipal licensees, the allocation is based on a combination of the project's authorized horsepower and the power actually generated. See 18 CFR 11.1.

<sup>8</sup> Public Law No. 99-509, title III, subtitle of E, section 3401 (1986) (codified as amended at 42 U.S.C. 7178). OBRA is implemented in part 382 of the Commission's Regulations, 18 CFR part 382.

<sup>9</sup> See Joint Explanatory Statement of the Committee of Conference to Accompany H.R. 5300 (Conference Report), H.R. Rep. No. 1012, 99th Cong., 2d Sess. 238, reprinted in 1986 U.S.C.A.N. 3607, 3883.

<sup>10</sup> The procedures for estimating the costs and later adjusting the assessments are described in Order No. 472, 52 FR 18201 (May 14, 1987), FERC Stats. & Regs. (Regulations Preambles 1986-1990) ¶ 30,746 at pp. 30,612 and 30,616-17 (1987). ¶

<sup>11</sup> FERC Stats. & Regs. (Regulations Preambles 1986-1990) ¶ 30,741 at p. 30,591.

<sup>12</sup> The background is described in the preamble to the above-referenced 1987 final rule on annual charges to recover hydroelectric administration costs and land use fees, FERC Stats. & Regs. ¶ 30,741 at pp. 30,591-92.

<sup>13</sup> Public Law 102-486, October 24, 1992.

that the annual charges for the use of tribal land within an Indian reservation will be billed during the year in which the land is used. The Commission's past practice had been to issue bills for the preceding year's use of such land. The Commission believed that the reasoning applicable to current-year billing for administrative charges was equally applicable to current-year billing for the use of tribal land. The NOPR proposed to bill in fiscal year 1993 the charges for both the fiscal year 1992 and the fiscal year 1993 use of tribal land.<sup>14</sup>

### III. Discussion

A majority of the commenters<sup>15</sup> express concern over whether costs incurred by Federal and State resource agencies would be billed on a current-year basis in the same manner as the costs incurred by the Commission. This topic drew far more comment than any other topic, and many of these comments<sup>16</sup> urge the Commission to delay or terminate this proceeding and to combine the proposals in the NOPR with broad comprehensive rulemaking proceeding on annual charges that includes consideration of how to implement section 1701(a) of the Energy Policy Act of 1992.

In particular, NHA and PG&E<sup>17</sup> contend that a determination to use current-year billing procedures with respect to the Commission's costs would set a precedent (in the commenters' view, a bad precedent) that would in some manner influence or foreclose the determination of whether to use current-year billing for Federal and State resource agency costs as well. EEI contends that it would be impractical or unduly complicated for the Commission to use current-year billing for the Commission's costs while using prior-year billing for the resource agency costs, while APPA requests an explanation of how the Commission and resource agency costs will be integrated in the billing process. These and other commenters contend that the resource agency costs must be billed on a basis of actual costs incurred, and not on a basis of estimates, and that the billing of the Commission's costs is so closely related to the billing of the resource agency costs that the two should be

considered together in the same proceeding.

A number of commenters<sup>18</sup> suggest that the NOPR did not provide an adequate explanation of the Commission's reasons for its proposal. Grant inquires as to whether the Commission would "gain greater flexibility or have more options in budgeting for future actions," whether the proposal "would decrease FERC's cost of doing business," and whether "there are advantages to a uniform billing and cost allocation scheme at FERC."<sup>19</sup>

The purpose of the proposed rule was clearly stated in the NOPR: "to revise the Commission's billing practices in such a manner as to enable it to fully recover its costs during the fiscal year in which those costs are incurred."<sup>20</sup> As we explained in the NOPR, in recent years there has been a significant fluctuation in the Commission's costs of administering Part I of the FPA. As several commenters noted, the recent sizable increase in costs is attributable at least in part to the large number of licenses that expired simultaneously, thus generating an unusually large number of applications for relicensing in the same time frame. Assessing annual charges, and receiving the payments of those charges, in the same fiscal year in which the administrative costs are incurred will better enable the Commission to recover its costs. In short, it will eliminate the year's lag between the incurrence and the recovery of administrative costs, so that any increase or decrease in such costs will be reflected in the current year's assessment instead of in the ensuing year's assessment.

In response to Grant's inquiries, the change will not provide "greater flexibility \* \* \* in budgeting" nor will it either increase or decrease the Commission's "cost of doing business." The Commission's budget is determined by Congress in its appropriations, and the change in billing procedures will not alter it. We don't expect any significant change in the Commission's cost of doing business due to this rule. The purpose of the final rule is to eliminate the one-year lag in recovery of the Commission's costs of administering Part I of the FPA.

We recognize that the recovery of costs incurred by State and Federal Resource agencies is not unrelated to the recovery of the Commission's costs. We also recognize that various aspects

of the Commission's annual charges allocation scheme were adopted many decades ago and may merit a fresh look in light of the evolution of the hydropower industry since that era.<sup>21</sup> As the commenters themselves recognize, however, section 1701(a) of the Energy Policy Act of 1992 raises difficult and perplexing issues that may not lend themselves to quick resolution. Comprehensive reconsideration of the annual charges program would be comparably time-consuming. As a practical matter, such a rulemaking proceeding could not be completed in time to affect the billing procedures for the current fiscal year, and we are unwilling to defer until next year the adoption of the final rule that is the subject of the instant proceeding.

The Commission emphasizes, however, that it does not regard the final rule adopted herein as in any way serving as a precedent with respect to the implementation of section 1701(a) of the Energy Policy Act of 1992. That Act raises numerous issues that must be considered independently on their own merits. The assessments for fiscal year 1993 will be based on estimates of the Commission's FY 1993 costs, to which will be added certain FY 1992 costs incurred by Federal agencies (i.e., the Federal agency costs will be calculated in the same manner as in prior years). We will not speculate here on how the Commission will integrate State and Federal resource agency costs into the billing process in future years.

Several commenters<sup>22</sup> contend that the analogy of OBRA to section 10(e) of the FPA is inapt. Several commenters<sup>23</sup> argue that the reference to "reimbursement" in section 10(e) precludes use of bills based on estimates of costs; these commenters contend that the bills must be based solely on actual costs that have already been incurred.

EEI and Consumers point out that section 3401(a)(2) of OBRA states that: "(2) The provisions of this subtitle shall not affect the authority, requirements, exceptions, or limitations in sections 10(e) and 30(e) of the Federal Power Act." They contend, therefore, that section 10(e) of the FPA governs the assessment of annual charges unencumbered by any requirements of OBRA. NHA and Consolidated point out

<sup>14</sup> No comments were received on the proposed revision of § 11.4, and these charges will be billed as proposed in the NOPR.

<sup>15</sup> NHA, EEI, APPA, Alabama, Consolidated, Consumers, Cowitz, Danville, Douglas, Georgia, Grant, Halecrest, PC&E, Pool, Puget, Tacoma, and Washington.

<sup>16</sup> NHA, APPA, Alabama, Grant, Consolidated, Consumers, Cowitz, PC&E, Pool, and Tacoma.

<sup>17</sup> Comments of NHA at 8-9; comments of PG&E at 2-3.

<sup>18</sup> NHA, Consolidated, Grant, Pool, Puget, and Tacoma.

<sup>19</sup> Comments of Grant at 2.

<sup>20</sup> IV FERC Stats. & Regs. at p. 32,681.

<sup>21</sup> The use of horsepower as a measure of capacity, for instance, reflects the hydropower industry of the prior century, and the variations in the different allocation formulae for different classes of licensees might also be outdated.

<sup>22</sup> See comments of NHA at 3-5, comments of EEI at 4-5, comments of Consolidated at 4-5, and comments of Consumers Power at 2-3.

<sup>23</sup> See comments of Consumers at 3-6 and comments of Danville at 1-4; cf. comments of Consolidated at 4-7.

that section 10(e) of the FPA, as amended by the Energy Policy Act of 1992, is broader in scope than OBRA, in that the former involves recovery of costs incurred by other agencies as well as by the Commission, while OBRA applies only to recovery of costs incurred by the Commission. We agree with both of these points, but that does not require a change to this rule. Our reference to OBRA was by analogy, and not as a source of legal authority for the proposed rule. Under OBRA, the Commission assesses annual charges on a current-year basis; that billing process has worked well; we believe that it would work equally well for the recovery of costs incurred to administer Part I of the FPA; and we believe that section 10(e) of the FPA permits comparable use of current-year billing to recover those costs.

This brings us to the argument advanced by Consumers and Danville that section 10(e) does not authorize use of estimates in the annual charges assessment process. They cite to the text of section 10(e), which provides in pertinent part that "the licensee shall pay to the United States reasonable annual charges in an amount to be fixed by the Commission for the purpose of reimbursing the United States for the costs of the administration of this part [Part I of the FPA] \* \* \*" (emphasis added). Consumers cites the consistent use of the word "reimburse" in the legislative history of section 10(e). Danville draws a distinction between the use of the word "reimbursing" in the above-quoted clause of section 10(e) and the use of the word "recompensing" in the next clause ("for recompensing it for the use, occupancy, and enjoyment of its lands or other property"), contending that (citing Webster's dictionary) "reimburse" means "to repay" or "to pay back or compensate \* \* \* for money spent," whereas "recompense" means "payment in return for something given or done, as services." Danville also cites the Commission's long-standing practice of implementing the administrative costs portion of section 10(e) by billing on a prior-year basis.

We believe that the billing procedures adopted in the final rule constitute "reimbursement" within the meaning of the first clause of section 10(e). The annual charges are designed to reimburse the United States for the administrative costs that are incurred. The adjustment in the ensuing year's bill will ensure that the assessments do not exceed the costs that were actually incurred. The Commission's costs are incurred pursuant to annual appropriations by Congress, and the

annual charges that are received from the licensees are transferred to the U.S. Treasury. Both of these events will now occur in the same fiscal year. We do not read section 10(e) to require use to defer the assessment until the ensuing fiscal year the costs were incurred.

EEL and Puget contend that the current practice has worked well for decades, and therefore that there is no need to change it. They also contend that using current-year data to determine the total charges while using prior-year costs to allocate those charges among the licensees is less precise and less equitable than using the same year's costs and data. EEL contends that the present system is simpler and less burdensome for both the licensees and the Commission, in that it avoids the two-step procedure and uncertainties inherent in estimates. APPA contends that the transition from prior-year billing to current-year billing could be disruptive and burdensome to licensees, both by increasing the assessment and by changing its timing. Danville suggests that use of current-year billing would discourage cost control at the Commission.

In the past there was less annual fluctuation in the Commission's costs. Given the changed circumstances, however, we believe that the change to current-year billing is now appropriate. We agree that the previous billing procedures were somewhat simpler for the Commission than the procedures adopted in the final rule, and that the transition to the new procedures may in some degree be temporarily burdensome to the licensees. We believe, however, that eliminating the delay in recovering the Commission's costs justifies the change in the procedure and outweighs the temporary burden to the licensees.

We agree with EEL and Puget that using the same year's costs and licensee data is more equitable and precise than the proposed method. Therefore, for the calculation using actual costs, the Commission will use generation data from the same year as the actual costs.

We disagree with Danville's suggestion that the use of current-year billing will discourage cost control at the Commission. As discussed above, the Commission cannot lawfully incur costs in excess of its appropriation from Congress; the annual charges paid by the licensees go to the U.S. Treasury, not the Commission; and the annual charge assessment and billing procedures cannot be used to increase the funds available to the Commission for expenditure.

In response to the Commission's inquiry in the NOPR, many

commenters<sup>24</sup> express the view that assessment of the costs that were incurred during fiscal year 1992 would be burdensome if such costs were billed in addition to, and in the same year as, the costs incurred during the then-current year. No commenter suggests that it wouldn't be burdensome. Danville characterizes the burden as "confiscatory," describing how (depending on the timing of the bills in relation to its fiscal year) the City of Danville might have to pay three years' bills in its same fiscal year.<sup>25</sup> Danville contends that those costs are not legally required to be billed.<sup>26</sup> NHA and Danville characterize the billing of the FY 1992 costs in addition to the then-current year's costs as constituting a "windfall" for the Commission. Several commenters<sup>27</sup> note that State regulatory commissions may treat the special payments for FY 1992 costs as non-recurring costs such as to disallow those costs in test-year rate cases; this would preclude utilities from recovering those costs from their ratepayers.

Approximately half of the commenters<sup>28</sup> urge us to defer the billing of the FY 1992 costs until FY 1994,<sup>29</sup> so as to provide an opportunity to budget for those extra costs. They also urge us to spread the FY 1992 costs over a period of several years, to reduce the burden and to increase the possibility of recovering some or all of these costs in rates approved by State commissions.

Virginia suggests spreading the FY 1992 costs over two or three years. Colorado, Sacramento, and Tapoco suggest three years. Washington suggests three or four years. Georgia suggests three "or more" years. Pool suggests three years, but four or five if warranted by the circumstances of particular licensees. Grant, PG&E, and Puget suggest four years. Cowlitz suggests four or five years. APPA and Alabama suggest five years. EEL suggests up to five or six years, based on the regulatory circumstances of the State involved. Pool suggests tailoring the period to the individual circumstances of the licensee. Danville suggests spreading the FY 1992 costs over the remaining years of the license, however many years that may be, for each individual licensee.

<sup>24</sup> NHA, EEL, APPA, Alabama, Consolidated, Danville, and Colorado.

<sup>25</sup> See comments of Danville at 6-7.

<sup>26</sup> *Id.* at 5.

<sup>27</sup> EEL, Georgia and Puget.

<sup>28</sup> EEL, APPA, Alabama, Consumers, PG&E, Colorado, Puget, Tapoco, and Virginia.

<sup>29</sup> In a related suggestion, Consumers recommends deferring until FY 1994 the change in billing procedure from prior-year costs to current-year costs.

In this regard, PC&E notes that, for it, the bill for FY 1992 administrative costs will be ten times larger than the bill for an extra year of land use charges that was mandated in the above-mentioned Order No. 469 and that was itself spread over three years. EEI believes that use of a five-year period might improve the opportunity for regulated utilities to recover the FY 1992 costs in a rate case before a State commission.

The FY 1992 costs do not constitute a "windfall" to the Commission or to the United States. Each licensee is obligated (by its license and by section 10(e) of the FPA) to pay annual charges for each year of its license. Fiscal year 1992 is one of those years. If the license runs for 50 years, the payment of charges attributable to FY 1992 in addition to the charges billed annually on a current-year basis will not add an extra year of charges to the license; the licensee will still pay for 50 years of administrative costs.

In light of the above, we see no reason why State regulatory commissions would not treat the separate charges for the FY 92 costs as a legitimate and integral part of the annual charges paid by the licensees, and approve rate structures that will enable the licensees to recover those costs.

The comments have convinced us that billing the charges for FY 1992 in the same year with the charges for FY 1993 would indeed be burdensome, and that the most serious aspect of the burden would result from imposing those charges immediately without providing the licensees an adequate period of time in which to budget for those extra costs. Therefore, we will defer the billing of those supplemental charges until FY 1994, and will allow each licensee the option of spreading those charges over a three-year period, in FY 1994, FY 1995, and FY 1996, with interest accruing from 1994. We are providing the initial deferred billing and the optional three-year payment plan in recognition of the fact that the previous billing procedure was lawful and was dutifully complied with by the licensees, and that the extra charges would be unduly burdensome to many licensees. Under these circumstances, we believe that the deferral of the FY 1992 bills as described above is both lawful and reasonable.

A number of commenters<sup>30</sup> request more information on how the new billing procedures will work, including the mechanics and the timing. EEI asks for a sample calculation. Pool asks how the costs will be estimated.

To arrive at the estimated billing basis, the Commission will start with an estimate of costs based on the Commission's current-year appropriation. Next, the Commission will deduct estimated administrative costs to be recovered from other sources, based on prior-year receipts. The net estimated costs will be divided among the hydropower projects as prescribed in § 11.1, using prior-year generation data as reported by the licensees, and authorized capacity to date.

After the end of the fiscal year, the Commission will calculate the actual costs for the program for that fiscal year. The difference between estimated and actual costs will be assessed to the hydropower projects as follows. The Commission will calculate the total costs, using the actual program costs (less actual administrative recoveries). The net actual costs will be redivided among the hydropower projects as described in § 11.1. For each project, we will then compare the charge derived from the estimated costs to the charge derived from the actual costs, and adjust that project's subsequent year's bill for the difference. In order to implement the changes made by this final rule, the issuance of the FY 1993 bills will be delayed, but not beyond June.

EEI suggests delaying the issuance of the bills until August or September of each year, when costs for the fiscal year can be estimated with greater accuracy and certainty. EEI also recommends providing a notice to the licensees by June or July of what the percentage increase might be vis-a-vis the prior year's bills, so that the licensees would have more time to budget for the increase.<sup>31</sup> Pool offers a comparable suggestion, that the estimate of current-year costs be based on the prior year's actual costs adjusted by a percentage factor, with the percentage announced in advance.

The Commission cannot delay issuance of the bills until August or September, because the Federal fiscal year ends on September 30 and the Commission needs to receive the payments by that date. To ensure timely receipt of payments within the fiscal year, the Commission will continue its present practice of issuing the bills in March.

Several commenters<sup>32</sup> ask us to clarify whether the rule proposed in the NOPR, as adopted herein, will in any way alter the present regulatory

<sup>31</sup> EEI also provides some suggestions on how the Commission might control costs. Although beyond the scope of the rulemaking, the Commission welcomes such suggestions and will give them serious consideration.

<sup>32</sup> Douglas, Grant, and Pool.

framework for determining the eligibility of States and municipalities for exemption from annual charges.<sup>33</sup> For the assessment based on estimated costs, municipal exemptions will be based on the prior year's generation or lack of profits. For the recalculated assessment, municipal exemptions will reflect the licensees' data for the year corresponding to the actual costs.

Grant inquires whether a "prorated true-up" will be performed if there is a change in the licensee's authorized capacity after the estimated bill is issued. The answer is yes. The change in capacity will be reflected in the ensuing recalculation using actual costs.

Finally, EEI urges us to adopt a schedule of filing fees for preliminary permit applications and original license applications, while Halecrest urges us to use this rulemaking proceeding to change the billing procedures so as to assess annual charges only after project construction has been completed and the project has commenced operating. Both of these suggestions fall well beyond the scope of this proceeding, as defined in the NOPR, and therefore will not be considered herein.

#### IV. Regulatory Flexibility Certification

The Regulatory Flexibility Act of 1980 (RFA)<sup>34</sup> generally requires a description and analysis of proposed regulations that will have a significant economic impact on a substantial number of small entities.<sup>35</sup> In the NOPR, and pursuant to section 605(b) of the RFA, the Commission certified that the regulations proposed therein would not have a significant economic impact on a substantial number of small entities. One commenter questioned that determination,<sup>36</sup> but its comment was predicated in part on costs incurred by the Federal and State resource agencies rather than the Commission. As discussed above, those costs fall beyond the scope of this rulemaking. The Commission certifies that the final rule adopted herein will not have a significant impact on a substantial number of small entities.

#### V. Environmental Statement

Issuance of this final rule does not constitute a major federal action having a significant adverse impact on the

<sup>33</sup> See 18 CFR 11.6.

<sup>34</sup> 5 U.S.C. 601-612.

<sup>35</sup> Section 601(c) of the RFA defines a "small entity" as a small business, a small not-for-profit enterprise, or a small governmental jurisdiction. A "small business" is defined by reference to section 3 of the Small Business Act as an enterprise which is "independently owned and operated and which is not dominant in its field of operating." 15 U.S.C. 632(a).

<sup>36</sup> Comments of Pool at 4.

<sup>30</sup> EEI, Douglas, Grant, PC&E, Pool, and Tacoma.

quality of the human environment under the Commission's regulations implementing the National Environmental Policy Act.<sup>37</sup> The regulations adopted herein are procedural in nature and therefore fall within the categorical exemptions provided in the Commission's regulations. Consequently, neither an environmental impact statement nor an environmental assessment is required.<sup>38</sup>

#### VI. Information Collection Statement

The Office of Management and Budget's (OMB) regulations require that OMB approve certain information collection requirements imposed by agency rule.<sup>39</sup> However, the regulations adopted herein contain no information collection requirements and therefore are not subject OMB approval.

#### VII. Effective Date

This rule is effective April 23, 1993.

#### List of Subjects in 18 CFR Part 11

Electric power, Reporting and recordkeeping requirements.

In consideration of the foregoing, the Commission amends part 11 of chapter I, title 18, Code of Federal Regulations, as set forth below.

By the Commission.

Lois D. Cashell,  
Secretary.

### PART 11—ANNUAL CHARGES UNDER PART I OF THE FEDERAL POWER ACT

1. The authority citation for part 11 is revised to read as follows:

**Authority:** 16 U.S.C. 791a-825r; 42 U.S.C. 7101-7352.

2. In § 11.1, a new paragraph (g) is added, to read as follows:

#### § 11.1 Cost of administration.

(g) With respect to costs incurred by the Commission, the assessment of annual charges will be based on an estimate of the costs of administration of part I of the Federal Power Act that will be incurred during the fiscal year in which the annual charges are assessed. After the end of the fiscal year, the assessment will be recalculated based on the costs of administration that were actually incurred during that fiscal year; the actual costs will be compared to the estimated costs; and the difference between the actual and estimated costs

will be carried over as an adjustment to the assessment for the subsequent fiscal year. The issuance of bills based on the administrative costs incurred by the Commission during the year in which the bill is issued will commence in 1993. The annual charge for the administrative costs that were incurred in fiscal year 1992 will be billed and payable in 1994. At the licensee's option, the charge may be paid in three equal annual installments in fiscal years 1994, 1995, and 1996, plus any accrued interest. If the licensee elects the three-year installment plan, the Commission will accrue interest (at the most recent yield of two-year Treasury securities) on the unpaid charges and add the accrued interest to the installments billed in fiscal years 1995 and 1996.

3. In § 11.4, a new paragraph (c) is added, to read as follows:

#### § 11.4 Use of government dams for pumped storage projects, and use of tribal lands.

\* \* \* \* \*

(c) Commencing in 1993, the annual charges for any project using tribal land within Indian reservations will be billed during the fiscal year in which the land is used, for the use of that land during that year.

**Note:** This appendix will not be published in the Code of Federal Regulations.

#### Appendix A—List of Commenters

Alabama Power Company (Alabama)  
American Public Power Association (APPA)  
Consolidated Pumped Storage, Inc.  
(Consolidated)  
Consumers Power (Consumers)  
City of Danville, Virginia Electric Department  
and Merced Irrigation District, California  
(Danville)  
Edison Electric Institute (EEI)  
Georgia Power Company (Georgia)  
Halecrest, Inc.  
National Hydropower Association (NHA)  
Pacific Gas and Electric Company (PG&E)  
Public Generating Pool (Pool)  
Public Service Company of Colorado  
(Colorado)  
Public Utility District of Cowlitz County,  
Washington (Cowlitz)  
Public Utility District No. 1 of Douglas  
County, Washington (Douglas)  
Public Utility District No. 2 of Grant County,  
Washington (Grant)  
Puget Sound Power & Light Company (Puget)  
Sacramento Municipal Utility District  
(Sacramento)  
Tacoma Public Utilities (Tacoma)  
Tapoco, Inc.  
Virginia Electric and Power Company  
(Virginia)  
Washington Water Power Company  
(Washington)  
Yuba-Bear River Project (Yuba)

[FR Doc. 93-6686 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

## DEPARTMENT OF THE TREASURY

### Customs Service

19 CFR Parts 19, 111, 112, 122, 146

[T.D. 93-18]

#### Submission of Fingerprints

**AGENCY:** U.S. Customs Service,  
Department of the Treasury.

**ACTION:** Final rule.

**SUMMARY:** This document amends several parts of the Customs Regulations to clarify Customs position regarding the submission of fingerprints when applying for certain occupations or requesting various identification cards which necessitate a fingerprint records check. Moreover in this connection, where permissible, a fee will be collected to recover both the fee now charged Customs by the Federal Bureau of Investigation for performing the fingerprint check, and Customs administrative costs. The amendments will allow Customs to continue providing, in a cost-effective manner, services which necessitate a fingerprint records check.

**EFFECTIVE DATE:** May 24, 1993.

**FOR FURTHER INFORMATION CONTACT:** Esther Mandelay, Office of Inspection and Control (202-927-0520).

#### SUPPLEMENTARY INFORMATION:

##### Background

Pursuant to a provision in Public Law 101-162, the Federal Bureau of Investigation (FBI) was authorized to establish a fee for processing fingerprint identification records for non-law enforcement employment and licensing purposes. This authorization is mentioned in a note to 28 U.S.C. 534 and indicates that the provision concerning fees was reenacted in Public Law 101-515.

On January 1, 1990, the FBI began charging Customs a \$14.00 user fee whenever the fingerprints of various applicants for Customs related occupations or identification cards were submitted for processing. On October 1, 1990, the fee was raised to \$17.00. Customs sought exemption from the fee, but the FBI denied the request on the basis that the underlying reason for the check was employment or licensing purposes.

Accordingly, by notice published in the *Federal Register* on December 11, 1991 (56 FR 64580), amendments were proposed to the Regulations which would allow Customs to charge a fee to recover the \$17 charged Customs by the FBI, plus an additional 15% of that

<sup>37</sup> See Order No. 486, 52 FR 47,897 (Dec. 17, 1987), FERC Stats. & Regs. (Regulations Preambles 1986-1990) ¶ 30,783 (Dec. 10, 1987) (codified at 18 CFR Part 380).

<sup>38</sup> See 18 CFR 380.4(a)(1).

<sup>39</sup> 5 CFR part 1320.

amount to cover Customs administrative overhead. Customs may assess such a fee pursuant to 31 U.S.C. 9701. Thus, the total charge would be \$19.55, which consists of \$17 (the FBI fee) plus \$2.55 (15% to cover overhead). However, this fee would change whenever the amount charged by the FBI changes. District directors would inform those required to submit the fee in the correct amount. At present, Customs estimates that it may be billed more than \$1 million per year by the FBI for fingerprint checks considered necessary to carry out Customs duties.

The proposed amendments would permit the recovery of these costs, together with Customs administrative overhead, whether the submission of fingerprints is required with the particular application, or whether it is a matter for the district director's discretion.

In this regard, under the proposed amendments, the submission of fingerprints either could, or would, be required, as applicable, from those wanting to establish a bonded warehouse (§ 19.2) or obtain a broker's license (§ 111.12), from licensed cartmen, lightermen or employees thereof needing an identification card (§ 112.42), and from those seeking to gain unescorted access to Customs security areas at an airport (§ 122.182) or activate a foreign trade zone (§ 146.6). The fingerprint fee would be due from broker applicants who pass the related examination (§ 111.96), from licensed cartmen, lightermen and employees thereof, as part of an application to secure an identification card (§ 112.42), and from those seeking unescorted access to Customs security areas at an airport (§ 122.182), but pursuant to 19 U.S.C. 58c(e)(6)(C) (i) and (ii), Customs would be effectively precluded from collecting the fee from those establishing a warehouse or activating a zone.

Thirty-nine commenters from the public responded to the notice of proposed rulemaking. A description, together with Customs analysis, of the issues they raised, is set forth below.

#### Analysis of Comments

*Comment:* By far, the majority of commenters responding to the notice of proposed rulemaking focused on the Customs Airport Security Program, and proposed § 122.182, which would require the submission of fingerprints, along with the related fee, for those seeking unescorted access to Customs security areas at airports.

Many of these commenters recommended that Customs delay or defer action on the proposed

amendment and, in order to avoid redundancies in the cost and processing of fingerprints, coordinate its program with the one to be implemented by the Federal Aviation Administration (FAA) under the Aviation Security Act of 1990, which requires a criminal history records check for those wanting unescorted access to and around domestic, as well as foreign, air carrier aircraft. It was stated that almost every person applying for Customs access would already have been fingerprinted under the FAA program, once implemented, and that both Customs and the FAA could achieve their goals through a single, joint program. One commenter declared that its airport charged a fee for conducting its own criminal background and fingerprint records check, and, thus, both the FAA and Customs programs were redundant.

A few commenters asserted that airport operators should be exempt from payment of fingerprint fees, because they assist federal inspection agencies in their respective duties. One commenter suggested that it would be costly to fingerprint the high number of emergency response personnel who must have access to Customs security areas. Another commenter thought that the proposed rule would have a significant impact on small businesses under the Regulatory Flexibility Act, and that it constituted a major rule under Executive Order (E.O.) 12291.

*Response:* Customs has concluded that it would not be advisable to delay or defer action on the final rule at this time pending FAA implementation of its program, inasmuch as it is important that Customs be able to recover, as soon as possible, the fees currently charged by the Federal Bureau of Investigation (FBI) on fingerprints Customs submits pursuant to its Airport Security Program. It is also believed that the final rule will serve to reduce confusion with the FAA regulations (14 CFR parts 107 and 108).

However, although it was initially proposed to require the submission of fingerprints, in all cases, as part of an application to obtain unescorted access to Customs security areas at an airport, Customs believes it prudent, upon further consideration, to simply retain the existing practice of requiring their submission, when found necessary in the discretion of the district director. Section 122.182(d) is therefore changed simply to make it clear that it is the district director who may require the submission of fingerprints from a given applicant, and that he may do so either at the time of, or following, the filing of the application. Such decisions are often based on different mission

requirements than those of the FAA, or of a private airport operator. The overriding purpose of the regulation, therefore, is to permit Customs to recoup both the fee charged it by the FBI for submitting the fingerprint cards, plus its own administrative overhead.

Nevertheless, Customs agrees that it needs to coordinate with the FAA to avoid redundancies, and is committed to taking action in this respect, which would minimize or eliminate any redundancies once the FAA program is fully operational, and Customs is satisfied that its own requirements are addressed by the FAA program. In fact, Customs has endeavored to work extensively with the FAA towards the goal of interfacing with its prospective program, in order to obviate redundancies in the costs and processing of background criminal investigations. However, Customs wants to ensure that the criminal background checks required by the FAA will fulfill its requirements in relation to persons seeking access to Customs-secured areas. Customs will continue to seek to interface with the FAA program, but until such time as that goal is reached, it must ensure that adequate safeguards exist in Customs security areas.

The expenses incurred in necessary background fingerprint records checks of airport or air carrier employees needing access, for whatever reason, to Customs security areas are properly reimbursable to Customs. Such employees do not perform Customs functions, nor do they perform the functions of any federal border inspection agency. The duties which they perform are those relative to the operations of the airport and the airlines. It is also observed that Customs has contingency plans in place at airports to address emergency response personnel who must have access to Customs security areas. In any event, it is estimated that in the Airport Security Program roughly a total of 60,000 fingerprint cards from personnel seeking unescorted access to Customs security areas may be processed annually, at a cost of approximately \$1.2 million.

A certification was previously made by the agency in the notice of proposed rulemaking (56 FR at 64581), from which no persuasive reason has been given to depart, that the amendment would neither have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act, nor constitute a major rule within the contemplation of E.O. 12291, thereby removing the rule from the regulatory analysis requirements of those laws. Parenthetically, such determinations fall

within the exclusive, nonreviewable province of the agency.

**Comment:** Several commenters objected to the proposed change to § 146.6, which would include the possible submission of fingerprints as part of an application to activate a foreign trade zone. Some of these commenters also asked for an extension of the comment period so that they could examine the proposed amendment in greater depth.

**Response:** Customs intent by this regulation is not to change its policy or practice regarding the submission of fingerprints for foreign trade zone grantees or operators. Customs already has the authority to require fingerprints in this connection. The regulation merely clarifies this existing authority, and thus does not create an undue burden for these parties. In light of this, and inasmuch as there is no fee requirement under § 146.6, it was decided that no extension of the comment period was warranted here.

**Conclusion**

After careful consideration of the comments received and further review of the matter, it has been determined that the amendments, modified as discussed above, should be adopted. In addition, § 111.12 is changed to confirm that it is likewise the district director who has the discretion to require the submission of fingerprints from broker applicants. Also, for editorial consistency, "will" is changed to "shall" in the last sentence of § 111.96(a), the third sentence of § 112.42, and the sixth sentence of § 122.182(d).

**Regulatory Flexibility Act**

Pursuant to the provisions of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), it is certified that the amendments will not have a significant economic impact on a substantial number of small entities. It is the applicant himself who would be responsible for paying the fee. Thus, the amendments are not subject to the regulatory requirements of 5 U.S.C. 603 and 604.

**Executive Order 12291**

This document does not meet the criteria for a "major rule" as specified in E.O. 12291. Accordingly, a regulatory impact analysis is not required.

**Drafting Information**

The principal author of this document was Russell Berger, Regulations and Disclosure Law Branch, U.S. Customs Service. However, personnel from other offices participated in its development.

**List of Subjects**

**19 CFR Part 19**

Customs duties and inspection, Exports, Imports, Surety bonds, Warehouses.

**19 CFR Part 111**

Administrative practice and procedure, Brokers, Customs duties and inspection, Imports.

**19 CFR Part 112**

Administrative practice and procedure, Common carriers, Customs duties and inspection, Exports, Freight forwarders, Imports, Motor carriers.

**19 CFR Part 122**

Air carriers, Airports, Customs duties and inspection, Imports.

**19 CFR Part 146**

Customs duties and inspection, Exports, Foreign trade zones, Imports.

**Amendments to the Regulations**

For the reasons set forth in the preamble, parts 19, 111, 112, 122 and 146, Customs Regulations (19 CFR parts 19, 111, 112, 122, and 146), are amended as set forth below.

**PART 19—CUSTOMS, WAREHOUSES, CONTAINER STATIONS AND CONTROL OF MERCHANDISE THEREIN**

1. The general authority citation for part 19 continues to read as follows:

**Authority:** 5 U.S.C. 301, 19 U.S.C. 66, 1202 (General Note 8, Harmonized Tariff Schedule of the United States), 1624, unless otherwise noted.

\* \* \* \* \*

2. Section 19.2 is amended by adding a sentence to the end of paragraph (f) to read as follows:

**§ 19.2 Applications to bond; bond; annual fee.**

\* \* \* \* \*

(f) \* \* \* The district director may require an individual applicant to submit fingerprints on Standard Form 87 at the time of filing the application, or in the case of applications from a business entity, may require the fingerprints; on Standard Form 87, of all officers and managing officials of the business entity.

\* \* \* \* \*

**PART 111—CUSTOMS BROKERS**

1. The authority citation for part 111 continues to read in part as follows:

**Authority:** 19 U.S.C. 66, 1202 (General Note 8, Harmonized Tariff Schedule of the

United States), 1624, 1641, unless otherwise noted.

\* \* \* \* \*

Section 111.96 also issued under 31 U.S.C. 9701.

2. Section 111.12 is amended by adding a sentence at the end of paragraph (a) to read as follows:

**§ 111.12 Application for license.**

(a) \* \* \* The district director may require the applicant to submit fingerprints on Standard Form 87 at the time of filing the application, or after the applicant obtains a passing score on the broker examination.

\* \* \* \* \*

3. Section 111.96 is amended by revising the heading of paragraph (a) and adding two sentences at the end of the paragraph to read as follows:

**§ 111.96 Fees.**

(a) *License fee; fingerprint fee.* \* \* \* Applicants receiving notice that they achieved a passing score on an examination are then liable for payment of a fingerprint fee. The district director shall inform the applicant of the current Federal Bureau of Investigation user fee for conducting fingerprint checks and the Customs administrative processing fee, the total of which must be paid to Customs before further processing of the application shall occur.

\* \* \* \* \*

**PART 112—CARRIERS, CARTMEN, AND LIGHTERMEN**

1. The authority citation for part 112 continues to read as follows:

**Authority:** 19 U.S.C. 66, 1551, 1565, 1623, 1624.

2. Section 112.42 is revised to read as follows:

**§ 112.42 Application for identification card.**

An application for an identification card required pursuant to § 112.41 of this part, shall be filed personally by the applicant with the district director on Customs Form 3078 together with two 1¼" x 1¼" color photographs of the applicant. The fingerprints of the applicant shall also be required on Standard Form 87 at the time of filing the application. The district director shall inform the applicant of the current Federal Bureau of Investigation user fee for conducting fingerprint checks and the Customs administrative processing fee, the total of which must be tendered with the application. The application may be referred for investigation and report concerning the character of the applicant.



**PART 122—AIR COMMERCE REGULATIONS**

1. The authority citation for part 122 continues to read as follows:

**Authority:** 5 U.S.C. 301, 19 U.S.C. 58b, 66, 1433, 1436, 1459, 1590, 1594, 1623, 1624, 1644, 49 U.S.C. App. 1509.

2. Section 122.182 is amended by revising the fifth sentence of paragraph (d) and adding a sentence immediately thereafter to read as follows:

**§ 122.182 Security provisions.**

\* \* \* \* \*

(d) \* \* \* The district director may require the applicant to submit fingerprints on form FD-258 either at the time of, or following, the filing of the application. If required, the district director shall inform the applicant of the current Federal Bureau of Investigation user fee for conducting fingerprint checks and the Customs administrative processing fee, the total of which must be tendered with the application. \* \* \*

\* \* \* \* \*

**PART 146—FOREIGN TRADE ZONES**

1. The general authority citation for part 146 continues to read as follows:

**Authority:** 19 U.S.C. 66, 81a-u, 1202 (General Note 8, Harmonized Tariff Schedule of the United States), 1623, 1624.

\* \* \* \* \*

2. Section 146.6 is amended by adding three sentences to the end of paragraph (a) to read as follows:

**§ 146.6 Procedure for activation.**

(a) *Application.* \* \* \* The district director may also require the operator or grantee to submit fingerprints on Standard Form 87 at the time of filing the application. If the operator is an individual, that individual's fingerprints may be required. If the operator or grantee is a business entity, fingerprints of all officers and managing officials may be required.

\* \* \* \* \*

Carol Hallett,  
*Commissioner of Customs.*

Approved: January 8, 1993.  
Nancy Worthington,  
*Acting Assistant Secretary of the Treasury.*  
[FR Doc. 93-6647 Filed 3-23-93; 8:45 am]

BILLING CODE 4920-02-M

**DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT****Office of the Secretary****24 CFR Parts 215, 236, 813, 905, and 913**

[Docket No. R-93-1654; FR-3494-F-01]

**Definition of Annual Income: Holocaust Reparations**

**AGENCY:** Office of the Secretary.

**ACTION:** Final rule.

**SUMMARY:** HUD takes family income into account in determining eligibility and the level of benefits in certain housing assistance programs. The purpose of this rule is to exclude from family income reparation payments made by foreign governments in connection with the Holocaust.

**EFFECTIVE DATE:** April 23, 1993.

**FOR FURTHER INFORMATION CONTACT:** Issues related to 24 CFR parts 215, 236, and 813: James J. Tahash, Director, Planning and Procedures Division, Office of Multifamily Housing Management, room 6182, 451 Seventh Street SW., Washington, DC 20410, telephone (202) 708-3944. A telecommunications device for deaf persons (TDD) is available at (202) 708-4594. (These are not toll-free telephone numbers.)

Issues related to 24 CFR parts 905 and 913: Casimir Bonkowski, Director, Office of Management and Policy, Office of Public and Indian Housing, room 4224, 451 Seventh Street SW., Washington, DC 20410, telephone (202) 708-0444. A telecommunications device for deaf persons (TDD) is available at (202) 708-0850. (These are not toll-free telephone numbers.)

**SUPPLEMENTARY INFORMATION:** HUD provides means-tested housing assistance to eligible lower income families under the Rent Supplement,<sup>1</sup> Section 236,<sup>2</sup> and section 8 and Public and Indian Housing programs.<sup>3</sup> In these programs, HUD takes family income into account in determining initial program eligibility, and uses periodic income reexaminations to determine the level of benefits to be provided eligible families.

The statute governing each program defines "income" to mean—

\* \* \* income from all sources of each member of the household, as determined in

accordance with criteria prescribed by the Secretary.<sup>4</sup>

In establishing criteria for calculating income, HUD has historically provided that the full amount of periodic payments received by program applicants and participants must be counted.<sup>5</sup> Since reparation payments made by foreign governments in connection with the Holocaust are made periodically (normally on a monthly basis), they have been included in family income.

HUD has reviewed its position and has determined, as a matter of agency discretion, to exclude these reparation payments from income with respect to the Rent Supplement, section 236, section 8, and Public and Indian Housing programs. The Department believes that the Holocaust—both in its scope and severity—represents a unique situation, and that payments by foreign governments intended to atone for atrocities committed during the Nazi era should not be taken into account with respect to the housing assistance programs involved.

It should be noted that this rule does not affect any other income-related provision in the programs involved. Specifically, all forms of periodic payments that are currently counted toward income will continue to be so counted.

In addition, this rule is prospective only. It applies to all initial and continuing income determinations conducted on or after its effective date. It also makes clear that any assisted housing residents who have been asked to repay assistance because of their failure to include past reparation payments in income will be excused from further repayment on or after the rule's effective date.

The rule does not provide retroactive relief to those for whom reparation payments have been included in income under HUD's long-standing policy. The Department is reviewing the feasibility, practicality, and desirability of making this new policy retroactive, and will advise the public of its conclusions in

<sup>1</sup> Rent Supplement: Section 101(c)(2) of the Housing and Urban Development Act of 1965; section 236: Section 236(m) of the National Housing Act; section 8 and Public Housing: Section 3(b)(4) of the United States Housing Act of 1937.

<sup>2</sup> Rent Supplement: 24 CFR 215.21(b)(4); section 236: 24 CFR 236.3(b)(4); section 8: 24 CFR 81.106(b)(4); and Public Housing: 24 CFR 913.106(b)(4).

Periodic payments are to be distinguished from lump sum payments, that are excluded from income. Rent Supplement: 24 CFR 215.21(c)(3); section 236: 24 CFR 236.3(c)(3); section 8: 24 CFR 81.106(c)(3); and Public Housing: 24 CFR 913.106(c)(3).

<sup>3</sup> Section 101 of the Housing and Urban Development Act of 1965.

<sup>4</sup> Section 236 of the National Housing Act.

<sup>5</sup> The United States Housing Act of 1937.

a Federal Register publication in the near future.

In general, the Department publishes a rule for public comment before issuing a rule for effect, in accordance with its own regulations on rulemaking, 24 CFR part 10. However, part 10 does provide for exceptions from that general rule where the agency finds good cause to omit advance notice and public participation. The good cause requirements is satisfied when prior public procedure is "impracticable, unnecessary, or contrary to the public interest." (24 CFR 10.1) The Department finds that good cause exists to publish this rule for effect without first soliciting public comment, in that prior public procedure is both unnecessary and contrary to public interest because the rule's only effect is to confer a benefit on a relatively small number of assisted housing tenants.

Under section 7(o)(3) of the Department of Housing and Urban Development Act (42 U.S.C. 3535(o)(3)), in the absence of congressional waiver, this final rule cannot become effective for 30 calendar days after its publication. HUD will publish a notice of the effective date of this rule following expiration of the 30-day period. Whether or not the statutory period has expired, this rule will not become effective until HUD publishes a separate notice announcing a specific effective date.

#### Findings and Certifications

##### A. Economic Impact

This rule does not constitute a "major rule" as that term is defined in Section 1(b) of Executive Order 12291 on Federal Regulation issued by the President on February 17, 1981. Analysis of the rule indicates that it does not (1) have an annual effect on the economy of \$100 million or more; (2) cause a major increase in cost or prices for consumers, individual industries, Federal, State or local government agencies, or geographic regions; or (3) have a significant adverse effect on competition, employment, investment, productivity, innovation, or on the ability of United States based enterprises to compete with foreign-based enterprises in domestic or export markets.

##### B. Environmental Impact

This action is categorically excluded from the NEPA requirements at 24 CFR part 50 in accordance with 24 CFR 50.20(k) because it relates to an internal administrative procedure whose content does not constitute a development decision nor affect the physical

condition of project areas or building sites.

##### C. Federalism

The General Counsel, as the Designated Official under section 6(a) of Executive Order 12612, Federalism, has determined that the policies contained in this rule do not have federalism implications and, thus, are not subject to review under the Order. The rule only changes the way in which a limited class of payments are treated for purposes of determining income in HUD assisted housing projects, and it will not have substantial, direct effects on States, on their political subdivisions, or on their relationships with the Federal government, or on the distribution of power and responsibilities between them and other levels of government.

##### D. Family Impact

The General Counsel, as the Designated Official under Executive Order 12606, the Family, has determined that this rule does not have a potentially significant impact on family formation, maintenance, and general well-being.

The rule affects only a limited class of assisted tenants, and to the extent it produces any family impact, the effect is likely to be positive. Thus, the rule is not subject to review under the Order.

##### E. Impact on Small Entities

The Secretary, in accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), has reviewed and approved this rule, and in so doing certifies that this rule will not have a significant economic impact on small entities. The rule only provides a benefit to a small class of individuals, and does not have the requisite impacts to trigger the law's applicability.

This rule was not listed on any Semiannual Agenda of Regulations published under Executive Order 12291 and the Regulatory Flexibility Act.

#### List of Subjects

##### 24 CFR Part 215

Grant programs—housing and community development, Rent subsidies, Reporting and recordkeeping requirements.

##### 24 CFR Part 236

Grant programs—housing and community development, Low and moderate income housing, Mortgage insurance, Rent subsidies, Reporting and recordkeeping requirements.

##### 24 CFR Part 813

Grant programs—housing and community development, Rent

subsidies, Reporting and recordkeeping requirements, Utilities.

##### 24 CFR Part 905

Aged, Energy conservation, Grant programs—housing and community development, Grant programs—Indians, Indians, Individuals with disabilities, Lead poisoning, Loan programs—housing and community development, Loan programs—Indians, Low and moderate income housing, Public housing, Reporting and recordkeeping requirements.

##### 24 CFR Part 913

Grant programs—housing and community development, Public housing, Reporting and recordkeeping requirements.

Accordingly, the Department amends 24 CFR Parts 215, 236, 813, 905, and 913 as set forth below:

#### PART 215—RENT SUPPLEMENT PAYMENTS

1. The authority citation for 24 CFR part 215 continues to read as follows:

Authority: 12 U.S.C. 1701s; 42 U.S.C. 3535(d).

2. In § 215.21, paragraph (c)(10) is redesignated as paragraph (c)(11), and paragraph (c)(9) is revised, and new paragraphs (c)(10) and (e) are added, to read as follows:

##### § 215.21 Annual Income.

\* \* \* \* \*

(c) \* \* \*

(9) Temporary, nonrecurring or sporadic income (including gifts);

(10) For all initial determinations and reexaminations of income carried out on or after April 23, 1993, reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era; or

\* \* \* \* \*

(e) Any family receiving reparation payments referred to in paragraph (c)(10) of this section that has been requested to repay assistance under this part as a result of receipt of such payments shall not be required to make further repayments on or after April 23, 1993.

#### PART 236—MORTGAGE INSURANCE AND INTEREST REDUCTION PAYMENT FOR RENTAL PROJECTS

3. The authority citation for 24 CFR part 236 continues to read as follows:

Authority: 12 U.S.C. 1715b and 1715z-1; 42 U.S.C. 3535(d).

4. In § 236.3, paragraph (c)(10) is redesignated as paragraph (c)(11), and

paragraph (c)(9) is revised, and new paragraphs (c)(10) and (e) are added, to read as follows:

**§ 236.3 Annual Income.**

(c) \* \* \*  
 (9) Temporary, nonrecurring or sporadic income (including gifts);  
 (10) For all initial determinations and reexaminations of income carried out on or after April 23, 1993, reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era; or

(e) Any family receiving the reparation payments referred to in paragraph (c)(10) of this section that has been requested to repay assistance under this part as a result of receipt of such payments shall not be required to make further repayments on or after April 23, 1993.

**PART 813—DEFINITION OF INCOME, INCOME LIMITS, RENT AND REEXAMINATION OF FAMILY INCOME FOR THE SECTION 8 HOUSING ASSISTANCE PAYMENTS PROGRAMS AND RELATED PROGRAMS**

5. The authority citation for 24 CFR part 813 is revised to read as follows:

Authority: 42 U.S.C. 1437a, 1437c, 1437f, 1437n and 3535(d).

6. In § 813.106, paragraph (c)(10) is redesignated as paragraph (c)(11), and paragraph (c)(9) is revised, and new paragraphs (c)(10) and (e) are added, to read as follows:

**§ 813.106 Annual Income.**

(c) \* \* \*  
 (9) Temporary, nonrecurring or sporadic income (including gifts);  
 (10) For all initial determinations and reexaminations of income carried out on or after April 23, 1993, reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era; or

(e) Any family receiving the reparation payments referred to in paragraph (c)(10) of this section that has been requested to repay assistance under this chapter as a result of receipt of such payments shall not be required to make further repayments on or after April 23, 1993.

**PART 905—INDIAN HOUSING PROGRAMS**

7. The authority citation for 24 CFR part 905 continues to read as follows:

Authority: 25 U.S.C. 450e(b); 42 U.S.C. 1437aa, 1437bb, 1437cc, 1437ee and 3535(d).

8. In § 905.320, paragraph (c)(10) is redesignated as paragraph (c)(11), and paragraph (c)(9) is revised, and new paragraphs (c)(10) and (e) are added, to read as follows:

**§ 905.320 Annual Income.**

(c) \* \* \*  
 (9) Temporary, nonrecurring or sporadic income (including gifts);  
 (10) For all initial determinations and reexaminations of income carried out on or after April 23, 1993, reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era; or

(e) Any family receiving the reparation payments referred to in paragraph (c)(10) of this section that has been requested to repay assistance under this part as a result of receipt of such payments shall not be required to make further repayments on or after April 23, 1993.

**PART 913—DEFINITION OF INCOME, INCOME LIMITS, RENT AND REEXAMINATION OF FAMILY INCOME FOR THE PUBLIC HOUSING PROGRAM**

9. The authority citation for 24 CFR part 913 is revised to read as follows:

Authority: 42 U.S.C. 1437a, 1437d, 1437n and 3535(d).

10. In § 913.106, paragraph (c)(10) is redesignated as paragraph (c)(11), and paragraph (c)(9) is revised, and new paragraphs (c)(10) and (e) are added, to read as follows:

**§ 913.106 Annual Income.**

(c) \* \* \*  
 (9) Temporary, nonrecurring or sporadic income (including gifts);  
 (10) For all initial determinations and reexaminations of income carried out on or after April 23, 1993, reparation payments paid by a foreign government pursuant to claims filed under the laws of that government by persons who were persecuted during the Nazi era; or

(e) Any family receiving the reparation payments referred to in paragraph (c)(10) of this section that has been requested to repay assistance under this chapter as a result of receipt of such payments shall not be required to make further repayments on or after April 23, 1993.

Dated: March 18, 1993.  
 Henry G. Cisneros,  
 Secretary.  
 [FR Doc. 93-6625 Filed 3-23-93; 8:45 am]  
 BILLING CODE 4210-32-M

**DEPARTMENT OF TRANSPORTATION**

**Coast Guard**

**33 CFR Part 165**

[COTP St. Louis Regulation 93-07]

**Safety Zone Regulations: Upper Mississippi River Between Mile 179.0 and 184.0**

AGENCY: Coast Guard, DOT.  
 ACTION: Temporary final rule.

**SUMMARY:** The Coast Guard is establishing a safety zone on the Upper Mississippi River between mile 179.0 and 184.0, requiring minimum horsepower and restricting the length of southbound tows during night transit. The safety zone is necessary to protect structures and commercial vessels from hazards associated with high water conditions.

**EFFECTIVE DATES:** This regulation is effective on March 5, 1993 and will remain in effect until March 31, 1993 unless sooner terminated by the Captain of the Port.

**FOR FURTHER INFORMATION CONTACT:** Commander Scott P. Cooper, Captain of the Port, St. Louis, Missouri at 314-539-3823.

**SUPPLEMENTARY INFORMATION:** In accordance with 5 U.S.C. 553, a notice of proposed rulemaking was not published for this regulation and good cause exists for making it effective less than 30 days after publication in the Federal Register. Publishing an NPRM and delaying the effective date would be contrary to the public interest since immediate action is necessary to ensure the safety of structures and vessels operating in the regulated area.

**Drafting Information**

The drafter of this regulation is Lieutenant (Junior Grade) T. Y. Deal, Assistant Chief, Port Operation under the Captain of the Port.

**Discussion of Regulation**

The circumstance requiring this regulation is the rapid rise in the Upper Mississippi River water level. This regulation will be in effect from March 5, 1993 and remain in effect until the river water recedes to a safe level, or until March 31, 1993, whichever is sooner. This regulation is required to

protect structures and commercial vessels from dangers associated with high water levels on the Upper Mississippi River. Entry into this zone is prohibited for towing vessels unless they have at least 250 horsepower for each 1,500 tons of cargo. Southbound tows greater than 600 feet in length (excluding the tow boat) may transit the safety zone during daylight hours only. Questions can be directed to Coast Guard Group Upper Mississippi River on VHF channel 16. Reopening broadcasts will be made by Coast Guard Group Upper Mississippi River. This regulation is issued pursuant to 33 U.S.C. 1231 as set out in the authority citation for all of 33 CFR part 165.

**List of Subjects in 33 CFR Part 165**

Harbors, Marine safety, Navigation (water), Security measures, Vessels, Waterways.

**Regulation**

In consideration of the foregoing, subpart C of part 165 of title 33, Code of Federal Regulations, is amended as follows:

**PART 165—[AMENDED]**

1. The authority citation for part 165 continues to read as follows:

**Authority:** 33 U.S.C. 1231; 50 U.S.C. 191; 49 CFR 1.46 and 33 CFR 1.05-1(g), 6.04-1, 6.04-6, and 160.5.

2. A new § 165.T0210 is added to read as follows:

**§ 165.T0210 Safety Zone: Upper Mississippi River.**

(a) *Location.* The following area is a safety zone: Upper Mississippi River between mile 179.0 through 184.0.

(b) *Effective Date.* This regulation becomes effective at 1 pm local time on March 5, 1993 and will remain in effect until March 31, 1993 unless sooner terminated by the Captain of the Port.

(c) *Regulations.* Entry into this zone by towing vessels is prohibited unless the following restrictions are complied with:

(1) Towing vessel must have a minimum of 250 horsepower for each 1,500 tons of cargo.

(2) Southbound tows greater than 600 feet in length (excluding the towboat) may transit the safety zone during daylight hours only.

Dated: 4 March 1993.

**Scott P. Cooper,**  
*Commander, U.S. Coast Guard, Captain of the Port, St. Louis, Missouri.*

[FR Doc. 93-6706 Filed 3-23-93; 8:45 am]

**BILLING CODE 4910-14-M**

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 81**

[MN9-1-5375: FRL-4554-2]

**Designation of Areas for Air Quality Planning Purposes; Minnesota**

**AGENCY:** United States Environmental Protection Agency (USEPA).

**ACTION:** Notice of action on direct final rule.

**SUMMARY:** USEPA is withdrawing its October 26, 1992, direct final rulemaking (57 FR 48461), which, effective December 28, 1992, would have redesignated all areas in the State currently designated nonattainment for total suspended particulate (TSP) to unclassified, except for portions of Ramsey County. Additionally, it would have changed the attainment designations from a Statewide basis to a county-wide basis. The rulemaking has been withdrawn on USEPA's own initiative for further USEPA review. The USEPA expects to publish a new direct final rulemaking notice in the near future. This document restores the appropriate text in the Code of Federal Regulations.

**EFFECTIVE DATE:** December 24, 1992.

**FOR FURTHER INFORMATION CONTACT:** Randy Robinson, Air Enforcement Branch, Regulation Development Section (AE-17J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 353-6713.

**SUPPLEMENTARY INFORMATION:** This withdrawal of the October 26, 1992, rulemaking (57 FR 48461), as amended (57 FR 56771, Nov. 30, 1992), is effective as of December 24, 1992. The withdrawal is due to an USEPA concern regarding consistency of the action with the requirement for attainment area redesignations specified in 40 CFR 52.21(b)(15)(ii) that no redesignated area intersect or be smaller than the area of impact of existing major stationary sources or major modifications subject to the prevention of significant deterioration program. USEPA is working with Minnesota to resolve this concern and expects to issue a new direct final rulemaking notice in the near future.

This action has been classified as a Table Three action by the Regional Administrator under the procedures published in the Federal Register on January 19, 1989, (54 FR 2214-2225). On January 6, 1989, the Office of Management and Budget (OMB) waived Table Two and Three SIP revisions (54 FR 2222) from the requirements of Section 3 of Executive Order 12291 for a period of 2 years. USEPA has submitted a request for a permanent waiver for Table 2 and Table 2 SIP revisions. OMB has agreed to continue the temporary waiver until such time as it rules on USEPA's request.

Dated: December 24, 1992.

**Valdas Y. Adamkus,**  
*Regional Administrator.*

Title 40 of the Code of Federal Regulations, chapter I, part 81, is amended as follows:

**PART 81—DESIGNATION OF AREA FOR AIR QUALITY PLANNING PURPOSES**

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

**Authority:** 42 U.S.C. 7407, 7501-7515, 7601.

2. Section 81.324 is revised to read as follows:

**§ 81.324 Minnesota.**

**MINNESOTA—TSP**

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
AQCR 131 (comprised of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington Counties)				
Anoka County:				
Cities of Fridley, Columbia Heights, Hill Top, and Spring Lake Park .....		X		
Remainder of the county .....				X
Carver County .....				X

MINNESOTA—TSP—Continued

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
Dakota County:				
Cities of West St. Paul, South St. Paul, Mendota Heights, Sunfish Lake, Rosemount, Inver Grove Heights, Hastings, Mendota, and Lilydale		X		
Remainder of the county				X
Cities of Minneapolis and St. Louis Park	X			
Cities of Richfield, Edina, Golden Valley, New Hope, Crystal, Robinson, Brooklyn Center, and Brooklyn Park		X		
Remainder of the county				X
Ramsey County:				
City of St. Paul	X			
Cities of North Oaks, White Bear, and White Bear Lake				X
Remainder of the county		X		
Scott County				X
Washington County:				
Cities of Oakdale, Newport, St. Paul Park, Cottage Grove, and Grey Cloud Island		X		
Remainder of the county				X
City of International Falls		X		
The City of Duluth (starting point is the south corner of the Duluth Arena. Go northwest on Commerce Street to I-35 corridor. Continue northeast on proposed I-35 corridor to Second Avenue East. Continue northwest on Second Avenue East to Superior Street (Minnesota U.S. 61). Go southwest on Superior Street to I-35 corridor. Follow I-35 corridor to 41st Avenue West. Continue southeast on 41st Avenue West to dock line. Follow dock line and harbor lines to the south corner of the Duluth Arena).	X			
The City of Duluth (starting point is Superior Street and Second Avenue East. Go northwest on Second Avenue East to Second Street (Minnesota 281). Continue southwest on Second Street to Fourth Avenue West. On Fourth Avenue West go northwest to Third Street. Continue southwest to Mesaba Avenue. On Mesaba Avenue go south to Second Street. Go southwest on Second Street to Eighth Avenue West. On Eighth Avenue West continue southeast to First Street. Follow First Street southwest to Tenth Avenue West. On Tenth Avenue West go northwest to Second Street. Continue southwest on Second Street to 14th Avenue West. On 14th Avenue West go southeast to First Street. Follow First Street southwest to 17th Avenue West. Go northwest on 17th Avenue West to Second Street. On Second Street continue southwest to 30th Avenue West. Follow 30th Avenue West to Vernon Street. Continue west on Vernon Street to Grand Avenue. On Grand Avenue go southwest to 34th Avenue West. On 34th Avenue West continue southeast to Second Street. From Second Street go southwest to the Northern Pacific Railway Line. Follow the Northern Pacific Railway Line to 61st Avenue West. From 61st Avenue West go to the dock line. Follow the dock line to 41st Avenue West. On 41st Avenue West continue northwest to the I-35 corridor. Go northeast along the I-35 corridor to Superior Street (Minnesota U.S. 61). On Superior Street go northeast to Second Avenue East).		X		
City of Red Wing		X		X
City of East Grant Forks				X
City of Cloquet				X
City of Silver Bay				X
Mesabi Iron Range Identified by county and township and range numbers:				
St. Louis County:				
T57N, R17W, Section 5		X		
T57N R21W, Section 13		X		
T57N, R22W, Section 17		X		
Sherburne County			X	
St. Clouds Township (Stearns County)			X	
City of Springfield and Burnstown Township (Brown County)			X	
Remainder of State				X

MINNESOTA—SO<sub>2</sub>

Designated area	Does not meet primary standards	Does not meet secondary standards	Cannot be classified	Better than national standards
AQCR 131	X			
City of Rochester	X			
Sherburne County			X	
Remainder of State				X

MINNESOTA—CARBON MONOXIDE

Designated area	Designation		Classification	
	Date <sup>1</sup>	Type	Date <sup>1</sup>	Type
Duluth area:				
St. Louis County (part)				
City of Duluth .....	1/6/92	Nonattainment .....	1/6/92	Moderate ≤ 12.7 ppm.
Minneapolis-St. Paul area:				
Anoka County .....		Nonattainment .....		Moderate ≤ 12.7 ppm.
Carver County (part):				
Carver, Chanhassen, Chaska, Hamburg, Norwood, Victoria, Waconla, Watertown, Young America, Chaska Township, Laketown Township, Waconla Township, Watertown Township, Young America Township.		Nonattainment .....		Moderate ≤ 12.7 ppm.
Dakota County (part):				
Apple Valley, Burnsville, Eagan, Farmington, Hastings, Inver Grove Heights, Lakeville, Lilydale, Mendota, Mendota Heights, Rosemount, South St. Paul, Sunfish Lake, West St. Paul.		Nonattainment .....		Moderate ≤ 12.7 ppm.
Hennepin County .....		Nonattainment .....		Moderate ≤ 12.7 ppm.
Ramsey County .....		Nonattainment .....		Moderate ≤ 12.7 ppm.
Scott County (part):				
Belle Plaine, Elko, New Market, New Prague, Prior Lake, Savage, Shakopee, Credit River Township, Jackson Township, Louisville Township, New Market Township, Spring Lake Township.		Nonattainment .....		Moderate ≤ 12.7 ppm.
Washington County (part):				
All cities and townships except Denmark Township .....		Nonattainment .....		Moderate ≤ 12.7 ppm.
Wright County (part):				
Albertville, Annandale, Buffalo, Clearwater, Cokato, Delano, Hanover, Monticello, Montrose, Rockford, St. Michael, South Haven, Waverly, Dayton (Wright Co. part), Buffalo Township, Chatham Township, Clearwater Township, Cokato Township, Corinna Township, Frankfort Township, Maple Lake Township, Franklin Township, Marysville Township, Monticello Township, Ostego Township, Rockford Township, Silver Creek Township, Southside Township.		Nonattainment .....		Moderate ≤ 12.7 ppm.
AQCR 131 Minneapolis-St. Paul Intrastate (Remainder of) .....		Unclassifiable/Attainment.		
Carver County (part) Remainder of County				
Dakota County (part) Remainder of County				
Scott County (part) Remainder of County				
Washington County (part) Denmark Township				
Best of State .....		Unclassifiable/Attainment.		

MINNESOTA—CARBON MONOXIDE—Continued

Designated area	Designation		Classification	
	Date <sup>1</sup>	Type	Date <sup>1</sup>	Type
Aitkin County, Becker County, Beltrami County, Benton County, <sup>2</sup> Big Stone County, Blue Earth County, Brown County, Carlton County, Cass County, Chippewa County, Chisago County, Clay County, Clearwater County, Cook County, Cottonwood County, Crow Wing County, Dodge County, Douglas County, Faribault County, Fillmore County, Freeborn County, Goodhue County, Grant County, Houston County, Hubbard County, Isanti County, Itasca County, Jackson County, Kanabec County, Kandiyohi County, Kittson County, Koochiching County, Lac qui Parle County, Lake County, Lake of the Woods County, Le Sueur County, Lincoln County, Lyon County, Mahnomon County, Marshall County, Martin County, McLeod County, Meeker County, Mille Lacs County, Morrison County, Mower County, Murray County, Nicollet County, Nobles County, Norman County, Olmsted County, Otter Tail County, Pennington County, Pine County, Pipestone County, Polk County, Pope County, Red Lake County, Redwood County, Renville County, Rice County, Rock County, Roseau County, Sherburne County, <sup>2</sup> Sibley County, Stearns County, <sup>2</sup> Steele County, Stevens County, St. Louis County (part) Remainder of County, Swift County, Todd County, Traverse County, Wabasha County, Wadena County, Waseca County, Watonwan County, Wilkin County, Winona County, Wright County (part) Remainder of County, Yellow Medicine County				

<sup>1</sup> This date is November 15, 1990, unless otherwise noted.

<sup>2</sup> The City of St. Cloud, which comprises portions of Benton, Sherburne, and Stearns Counties, was designated nonattainment for CO under the preamended Act. See 43 FR 8962 (March 3, 1978), 40 CFR part 81. As such, the St. Cloud area retained its designation of nonattainment upon enactment of the CAAA on November 15, 1990. CAA section 107(d)(1)(C), 42 U.S.C. 7407(d)(1)(C). However, EPA expects to imminently publish a direct-final notice in the FEDERAL REGISTER redesignating the City of St. Cloud from nonattainment to attainment for CO. If EPA receives notification within 30 days of the direct-final action that a party wishes to comment adversely on the redesignation, EPA will withdraw the direct-final action and issue a proposed rule redesignating St. Cloud to attainment. Based on the comments the Agency receives and the underlying facts, EPA then will decide whether to issue a final redesignation to attainment. If EPA determines in the final notice to retain St. Cloud's nonattainment designation, this table will be revised at that time. If EPA does not receive notification of any adverse comments, then St. Cloud will be redesignated to attainment 60 days from publication of the direct-final redesignation action, and the attainment designation indicated in this notice for those portions of Benton, Sherburne, and Stearns Counties that comprise the City of St. Cloud will stand. However, until such time as the redesignation to attainment becomes final pursuant to EPA's action on the redesignation request, the attainment listing for those portions of Benton, Sherburne, and Stearns Counties that comprise the City of St. Cloud has no force or effect.

MINNESOTA—LEAD

Designated area	Designation		Classification	
	Date	Type	Date	Type
Dakota County (part) ..... Lone Oak Road (County Road 26) to the north, County Road 63 to the east, Westcott Road to the south, and Lexington Avenue (County Road 43) to the west Rest of State Not Designated	1/6/92	Nonattainment ..	.....	

MINNESOTA—OZONE

Designated area	Designation		Classification	
	Date <sup>1</sup>	Type	Date <sup>1</sup>	Type
Carlton County .....	.....	Unclassifiable/ Attainment	.....	
Lake County .....	.....	Unclassifiable/ Attainment	.....	
Olmsted County .....	.....	Unclassifiable/ Attainment	.....	
Sherburne County .....	.....	Unclassifiable/ Attainment	.....	
St. Louis County .....	.....	Unclassifiable/ Attainment	.....	

MINNESOTA—OZONE—Continued

Designated area	Designation		Classification	
	Date <sup>1</sup>	Type	Date <sup>1</sup>	Type
AQCR 131 Minneapolis-St. Paul Intrastate .....	.....	Unclassifiable/ Attainment	.....	
Anoka County, Carver County, Dakota County, Hennepin County, Ramsey County, Scott County, Washington County Rest of State .....	.....	Unclassifiable/ Attainment	.....	
Aitkin County, Becker County, Beltrami County, Benton County, Big Stone County, Blue Earth County, Brown County, Cass County, Chippewa County, Chisago County, Clay County, Clearwater County, Cook County, Cottonwood County, Crow Wing County, Dodge County, Douglas County, Faribault County, Fillmore County, Freeborn County, Goodhue County, Grant County, Houston County, Hubbard County, Isanti County, Itasca County, Jackson County, Kanabec County, Kandiyohi County, Kittson County, Koochiching County, Lac qui Parle County, Lake of the Woods County, Le Sueur County, Lincoln County, Lyon County, Mahnomen County, Marshall County, Martin County, McLeod County, Meeke County, Mille Lacs County, Morrison County, Mower County, Murray County, Nicollet County, Nobles County, Norman County, Otter Tail County, Pennington County, Pine County, Pipestone County, Polk County, Pope County, Red Lake County, Redwood County, Renville County, Rice County, Rock County, Roseau County, Sibley County, Stearns County, Steele County, Stevens County, Swift County, Todd County, Traverse County, Wabasha County, Wadena County, Waseca County, Watonwan County, Wilkin County, Winona County, Wright County, Yellow Medicine County				

<sup>1</sup> This date is November 15, 1990, unless otherwise noted.

MINNESOTA—PM-10 NONATTAINMENT AREAS

Designated area	Designation		Classification	
	Date	Type	Date	Type
Ramsey County: The area bounded by the Mississippi River from Lafayette to Route 494, Route 494 east to Route 61, Route 61 north to I-94, I-94 west to Lafayette, and Lafayette south to the Mississippi River.	11/15/90	Nonattainment ..	11/15/90	Moderate.
Olmsted County: The area bounded on the south by U.S. Highway 14; on the west by U.S. Highway 52; on the north by 14th Street NW. between U.S. Highway 52 and U.S. Route 63 (Broadway Avenue), U.S. Route 63 north to Northern Heights Drive, NE., and Northern Heights Drive NE. extended east to the 1990 City of Rochester limits; and on the east by the 1990 City of Rochester limits.	11/15/90	Nonattainment ..	11/15/90	Moderate.
Rest of State .....	11/15/90	Unclassifiable		



[FR Doc. 93-6148 Filed 3-23-93; 8:45 am]  
BILLING CODE 6560-50-M

#### 40 CFR Part 86

[AMS-FRL 4602-5]

RIN 2060-AD37

### Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Particulate Emission Regulations for 1993 Model Year Buses, Particulate Emission Regulations for 1994 and Later Model Year Urban Buses, Test Procedures for Urban Buses, and Oxides of Nitrogen Emission Regulations for 1998 and Later Model Year Heavy-Duty Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

**SUMMARY:** This final rule implements several provisions of the Clean Air Act, as amended in 1990, related to buses and heavy-duty engines (HDEs). First, for model year 1993, EPA expands the applicability of the 0.10 gram per brake horsepower-hour (g/bhp-hr) particulate matter (PM) standard currently required of urban bus engines to a broader group of HDEs used in other types of buses. Second, for model year 1994 and 1995 HDEs used in urban buses, EPA promulgates a PM standard of 0.07 g/bhp-hr. (For model year 1996 and later HDEs used in urban buses, the certification and SEA standard is lowered to 0.05 g/bhp-hr, the in-use standard remains at 0.07 g/bhp-hr.) Third, EPA retains the current heavy-duty transient test procedure for emissions testing of urban bus engines.

Fourth, in addition to the bus requirements listed above, this final rule also promulgates an oxides of nitrogen (NO<sub>x</sub>) standard of 4.0 g/bhp-hr for all 1998 and later model year HDEs. Finally, for the two new emission standards promulgated in this action (1994 urban bus PM standard and 1998 HDE NO<sub>x</sub> standard), the useful life is extended from eight years to ten years. The items contained in this action are intended to reduce the ambient levels of particulate matter in oxides of nitrogen in urban areas.

**EFFECTIVE DATE:** This final rule is effective on April 23, 1993.

**ADDRESSES:** Materials relevant to this final rule are contained in Public Docket A-91-28. This docket is located in room M-1500, Waterside Mall (Ground Floor), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC, 20460. Dockets may be inspected from 8 a.m. until 12 noon, and from 1:30

p.m. until 3 p.m. Monday through Friday. As provided in 40 CFR part 2, a reasonable fee may be charged by EPA for copying docket materials.

#### FOR FURTHER INFORMATION CONTACT:

Philip N. Carlson, Regulation Development and Support Division, U.S. Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, Michigan, 48105. Telephone: (313) 668-4270.

#### SUPPLEMENTARY INFORMATION:

##### I. Introduction

##### A. Background

Today's action finalizes regulations implementing four regulatory programs required by the Clean Air Act (CAA), as amended in 1990, to control: (1) Particulate matter (PM) emissions from Model Year (MY) 1993 buses; (2) PM emissions from MY 1994 and later urban buses; (3) testing procedures for urban buses; and (4) emissions of oxides of nitrogen (NO<sub>x</sub>) from MY 1988 and later heavy-duty engines (HDEs). EPA published a notice of proposed rulemaking (NPRM) on September 24, 1991 (56 FR 48350) proposing to implement these programs. The NPRM also contained a proposed retrofit/rebuild program for 1993 and earlier MY urban buses. EPA recently reopened the comment period to accept public comment on two new options under consideration for the retrofit/rebuild program and also proposed and requested comments on the change in the useful life for new HDE standards from eight years to ten years (57 FR 33141, July 27, 1992). EPA will issue a separate final rulemaking for the urban bus retrofit/rebuild program at a later date. As noted earlier, today's action implements changes to the useful life requirements for the two new HDE standards promulgated in this final rulemaking.

This preamble provides a description of today's action and includes a summary of the major comments received on relevant portions of the NPRM and EPA's responses to those comments. This preamble also includes a summary of the environmental and economic impacts of today's action. Additional discussion of comments and detailed EPA analyses for this final rule are in the Final Regulatory Support Document (FRSD) which is available in Docket A-91-28 (see "ADDRESSES," above). A limited number of copies of the FRSD are also available from the contact person listed above (see "FOR FURTHER INFORMATION CONTACT").

##### B. Requirements of the Clean Air Act

Today's action implements several requirements of the CAA. These requirements are as follows:

##### 1. 1993 Model Year Bus PM Standard

Section 202(f)<sup>1</sup> establishes a 0.10 gram per brake horsepower-hour (g/bhp-hr) PM standard in the 1993 MY for buses other than those subject to standards under section 219. Because section 219 applies to urban buses and section 202(f) is not limited to urban buses, section 202(f) appears to apply to buses other than urban buses. However, the Act does not specifically distinguish the term "buses" from "urban buses", and the Act does not make clear what vehicles are included in the term "buses."

##### 2. 1994 and Later Model Year Urban Bus PM Standard

Section 219(b) requires a 0.05 g/bhp-hr PM standard for 1994 and later MY urban buses. However, it also requires that if EPA determines that 0.05 g/bhp-hr is not technologically achievable, taking into account durability, costs, lead time, safety, and other relevant factors, EPA must relax the PM standard to a value no higher than 0.07 g/bhp-hr.

##### 3. Urban Bus Test Procedure

Section 219(e) requires that testing procedures for urban buses reflect actual operating conditions.

##### 4. 1998 and Later Model Year HDE NO<sub>x</sub> Standard

Section 202(a)(3)(B)(ii) requires a 4.0 g/bhp-hr NO<sub>x</sub> standard for all gasoline-fueled and diesel-fueled 1998 and later MY HDEs.

##### 5. Useful life requirements

Section 202(d)(2) requires that regulations prescribing useful life for certain classes of motor vehicles, including urban buses and HDEs, be the same period as that required in paragraph 202(d)(1) for light-duty vehicles (10 years or 100,000 miles, whichever comes first), unless the Administrator determines that a period of use of greater duration or mileage is appropriate in lieu thereof.

#### II. Public Participation

EPA held a public hearing on the proposal for this rulemaking on October 9, 1991 and received written comments

<sup>1</sup> The Clean Air Act Amendments of 1990 amend section 202 of the Act by adding a new section 202(f). However, the previously existing section 202(f) in the CAA was not omitted by the amendments. "Section 202(f)" will be used in this rule to refer solely to the new subsection added by the amendments.

through November 8, 1991. EPA also held a public workshop on August 6, 1992 on the revisions to the useful life requirements for the new HDE standards and received written comments until September 8, 1992. Each submittal received by EPA has been placed in Docket A-91-28 (see "ADDRESSES" above); the FRSD fully summarizes the comments and EPA's response to them.

The following sections describe each of the five requirements that EPA is promulgating with today's action. Each section begins with a brief summary of what was proposed in the NPRM, followed by a summary of the major comments raised on each of the proposed requirements and EPA's response to the comments. As mentioned above, a more in-depth summary of the comments received on the NPRM, along with EPA's response to the comments, is contained in the FRSD associated with this rulemaking.

#### A. 1993 model year bus PM standard

##### 1. Summary of proposal

As described in the NPRM, EPA believes the most straightforward interpretation of section 202(f) of the amended CAA is that Congress intended to include more than urban buses in its scope. However, because there is no indication that Congress intended to include all possible buses, from small shuttle buses to large inter-city passenger buses, the CAA allows considerable flexibility in how broadly EPA defines the scope of section 202(f).

For these reasons, EPA examined three options for the applicability of the 1993 bus PM standard. The options considered were: (1) Applying the standard to only urban buses, (2) applying the standard to urban buses plus those buses capable of being centrally fueled that use the same class of engines as urban buses (normally heavy heavy-duty diesel engines); and (3) applying the standard to all buses (including school buses, shuttle vans and others). The NPRM proposed the second option.

EPA did not propose any changes to the HDE averaging, trading and banking program as a result of the MY 1993 bus PM standard. EPA did propose changes in the nonconformance penalty (NCP) program for the additional buses that would be covered under the standard. Because the additional buses required to meet the 0.10 g/bhp-hr standard likely would use the same types of emission controls as urban buses (such as particulate trap oxidizers), EPA proposed that the NCPs and NCP parameters contained in the rule that set the interim PM standard for MY 1991

and 1992 urban buses be extended to all buses required to meet the 0.10 g/bhp-hr PM standard in MY 1993. The reader is directed to the NPRM which delayed the 1991 urban bus PM standard for a detailed discussion of the proposed NCP regulations (56 FR 24242, May 29, 1991).

EPA also proposed a slightly revised "urban bus" definition that would be effective beginning with MY 1993. The existing definition was promulgated as part of the final rule for the HDE emissions banking and trading program (55 FR 30584, July 26, 1990). As proposed, the urban bus definition was modified to include buses of a type normally powered by heavy HDDEs in addition to buses which are actually powered by heavy HDDEs. The proposed revision to the urban bus definition was intended to close a loophole that might encourage the use of medium heavy-duty diesel engines (HDDEs) in large buses to avoid classification as an urban bus (and avoid the more stringent urban bus PM standards).

Under the proposed definition, an urban bus would be defined as "a passenger-carrying vehicle powered by a heavy HDDE, or of a type normally powered by a heavy heavy-duty engine, with a load capacity of fifteen or more passengers and intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or tokens, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., rest rooms, large luggage compartments, and facilities for stowing carry-on luggage."

##### 2. Summary and Analysis of Comments

*a. Scope of Section 202(f).* The main comments on the 1993 bus standard concerned the expanded applicability of the 0.10 g/bhp-hr PM standard. The Manufacturers of Emission Controls Association (MECA) commented that Congress intended to expand the applicability of the 1993 urban bus PM standard beyond urban buses. MECA also noted that trap oxidizers could be made available for other buses not included in the proposed definition.

On the other hand, some engine manufacturers commented that it was

not the intent of the CAA to expand the 1993 urban bus PM standard beyond urban buses. Cummins Engine Company cited the House Committee Report on the Act that interchangeably refers to "urban buses", "diesel-fueled buses" and "buses" when it discussed the American Public Transit Association (APTA) petition to delay the 1991 urban bus PM standard. In addition, engine manufacturers commented that Congress would not have intended to delay the 0.10 g/bhp-hr PM standard for urban buses, while accelerating the standard for other buses. They point out that no other types of buses (other than urban buses) have ever been controlled separately from HDEs. They also claim that Congress would have given clearer direction on this issue rather than casually referring to "buses" just once in the CAA.

In response, EPA continues to believe that Congress intended to require buses other than urban buses to meet the 0.10 g/bhp-hr PM standard in 1993. The plain terminology used in the CAA and the difficulty in finding a purpose for this provision in the CAA if a contrary interpretation is assumed, both support this interpretation. As stated above, Section 202(f) of the CAA requires EPA to establish a 1993 PM standard of 0.10 g/bhp-hr for buses other than those subject to standards under section 219. Section 219 applies at the manufacturing stage only to 1994 and later MY urban buses. Therefore, the plain meaning of section 202(f) indicates that any other group of buses are subject to consideration for inclusion in the 1993 0.10 g/bhp-hr PM standard. However, EPA continues to believe that while some broadening of applicability appears to have been intended, there is no indication that Congress intended all buses to be subject to this standard, and therefore there is flexibility in how broad the definition should be.

*b. Practical Difficulties in Expanding the Scope of the 0.10 g/bhp-hr PM Standard in 1993.* All engine manufacturers who submitted comments were opposed to the option considered in the NPRM that would expand the 1993 urban bus PM standard to all buses. The engine manufacturers cited lead time and feasibility concerns for many engines. In addition, the current urban bus engine manufacturers (Cummins and Detroit Diesel Corporation (DDC)) and APTA were opposed to EPA's proposed option that would expand the standard to all buses that use the same class of engines as urban buses (normally heavy HDEs) and that furthermore are capable of being centrally fueled. They recommended

that EPA limit the extension of the standard to those buses which use engines of the same engine families as urban buses and that are actually centrally fueled.

In support of their comments, engine manufacturers submitted information showing typical duty cycle and particulate composition differences between heavy HDEs used in urban buses and heavy HDEs used in other types of buses. Because of these differences, manufacturers claimed that the 0.10 g/bhp-hr PM standard would not be feasible in 1993 for non-urban buses due to the shortened amount of lead time, because manufacturers have not designed buses other than urban buses to be subject to the 0.10 g/bhp-hr PM standard until 1994, when low sulfur diesel fuel would be available for certification.

Further, Cummins and DDC also questioned whether it was feasible for engines that are used in other types of buses to meet the standard in 1993, even if the engines are of the same engine models as those used in urban buses. Again, they were concerned because power and duty cycle requirements for heavy HDEs used in non-urban buses are higher than those required for engines from the same engine model used in urban buses. Cummins suggested that EPA should limit the extension of the 1993 0.10 g/bhp-hr PM standard to those buses that are centrally fueled and which use HDEs of the same model and power rating as used in urban buses.

Engine manufacturers and APTA also requested that EPA allow 0.05 weight percent sulfur fuel to be used for certification and audit testing in 1993. Manufacturers noted that since low sulfur diesel fuel will be required beginning in October 1993, these buses will be operated on fuel with a 0.05 weight percent maximum sulfur content for nearly all of their life.

EPA continues to believe the engine manufacturers will be able to comply with the 0.10 g/bhp-hr PM standard for the additional buses proposed in the NPRM. For buses that use the same type engines as urban buses, there should be little concern since engines used in urban buses must already meet the 0.10 g/bhp-hr PM standard in 1993 under current regulations. Additionally, driving cycles for the additional buses that will be covered under the 1993 bus PM standard are generally similar to those normally experienced for urban buses. Particulate trap systems developed for engine families used in urban buses should be applicable to the same type engines used in other buses. For any additional heavy HDEs that may

not be used in urban buses, but that would be covered under the bus definition, EPA believes that manufacturers have engaged in significant research and development work and that, as a result, the 0.10 g/bhp-hr PM standard is feasible for such engines in the 1993 MY.<sup>2</sup>

Regarding test fuel sulfur content, EPA cannot allow 0.05 weight percent sulfur diesel fuel for certification or audit testing for MY 1993 buses. Section 211(i)(3) of the amended CAA clearly specifies a 0.10 weight percent diesel fuel for MY 1991 through 1993. However, under the central fueling provisions discussed below, EPA has set the bus definition to ensure that any additional buses covered by the 0.10 g/bhp-hr standard would be fueled with low sulfur fuel under in-use conditions.<sup>3</sup>

c. "Centrally Fueled". Engine manufacturers and APTA also submitted comments noting that the "capable of being centrally fueled" terminology used in the proposed bus definition is vague and must be clarified. The Engine Manufacturers Association (EMA) proposed a definition in which a "vehicle capable of being centrally fueled" would be a vehicle that operates from and returns daily to a single refueling terminal and that operates exclusively within a distance of one-half the vehicle's operating range from the refueling terminal.

In response, EPA agrees that it is important to clarify the meaning of "centrally fueled." In theory, any bus is capable of being centrally fueled, but in reality, only certain buses are centrally fueled. However, EPA believes that EMA's central fueling definition which would require that a vehicle be refueled at one location all of the time and never travel outside of one half of the vehicle's operating range is too stringent. EPA does not believe that it is necessary for a vehicle to be exclusively fueled at one location or operate exclusively within a distance one half of its operating range from the refueling terminal. The occasional use of higher sulfur fuel

should not cause serious problems with particulate trap systems which might be used on these non-urban buses in 1993. Therefore, EPA is adopting a definition in which a vehicle would be considered centrally fueled if the vehicle is refueled at least 75 percent of the time at one refueling facility that is owned, operated, or controlled by the vehicle operator.

d. Revised "Urban Bus" Definition. Comments were also received on the proposed revision to the urban bus definition. DDC supported EPA's revised definition noting that it would prevent engine manufacturers from circumventing the stringent urban bus PM standards. However, DDC suggested that the definition should take effect immediately instead of in 1993 to prevent the exchange of credits between medium HDEs used in trucks and medium HDEs used in urban buses. Bus Industries of America commented that the urban bus definition should be clarified as not to include buses of 34 feet or less in length, since these are not full sized buses. It noted that some buses are equipped with heavy HDEs instead of medium HDEs because there is no other choice of engines for the bus.

EPA continues to believe that placing a medium HDE in a type of bus that normally uses a heavy HDE to avoid being classified as an urban bus (and meeting a more stringent emission regulation) goes against the intent of the urban bus provisions of the CAA and EPA's regulations. Therefore, EPA believes it is necessary to require buses of a type that normally are powered by heavy HDEs to be considered as urban buses, even if a medium HDE is used in the bus. At this time, it is too late to apply the revised urban bus definition for MY 1992 because manufacturers have already certified MY 1992 engines. Therefore, as proposed in the NPRM, the revised urban bus definition will become applicable with MY 1993 urban buses.

In response to the comment regarding a minimum length for urban buses, EPA originally chose not to set a length requirement for urban buses as part of the rule establishing the urban bus definition. Instead, EPA decided to base its urban bus definition on the size of the engine that powers the vehicle. EPA's intent is to regulate bus engines, not to dictate bus design parameters. Additionally, EPA did not want to give incentive to transit companies to buy smaller urban buses. With today's action, the urban bus definition leaves intact the bus chassis related parameters that EPA believes are important, such as the passenger load capacity, and typical physical characteristics.

<sup>2</sup> It should be noted that engine manufacturers can use banked credits from other HDEs to meet the standard if such credits are available. This is especially true for such a limited number of additional, centrally-fueled buses. In fact, one engine manufacturer commented that it expects banked credits to be available in 1993, and that it will use them to meet the standard for these additional buses, if necessary.

<sup>3</sup> 0.05 weight percent sulfur diesel fuel is available today; although development of production capacity to fuel all diesel vehicles may take additional time, EPA believes that a sufficient supply of low sulfur fuel will be available to fuel the additional buses included under the 1993 PM standard.

*e. Averaging, Banking and Trading.* EPA received comments regarding the averaging, banking and trading provisions for the 1993 MY bus PM standard. Engine manufacturers commented that EPA should clarify whether any additional (non-urban) buses that must meet the 0.10 g/bhp-hr PM standard in 1993 would be able to continue using emission credits generated by other non-urban bus HDEs (not covered under this standard). Southern California Edison Company requested that EPA clarify whether electric buses could participate in the averaging, trading and banking program.

EPA makes no changes to the current averaging, banking and trading program with today's action. Engine manufacturers will be allowed to use credits generated from non-urban bus HDEs to demonstrate compliance with the 0.10 g/bhp-hr PM standard in MY 1993 for the additional bus engines covered under 0.10 g/bhp-hr standard, but not for urban bus engines. As with the current program, engine manufacturers will not be allowed to use credits generated from non-urban bus engines to comply with the 0.10 g/bhp-hr PM standard for engines used in urban buses. Regarding the comments from Southern California Edison Company, EPA does not consider an electric trolley to be an urban bus because it does not meet the definition of an urban bus. Therefore, electric trolleys are not included in the current averaging, trading and banking program. However, EPA has proposed a clean fleet program that may allow fleet operators to earn emission credits for purchasing vehicles with low or zero emissions (October 3, 1991, 56 FR 50196). The reader is directed to the NPRM for the clean fuels fleet program for further details of the proposed program.

*f. Nonconformance Penalties (NCPs).* Engine manufacturers supported the proposed expansion of NCPs to the additional buses covered under the 0.10 g/bhp-hr PM standard in 1993. Based on the comments received, EPA continues to believe that any additional buses required to meet the 0.10 g/bhp-hr standard would use essentially the same types of emission controls as urban buses. Therefore, for the additional buses covered by today's action, EPA is adopting the NCP provisions as finalized in the recent rulemaking that delayed the 0.10 g/bhp-hr PM urban bus standard from 1991 to 1993 (56 FR 64704, December 12, 1991).

*g. Enforcement.* EPA also received comments regarding the enforcement of the 1993 bus PM standard. DDC noted that the proposed regulations require

buses capable of being centrally fueled to meet the 0.10 g/bhp-hr PM standard in 1993 while similar non-centrally fueled buses would have to meet a 0.25 g/bhp-hr PM standard. DDC commented that vehicle operators should be responsible for purchasing the properly certified engines. DDC also commented that vehicle operators should be responsible for proper fueling, and that any misfueled engine should be considered improperly maintained and excluded from in-use testing.

As with all emission standards, it is the responsibility of the engine manufacturer to ensure that their engines comply with the emission standards set by EPA. However, EPA agrees that the responsibility for selecting a vehicle with the properly certified engine should rest on the vehicle purchaser and not the engine manufacturer. In response to DDC's comment on in-use liability, vehicle operators will be considered responsible for proper fueling of the vehicle. Any vehicle required by the engine manufacturer to be operated on a low sulfur fuel that is not fueled with a low sulfur diesel fuel will be considered improperly maintained and excluded from in-use testing.

*h. Labelling.* A final area in which comments on the 1993 0.10 g/bhp-hr bus PM standard were received related to the labeling requirements for urban bus engines. General Motors (GM) commented that the labeling regulations for urban bus engines needed to be revised to refer to the proper section of the regulations containing the 0.10 g/bhp-hr urban bus PM standard. As required by the CAA, EPA delayed the 0.10 g/bhp-hr PM standard from 1991 until 1993 (see 56 FR 64704, December 12, 1991). Today's action implements the changes to the labeling requirements necessary to require engines used in buses (for MY 1993) and engines used in urban buses (for MY 1994 and later) to be labeled as bus and urban bus engines, respectively.

#### *B. 1994 and Later Model Year Urban Bus PM Standard*

##### 1. Summary of Proposal

EPA proposed a PM standard of 0.05 g/bhp-hr for 1994 and later MY engines used in urban buses. EPA concluded that at that time the 0.05 g/bhp-hr PM level was technologically achievable for urban buses, taking into account durability, costs, lead time, safety, and other relevant factors. EPA requested comments on its assessment of the technological achievability of the 0.05 g/bhp-hr PM standard.

Because urban bus engine manufacturers had expressed concerns about the feasibility of complying with the 0.05 g/bhp-hr PM standard in use, EPA also requested comments on two alternatives for the 1994 and later MY urban bus PM standard. The intent of the alternatives contained in the NPRM was to account for the differences between certification and in-use emissions. Factors such as test to test variability (variability that occurs when the same engine tested multiple times using the same test receives different results from the tests), engine to engine variability, (variability which occurs when different engines of the same engine type receive different results using the same test procedure) and usage variability (variability that arises from differences in the usage patterns of urban buses) force manufacturers to provide a margin to ensure in-use compliance.

The first alternative was a PM standard of 0.05 g/bhp-hr for the first half of the useful life of an urban bus and a PM standard of 0.07 g/bhp-hr for the second half of the useful life. (The useful life period for which manufacturers must certify urban bus engines is 290,000 miles.) The second alternative was a certification PM standard of 0.05 g/bhp-hr and an in-use PM standard of 0.07 g/bhp-hr. (Certification testing is typically performed on prototype or relatively new production-type engines, under conditions that are controlled to a large degree by the engine manufacturer. In-use testing, on the other hand, is performed on engines that have been used by consumers and thus have been operated under widely varying conditions that are uncontrolled by the engine manufacturer.)

EPA did not propose any changes to the current emissions averaging, banking and trading program for 1994 and later MY engines. Regarding NCPs, the proposal noted that EPA would propose changes to the NCP program for PM emissions from 1994 and later MY urban buses as part of a separate rulemaking.

##### 2. Summary and Analysis of Comments

###### *a. Feasibility of Standard/Lead Time.*

The main area of comment on the 1994 and later MY urban bus PM standard was the feasibility of the proposed standard. Commenters supporting the feasibility of the 0.05 g/bhp-hr PM standard included Donaldson Company and Engine Control Systems, both of which are manufacturers of particulate traps, and MECA, a trade group that represents manufacturers of exhaust aftertreatment equipment (e.g., traps and

catalysts), among others. Both trap manufacturers claimed that the 0.05 g/bhp-hr level is achievable with current design particulate traps on current urban bus engines. Engine Control Systems claimed that its passive trap has tested as low as 0.017 g/bhp-hr over the Federal test procedure (FTP), which is used to determine compliance with federal emissions standards. However, as documented by the Urban Mass Transportation Administration (the agency responsible for many of the federal government's mass transit programs within the Department of Transportation), the initial traps supplied by Emission Control Systems to the South Eastern Pennsylvania Transit Authority (SEPTA) did not perform successfully under in-use conditions and were removed from service.<sup>4</sup>

Engine manufacturers stated their belief that the 0.05 g/bhp-hr PM level is not achievable, because of variability that occurs in emissions measurement (both test-to-test variability and engine-to-engine variability), as well as the unknown durability of particulate trap systems. They noted that complete information on the durability of trap systems is not available for in-use trap-equipped vehicles because of the limited in-use experience with such systems. Engine manufacturers also claimed that there is insufficient lead time to develop durable aftertreatment systems and integrate them into urban bus chassis designs, which are manufactured by separate manufacturers, to meet a 0.05 g/bhp-hr PM standard in MY 1994. Engine manufacturers and APTA recommended that EPA relax the 1994 and later MY urban bus PM standard to 0.07 g/bhp-hr.

Cummins submitted comments stating that in order to ensure compliance with the 0.05 g/bhp-hr PM standard, it would need to design an engine that would emit at levels between 0.03 and 0.035 g/bhp-hr to account for emissions variability and SEA compliance requirements. Cummins also noted that its estimated design level assumed no deterioration in the PM emissions performance of trap systems, though Cummins believes that in-use durability of traps is extremely uncertain. For these reasons, Cummins commented that a standard of 0.05 g/bhp-hr PM level would not be technologically achievable.

DDC submitted data that shows it has obtained PM levels as low as 0.04 g/

bhp-hr using a dual trap (non-bypass) system. However, DDC commented that its testing has found differences of seven percent in the trapping efficiency of two nominally identical trap cores.<sup>5</sup> DDC also expects tests variability to increase for trap-equipped engines. This is because, in order to determine the overall emissions from a trap-equipped engine, the trap will need to be tested in various stages of particulate accumulation and trap regeneration and the test results then weighted to determine an overall emission value. Therefore, DDC stated that, because of test variability and the unknown extent of trap deterioration in use<sup>6</sup>, compliance with a 0.05 g/bhp-hr PM standard is not assured.

Comments were also submitted on the feasibility of the 0.05 g/bhp-hr PM standard using alternatively-fueled engines. DDC provided information on its currently certified methanol-fueled urban bus engine, equipped with a catalytic converter, that was certified at a 0.06 g/bhp-hr PM level. Accounting for SEA and in-use compliance, DDC expects it could meet a PM standard of 0.07 to 0.08 g/bhp-hr. DDC noted that additional emission reductions may be possible but the feasibility of meeting the 0.05 g/bhp-hr PM standard is still uncertain. Cummins, which has been investigating natural gas-fueled engines, stated in its comments that it does not believe that the 0.05 g/bhp-hr PM standard will be feasible for natural gas-fueled engines either.

Regarding the alternatives considered in the NPRM, DDC commented that it could support a PM standard of 0.05 g/bhp-hr for certification testing and a PM standard of 0.07 g/bhp-hr for in-use testing as long as the PM standard for SEA testing was also 0.07 g/bhp-hr. DDC stated that the 0.07 g/bhp-hr requirement is necessary for SEA

<sup>5</sup> For an engine-out PM level of 0.25 g/bhp-hr, a seven percent difference in filtering efficiency could result in a variability of about 0.02 g/bhp-hr of PM.

<sup>6</sup> DDC stated that trap deterioration could result either from loss of trap filtering efficiency or from increases in engine-out particulate concentration due to higher exhaust backpressure induced by the trap. DDC noted its concerns regarding plugging of trap cores due to the accumulation of ash from both fuel and lubricating oil. DDC noted that the electrically regenerating dual trap system that it was focusing on has over 170 mechanical and electrical components, many of which had never previously been used in vehicular applications; thus, their ability to operate reliably in this environment had not been demonstrated. DDC stated that it had encountered a number of component reliability problems, but that many of these problems had been resolved. DDC stated that though it believed the remaining problems could be overcome by 1994, it could not be certain that these problems, or new problems that may occur later, would be resolved by 1994.

because of the "need for an SEA audit compliance margin." DDC did not elaborate on this point. Donaldson noted that, even though there are demonstration programs involving many in-use urban buses with trap systems, complete information on test variability and trap durability is not available at this time. For this reason, Donaldson also supported the alternative that would set a certification PM standard of 0.05 g/bhp-hr and a 0.07 g/bhp-hr standard for SEA and in-use compliance.

EPA received no comments on the alternative that would have set different half-life and full-life emissions standards.

DDC has recently provided additional comments to EPA on the development of new engine and oxidation catalyst technology directed toward meeting the 1994 proposed urban bus PM standard.<sup>7</sup> DDC has been developing a new diesel engine for the urban bus market, known as the Series 50 engine. DDC noted in its submittal that it planned to certify the Series 50 engine for MY 1993 at 0.08 g/bhp-hr PM without any exhaust aftertreatment. With the addition of an oxidation catalyst, DDC believes it can meet a certification standard of 0.05 g/bhp-hr in MY 1994 but has concerns over meeting such a standard under SEA and in-use testing. For these reasons, DDC reiterated its previous comments that EPA should consider a 0.07 g/bhp-hr PM standard for SEA and in-use testing. (Subsequent to providing these additional comments, DDC formally submitted certification information for its MY 1993 Series 50 diesel urban bus engine. The emissions test results ranged from 0.07 to 0.13 g/bhp-hr of PM for its Series 50 engine without aftertreatment.)

#### *Certification/SEA Standard Feasibility*

In response to the comments noted above, EPA has reassessed its earlier conclusion that a 0.05 g/bhp-hr PM standard is technologically feasible by model year 1994 and has instead concluded that a 0.05 g/bhp-hr PM level is technologically achievable for certification and SEA testing of engines used in urban buses, including alternatively-fueled engines, for model year 1996. As discussed in detail below, this conclusion is based on recognition

<sup>7</sup> The letter to William C. Rosenberg, Assistant Administrator for Air and Radiation, U.S. EPA, from Roger Penske, Chairman, Detroit Diesel Corporation, September 10, 1992 was placed in the docket for this rulemaking (A-91-28). EPA has been in contact with a number of companies and organizations and has discussed DDC's comments regarding its ability to use oxidation catalysts to meet the 1994 urban bus PM standard.

<sup>4</sup> "Status of Particulate Trap Developments Related to the Transit Industry," U.S. DOT Technical Report UMTA-OH-06-0056-91-6, May 1991

of the significant improvements urban bus engine manufacturers are making in engine-out emission controls, as well as the important breakthroughs that have occurred in exhaust aftertreatment technology. This conclusion was made, as described below, with consideration of recent engine testing that shows PM levels near or below the 0.05 g/bhp-hr level, as shown by the information contained in the NPRM, the comments, and recent testing of 1993 MY engines.

Engine manufacturers have significantly reduced engine-out PM levels through improved engine design, combustion chamber design and fuel injection controls, as well as the addition of turbocharging and charge air cooling to the air intake system. With the addition of exhaust aftertreatment, such as particulate traps or oxidation catalysts, even lower PM levels are achievable. Using a new particulate trap with 85 percent efficiency at filtering diesel particulate emissions, an urban bus with an engine-out PM level of 0.30 g/bhp-hr would be expected to emit at a level just below 0.05 g/bhp-hr. In fact, the 0.04 g/bhp-hr PM emission level of a trap-equipped engine, cited by DDC, supports this. In addition, in more recent testing of DDC's 6V-92TA urban bus engines for MY 1993 certification, DDC has achieved PM levels lower than 0.05 g/bhp-hr for both a trap-equipped diesel-fueled engine and a methanol-fueled engine.

As noted earlier, some of the commenters supporting a 0.05 g/bhp-hr certification standard also requested a less stringent standard for SEA and in-use testing. EPA does not believe that such a differentiation between standards for certification and SEA is consistent with the purposes of SEA testing. Both certification and SEA testing involve engines that have not been used in actual service. Certification testing is largely conducted by manufacturers in accordance with EPA-specified procedures, while SEA testing is monitored by EPA personnel. As such, SEA testing is meant to be an enforcement audit of the manufacturer's certification testing.<sup>8</sup> Thus, emission levels measured in certification and SEA testing should generally be comparable if manufacturers have adequately implemented their prototype's emission control strategies.

<sup>8</sup> The SEA program inherently considers engine variability by requiring that at least sixty percent of the engines tested meet the certification standards. Thus, an engine family will still pass an SEA even if up to forty percent of the engines tested emit at levels higher than the emission standard applicable to that engine family. However, individual engines that are found to be emitting above the applicable standard must be corrected.

Because of the connection between certification and SEA testing, EPA believes that the SEA standard should be set at the same level as the certification standard. Thus, the relevant question is whether a 0.05 g/bhp-hr PM standard is appropriate for both certification and SEA testing, or whether it is appropriate for neither certification or SEA testing.

EPA believes that a relaxed standard of 0.07 g/bhp-hr PM, the maximum level allowed by the CAA, is justified in the near term for certification and SEA testing (and in-use testing as well, as described below). Recent information submitted by DDC on the development of a low-emitting urban bus engine shows that it should be possible for an engine equipped with an oxidation catalyst, but no trap, to achieve a PM standard of 0.07 g/bhp-hr in the short term. DDC also commented that, as more experience is gained with this technology, it will be possible to achieve a 0.05 g/bhp-hr PM standard for certification testing, but requested a 0.07 g/bhp-hr PM standard for SEA and in-use testing. Based on DDC's comments and the short amount of lead time before the 1994 model year begins, it appears highly unlikely that manufacturers can develop oxidation catalyst technology to meet a 0.05 g/bhp-hr urban bus PM standard in 1994 production line urban buses. Although DDC's comments indicate that urban bus engines equipped with oxidation catalysts should be capable of meeting a PM standard of 0.07 g/bhp-hr, EPA believes that manufacturers will require additional time to implement any necessary improvements in the technology to meet a 0.05 g/bhp-hr PM standard for certification and SEA testing.

The application of oxidation catalysts to HDEs used in urban buses in a new development and potentially much less costly as a method of particulate emissions control compared to particulate traps. Based on comments from urban bus operators, current trap systems cost over \$15,000. In recent comments on the urban bus retrofit/rebuild program, Donaldson noted that, as trap production increases, trap costs are likely to decrease to between \$5,000 and \$6,500 per system. This is the price at which Donaldson expects to wholesale market a trap system and would not include any distribution mark-up (typically around 36 percent for engine manufacturers as estimated by EPA<sup>9</sup>). Including such a mark-up

<sup>9</sup> Update of EPA's Motor Vehicle Emission Control Equipment Retail Price Equivalent (RPE)

would raise costs to the purchaser of the urban bus to around \$8,800 per system, a significant increase considering new urban bus engines cost around \$20,000. Moreover, Donaldson's cost projections assume that a significant number of new particulate traps will be purchased for several years, allowing Donaldson to recover the cost associated with developing traps at a fairly low markup. If, as DDC indicates, oxidation catalysts that can meet the 0.05 g/bhp-hr PM standard become available within the next few years and capture a significant share of the market, then trap costs would likely be even higher in order to recover development costs over a smaller number of trap systems.

In addition to raising the initial purchase price of a bus, traps will also increase the expense of operating the bus. The use of a trap is expected to result in a fuel economy penalty of around one to two percent because of increases in exhaust backpressure and electrical regeneration. Such a decrease in fuel economy could increase the overall expense of a trap-equipped urban bus by over \$2,000 over its life.

EPA believes that, because of the simpler design of oxidation catalysts, the price of oxidation catalysts will be significantly lower than that of trap systems. Oxidation catalysts consist of a flow-through container that is filled with an inert material on which an oxidizing catalyst, such as platinum or palladium, has been loaded. The catalyst is located in the exhaust stream of the vehicle and oxidizes the particulate in the exhaust. Because a catalyst does not require regeneration and has little to no impact on exhaust backpressure, there should be no decrease in fuel economy as a result of the catalyst system.

EPA examined the cost of oxidation catalysts for HDEs in support of two different programs, the low-sulfur diesel fuel regulations and the NCP rules for the 1994 HDE PM standards. Based on information received on the loading and volume requirements of prototype catalyst systems, EPA estimated a cost of \$317 for a heavy HDE oxidation catalyst system in the Draft Regulatory Impact Analysis for the diesel sulfur rulemaking.<sup>10</sup> (The estimate includes the cost of the catalyst and related hardware as well as amortized fixed costs.) In a more recent analysis supporting the development of

Calculate Formula," Jack Faucett Associates for U.S. EPA, September 4, 1985.

<sup>10</sup> Draft Regulatory Impact Analysis, "Control of Sulfur and Aromatics Contents of On-Highway Diesel Fuel," U.S. EPA, OAR, OMS, July 1989. This document is available in EPA Docket A-86-03 as well as the docket for this rulemaking (A-91-26).

proposed NCPs for the 1994 HDE PM standards, EPA estimated catalyst costs based on discussions with engine manufacturers. The cost estimate for a heavy HDE oxidation catalyst, including amortized fixed costs, was determined to be \$816.<sup>11</sup>

One additional catalyst cost estimate was available from a study performed by Acurex for the California Air Resources Board. In that report, Acurex estimated that an oxidation catalyst would add approximately 10 percent to the cost of a HDE, but provided no supporting information for the estimate. For urban bus engines which cost around \$20,000 per engine, the added cost would therefore be around \$2000.<sup>12</sup>

Based on the cost estimates presented above, the purchase price of a catalyst-equipped bus is estimated to be \$6,800 to \$8,500 less (and could be as much as \$14,000 less if trap costs were to remain at current levels) than that of a trap-equipped bus, a substantial difference for transit authorities already operating under significant budget constraints. Considering a fuel economy penalty of two percent over the lifetime of a trap-equipped bus, EPA estimates the total discounted cost of meeting a 0.05 g/bhp-hr PM standard with traps, incremental to the cost of meeting a 0.07 g/bhp-hr PM standard with catalysts, is approximately \$8,700 to \$10,400 per bus.

EPA has examined the environmental impact and cost effectiveness of implementing a 0.07 g/bhp-hr PM standard versus a 0.05 g/bhp-hr PM standard in 1994. Assuming all of the urban buses purchased in a given model year emit 0.07 g/bhp-hr of PM, the nationwide emission reduction will be only 20 metric tons per year less than if all of the buses purchased emit 0.05 g/bhp-hr of PM. (This calculation assumes that of the nationwide urban bus fleet of 44,000, one-fifteenth will be replaced each year, based on the average urban bus life of 15 years as determined by the Federal Transit Administration.) By dividing the incremental costs discussed above by the discounted emission reduction of approximately 50

kilograms over the lifetime of an urban bus, EPA calculated the incremental cost effectiveness of meeting a 0.05 g/bhp-hr PM standard compared to a 0.07 g/bhp-hr PM standard in 1994 to range from \$176,000 to \$210,000 per ton. EPA believes that such cost effectiveness levels, considerably higher than any other mobile source programs previously considered for PM control, justify a delay in the 0.05 g/bhp-hr PM standard.

EPA believes that, in addition to the high cost of reducing emissions by a relatively small amount, the tight financial condition of the transit industry further justifies setting a 0.07 g/bhp-hr PM standard in 1994.

Considering comments from APTA and several individual transit companies, EPA believes that many transit operators would be unable, without significant financial hardship or increase in fares, to incur large increases in the purchase price of new buses due to the addition of traps.<sup>13</sup> Raised fares would likely cause significant public dissatisfaction and typically involves a difficult process, according to transit companies. Raised fares would shift costs to mass transit customers, which could result in reduced ridership. Cost increases could also force reductions in transit service and lead to greater use of single-occupant automobiles. EPA believes that fostering the development of low cost emissions control technology for the urban bus market by implementing a 0.07 g/bhp-hr PM standard in 1994 will limit the impact on an industry already under significant financial burden.<sup>14</sup>

As noted above, EPA does not believe that there will be a significant negative environmental impact from a short delay in implementing the 0.05 g/bhp-hr PM standard. In fact, EPA believes that implementing a 0.05 g/bhp-hr PM standard in 1994 could actually result in less environmental benefits than implementing a 0.07 g/bhp-hr PM standard in 1994, due to the significantly higher costs of meeting the more stringent standard in 1994. One possible response to higher new bus costs, particularly if less expensive emission control equipment is expected by 1995 or 1996, is that transit authorities would delay the purchase of

new buses and keep older, dirtier buses on the road longer. Another possible response to significantly higher new bus costs, as discussed above, would be an increase in the fares charged to passengers, which could result in increased use of privately owned vehicles. Both of these responses would reduce the environmental benefit of the lower standard. Under either standard, engine manufacturers should be able to certify trap-equipped urban bus engine. However, the 0.07 g/bhp-hr PM standard should allow manufacturers to certify oxidation catalyst-equipped engines, with only a small increase in emissions over the levels that a 0.05 g/bhp-hr PM standard would produce.<sup>15</sup>

EPA believes that a relaxed PM standard of 0.07 g/bhp-hr is justified for urban buses in 1994 notwithstanding the role that emissions averaging, trading and banking could play in meeting a 0.05 g/bhp-hr PM standard or the potential for manufacturers to pay NCPs in lieu of meeting a 0.05 g/bhp-hr PM standard. EPA does not believe that urban bus engine manufacturers will be able to take advantage of averaging to comply with a 0.05 g/bhp-hr PM standard. Under the averaging program, an urban bus engine manufacturer may certify an engine above the PM standard as long as the sales-weighted average of its urban bus engines is at or below the applicable standard. However, because of the difficulty of attaining levels much below g/bhp-hr, as well as the need to account for test to test and engine to engine variability when certifying an engine, EPA believes engine manufacturers will not likely be able to certify any urban bus engines below 0.05 g/bhp-hr. In regard to trading and banking, EPA does not expect that engine manufacturers will have sufficient credits available to demonstrate compliance with a 0.05 g/bhp-hr PM standard. This conclusion is based on the fact that manufacturers have not been able to generate significant credits in the last few years because of the rapid lowering of the urban bus PM standards.

EPA does not believe that the availability of NCPs would make a 0.05 g/bhp-hr standard reasonable because their cost would be based on traps and so would be relatively high. In addition, under the proposed regulations, an

<sup>11</sup> "Calculation of Nonconformance Penalty Rates for 1994 and Later Model Year Heavy-duty Diesel Particulate Matter (PM) Standards," prepared by Engine, Fuel, and Emissions Engineering and ICF Incorporated, for U.S. EPA, OAR, OMS, MOD, April 9, 1992. A copy of this report is available in EPA docket A-91-29 and has also been placed in the docket for this rulemaking (A-91-28).

<sup>12</sup> "Technical Feasibility of Reducing NOx and Particulate Emissions from Heavy-duty Engines," Draft Final Report prepared by Acurex Environmental Corporation for California Air Resources Board, July 27, 1992. A copy of this report has been placed in the docket for this rulemaking (A-91-28).

<sup>13</sup> Current trap-equipped urban bus programs have been financed primarily by grants from state and federal agencies, thereby minimizing the impact of the increased costs on transit authorities. It is unclear to what extent future urban bus purchases will be financed in this way.

<sup>14</sup> See comments of American Public Transit Association, September 24, 1992, A-91-28, IV-D-68; and New York City Transit Authority, September 1, 1992, A-91-28, IV-D-69.

<sup>15</sup> EPA recognizes the potential for a competitive disadvantage to engine manufacturers who use traps instead of oxidation catalysts to comply with the standards. However, it is not certain that such a disadvantage will arise. EPA believes that all urban bus engine manufacturers should be able to use catalyst technology to comply with the standards contained in today's action, as discussed later in this section.

engine must meet at least a 0.10 g/bhp-hr PM standard to be able to use NCPs. (Based on the proposed regulations, EPA estimates that if EPA promulgates a 0.05 g/bhp-hr PM standard, the NCP for an engine certifying at 0.09 g/bhp-hr PM would be over \$5,000 per engine, and the NCP for an engine certifying at 0.10 g/bhp-hr would be over \$10,000 per engine for the first year. NCPs during succeeding years would be significantly higher.<sup>16</sup>) Because part of EPA's objective in choosing a 0.07 g/bhp-hr standard is to keep costs reasonable, it would not make sense to set a 0.05 g/bhp-hr standard and force manufacturers to pay high-cost NCPs.

While EPA believes that the standard for certification and SEA testing should be set at 0.07 g/bhp-hr in 1994, EPA also believes that engines equipped with oxidation catalysts should be able to achieve a 0.05 g/bhp-hr PM standard in the long run. Engine manufacturers have been in the process of developing oxidation catalyst technology for non-urban bus applications in preparation for meeting the 1994 HDE PM standard of 0.10 g/bhp-hr. Recent information from DDC indicates that emissions from urban bus engines equipped with oxidation catalysts can be reduced to 0.07 g/bhp-hr in the 1994 MY. However, as noted earlier, the potential for using oxidation catalysts to meet a 0.05 g/bhp-hr standard for urban buses has only recently begun to be investigated. In order to provide manufacturers with an opportunity to fully develop the technology to meet PM levels below 0.07 g/bhp-hr and to develop the production capacity for application to urban buses, EPA believes that a short delay in implementing the lower standard is warranted.

EPA also believes that the standard for certification and SEA testing should be lowered to 0.05 g/bhp-hr at the earliest possible time. Based on the information available, EPA has decided that, beginning with model year 1996, urban bus engines must meet a 0.05 g/bhp-hr PM standard in certification and SEA testing. EPA believes that two years is the minimum period of delay that will allow engine manufacturers to gain additional experience with catalyst technology and to develop improved catalyst systems capable of meeting a 0.05 g/bhp-hr PM standard over the useful life of an urban bus.

EPA has applied the specified statutory criteria in reaching its decision on the urban bus PM standards. Section 219(b) of the CAA requires that EPA

take into account durability, costs, lead time, safety and other relevant factors in determining whether the 0.05 g/bhp-hr PM standard is technologically achievable for the 1994 MY. As discussed above, EPA believes that the imposition of the 0.05 g/bhp-hr PM standard in the 1994 MY would increase costs of urban bus engines by an unreasonable amount, particularly in light of the questionable environmental benefits of imposing that standard in the near term and the significant cost savings of imposing a 0.07 g/bhp-hr standard. The increased costs of meeting a 0.05 g/bhp-hr standard could also have detrimental effects on the urban transit companies with the counterproductive results discussed above. EPA believes that emission control technologies will be available to meet the 0.07 g/bhp-hr standard in the 1994 MY and the 0.05 g/bhp-hr standard in the 1996 MY, at significantly lower costs (both in terms of purchase price and performance impacts). The additional lead time provided by the two-year delay of the 0.05 g/bhp-hr standard will aid in the development and use of these emission control technologies and, as discussed above, will not cause a significant loss of environmental benefits. On the basis of this information, EPA believes that, taking into account the factors listed in the CAA, the 0.05 g/bhp-hr PM standard is not technologically achievable for MY 1994 and MY 1995.<sup>17</sup>

#### *In-Use Standard Feasibility*

For the reasons discussed above regarding why a 0.07 g/bhp-hr PM standard is appropriate for certification and SEA testing for model years 1994 and 1995, and also because the CAA specifies that the 1994 urban bus PM standard shall be no higher than 0.07 g/bhp-hr, EPA believes that the in-use standard should also be 0.07 g/bhp-hr for those model years. EPA has examined the feasibility of meeting a 0.05 g/bhp-hr PM standard under in-use

conditions in model year 1996, when the certification and SEA standard will be reduced to 0.05 g/bhp-hr. In response to the comments received on the September 1991 NPRM, EPA does not believe that a 0.05 g/bhp-hr PM level is technologically achievable under in-use conditions. As discussed in detail below, this conclusion is based on concerns with the in-use durability characteristics of exhaust aftertreatment as well as the variability associated with in-use engine testing.

EPA recognizes that achieving a PM level below 0.05 g/bhp-hr in certification and SEA testing of urban bus engines does not ensure that such engines could meet a PM standard of 0.05 g/bhp-hr in use. To comply with EPA standards (and to ensure compliance with in-use testing requirements), an engine must meet a standard over its entire useful life. Therefore, engine manufacturers typically design an engine so that, when new, it emits at a level below the standard to account for potential emissions deterioration over the engine's useful life. Moreover, as noted in this section, engine manufacturers must take into consideration the differences between certification and in-use emissions. Factors such as test to test variability, engine to engine variability, and usage variability force manufacturers to provide a margin to ensure in-use compliance.

Because of the recent development of oxidation catalyst technology for HDEs used in urban buses, durability information on such oxidation catalysts is very limited. However, oxidation catalysts for diesel engines are expected to be similar to those used for gasoline engines. Based on the testing of light-duty gasoline vehicles equipped with catalysts, catalyst conversion efficiency has been shown to degrade with increasing mileage. The amount of deterioration varies from vehicle to vehicle, but some amount of deterioration typically occurs. EPA has tested properly maintained in-use vehicles to compare the conversion efficiency of in-use catalysts to the efficiency of catalysts known to be good. (The good catalysts were taken from vehicles of the same model that were known to meet the applicable emissions standards.) The results of the testing show a decrease in catalyst efficiency ranging from less than five percent to over ten percent, depending on the pollutant, for vehicles which have accumulated close to their useful life of 50,000 miles.<sup>18</sup> Extrapolating to the

<sup>16</sup> The proposed NCP rulemaking was published in the Federal Register on May 29, 1992 (57 FR 22675).

<sup>17</sup> Although a 0.07 g/bhp-hr PM certification standard for 1994 and later MY urban buses was not specifically proposed by EPA in the September 1991 NPRM, the Act clearly provides that EPA may consider an urban bus PM standard as high as 0.07 g/bhp-hr. The September 1991 NPRM provided notice that EPA considered a 0.07 g/bhp-hr PM standard and also highlighted other options which included a 0.07 g/bhp-hr full-life PM standard (with a 0.05 g/bhp-hr half-life PM standard) and a 0.07 g/bhp-hr in-use PM standard (with a 0.05 g/bhp-hr certification PM standard). EPA also believes that the number of comments which discussed and/or supported a 0.07 g/bhp-hr PM standard makes it clear that this standard was the topic of serious consideration in the notice and public comment period. In addition, EPA contacted several commenters regarding the information provided in DDC's September 10, 1992 letter.

<sup>18</sup> "In Use Performance of Catalytic Converters on Properly Maintained High Mileage Vehicles," by



useful life for urban bus HDEs of 290,000 miles, the deterioration in urban bus catalyst conversion efficiency would be expected to be much higher over the useful life compared to the deterioration in catalyst efficiency from these light-duty vehicles. Any such decreases in conversion efficiency will make it exceedingly difficult for engine manufacturers to comply with a 0.05 g/bhp-hr PM standard over the full useful life of an urban bus engine under in-use conditions.

In addition to the difference in useful life, there are other differences between gasoline and diesel engines that could negatively affect the durability of an oxidation catalyst. The diesel catalyst, unlike current gasoline engine catalysts, will be required to operate at low temperatures, will be required to oxidize heavy hydrocarbons, and could be affected by the sulfur in diesel fuel over the 290,000 mile useful life of an urban bus engine versus the 50,000 mile useful life of current light-duty gasoline vehicles. Given the expected similarity of oxidation catalysts for both gasoline and diesel engine and the effect that differences between the operating conditions of diesel versus gasoline engines could have on the durability of oxidation catalysts for diesel engines, EPA believes that some degradation in the performance of oxidation catalysts is likely.

Concerns also exist regarding the durability of trap systems. The main source of information on the durability of trap systems is from NYCTA's trap-equipped urban buses. The 400 trap-equipped urban buses currently in operation in New York City were placed into service in early 1991 and have accumulated an average of 45,000 miles per bus (individual buses have accumulated up to approximately 80,000 miles). After experiencing (and correcting) initial problems with the trap systems, NYCTA has found the low mileage durability of the trap system to be promising. However, none of these urban buses has achieved a mileage accumulation near the useful life requirement of 290,000 miles.

EPA believes that, although the low mileage durability of the New York City traps is promising, the long term durability of particulate traps remains unproven and an area of concern. A particulate trap system is a complex system that includes the trap and related hardware which filter the particulate in the exhaust, and the

electrical and microprocessor systems which control the regeneration process. Urban bus engine manufacturers have certified trap-equipped engines for model year 1993 that tested at levels below 0.05 g/bhp-hr PM. However, certification testing is performed on a well maintained engine that has been run solely on an engine dynamometer, whereas in-use testing is performed on engines that experience widely varying degrees of maintenance and that have been operated under in-use conditions potentially more demanding than certification. EPA believes that many of the problems that in-use trap-equipped buses have experienced can be attributed to the differences between controlled certification testing and more stringent in-use operation. Therefore, EPA believes that the long-term in-use durability of traps is not proven at this time.

In addition to durability concerns, in order to meet a given standard under in-use conditions, engine manufacturers must take test-to-test, engine-to-engine, and usage variability into consideration when designing an engine to meet the applicable standard in in-use testing. The need for an in-use margin will impact the ability of engine manufacturers to achieve the urban bus PM standard in use. Based on tests performed by EPA and industry, the standard deviation on a current engine (with engine-out PM of around 0.17 g/bhp-hr) tested at the same laboratory over the heavy-duty transient test appears to be around 0.01 g/bhp-hr for PM.<sup>19</sup> Even though urban bus engines designed to meet the 1993 PM standard and the 1994 and later PM standards will have lower PM emissions than current engines, some level of test variability is inherent and EPA does not expect that test-to-test variability will decrease appreciably in the future.

In addition, as noted by DDC in its comments, the testing of two identical trap filters showed trap efficiency differences of as much as seven percent. For an urban bus with an engine-out PM level of 0.25 g/bhp-hr, such a difference in filter efficiency could result in a variability in PM emissions of approximately 0.02 g/bhp-hr. Although trap manufacturers should be able to improve the consistency of traps through improved quality controls, EPA believes that some level of equipment variability will continue to exist in the 1994 model year.

Because of these concerns over the long term performance characteristics of exhaust aftertreatment systems, as well as engine, test and usage variability, EPA believes that it may not be feasible for urban bus engines to meet a PM standard of 0.05 g/bhp-hr in in-use testing. Therefore, EPA is setting a separate urban bus PM standard of 0.07 g/bhp-hr for in-use compliance. This is the maximum level allowed by the CAA. EPA does not believe that an in-use standard set at a level between 0.05 and 0.07 g/bhp-hr would be sensible because of engine and test variability and the difficulty in measuring such a small difference in emissions. As required by the CAA, EPA will monitor the in-use compliance of 1994 and later model year urban bus engines with this standard. If EPA finds that engines are not in compliance, EPA is required to implement a low polluting fuels program for urban buses.

As discussed earlier, the NPRM also contained an alternative suggested by industry that would set a half-life PM standard of 0.05 g/bhp-hr and a full-life standard of 0.07 g/bhp-hr. Because deterioration is the major concern with both candidate technologies, and an initial 0.05 g/bhp-hr standard might force higher cost traps, EPA does not believe that such an approach would offer an in-use benefit over the standards contained in today's action. Additionally, EPA received no comments recommending the alternative.

EPA shall continue to evaluate the in-use performance of urban buses equipped with aftertreatment systems. If EPA believes that an in-use standard of 0.05 g/bhp-hr appears to be achievable, EPA will revisit this issue in a future rulemaking.

#### *Legal Authority for Two-Tiered Standard*

Section 202(a) of the Act does not require that standards applicable to new motor vehicles be uniform over the useful life of such vehicles. Also, neither section 206 nor 207 requires a single standard for certification and in-use compliance. In fact, section 207(c)(4) specifically mandates separate in-use standards for certain motor vehicles.

As required by section 219(a) of the Clean Air Act, the standard promulgated by EPA for urban buses under section 202(a) "shall be based on the best technology that can reasonably be anticipated to be available at the time such measures are to be implemented, taking costs, safety, energy, lead time, and other relevant factors into account." Section 219(b) requires that EPA

Michael Sabourin, Robert Larson and Kimberly Donahue, U.S. EPA, SAE Paper 860568. The deterioration per mile could not be determined from the data.

<sup>19</sup>"Heavy-Duty Engine Testing Report, EMA Particulate Correlation Program Test Results—1990," EPA Technical Report, EPA-AA-SDSB-91-01.

mandate a PM standard for urban bus engines of 0.05 g/bhp-hr unless EPA determines that such standard is not technologically achievable, taking into account durability, costs, lead time, safety, and other relevant factors. A determination as to whether the 0.05 g/bhp-hr level is technologically achievable must accompany this rulemaking.

Based on existing test data, it appears that the best technology expected to be available, considering costs and leadtime, will allow engines to achieve a certification PM level of 0.05 g/bhp-hr by the 1996 MY. However, the standard must be considered under in-use conditions as well, since durability is a factor and failure to comply with the standard has important consequences. As described above, EPA cannot conclude from current information that a 0.05 g/bhp-hr PM standard is feasible under in-use conditions over the vehicle's full useful life. As a result, EPA cannot now make a determination that a 0.05 g/bhp-hr PM standard is technologically achievable, taking into account the factors listed in the CAA, under in-use conditions. Therefore, it is appropriate for EPA to set a standard for in-use testing that is different from the 0.05 g/bhp-hr PM standard for certification and SEA. EPA believes the two-tiered emission standard will force the use of advanced particulate emission control technology, as envisioned by the CAA, while providing engine manufacturers with a separate in-use standard necessary to implement this technology in the available lead time.

#### Leadtime

In response to the comments on the lead time for implementing the more stringent PM standard for urban buses, section 219(b) of the CAA specifically requires compliance with the standard beginning with the 1994 model year. In any case, based on 1993 MY certification applications, EPA believes that the same control strategies used to meet the MY 1993 urban bus PM standard of 0.10 g/bhp-hr (e.g., particulate traps) can be used to meet the PM standards adopted today. In addition, based on the information described above, it appears that an urban bus equipped with an oxidation catalyst should be capable of meeting the standards contained in today's action. For these reasons, EPA believes that there is adequate lead time for engine manufacturers to meet the urban bus PM standards contained in today's rule by MY 1994.

*b. Averaging, Banking and Trading.* Related to emissions averaging, banking

and trading, DDC commented that EPA should modify the current program to allow for the exchange of particulate credits between truck and urban bus engines. Southern California Edison Company commented that EPA should make explicit the ability of urban electric trolley and shuttle buses to generate, bank, trade and use emission credits among manufacturers.

In response to these comments, EPA is not adopting any changes to the current emissions averaging, banking and trading provisions for the reasons discussed below. However, EPA is modifying its approach to the current averaging, banking and trading program in response to the two-tiered urban bus PM standard promulgated with today's action.

The current averaging, banking and trading program was intentionally developed in such a way that engine manufacturers could not average, bank or trade emission credits between urban bus engines and other HDEs. Urban buses have been set apart from the other HDEs for averaging, banking and trading purposes because urban buses operate primarily in urban areas where ambient particulate levels tend to be high (50 FR 10653, March 15, 1985). Allowing PM emission credits earned with truck HDEs to be used for urban bus engines would reduce the potential impact of lower urban bus emission standards on urban ambient particulate levels, because many of these trucks operate primarily outside urban areas. As stated earlier, EPA does not consider an electric trolley to be an urban bus, and thus it is not included in the current HDE averaging, trading and banking program. However, as mentioned earlier, EPA recently proposed a program that may allow fleet operators to earn emission credits for purchasing vehicles with low or zero emissions (October 3, 1991, 56 FR 50196). The reader is directed to the NPRM for the clean fuels fleet program for further details.

In response to the two-tiered PM standard promulgated with today's action, EPA is modifying its approach to the current averaging, trading and banking program for 1996 and later MY urban buses. Under the current program, urban bus engine manufacturers may declare a family emission limit (FEL) different than the certification PM standard. In such a case, the engine manufacturer is held responsible for meeting the FEL during all testing, including certification, SEA, and in-use testing. However, because EPA is adopting a two-tiered PM standard beginning with the 1996 model year (0.05 g/bhp-hr for certification/SEA

testing, 0.07 g/bhp-hr for in-use testing), EPA does not believe that a manufacturer should be required to meet the same FEL level under in-use testing as for certification and SEA.

Therefore, as a result of today's action, engine manufacturers may still declare an FEL for their urban bus engine families different than the certification/SEA PM standard. Beginning with the 1996 model year, engines of such an engine family will be responsible for meeting the FEL under both certification and SEA testing. However, for in-use testing, urban bus engines participating in the averaging, banking and trading program will be responsible for meeting a PM level that is 0.02 g/bhp-hr higher than the FEL declared by the engine manufacturer at the time of certification. Engine manufacturers will still be required to show that the sales-weighted average of their FELs meets the 0.07 g/bhp-hr certification standard for MY 1994 and 1995 urban buses and the 0.05 g/bhp-hr certification standard for 1996 and later MY urban buses.

*c. Non-Conformance Penalties (NCPs).* With regard to NCPs, engine manufacturers commented that EPA should establish NCPs for PM emissions from 1994 and later urban buses immediately to help them plan for MY 1994. EPA recently proposed NCP provisions for the 1994 and later urban bus engine PM standard on May 29, 1992 (57 FR 22675). The reader is directed to that proposal for complete details of the proposed NCP provisions.

*d. Fuel Quality.* Two additional comments were received from DDC related to the 1994 urban bus PM standard. DDC recommended that EPA study the need for low ash fuels for trap-equipped engines, and allow the use of test fuels with oxygenates or other PM-reducing additives, contingent on assurance that vehicles will be operated on such fuels under in-use conditions. DDC believes that such fuel changes would assist manufacturers in meeting the stringent PM standards. No data was submitted regarding the feasibility, the environmental impact, or the cost related to these changes.

In response to these comments on diesel fuel quality, EPA does not at this time have sufficient evidence indicating a need for such changes to diesel fuel to ensure compliance with the urban bus PM standard contained in today's action. However, EPA is open to making cost-effective changes that would have a beneficial impact on the environment. In order to further such concepts, EPA would encourage joint industry efforts such as the joint effort that resulted in

EPA's promulgation of the low-sulfur diesel fuel regulations.

### C. Urban Bus Test Procedure

#### 1. Summary of Proposal

EPA examined three options for establishing urban bus test procedures that reflect actual operating conditions: (1) Retain the current engine-based heavy-duty transient test procedure, (2) adopt a new engine-based urban transient test procedure specific to urban buses, and (3) adopt a vehicle-based urban bus test procedure. As explained in the NPRM, EPA noted that the current heavy-duty transient test procedure contains elements that reflect actual urban bus operating conditions, including both freeway and non-freeway operating conditions. At this time, EPA has deemed the current test procedure to be adequate for the limited number of vehicles being covered by this test procedure. For these reasons, EPA proposed to retain the heavy-duty transient test procedure for all urban bus testing.

#### 2. Summary and analysis of comments

Nearly all commenters supported retaining the heavy-duty transient test procedure, noting that the current test is sufficiently representative of in-use urban bus operations. DDC and APTA supported a separate urban bus test cycle more representative of in-use operation noting that such a bus-specific cycle could result in the use of different emission control technologies that could have a beneficial effect on air quality. Southern California Rapid Transit District (SCRTD) commented that EPA should recognize a separate chassis-based test procedure in the long term since it would allow a more accurate simulation of typical urban bus operating conditions.

After reviewing all of the comments received on this issue, EPA continues to believe that the current heavy-duty transient test cycle reflects actual urban bus operating conditions adequately for today's purposes. Based on previous analyses and the lack of emissions data in support of a new urban bus test cycle (engine or chassis based), EPA continues to believe that a change in the test procedure for urban buses would not result in a significant difference in in-use emissions or result in the use of different emission control strategies.<sup>20</sup> For these reasons, EPA plans to retain

the current heavy-duty transient test for all testing of urban buses. If data should become available that would support a change in test procedures from an environmental standpoint, EPA would be open to re-examining the need for a separate urban bus test procedure. The reader is directed to the FRSD for a complete summary and analysis of the urban bus test procedure comments.

### D. 1998 and Later Model Year HDE NO<sub>x</sub> Standard

#### 1. Summary of Proposal

EPA proposed the 4.0 g/bhp-hr NO<sub>x</sub> standard for 1998 and later MY HDEs as required by the amended CAA. Consistent with past practice, the standard was proposed to apply to all HDEs fueled by gasoline, diesel fuel, or methanol.

EPA did not propose any changes to the current emissions trading, banking and averaging program for 1998 and later MY engines. In addition, EPA did not propose NCPs for the proposed 4.0 g/bhp-hr NO<sub>x</sub> standard. The proposal noted that any regulatory actions necessary for NCPs would be undertaken by EPA at a later date.

#### 2. Summary and Analysis of Comments

The American Gas Association (AGA) submitted comments stating their belief that the proposed 4.0 g/bhp-hr NO<sub>x</sub> standard does not meet the Congressionally mandated requirements of the CAA. They claim that Section 202(a)(3)(A)(i) of the CAA requires that HDE regulations shall contain standards that "reflect the greatest degree of emission reduction achievable with technology that the Administrator determines will be available for the model year to which such standards apply." Based on supporting information, they commented that EPA is required to adopt a more stringent NO<sub>x</sub> standard for 1998 and later HDEs.

Upon reexamination, EPA still believes that the CAA requires a 4.0 g/bhp-hr NO<sub>x</sub> standard for all 1998 and later MY HDEs. Section 202(a)(3)(A)(i) begins with the words, "Unless the standard is changed as provided in subparagraph (B)" and then continues with the language noted in the AGA comments. Section 202(a)(3)(B)(ii) states that "effective for the model year 1998 and thereafter, the regulations under [section 202(a)(1)] applicable to emissions of oxides of nitrogen (NO<sub>x</sub>) from gasoline and diesel-fueled heavy duty trucks shall contain standards which provide that such emissions may not exceed 4.0 grams per brake horsepower-hour." Section 202(a)(1) does not contain the "greatest degree of

emission reduction" language cited by AGA. Therefore, EPA believes that the promulgation of the 4.0 g/bhp-hr NO<sub>x</sub> standard is appropriate, given the language of section 202(a)(3)(B)(ii) and section 202(a)(1).

Engine manufacturers commented that the feasibility of meeting has 4.0 g/bhp-hr NO<sub>x</sub> standard is not clear at this time, although GM commented that the standard will be feasible for their engines. All engine manufacturers noted that EPA should consider and implement additional commercial fuel and certification fuel regulations for specifications such as cetane, aromatics content and volatility to assist engine manufacturers in meeting the 4.0 g/bhp-hr NO<sub>x</sub> standard. Engine manufacturers also commented that the 4.0 g/bhp-hr NO<sub>x</sub> standard will result in a fuel economy penalty. GM submitted comments claiming a two to four percent fuel economy penalty when a HDDE is calibrated for a 4.0 g/bhp-hr NO<sub>x</sub> level compared to the current 5.0 g/bhp-hr NO<sub>x</sub> standard. However, GM noted that the potential fuel penalty may be reduced with refinements to combustion and fuel system designs.

AGA, MECA and particulate trap manufacturers supported the feasibility of the 4.0 g/bhp-hr NO<sub>x</sub> standard. They noted that lean NO<sub>x</sub> catalyst technology currently is being investigated and may play a role in meeting the 4.0 g/bhp-hr NO<sub>x</sub> standard. In addition, they note particulate traps can be utilized to control increased PM levels that may result from various engine control strategies employed to reduce NO<sub>x</sub> emissions.

Despite the concerns raised by engine manufacturers, EPA continues to believe that the 4.0 g/bhp-hr NO<sub>x</sub> standard is feasible with improvements in existing technology with little or no effect on fuel economy. Significant attention has been paid to HDE NO<sub>x</sub> control techniques in recent years as a result of EPA's adoption of the 5.0 g/bhp-hr NO<sub>x</sub> standard for MY 1991, along with the increasingly stringent PM standards starting in MY 1991 and 1994. As a result, engine manufacturers have been successful in developing various means to lower NO<sub>x</sub> emissions significantly while at the same time avoiding adverse impacts on fuel economy and particulate emissions that were characteristic of older engines. In any case, the CAA explicitly requires a NO<sub>x</sub> standard of no greater than 4.0 g/bhp-hr for all 1998 and later MY gasoline and diesel-fueled HDEs. Therefore, EPA is adopting the 4.0 g/bhp-hr NO<sub>x</sub> standard for such engines. The reader is directed to the FRSD for today's action for a complete summary and analysis of the

<sup>20</sup>The reader is directed to the NPRM for this rulemaking and the document "Summary and Analysis of Comments to the NPRM: 1993 and Later Model Year Heavy-Duty Engines; Proposed Gaseous Emission Regulations", both found in the docket for this rulemaking, for further information on the effect of the test procedure on in-use emissions.

comments received on the 4.0 g/bhp-hr NO<sub>x</sub> standard.

In response to the requested changes to in-use fuel and certification fuel properties, EPA does not believe that such changes currently are warranted based on the information available at this time. If engine manufacturers develop data showing that fuel changes will be necessary to assure compliance with the 4.0 g/bhp-hr NO<sub>x</sub> standard, EPA would encourage engine manufacturers to work jointly with fuel producers toward implementing such changes. Recently, such a joint agreement between engine manufacturers and fuel producers resulted in EPA's adoption of the low-sulfur diesel fuel regulations that are set to begin in 1993.

On the issue of trading, banking and averaging for the 1998 NO<sub>x</sub> standard, EPA received no significant comments. Regarding NCPs, engine manufacturers commented that EPA should set NCPs for the 1998 HDE NO<sub>x</sub> standard at the time the standard is finalized. EPA stated in the NPRM that it did not intend to address the establishment of NCPs in this action. However, EPA is currently analyzing the need to establish NCPs for the 1998 HDE NO<sub>x</sub> standard and will issue a notice of proposed rulemaking in the future addressing the NCP issue.

#### E. Useful Life Requirements

##### 1. Summary of Proposal

On July 27, 1992 EPA issued a notice which contained proposed changes to the useful life requirements for the 1994 and later MY urban bus PM standard and the 1998 and later MY HDE NO<sub>x</sub> standard (57 FR 33141). As required by the amended CAA, EPA proposed to extend the useful life of the new standards from eight years to ten years, the useful life mileage requirements were not affected.

As noted in the July 1992 notice, the emission standards already in place for HDEs will not be affected by this proposed change in useful life. The CAA states that the revised useful life requirements are only for new standards promulgated after the enactment of the 1990 Amendments. Therefore, the only standards which are affected in today's action are the urban bus PM standard and the HDE NO<sub>x</sub> standard.

##### 2. Summary and Analysis of Comments

Engine manufacturers supported EPA's change in the useful life provisions and recommended that EPA add an equivalent hours of operation for the 1994 and later MY urban bus PM standard. EMA predicated their support

for the change in useful life on the condition that EPA add an equivalent hours of operation to the useful life. All of these commenters pointed out that many heavy-duty vehicles that have low average speeds, large amounts of idle time, and are used considerably more than the miles accumulated would otherwise indicate. Therefore, such vehicles accumulate the same hours of operation as high average speed vehicles in a significantly shorter period of miles. The engine manufacturers claim that the result of this difference in vehicle operating characteristics is standards that are more stringent for such low speed vehicles. EMA recommended that EPA add "9,000 hours of operation" to the proposed useful life definition. The 9,000 hours recommended by EMA is based on EPA's allowable maintenance schedule for heavy-duty engines (150,000 miles or 4,500 hours of operation) projected to 300,000 miles.

In response to these comments, EPA does not believe that it is practical to set an equivalent hours of operation for the new HDE standards. Because each type of heavy-duty vehicle has different operating characteristics, the number of hours of operation that would be equivalent to the year and mileage requirements of the useful life would differ for each type of heavy-duty vehicle. If EPA chose a single hours of operation equivalent useful life for all HDEs, it would have to be set in a manner such that no vehicle typically met the hours of operation limit before they met the year or mileage requirements. (In order to comply with section 202(d) of the CAA, EPA must set any such requirements so that they are equivalent to the years and mileage requirements of the useful life.) EPA does not have sufficient information on the operating characteristics of all types of heavy-duty vehicles to develop equivalent hours of operation.

In addition, the useful life requirements for HDE emissions standards have not had an hours of operation since EPA adopted the three classes of HDEs in 1984. Engine manufacturers have complied with the current requirements and no comments were received on why it is now necessary to add such a requirement. Therefore, EPA is adopting the ten year useful life requirement for the new HDE standards contained in today's action and is not incorporating an equivalent hours of operation into the useful life provisions.

### III. Final Rule Requirements

#### A. 1993 Model Year Bus PM Standard

With today's action, EPA is adopting a slightly revised "bus" definition compared to that contained in the proposal. Under the provisions of today's rule, all urban buses plus those additional buses that are centrally fueled and which are powered by a heavy heavy-duty diesel powered engine will be required to meet the 0.10 g/bhp-hr PM standard beginning in MY 1993. For purposes of this regulation, EPA is defining centrally fueled to mean that a vehicle is refueled at least 75 percent of the time at one refueling facility that is owned, operated or controlled by the bus operator.

Furthermore, EPA is adopting the slightly revised definition of "urban bus" proposed in the NPRM. The revised definition will eliminate the loophole that potentially allows manufacturers to place medium HDEs in a bus normally powered by heavy HDEs to avoid being classified as an urban bus. Under the "urban bus" definition promulgated today, such a bus would be classified as an urban bus and would be required to meet the more stringent urban bus PM standards.

EPA is not making any changes to the current averaging, trading and banking provisions as a result of today's action. Regarding NCPs, EPA is promulgating the provisions as proposed in the NPRM. The revised upper limit for NCP availability, the average and ninetieth percentile incremental costs, and the engineering and development factor that were adopted in the final rulemaking delaying the MY 1991 urban bus PM standard until MY 1993 (56 FR 64704, December 12, 1991) will also apply to the additional buses required to meet the 1993 bus PM standard under today's action.

#### B. 1994 and Later Model Year Urban Bus PM Standard

For MY 1994 and 1995, EPA is adopting a 0.07 g/bhp-hr PM standard for HDEs used in urban buses. Beginning in MY 1996, EPA is adopting a two-tiered set of PM standards for HDEs used in urban buses. For certification and SEA testing, the PM standard will be 0.05 g/bhp-hr. For in-use testing, the PM standard will be 0.07 g/bhp-hr. In addition, the useful life for the urban bus PM standard is extended to ten years for 1994 and later MY engines.

EPA is adopting changes to the current averaging, trading and banking provisions as a result of the two-tiered standard contained in today's action. Regarding NCPs, EPA proposed NCP

provisions for the 1994 and later MY urban bus PM standard on May 29, 1992 (57 FR 22675). The reader is directed to that proposal for complete details of the proposed NCP provisions.

#### C. Urban Bus Test Procedure

With today's action, EPA retains the heavy-duty transient test procedure for all emissions testing of urban buses.

#### D. 1998 and Later Model Year HDE NO<sub>x</sub> Standard

EPA is promulgating a 4.0 g/bhp-hr NO<sub>x</sub> standard for all 1998 and later MY HDEs, as required by the CAA. In addition, the useful life for the HDE NO<sub>x</sub> standard is increased to ten years for 1998 and later MY HDEs. No change in the trading and banking program will occur as a result of today's action. Regulatory actions necessary for NCPs may be undertaken by EPA at a later date.

#### E. Useful Life Requirements

With today's action, EPA revises the useful life requirements for the 1994 and later MY urban bus PM standard and the 1998 and later MY HDE NO<sub>x</sub> standard to ten years. The useful life mileage requirements are not affected by today's action.

### IV. Environmental Impact

The following section summarizes the environmental impacts expected to result from today's action. The reader is directed to the FRSD for a more detailed analysis of the environmental impact of today's action. As detailed further below, continuing reductions in urban ambient levels of diesel particulate are expected to result from the MY 1993 bus PM standard and the 1994 and later MY urban bus PM standard. Such particulate reductions will help many of the areas of the country designated to be in nonattainment with the National Ambient Air Quality Standard for PM<sub>10</sub> move closer to attainment and have other potential health benefits. Diesel particulate is a possible human carcinogen, and, at high levels of exposure, can cause other negative health effects, including lung disease and neurotoxic effects. Therefore, the diesel particulate reductions expected from the programs contained in today's rule potentially could reduce the number of expected cancer incidences associated with exposures to overall diesel particulate emissions and lower the potential for exposures that could result in other adverse effects.

#### A. 1993 Model Year Bus PM Standard

The only change that will occur as a result of this final rule would be

requiring a number of additional buses to meet the 0.10 g/bhp-hr PM standard in MY 1993. Under current regulations, these additional buses are required to meet a 0.25 g/bhp-hr PM standard in MY 1993. Therefore, EPA would expect to achieve an additional emissions benefit from moving the implementation of the standard forward by one model year for these buses. Based on comments from engine manufacturers, EPA estimates the maximum number of additional buses covered by the 1993 bus PM standard is around 1900 vehicles. EPA estimates that the expansion in the applicability of the 0.10 g/bhp-hr PM standard for MY 1993 could result in an additional reduction of between 19 and 100 metric tons of particulate emissions for 1993.

#### B. 1994 and Later Model Year Urban Bus PM Standard

The September NPRM contained EPA's estimated environmental impact of the proposed 0.05 g/bhp-hr PM standard for 1994 and later MY urban buses. EPA received no comments on the analysis. Therefore the environmental analysis summarized below has been performed in the same manner as the NPRM. However, because EPA is adopting a certification PM standard of 0.05 g/bhp-hr and an in-use/SEA PM standard of 0.07 g/bhp-hr (with the SEA standard reduced to 0.05 g/bhp-hr in 1997), EPA is presenting a range in the expected benefit of the 1994 urban bus PM standard.

EPA estimates that a discounted lifetime per-vehicle PM emission reduction of 60 to 100 kilograms (assuming a 10-percent discount rate) will result from the urban bus PM standards promulgated with today's action. Once the entire fleet is made up of urban buses meeting the 1994 PM standard, the annual emission reduction resulting from this regulation will range from 350 to 600 metric tons of particulate matter nationwide. The lower end of the range is based on the assumption that all urban buses emit at the 0.07 g/bhp-hr PM level allowed in use. The upper end of the range assumes that these urban buses emit at the 0.05 g/bhp-hr certification/SEA level.

#### C. Heavy-Duty Engine NO<sub>x</sub> Standard

The September 1991 NPRM contained EPA's estimated environmental impact of the 4.0 g/bhp-hr NO<sub>x</sub> standard for 1998 and later MY HDEs. EPA received no comments on the analysis and is relying on the same analysis for today's action.

As detailed in the FRSD, the 4.0 g/bhp-hr NO<sub>x</sub> standard is expected to lower NO<sub>x</sub> emissions from heavy duty

vehicles on the order of 16 to 19 percent in the 2005 to 2010 time frame. When factored into the national NO<sub>x</sub> inventory, the 4.0 g/bhp-hr HDE NO<sub>x</sub> standard is expected to yield a reduction of approximately two percent in the 2005 to 2010 time frame.

### V. Economic Impact

#### A. 1993 Model Year Bus PM Standard

For the additional buses included under the MY 1993 bus standard, there will be increased costs. In order to meet the lower PM standard, engine manufacturers will likely use exhaust aftertreatment technology such as particulate traps. As noted in the September 1991 NPRM, based on current cost estimates and manufacturer projected cost estimates, EPA expects the cost for these additional buses to meet a 0.10 g/bhp-hr PM standard by use of a particulate trap to be between \$1,500 and \$9,000 per bus. For all of the additional buses covered under the 0.10 g/bhp-hr PM standard in 1993, the total cost is estimated to range from around \$0.5 million to \$17 million.

#### B. 1994 and Later Model Year Urban Bus PM Standard

Based on the feasibility analysis of a 0.05 g/bhp-hr urban bus PM standard, EPA believes that one means of meeting such a standard is to equip urban buses with dual-trip non-bypass trap systems. Based on its analysis, EPA has projected the incremental cost (five model year discounted total cost) of meeting the statutory 1994 and later MY PM standards (over the 1993 urban bus PM standard) to be \$1,650 per vehicle for a trap-equipped urban bus. The discounted five model year cost to manufacturers if all urban buses were trap-equipped is estimated to be around \$24 million. The discounted five model year cost effectiveness of the 1994 and later model year urban bus PM standards is estimated to range from \$21,000 to \$36,000 per ton for a trap-equipped urban bus.

EPA has also estimated the cost effectiveness of meeting the 1994 and later MY urban bus PM standards for a catalyst-equipped urban bus. Based on its analysis, EPA projects the five model year total cost to manufacturers of complying with the 1994 and later MY urban bus PM standard to be \$730 per vehicle for a catalyst-equipped urban bus. The discounted five model year cost to manufacturers if all urban buses were catalyst equipped is estimated to be around \$11 million. The discounted five model year cost effectiveness of the 1994 and later model year urban bus PM standards is estimated to range from

\$10,000 to \$16,000 per ton for a catalyst-equipped urban bus.

**C. Heavy-duty Engine NO<sub>x</sub> Standards**

Comments were received from engine manufacturers claiming that EPA underestimated the cost of complying with the 4.0 g/bhp-hr NO<sub>x</sub> standard. However, the manufacturers did not submit any cost information in support of their comments. Based on EPA's technological feasibility analysis summarized earlier, EPA believes that the economic analysis presented in the September 1991 NPRM is still applicable.

The Agency expects the cost impacts of the 4.0 g/bhp-hr standard to be similar to those of the 5.0 g/bhp-hr standard, after accounting for inflation. When adjusted for the consumer price index for new vehicle first year price, the projected first costs for compliance with the 4.0 g/bhp-hr NO<sub>x</sub> standard per new Otto-cycle and diesel engines are estimated to be \$16 and \$78 per engine respectively.

EPA estimates that total costs to the nation of the 4.0 g/bhp-hr standard should result only from first cost increases in new engines. EPA believes that manufacturers will comply with the 4.0 g/bhp-hr NO<sub>x</sub> standard without significant effect on the fuel economy of the engines. The anticipated annual costs to the nation resulting from the first year price increase of HDEs in the three years following implementation of the 4.0 g/bhp-hr NO<sub>x</sub> standard for HDEs will be just under \$50 million each year. The cost effectiveness of the 4.0 g/bhp-hr standard, over the useful life of a typical heavy-duty Otto-cycle engine and an average heavy-duty diesel engine is estimated to be \$260 per ton and \$210 per ton, respectively.

**VI. Administrative Designation and Regulatory Analysis**

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirement that a Regulatory Impact Analysis be prepared. Major regulations have an annual effect on the economy in excess of \$100 million, have a significant adverse impact on competition, investment, employment or innovation, or result in a major price increase. The elements of this rulemaking, individually and together, do not constitute major rules according to the established criteria. Therefore, I have determined that this rulemaking does not constitute a "major" regulation.

This final rule was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291. Any written comments from OMB and any EPA responses to those comments have been placed in the public docket for this rulemaking.

**VII. Impact on Small Entities**

The Regulatory Flexibility Act of 1980 requires federal agencies to consider potentially adverse impacts of Federal regulations upon small entities. In instances where significant impacts are possible on a substantial number of these entities, agencies are required to perform a Regulatory Flexibility Analysis.

There will not be a significant impact on a substantial number of small entities due to the new PM or NO<sub>x</sub> standards since none of the engine manufacturers affected by these regulations are small business entities.

Therefore, as required under section 605 of the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, I certify that this regulation does not have a significant

impact on a substantial number of small entities.

**VIII. Reporting and Recordkeeping Requirements**

Under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, EPA must obtain OMB clearance for any activity that will involve collecting substantially the same information from 10 or more non-Federal respondents. This final rule does not create any new information requirements or contain any new information collection activities.

**IX. Statutory Authority**

Authority for actions promulgated in this final rule are granted to EPA by Sections 202, 219, and 301 of the Clean Air Act as amended.

**X. Judicial Review**

Under section 307(b) of the Clean Air Act, EPA hereby finds that these regulations are of national applicability. Accordingly, judicial review of this action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit within 60 days of publication. Under section 307(b)(2) of the Act, the requirements which are the subject of today's notice may not be challenged later in judicial proceedings brought by EPA to enforce these requirements.

**List of Subjects in 40 CFR Part 86**

Administrative practice and procedure, Air pollution control, Environmental protection, Imports, Labeling, Motor vehicles, Motor vehicle pollution, Reporting and recordkeeping requirements.

Dated: February 26, 1993.

Carol M. Browner,  
Administrator.

APPENDIX TO THE PREAMBLE.—TABLE OF CHANGES MADE TO VARIOUS SUBPARTS OF PART 86

Section	Change	Reason
1. Authority .....	None	
2. § 86.093-2 .....	Add Section 86.093-2 .....	Incorporation of definition for separate class of buses.
3. § 86.093-11 Revise paragraph (a)(1)(iv) .....	Addition of new bus particulate standard.	Incorporation of separate bus particulate standard.
4. § 86.093-35 .....	Add Section 86.093-35 .....	Incorporation labeling requirements for urban bus engines.
5. § 86.094-2 .....	Revision of useful life provisions ...	Incorporation of ten year useful life for 1994 and later model year urban bus particulate standards.
6. § 86.094-11 Revise paragraph (a)(1)(iv) .....	Addition of new urban bus particulate standard.	Implement CAAA of 1990.
7. § 86.094-35 Add paragraph .....	Addition of urban bus labeling requirement.	Incorporate labeling requirement for urban bus engines.
8. § 86.095-35 Add paragraph .....	Addition of urban bus labeling requirement.	Incorporate labeling requirement for urban bus engines.
9. § 86.096-11 .....	Addition of new urban bus particulate standard.	Implement CAAA of 1990.
10. § 86.098-2 .....	Add Section 86.098-2 .....	Incorporation of ten year useful life for 1998 and later model year heavy-duty engine oxides of nitrogen standard.

APPENDIX TO THE PREAMBLE.—TABLE OF CHANGES MADE TO VARIOUS SUBPARTS OF PART 86—Continued

Section	Change	Reason
11. § 86.098-10 .....	Addition of new heavy-duty engine oxides of nitrogen standard.	Implement CAAA of 1990.
12. § 86.098-11 .....	Addition of new heavy-duty engine oxides of nitrogen standard.	Implement CAAA of 1990.
13. § 86.1105-87 .....	Revise Section 86.1105-87(d) .....	Change NCPs to reflect new bus PM standard.

For the reasons set out in the preamble, part 86 of title 40 of the Code of Federal Regulations is amended as follows:

**PART 86—CONTROL OF AIR POLLUTION FROM NEW AND IN-USE MOTOR VEHICLES AND NEW AND IN-USE MOTOR VEHICLE ENGINES: CERTIFICATION AND TEST PROCEDURES**

1. The Authority citation for part 86 continues to read as follows:

**Authority:** Secs. 202, 203, 205, 206, 207, 208, 215, 216, 301(a), Clean Air Act as amended (42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, 7549, 7550, and 7601(a)).

2. A new § 86.093-2 is added to subpart A, to read as follows:

**§ 86.093-2 Definitions.**

The definitions of § 86.092-2 continue to apply. The definitions listed in this section apply beginning with the 1993 model year.

*Bus* means a heavy heavy-duty diesel-powered passenger-carrying vehicle with a load capacity of fifteen or more passengers that is centrally fueled, and all urban buses. This definition only applies in the context of §§ 86.093-11 and 86.093-35.

*Centrally fueled bus* means a bus that is refueled at least 75 percent of the time at one refueling facility that is owned, operated, or controlled by the bus operator.

*Urban bus* means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of fifteen or more passengers and intended primarily for intracity operation, *i.e.*, within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or tokens, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long

distance travel, *e.g.*, rest rooms, large luggage compartments, and facilities for stowing carry-on luggage. The useful life for urban buses is the same as the useful life for other heavy heavy-duty diesel engines.

3. Section 86.093-11 of subpart A is amended by revising paragraphs (a)(1)(iv) (A) and (C) to read as follows:

**§ 86.093.11 Emission Standards for 1993 and Later Model Year Diesel Heavy-duty Engines.**

(a)(1) \* \* \* \*  
 (iv) \* \* \* \* (A) For diesel engines to be used in buses, 0.10 grams per brake horsepower-hour (0.037 gram per megajoule), as measured under transient operating conditions.

(B) \* \* \* \*  
 (C) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the particulate averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094.15. If the manufacturer elects to include engine families in any of these programs, the particulate FEL may not exceed:

(1) 0.25 gram per brake horsepower-hour (0.093 gram per megajoule) for diesel engines intended for use in urban buses.

(2) 0.60 gram per brake horsepower-hour (0.22 gram per megajoule) for diesel engines *not* intended for use in urban buses.

(3) The ceiling values in paragraphs (a)(1)(iv)(C) (1) and (2) of this section apply whether credits for the family are derived from averaging, trading or banking programs.

\* \* \* \* \*  
 4. A new § 86.093-35 is added to subpart A to read as follows:

**§ 86.093-35 Labeling.**

(a) The manufacturer of any motor vehicle (or motor vehicle engine) subject to the applicable emission standards (and family emission limits, as appropriate) of this subpart, shall, at the time of manufacture, affix a permanent legible label, of the type and in the manner described in this section, containing the information hereinafter provided, to all production models of such vehicles (or engines) available for

sale to the public and covered by a certificate of conformity under § 86.091-30(a). Where blanks appear in this section, manufacturers are required to fill in the appropriate information in the blanks.

(1) *Light-duty vehicles.* (i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment.

(ii) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, in such manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such vehicle.

(iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

- (A) The label heading: Vehicle Emission Control Information;
- (B) Full corporate name and trademark of manufacturer;
- (C) Engine displacement (in cubic inches or liters), engine family identification and evaporative family identification;
- (D) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards (or family emission limits, as applicable), including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedures and value (*e.g.*, idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing and valve lash (as applicable), as well as other parameters deemed necessary by the manufacturer. These specifications should indicate the proper transmission position during tuneup and what accessories (*e.g.*, air conditioner), if any, should be in operation;
- (E) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations which apply to light-duty vehicles;
- (F) For vehicles which are part of the diesel particulate averaging program, the family particulate emission limit to which the vehicle is certified;

(G) For vehicles that have been exempted from compliance with the emission standards at high altitude, as specified in § 86.090-8(h):

(1) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at low altitude only;

(2) A statement that the vehicle's unsatisfactory performance under high-altitude conditions makes it unsuitable for principal use at high altitude; and

(3) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at high altitude;

(H) For vehicles that have been exempted from compliance with the emission standards at low altitude, as specified in § 86.090-8(i):

(1) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at high altitude only; and

(2) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at low altitude;

(I) The vacuum hose routing diagram applicable to the vehicles if the vehicles are equipped with vacuum actuated emission and emission-related components. The manufacturer may, at its option, use a separate label for the vacuum hose routing diagram provided that the vacuum hose diagram is placed in a visible and accessible position as provided in this section; and

(J) Vehicles granted final admission under § 85.1505 must comply with the labeling requirements contained in § 85.1510.

(2) *Light-duty truck and heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions.* (i) A legible, permanent label shall be affixed in a readily visible position in the engine compartment.

(ii) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, in such a manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such vehicle.

(iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label.

(A) The label heading: Important Vehicle Information;

(B) Full corporate name and trademark of manufacturer;

(C) Engine displacement (in cubic inches or liters) and engine family identification;

(D) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards (or family emission limits, as appropriate), including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedure and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing, and valve lash (as applicable), as well as other parameters deemed necessary by the manufacturer. These specifications should indicate the proper transmission position during tuneup and what accessories (e.g., air conditioner), if any, should be in operation. If adjustments or modifications to the vehicle are necessary to insure compliance with emission standards (or family emission limits, as appropriate) at either high or low altitude, the manufacturer shall either include the instructions for such adjustments on the label, or indicate on the label where instructions for such adjustments may be found. The label shall indicate whether the engine tune-up or adjustment specifications are applicable to high altitude, low altitude, or both;

(E) (1) Light-duty trucks. One of the prominent statements, as applicable:

(i) Labels for light-duty trucks certified to the oxides of nitrogen standard of 1.12 grams per vehicle mile shall include the following statement: "This vehicle conforms to U.S. EPA regulations applicable to 19\_\_\_\_ Model Year New Light-Duty Trucks."

(ii) Labels for light-duty trucks certified to the oxides of nitrogen standard of 1.7 grams per vehicle mile shall include the following statement: "This vehicle conforms to U.S. EPA regulations applicable to 19\_\_\_\_ Model Year New Light-Duty Trucks with a curb weight greater than 3,450 pounds."

(2) Heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions: "This heavy-duty vehicle conforms to U.S. EPA regulations applicable to 19\_\_\_\_ Model Year New Light-Duty Trucks under the special provision of 40 CFR 86.092-1(b).";

(F) If the manufacturer is provided an alternate useful life period under the provisions of § 86.091-21(f), the prominent statement: "This vehicle has been certified to meet U.S. EPA standards for a useful-life period of \_\_\_\_ years or \_\_\_\_ miles of operation, whichever occurs first. This vehicle's actual life may vary depending on its service application." The manufacturer

may alter this statement only to express the assigned alternate useful life in terms other than years or miles (e.g., hours, or miles only);

(G) A statement, if applicable, that the adjustments or modifications indicated on the label are necessary to ensure emission control compliance at the altitude specified;

(H) A statement, if applicable, that the high-altitude vehicle was designated or modified for principal use at high altitude. This statement must be affixed by the manufacturer at the time of assembly or by any dealer who performs the high-altitude modification or adjustment prior to sale to an ultimate purchaser;

(I) For vehicles that have been exempted from compliance with the high-altitude emission standards, as specified in § 86.091-9(g)(2).

(1) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at low altitude only;

(2) A statement that the vehicle's unsatisfactory performance under high-altitude conditions makes it unsuitable for principal use at high altitude; and,

(3) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at high altitude;

(J) For vehicles which are included in the diesel particulate averaging program, the family particulate emission limit to which the vehicle is certified;

(K) For vehicles which are included in the light-duty truck NO<sub>x</sub> averaging program, the family NO<sub>x</sub> emissions limit to which the vehicle is certified;

(L) The vacuum hose routing diagram applicable to the vehicles if the vehicles are equipped with vacuum actuated emission and emission-related components. The manufacturer may, at its option, use a separate label for the vacuum hose routing diagram provided that the vacuum hose diagram is placed in a visible and accessible position as provided by this section;

(M) Vehicles granted final admission under § 85.1505 of this chapter must comply with the labeling requirements contained in § 85.1510 of this chapter.

(3) *Heavy-duty engines.* (i) A permanent legible label shall be affixed to the engine in a position in which it will be readily visible after installation in the vehicle.

(ii) The label shall be attached to an engine part necessary for normal engine operation and not normally requiring replacement during engine life.

(iii) The label shall contain the following information lettered in the English language in block letters and



numerals which shall be of a color that contrasts with the background of the label:

(A) The label heading: Important Engine Information;

(B) Full corporate name and trademark of manufacturer;

(C) Engine displacement (in cubic inches or liters) and engine family and model designations;

(D) Date of engine manufacture (month and year). The manufacturer may, in lieu of including the date of manufacture on the engine label, maintain a record of the engine manufacture dates. The manufacturer shall provide the date of manufacture records to the Administrator upon request;

(E) Engine specifications and adjustments as recommended by the manufacturer. These specifications should indicate the proper transmission position during tune-up and what accessories (e.g., air conditioner), if any, should be in operation;

(F) For Otto-cycle engines the label should include the idle speed, ignition timing, and the idle air-fuel mixture setting procedure and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), and value lash;

(G) For diesel engines the label should include the advertised hp at rpm, fuel rate at advertised hp in mm<sup>3</sup>/stroke, valve lash, initial injection timing, and idle speed;

(H) The prominent statement: "This engine conforms to U.S. EPA regulations applicable to 19— Model Year New Heavy-Duty Engines.";

(I) If the manufacturer is provided with an alternate useful life period under the provisions of § 86.901-21(f), the prominent statement: "This engine has been certified to meet U.S. EPA standards for a useful-life period of \_\_\_\_\_ miles or \_\_\_\_\_ hours of operation, whichever occurs first. This engine's actual life may vary depending on its service application." The manufacturer may alter this statement only to express the assigned alternate useful life in terms other than miles or hours (e.g., years, or hours only);

(J) For diesel engines. The prominent statement: "This engine has a primary intended service application as a \_\_\_\_\_ heavy-duty engine." (The primary intended service applications are light, medium, and heavy, as defined in § 86.902-2.);

(K) For Otto-cycle engines. One of the following statements, as applicable:

(1) For engines certified to the emission standards under § 86.09—10(a)(1) (i) or (iii), the statement: "This engine is certified for use in all heavy-duty vehicles.";

(2) For gasoline-fueled engines certified under the provisions of § 86.091-10(a)(3)(i), the statement: "This engine is certified for use in all heavy-duty vehicles under the special provision of 40 CFR 86.091-10(a)(3)(i).";

(3) For engines certified to the emission standards under § 86.091-10(a)(1) (ii) or (iv), the statement: "This engine is certified for use only in heavy-duty vehicles with a gross vehicle weight rating above 14,000 lbs.";

(L) For all heavy-duty engines which are included in diesel heavy-duty particulate trading, banking or averaging programs, the particulate family emission limit to which the engine is certified;

(M) For all heavy-duty engines which are included in NO<sub>x</sub> trading, banking or averaging programs, the NO<sub>x</sub> family emission limit to which the engine is certified;

(N) Engines granted final admission under § 85.1505 must comply with the labeling requirements contained in § 85.1510; and

(O) For diesel engines which have been certified to comply with the particulate standard of 40 CFR 86.093-11(a)(1)(iv)(A), the statement "This engine is certified for use in a bus as defined at 40 CFR 86.093-2." Unless waived by the Administrator on the basis of impracticality, for diesel engines not certified to comply with the particulate standard 40 CFR 86.093-11(a)(1)(iv)(A), the statement "This engine is not certified for use in a bus as defined at 40 CFR 86.093-2. Sales of this engine for use in a bus is a violation of Federal law under the Clean Air Act."

(iv) The label may be made up of one or more pieces: Provided, That all pieces are permanently attached to the same engine or vehicle part as applicable.

(4) *Gasoline-fueled and methanol-fueled heavy-duty vehicles.* (i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment. If such vehicles do not have an engine compartment, the label required in paragraphs (a)(4) and (g)(1) of this section shall be affixed in a readily visible position on the operator's enclosure or on the engine.

(ii) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, in such a manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such vehicle.

(iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that

contrasts with the background of the label:

(A) The label heading: Vehicle Emission Control Information;

(B) Full corporate name and trademark of manufacturer;

(C) Evaporative family identification;

(D) The maximum nominal fuel tank capacity (in gallons) for which the evaporative control system is certified; and

(E) One of the following, as appropriate:

(1) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations (40 CFR part 86) which apply to gasoline-fueled heavy-duty vehicles;

(2) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations (40 CFR part 86) which apply to methanol-fueled heavy-duty vehicles;

(F) Vehicles granted final admission under § 85.1505 of this chapter must comply with the labeling requirements contained in § 85.1510 of this chapter.

(b) The provisions of this section shall not prevent a manufacturer from also reciting on the label that such vehicle (or engine) conforms to any applicable state emission standards for new motor vehicles (or new motor vehicle engines) or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle (or engine).

(c)(1) The manufacturer of any light-duty vehicle or light-duty truck subject to the emission standards (or family emission limits, as appropriate) of this subpart shall, in addition and subsequent to setting forth those statements on the label required by the Department of Transportation (DOT) pursuant to 49 CFR 567.4, set forth on the DOT label or an additional label located in proximity to the DOT label and affixed as described in 40 CFR 567.4(b), the following information in the English language, lettered in block letters and numerals not less than three thirty-seconds of an inch high, of a color that contrasts with the background of the label:

(i) The heading: "Vehicle Emission Control Information."

(ii)(A) For light-duty vehicles, The statement: "This Vehicle Conforms to U.S. EPA Regulations Applicable to 19— Model Year New Motor Vehicles."

(B) For light-duty trucks:

(1) The statement: "This vehicle conforms to U.S. EPA regulations

applicable to 19\_\_\_ Model Year New Light-Duty Trucks."

(2) If the manufacturer is provided an alternate useful life period under the provisions of § 86.091-21(f), the prominent statement: "This vehicle has been certified to meet U.S. EPA standards for a useful-life period of \_\_\_ years or \_\_\_ miles of operation, whichever occurs first. This vehicle's actual life may vary depending on its service application." The manufacturer may alter this statement only to express the assigned alternate useful life in terms other than years or miles (e.g., hours, or miles only).

(iii) One of the following statements, as applicable, in letters and numerals not less than six thirty-seconds of an inch high and of a color that contrasts with the background of the label:

(A) For all vehicles certified as noncatalyst-equipped: "Non-Catalyst".

(B) For all vehicles certified as catalyst-equipped which are included in a manufacturer's catalyst control program for which approval has been given by the Administrator: "Catalyst—Approved for Import".

(C) For all vehicles certified as catalyst-equipped which are not included in a manufacturer's catalyst control program for which prior approval has been given by the Administrator: "Catalyst".

(2) In lieu of selecting either of the labeling options of paragraph (c)(1) of this section, the manufacturer may add the information required by paragraph (c)(1)(iii) of this section to the label required by paragraph (a) of this section. The required information will be set forth in the manner prescribed by paragraph (c)(1)(iii) of this section.

(d) Incomplete light-duty trucks or incomplete heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions shall have one of the following prominent statements, as applicable, printed on the label required by paragraph (a)(2) of this section in lieu of the statement required by paragraph (a)(2)(iii)(E) of this section.

(1) Light-duty trucks. (i) Labels for light-duty trucks certified to the oxides of nitrogen standard of 1.2 grams per vehicle mile shall include the following statement: "This vehicle conforms to U.S. EPA regulations applicable to 19\_\_\_ Model Year New Light-Duty Trucks when it does not exceed \_\_\_ pounds in curb weight, \_\_\_ pounds in gross vehicle weight rating, and \_\_\_ square feet in frontal area."

(ii) Labels for light-duty trucks certified to the oxides of nitrogen standards of 1.7 grams per vehicle mile shall include the following statement: "This vehicle conforms to U.S. EPA

regulations applicable to 19\_\_\_ Model Year New Light-Duty Trucks when it is between 3,450 pounds and \_\_\_ pounds in curb weight and it does not exceed \_\_\_ pounds in gross vehicle weight rating nor \_\_\_ square feet in frontal area."

(2) Heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions. "This heavy-duty vehicle conforms to the U.S. EPA regulations applicable to 19\_\_\_ Model Year Light-Duty Trucks under the special provision of 40 CFR 86.085-1(b) when it does not exceed \_\_\_ pounds in curb weight, \_\_\_ pounds in gross vehicle weight rating, and \_\_\_ square feet in frontal area."

(e) Incomplete heavy-duty vehicles having a gross vehicle weight rating of 8,500 pounds or less shall have one of the following statements printed on the label required by paragraph (a)(3) of this section in lieu of the statement required by paragraph (a)(3)(iii)(H) of this section: "This engine conforms to U.S. EPA regulations applicable to 19\_\_\_ Model Year Heavy-Duty Engines when installed in a vehicle completed at a curb weight of more than 6,000 pounds or with a frontal area of greater than 45 square feet."

(f) The manufacturer of any incomplete light-duty vehicle or light-duty truck shall notify the purchaser of such vehicle of any curb weight, frontal area, or gross vehicle weight rating limitations affecting the emission certificate applicable to that vehicle. This notification shall be transmitted in a manner consistent with National Highway Traffic Safety Administration safety notification requirements published in 49 CFR part 568.

(g)(1) (i) Incomplete gasoline-fueled heavy-duty vehicles shall have the following prominent statement printed on the label required in paragraph (a)(4) of this section: "(Manufacturer's corporate name) has determined that this vehicle conforms to U.S. EPA regulations applicable to 19\_\_\_ Model Year New Gasoline-Fueled Heavy-Duty Vehicles when completed with a nominal fuel tank capacity not to exceed \_\_\_ gallons. Persons wishing to add fuel tank capacity beyond the above maximum must submit a written statement to the Administrator that the hydrocarbon storage system has been upgraded according to the requirements of 40 CFR 86.092-35(g)(2)."

(ii) Incomplete methanol-fueled heavy-duty vehicles shall have the following prominent statement printed on the label required in paragraph (a)(4) of this section: "(Manufacturer's corporate name) has determined that this vehicle conforms to U.S. EPA

regulations applicable to 19\_\_\_ Model Year New Methanol-Fueled Heavy-Duty Vehicles when completed with a nominal fuel tank capacity not to exceed \_\_\_ gallons. Persons wishing to add fuel tank capacity beyond the above maximum must submit a written statement to the Administrator that the hydrocarbon storage system has been upgraded according to the requirements of 40 CFR 86.091-35(g)(2)."

(2) Persons wishing to add fuel tank capacity beyond the maximum specified on the label required in paragraph (g)(1) of this section shall:

(i) Increase the amount of fuel tank vapor storage material according to the following function:

$$\text{Capf}=\text{Capi} \left( \frac{\text{T. Vol.}}{\text{Max. Vol.}} \right)$$

Where:

Capf=final amount of fuel tank vapor storage material, grams.

Capi=initial amount of fuel tank vapor storage material, grams.

T. Vol.=total fuel tank volume of completed vehicle, gallons.

Max. Vol.=maximum fuel tank volume as specified on the label required in paragraph (g)(1) of this section, gallons.

(ii) Use, if applicable, hosing for fuel vapor routing which is at least as impermeable to hydrocarbon vapors as that used by the primary manufacturer.

(iii) Use vapor storage material with the same absorptive characteristics as that used by the primary manufacturer.

(iv) Connect, if applicable, any new hydrocarbon storage device to the existing hydrocarbon storage device in series such that the original hydrocarbon storage device is situated between the fuel tank and the new hydrocarbon storage device. The original hydrocarbon storage device shall be sealed such that vapors cannot reach the atmosphere. The elevation of the original hydrocarbon storage device shall be equal to or lower than the new hydrocarbon storage device.

(v) Submit a written statement to the Administrator that paragraphs (g)(2)(i) through (g)(2)(iv) of this section have been complied with.

(3) If applicable, the Administrator will send a return letter verifying the receipt of the written statement required in paragraph (g)(2)(v) of this section.

(h)(1) Light-duty trucks and heavy-duty vehicles and engines for which nonconformance penalties are to be paid in accordance with § 86.1113-87(b) shall have the following information printed on the label required in

paragraph (a) of this section. The manufacturer shall begin labeling production engines or vehicles within 10 days after the completion of the PCA.

(i) The statement: "The manufacturer of this engine/vehicle will pay a nonconformance penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is \_\_\_\_\_." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with § 86.1112-87(a).)

(ii) [Reserved]

(2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of § 86.1112-87(a), it shall provide the engine or vehicle owner with a label as described in paragraph (h) of this section to be affixed in a location in proximity to the label required in paragraph (a) of this section within 30 days of the completion of the PCA.

5. In § 86.094-2 of subpart A, the definition for "useful life" is amended by revising paragraph (d)(3), and adding paragraph (d)(4) to read as follows:

**§ 86.094-2 Definitions.**

\* \* \* \* \*  
*Useful life* means \* \* \* \* \*  
 (d) \* \* \* \* \*

(3) For heavy-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever first occurs, except as provided in paragraph (d)(4) of this definition.

(4) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

\* \* \* \* \*

6. Section 86.094-11 of subpart A is amended by revising paragraph (a)(1)(iv), to read as follows:

**§ 86.094-11 Emission Standards for 1994 and Later Model Year Diesel Heavy-duty Engines.**

(a)(1) \* \* \* \* \*  
 (iv) *Particulate*. (A) For diesel engines to be used in urban buses, 0.07 gram per brake horsepower-hour (0.026 gram per megajoule), as measured under transient operating conditions.

(B) For all other diesel engines only, 0.10 gram per brake horsepower-hour (0.037 gram per megajoule), as measured under transient operating conditions.

(C) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the particulate averaging, trading, or banking programs for heavy-duty

engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the particulate FEL may not exceed:

(1) For engine families intended for use in urban buses, 0.25 gram per brake horsepower-hour (0.093 gram per megajoule).

(2) For engine families *not* intended for use in urban buses, 0.60 gram per brake horsepower-hour (0.22 gram per megajoule).

(3) The ceiling values in paragraphs (a)(1)(iv)(C) (1) and (2) of this section apply whether credits for the family are derived from averaging, trading, or banking programs.

\* \* \* \* \*

7. Section 86.094-35 of subpart A is amended by adding paragraph (a)(3)(iii)(O), to read as follows:

**§ 86.094-35 Labeling.**

\* \* \* \* \*

(a) \* \* \* \* \*  
 (3) \* \* \* \* \*  
 (iii) \* \* \* \* \*

(O) For diesel engines which have been certified to comply with the urban bus particulate standard of 40 CFR 86.094-11(a)(1)(iv)(A), the statement "This engine is certified for use in an urban bus as defined at 40 CFR 86.093-2." Unless waived by the Administrator on the basis of impracticality, for diesel engines not certified to comply with the urban bus particulate standard, the statement "This engine is not certified for use in an urban bus as defined at 40 CFR 86.093-2. Sales of this engine for use in an urban bus is a violation of Federal law under the Clean Air Act."

\* \* \* \* \*

8. Section 86.095-35 of subpart A is amended by adding paragraph (a)(3)(iii)(O), to read as follows:

**§ 86.095-35 Labeling.**

\* \* \* \* \*

(a) \* \* \* \* \*  
 (3) \* \* \* \* \*  
 (iii) \* \* \* \* \*

(O) For diesel engines which have been certified to comply with the urban bus particulate standard of 40 CFR 86.094-11(a)(1)(iv)(A), the statement "This engine is certified for use in an urban bus as defined at 40 CFR 86.093-2." Unless waived by the Administrator on the basis of impracticality, for diesel engines not certified to comply with the urban bus particulate standard, the statement "This engine is not certified for use in an urban bus as defined at 40 CFR 86.093-2. Sales of this engine for use in an urban bus is a violation of Federal law under the Clean Air Act."

\* \* \* \* \*

9. A new § 86.095-11 is added to subpart A, to read as follows:

**§ 86.095-11 Emission Standards for 1996 and Later Model Year Diesel Heavy-duty Engines.**

(a) Exhaust emissions from new 1996 and later model year diesel heavy-duty engines shall not exceed the following:

(1)(i) *Hydrocarbons (for petroleum-fueled diesel engines)*. 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(ii) *Organic Material Hydrocarbon Equivalent (for methanol-fueled diesel engines)*. 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(2) *Carbon monoxide*. (i) 15.5 grams per brake horsepower-hour (5.77 grams per megajoule), as measured under transient operating conditions.

(ii) 0.50 percent of exhaust gas flow at curb idle (methanol-fueled diesel only).

(3) *Oxides of Nitrogen*. (i) 5.0 grams per brake horsepower-hour (1.9 grams per megajoule), as measured under transient operating conditions.

(ii) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 6.0 grams per brake horsepower-hour (2.2 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(4) *Particulate*. (i) For diesel engines to be used in urban buses, 0.05 gram per brake horsepower-hour (0.019 gram per megajoule) for certification testing and selective enforcement audit testing, and 0.07 gram per brake horsepower-hour (0.026 gram per megajoule) for in-use testing, as measured under transient operating conditions.

(ii) For all other diesel engines only, 0.10 gram per brake horsepower-hour (0.037 gram per megajoule), as measured under transient operating conditions.

(iii) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the particulate averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the particulate FEL may not exceed:

(A) For engine families intended for use in urban buses, 0.25 gram per brake

horsepower-hour (0.093 gram per megajoule).

(B) For engine families not intended for use in urban buses, 0.60 gram per brake horsepower-hour (0.22 gram per megajoule).

(C) The ceiling values in paragraphs (a)(4)(iii) (A) and (B) of this section apply whether credits for the family are derived from averaging, trading or banking programs.

(b) (1) The opacity of smoke emission from new 1996 and later model year diesel heavy-duty engine shall not exceed:

(i) 20 percent during the engine acceleration mode.

(ii) 15 percent during the engine lugging mode.

(iii) 50 percent during the peaks in either mode.

(2) The standards set forth in paragraph (b)(1) of this section refer to exhaust smoke emissions generated under the conditions set forth in subpart I of this part and measured and calculated in accordance with these procedures.

(3) *Evaporative emissions* (total of non-oxygenated hydrocarbons plus methanol) from 1996 and later model year heavy-duty vehicles equipped with methanol-fueled diesel engines shall not exceed:

(i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs, 3.0 grams per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs, 4.0 grams per test.

(4)(i) For vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs, the standards set forth in paragraph (b)(3) of this section refer to a composite sample of evaporative emissions collected under the conditions set forth in subpart M of this part and measured in accordance with those procedures.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs, the standard set forth in paragraph (b)(3)(ii) of this section refers to the manufacturers engineering design evaluation using good engineering practice (a statement of which is required in § 86.091-23(b)(4)(ii)).

(c) No crankcase emissions shall be discharged into the ambient atmosphere from any new 1996 or later model year methanol-fueled diesel, or any naturally-aspirated diesel heavy-duty engine. For petroleum-fueled engines only, this provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

(d) Every manufacturer of new motor vehicle engines subject to the standards prescribed in this section shall, prior to

taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with applicable procedures in subpart I or N of this part to ascertain that such test engines meet the requirements of paragraphs (a), (b), (c), and (d) of this section.

10. A new § 86.098-2 is to be added to subpart A to read as follows:

**§ 86.098-2 Definitions.**

The definitions of § 86.094-2 continue to apply. The definitions listed in this section apply beginning with the 1998 model year.

*Useful life* means:

(1) For an Otto-cycle heavy-duty engine family:

(i) For hydrocarbon and carbon monoxide standards, a period of use of 8 years or 110,000 miles, whichever first occurs.

(ii) For the oxides of nitrogen standard, a period of use of 10 years or 110,000 miles, whichever first occurs.

(2) For a diesel heavy-duty engine family:

(i) For light heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 110,000 miles, whichever first occurs.

(ii) For light heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 110,000 miles, whichever first occurs.

(iii) For medium heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 185,000 miles, whichever first occurs.

(iv) For medium heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 185,000 miles, whichever first occurs.

(v) For heavy heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 290,000 miles, whichever first occurs, except as provided in paragraph (2)(vii) of this definition.

(vi) For heavy heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

(vii) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

11. A new § 86.098-10 is added to subpart A, to read as follows:

**§ 86.098-10 Emission Standards for 1998 and Later Model Year Otto-cycle Heavy-duty Engines and Vehicles.**

Section 86.098-10 includes text that specifies requirements that differ from

§ 86.096-10. Where a paragraph in § 86.096-10 is identical and applicable to § 86.098-10, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.096-10."

(a)(1) Exhaust emissions from new 1998 and later model year Otto-cycle heavy-duty engines shall not exceed:

(i) For gasoline-fueled Otto-cycle engines intended for use in all vehicles except as provided in paragraph (a)(3) of this paragraph.

(A) *Hydrocarbons*. 1.1 grams per brake horsepower-hour (0.41 gram per megajoule), as measured under transient operating conditions.

(B) *Carbon monoxide*. (1) 14.4 grams per brake horsepower-hour (5.36 grams per megajoule), as measured under transient operating conditions.

(2) For gasoline-fueled Otto-cycle heavy-duty engines utilizing after-treatment technology. 0.50 percent of exhaust gas flow at curb idle.

(C) *Oxides of nitrogen* (1) 4.0 grams per brake horsepower-hour (1.49 grams per megajoule), as measured under transient operating conditions.

(2) A manufacturer may elect to include any or all of its gasoline-fueled Otto-cycle heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 5.0 grams per brake horsepower-hour (1.9 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(ii) For gasoline-fueled Otto-cycle engines intended for use only in vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs.

(A) *Hydrocarbons*. 1.9 grams per brake horsepower-hour (0.71 gram per megajoule), as measured under transient operating conditions.

(B) *Carbon Monoxide*. (1) 37.1 grams per brake horsepower-hour (13.8 grams per megajoule), as measured under transient operating conditions.

(2) For gasoline-fueled Otto-cycle heavy-duty engine utilizing after-treatment technology. 0.50 percent of exhaust gas flow at curb idle.

(C) *Oxides of nitrogen* (1) 4.0 grams per brake horsepower-hour (1.49 grams per megajoule), as measured under transient operating conditions.

(2) A manufacturer may elect to include any or all of its gasoline-fueled Otto-cycle heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty

engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 5.0 grams per brake horsepower-hour (1.9 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(iii) For methanol-fueled Otto cycle heavy-duty engines intended for use in all vehicles, except as provided in paragraph (a)(3) of this section.

(A) *Organic Material Hydrocarbon Equivalent*. 1.1 gram per brake horsepower-hour (0.41 gram per megajoule), as measured under transient operating conditions.

(B) *Carbon monoxide*. (1) 14.4 grams per brake horsepower-hour (5.36 grams per megajoule), as measured under transient operating conditions.

(2) 0.50 percent of exhaust gas flow at curb idle.

(C) *Oxides of nitrogen*. (1) 4.0 grams per brake horsepower-hour (1.49 grams per megajoule), as measured under transient operating conditions.

(2) A manufacturer may elect to include any or all of its methanol-fueled Otto-cycle heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094-15. If the manufacturer elects to engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 5.0 grams per brake horsepower-hour (1.9 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(iv) For methanol-fueled Otto-cycle heavy-duty engines intended for use only in vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs.

(A) *Organic Material Hydrocarbon Equivalent*. 1.9 grams per brake horsepower-hour (0.71 gram per megajoule), as measured under transient operating conditions.

(B) *Carbon monoxide*. (1) 37.1 grams per brake horsepower-hour (13.8 grams per megajoule), as measured under transient operating conditions.

(2) 0.50 percent of exhaust gas flow at curb idle.

(C) *Oxides of nitrogen*. (1) 4.0 grams per brake horsepower-hour (1.49 grams per megajoule), as measured under transient operating conditions.

(2) A manufacturer may elect to include any or all of its methanol-fueled Otto-cycle heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, within the restrictions

described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 5.0 grams per brake horsepower-hour (1.9 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(2) The standards set forth in paragraph (a)(1) of this section refer to the exhaust emitted over the operating schedule set forth in paragraph (f)(1) of appendix I to this part, and measured and calculated in accordance with the procedures set forth in subpart N or P of this part.

(3) (i) A manufacturer may certify one or more gasoline-fueled Otto-cycle heavy-duty engine configurations intended for use in all vehicles to the emission standards set forth in paragraph (a)(1)(ii) of this section: *Provided, That* the total model year sales of such configuration(s) being certified to the emission standards in paragraph (a)(1)(ii) of this section represent no more than 5 percent of total model year sales of all gasoline-fueled Otto-cycle heavy-duty engines intended for use in vehicles with a Gross Vehicle Weight Rating of up to 14,000 pounds by the manufacturer.

(ii) A manufacturer may certify one or more methanol-fueled Otto-cycle heavy-duty engine configurations intended for use in all vehicles to the emissions standards set forth in paragraph (a)(1)(iv) of this section: *Provided, That* the total model year sales of such configuration(s) being certified to the emission standards in paragraph (a)(1)(iv) of this section represent no more than 5 percent of total model year sales of all methanol-fueled Otto-cycle heavy-duty engines intended for use in vehicles with a Gross Vehicle Weight Rating of up to 14,000 pounds by the manufacturer.

(iii) The configurations certified to the emission standards of paragraphs (a)(1)(ii) and (iv) of this section under the provisions of paragraphs (a)(3)(i) and (ii) of this section shall still be required to meet the evaporative emission standards set forth in paragraphs (b)(1)(i), (b)(2)(ii), and (b)(3)(i) of this section.

(b) [Reserved]. For guidance see § 86.096-10.

(c) No crankcase emissions shall be discharged into the ambient atmosphere from any new 1998 or later model year Otto-cycle heavy-duty engine.

(d) Every manufacturer of new motor vehicle engines subject to the standards prescribed in this section shall, prior to taking any of the actions specified in section 203(a)'1) of the Act, test or cause

to be tested motor vehicle engines in accordance with applicable procedures in subpart N or P of this part to ascertain that such test engines meet the requirements of paragraphs (a) and (c) of this section.

12. A new section 86.098-11 is added to subpart A, to read as follows:

**§ 86.098-11 Emission Standards for 1998 and Later Model Year Diesel Heavy-duty Engines.**

(a) Exhaust emissions from new 1998 and later model year diesel heavy-duty engines shall not exceed the following:

(1)(i) *Hydrocarbons (for petroleum-fueled diesel engines)*. 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(ii) *Organic Material Hydrocarbon Equivalent (for methanol-fueled diesel engines)*. 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(2) *Carbon monoxide*. (i) 15.5 grams per brake horsepower-hour (5.77 grams per megajoule), as measured under transient operating conditions.

(ii) 0.50 percent of exhaust gas flow at curb idle (methanol-fueled diesel only).

(3) *Oxides of Nitrogen*. (i) 4.0 grams per brake horsepower-hour (1.49 grams per megajoule), as measured under transient operating conditions.

(ii) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the NO<sub>x</sub> FELs may not exceed 5.0 grams per brake horsepower-hour (1.9 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(4) *Particulate*. (i) For diesel engines to be used in urban buses, 0.05 gram per brake horsepower-hour (0.019 gram per megajoule) for certification testing and selective enforcement audit testing, and 0.07 gram per brake horsepower-hour (0.026 gram per megajoule) for in-use testing, as measured under transient operating conditions.

(ii) For all other diesel engines only, 0.10 gram per brake horsepower-hour (0.037 gram per megajoule), as measured under transient operating conditions.

(iii) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the particulate averaging, trading, or banking programs for heavy-duty engines, within the restrictions

described in § 86.094-15. If the manufacturer elects to include engine families in any of these programs, the particulate FEL may not exceed:

(A) For engine families intended for use in urban buses, 0.25 gram per brake horsepower-hour (0.093 gram per megajoule).

(B) For engine families not intended for use in urban buses, 0.60 gram per brake horsepower-hour (0.22 gram per megajoule).

(C) The ceiling values in paragraphs (a)(4)(iii) (A) and (B) of this section apply whether credits for the family are derived from averaging, trading or banking programs.

(b)(1) The opacity of smoke emission from new 1998 and later model year diesel heavy-duty engine shall not exceed:

(i) 20 percent during the engine acceleration mode.

(ii) 15 percent during the engine lugging mode.

(iii) 50 percent during the peaks in either mode.

(2) The standards set forth in paragraph (b)(1) of this section refer to exhaust smoke emissions generated under the conditions set forth in subpart I of this part and measured and calculated in accordance with those procedures.

(3) *Evaporative emissions* (total of non-oxygenated hydrocarbons plus methanol) from 1998 and later model year heavy-duty vehicles equipped with methanol-fueled diesel engines shall not exceed:

(i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs, 3.0 grams per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs, 4.0 grams per test.

(4)(i) For vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs, the standards set forth in paragraph (b)(3) of this section refer to a composite sample of evaporative emissions collected under the conditions set forth in subpart M and measured in accordance with those procedures.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs, the standard set forth in paragraph (b)(3)(ii) of this section refers to the manufacturers engineering design evaluation using good engineering practice (a statement of which is required in § 86.091-23(b)(4)(ii)).

(c) No crankcase emissions shall be discharged into the ambient atmosphere from any new 1998 or later model year methanol-fueled diesel, or any naturally-aspirated diesel heavy-duty engine. For petroleum-fueled engines only, this provision does not apply to

engines using turbochargers, pumps, blowers, or superchargers for air induction.

(d) Every manufacturer of new motor vehicle engines subject to the standards prescribed in this section shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with applicable procedures in subpart I or N of this part to ascertain that such test engines meet the requirements of paragraphs (a), (b), (c), and (d) of this section.

13. Section 86.1105-87 of subpart L is amended by revising paragraph (d)(1) introductory text to read as follows:

**§ 86.1105-87 Emissions Standards for Which Nonconformance Penalties Are Available.**

\* \* \* \* \*

(d) \* \* \*

(1) Petroleum-fueled diesel bus engine (as defined in § 86.093-2) particulate emission standard of 0.10 grams per brake horsepower-hour.

\* \* \* \* \*

[FR Doc. 93-5259 Filed 3-23-93; 8:45 am]

BILLING CODE 8560-50-P-M

**40 CFR Part 180**

[OPP-300270A; FRL-4139-3]

RIN 2070-AB78

**Methyl Methacrylate-2-Sulfoethyl Methacrylate-Dimethylaminoethyl Methacrylate-Glycidyl Methacrylate-Styrene-2-Ethylhexyl Acrylate Graft Copolymer; Tolerance Exemption**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This document establishes an exemption from the requirement of a tolerance for residues of methyl methacrylate-2-sulfoethyl methacrylate-dimethylaminoethyl methacrylate-glycidyl methacrylate-styrene-2-ethylhexyl acrylate graft copolymer when used as an inert ingredient (carrier) in pesticide formulations applied to growing crops only. This regulation was requested by DowElanco.

**EFFECTIVE DATE:** This regulation becomes effective March 24, 1993.

**ADDRESSES:** Written objections, identified by document control number, [OPP-300270A], may be submitted to: Hearing Clerk (A110), Environmental Protection Agency, rm. 3708, 401 M St., SW., Washington, DC 20460.

**FOR FURTHER INFORMATION CONTACT:** By mail: Connie Welch, Registration Support Branch, Registration Division

(H-7505C), Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: Rm. 711-1, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202, (703)-305-7252.

**SUPPLEMENTARY INFORMATION:** In the Federal Register of December 31, 1992 (57 FR 62540), EPA issued a proposed rule that gave notice that at the request of DowElanco, P.O. Box 1706, Midland, MI 48641-1706, the Administrator, pursuant to section 408(e) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a(e)), proposed to amend 40 CFR 180.1001(d) by establishing an exemption from the requirement of a tolerance for residues of methyl methacrylate-2-sulfoethyl methacrylate-dimethylaminoethyl methacrylate-glycidyl methacrylate-styrene-2-ethylhexyl acrylate graft copolymer when used as an inert ingredient (carrier) in pesticide formulations applied to growing crops only.

Inert ingredients are all ingredients that are not active ingredients as defined in 40 CFR 153.125, and include, but are not limited to, the following types of ingredients (except when they have a pesticidal efficacy of their own): Solvents such as alcohols and hydrocarbons; surfactants such as polyoxyethylene polymers and fatty acids; carriers such as clay and diatomaceous earth; thickeners such as carrageenan and modified cellulose; wetting, spreading, and dispersing agents; propellants in aerosol dispensers; microencapsulating agents; and emulsifiers. The term "inert" is not intended to imply non-toxicity; the ingredient may or may not be chemically active.

No public comments or requests for referral to an advisory committee were received in response to the notice of proposed rulemaking.

Therefore, based on information considered by EPA and discussed in detail in the December 31, 1992 proposal and in this final rule, EPA is establishing the exemption from the requirement of a tolerance as set forth below.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the Federal Register, file written objections and/or a request for a hearing with the Hearing Clerk, at the address given above (40 CFR 178.20). The objections submitted must specify the provisions of the regulation deemed objectionable and the grounds for the objections (40 CFR 178.25). Each objection must be accompanied by the fee prescribed by 40 CFR 180.33(i). If a hearing is

requested, the objections must include a statement of the factual issue(s) on which a hearing is requested, the requestor's contentions on each such issue, and a summary of any evidence relied upon by the objector (40 CFR 178.27). A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: there is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established, resolve one or more issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issue(s) in the manner sought by the requestor would be adequate to justify the action requested (40 CFR 178.32).

The Office of Management and Budget has exempted this rule from the

requirements of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act of 1980 (Pub. L. 96-354, 94 Stat 1164; 5 U.S.C. 601 *et seq.*), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from the tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the *Federal Register* of May 4, 1981 (46 FR 24950).

**List of Subjects in 40 CFR Part 180**

Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: March 9, 1993.

**Douglas D. Campt,**  
*Director, Office of Pesticide Programs.*

Therefore, 40 CFR part 180 is amended as follows:

**PART 180—[AMENDED]**

1. The authority citation for part 180 continues to read as follows:

**Authority:** 21 U.S.C. 346a and 371.

2. Section 180.1001(d) is amended by adding and alphabetically inserting the inert ingredient, to read as follows:

**§ 180.1001 Exemptions from the requirement of a tolerance.**

\* \* \* \* \*  
(d) \* \* \*

Inert ingredients	Limits	Uses
Methyl methacrylate-2-sulfoethyl methacrylate-dimethylaminoethyl methacrylate-glycidyl methacrylate-styrene-2-ethylhexyl acrylate graft copolymer (minimum average molecular weight 9,600).	.....	Carrier

[FR Doc. 93-6388 Filed 3-23-93; 8:45 am]  
BILLING CODE 6560-50-F

**40 CFR Part 180**  
[PP 0E3844/R1131; FRL-3946-8]  
RIN 2070-AB78

**Pesticide Tolerance for 2-(2-Chlorophenyl)methyl-4,4-Dimethyl-3-Isloxazolidinone**

**AGENCY:** Environmental Protection Agency (EPA).  
**ACTION:** Final rule.

**SUMMARY:** This document establishes a tolerance for the residues of the herbicide 2-(2-chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone (also referred to as clomazone) in or on the raw agricultural commodity winter squash. This regulation was requested in a petition submitted by the Interregional Research Project No. 4 (IR-4).

**EFFECTIVE DATE:** This regulation becomes effective March 24, 1993.  
**ADDRESSES:** Written objections, identified by the document control number, [PP 0E3844/R1131], may be

submitted to: Hearing Clerk (A-110), Environmental Protection Agency, rm. M3708, 401 M St., SW., Washington, DC 20460.

**FOR FURTHER INFORMATION CONTACT:** By mail: Hoyt Jamerson, Emergency Response and Minor Use Section (H-7505W), Registration Division, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: No. 1, 6th Floor, CS #1, 2800 Jefferson Davis Highway, Arlington, VA 22202, (703)-305-5310.

**SUPPLEMENTARY INFORMATION:** In the *Federal Register* of August 28, 1991 (56 FR 42574), EPA issued a proposed rule that gave notice that the Interregional Research Project No. 4 (IR-4), New Jersey Agricultural Experiment Station, P.O. Box 231, Rutgers University, New Brunswick, NJ 08903, had submitted pesticide petition (PP) 0E3844 to EPA on behalf of the IR-4 and the Agricultural Experiment Stations of New Jersey, North Carolina, and Tennessee.

The petition requested that the Administrator, pursuant to section 408(e) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a(e)), propose the establishment of a tolerance

for residues of the herbicide 2-(2-chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone in or on the raw agricultural commodity winter squash at 0.1 part per million (ppm).

There were no requests for referral to an advisory committee received in response to the proposed rule.

However, one comment was received opposing the proposed establishment of the tolerance in or on winter squash. The commenter, generally, asserts that EPA has failed to conclude that the tolerance would be protective of the public health. EPA disagrees. The proposed rule states, and supports by analysis, that the tolerance would result in a negligible increase in dietary exposure to residues of clomazone. The tolerance process is highly protective in that it is based on the most sensitive animal test results available and a combination of highly conservative assumptions and risk assessment practices.

The commenter asserts that the tolerance is unnecessary since there is "no actual demonstrated need" for the proposed use of clomazone in order to produce an adequate or safe food supply and no emergency condition which is uncontrollable with herbicides for

which tolerances already exist. The commenter implies that EPA should not allow the tolerance or use of clomazone on winter squash unless EPA can "conclusively and effectively" demonstrate that other herbicides, already registered and with tolerances for winter squash, are inadequate to provide for a safe and reliable supply of that food commodity.

EPA believes that the commenter has incorrectly interpreted the standard for approval of tolerances under FFDCA section 408. EPA construes the requirement in sec. 408 to consider the "necessity for the production of an adequate, wholesome, and economical food supply" to prevent the Agency from denying a tolerance solely on the basis of a calculation of the risks posed by pesticide residues on agricultural products. Instead, the Agency must balance these risks against the benefits of the pesticide for food production. The commenter's reading of the FFDCA would negate this balancing by preventing issuance of a tolerance solely on the basis of failure of the pesticide to meet one possible aspect of the benefits consideration, i.e., essentiality. Although essential pesticides would clearly provide large benefits for food production, the statute in no way suggests that only essential pesticides provide benefits worthy of consideration in the risk/benefit weighing mandated by section 408.

This construction of FFDCA sec. 408 is supported by sec. 3(c)(5) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA must consider the provisions of the FFDCA and the FIFRA together and construed in a manner that is harmonious if possible, given EPA's overlapping responsibilities under the two statutes—to regulate the use of pesticides under FIFRA and to regulate pesticide residues in food under FFDCA. FIFRA sec. 3(c)(5) provides in part the following:

The Administrator shall not make any lack of essentiality a criterion for denying registration of any pesticide. Where two pesticides meet the requirements of this paragraph, one should not be registered in preference to the other. \* \* \*

If EPA were to deny a pesticide tolerance under FFDCA solely because there are other adequate pesticides for the affected crop, EPA's registration decisions under FIFRA would be negated by the tolerance determination. Thus, the FIFRA language on essentiality would become a nullity.

The commenter is further concerned that the tolerance would allow the unnecessary introduction of clomazone residues into the environment and ground and surface waters of the U.S.

The Agency points out that the FFDCA is not the mechanism through which EPA considers pesticide effects on public health that occur through other than dietary routes. FFDCA section 408 only refers to tolerances on raw agricultural commodities. Other pesticidal effects are appropriately considered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) when a pesticide is registered. Under sec. 4(c)(5) of FIFRA, the Agency registers a pesticide, generally, if it will not cause "unreasonable adverse effects on the environment." FIFRA sec. 2(j) defines "environment" to include "water, air, land, and all plants and man and other animals living therein, and the interrelationships which exist among these."

The data submitted in the petition and other relevant material have been evaluated and discussed in the proposed rule. Based on the data and information considered, the Agency concludes that the tolerance will protect the public health. Therefore, the tolerance is established as set forth below.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the Federal Register, file written objections with the Hearing Clerk, at the address given above. 40 CFR 178.20. The objections submitted must specify the provisions of the regulation deemed objectionable and the grounds for the objections. 40 CFR 178.25. Each objection must be accompanied by the fee prescribed by 40 CFR 180.33(i). If a hearing is requested, the objections must include a statement of the factual issue(s) on which a hearing is requested, the requestor's contentions on each such issue, and a summary of any evidence relied upon by the objector. 40 CFR 178.27. A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: There is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established, resolve one or more of such issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issue(s) in the manner sought by the requestor would be adequate to justify the action requested. 40 CFR 178.32.

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-

354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 24950).

**List of Subjects in 40 CFR Part 180**

Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: March 15, 1993.

Douglas D. Camp, Director, Office of Pesticide Programs.

Therefore, 40 CFR part 180 is amended as follows:

**PART 180—[AMENDED]**

1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 346a and 371.

2. Section 180.425 is amended in the table therein by adding and alphabetically inserting the raw agricultural commodity winter squash, to read as follows:

§ 180.425 2-(2-Chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone; tolerances for residues.

Commodity	Parts per million
Squash, winter .....	0.1

[FR Doc. 93-6727 Filed 3-23-93; 8:45 am] BILLING CODE 0560-50-F

**40 CFR Part 180**

[PP 1E3926/R1133; FRL-3947-1] RIN 2070-AB78

**Pesticide Tolerances for Metalaxyl**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This document establishes a tolerance for combined residues of the fungicide metalaxyl and its metabolites in or on the raw agricultural commodity ginseng. This regulation to establish a maximum permissible level for residues of the fungicide in or on the commodity



was requested in a petition submitted by the Interregional Research Project No. 4 (IR-4).

**EFFECTIVE DATE:** This regulation becomes effective March 24, 1993.

**ADDRESSES:** Written objections, identified by the document control number, [PP 1E3926/R1133], may be submitted to: Hearing Clerk (A-110), Environmental Protection Agency, rm. M3708, 401 M St., SW., Washington, DC 20460.

**FOR FURTHER INFORMATION CONTACT:** By mail: Hoyt Jamerson, Emergency Response and Minor Use Section (H-7505W), Registration Division, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: No. 1, 6th Floor, CS #1, 2800 Jefferson Davis Hwy., Arlington, VA 22202, (703)-305-5310.

**SUPPLEMENTARY INFORMATION:** In the Federal Register of August 28, 1991 (56 FR 42577), EPA issued a proposed rule that gave notice that the Interregional Research Project No. 4 (IR-4), New Jersey Agricultural Experiment Station, P.O. Box 231, Rutgers University, New Brunswick, NJ 08903, had submitted pesticide petition 1E3926 to EPA on behalf of the Agricultural Experiment Stations of North Carolina and Virginia.

The petition requested that the Administrator, pursuant to section 408(e) of the Federal Food, Drug, and Cosmetic Act (FFDCA) (21 U.S.C. 346a(e)), propose the establishment of a tolerance for residues of the fungicide metalaxyl, [N-(2,6-dimethylphenyl)-N-(methoxyacetyl) alanine methyl ester] and its metabolites containing the 2,6-dimethylaniline moiety, and N-[2-hydroxy methyl-6-methyl)-N-(methoxyacetyl)-alanine methyl ester, in or on the raw agricultural commodity ginseng at 3.0 parts per million.

There were no requests for referral to an advisory committee received in response to the proposed rule.

However, one comment was received opposing the proposed establishment of the tolerance in or on ginseng. The commenter, generally, asserts that EPA has failed to conclude that the tolerance would be protective of the public health. EPA disagrees. The proposed rule states, and supports by analysis, that the tolerance would result in a negligible increase in dietary exposure to residues of metalaxyl. The tolerance process is highly protective in that it is based on the most sensitive animal test results available and a combination of highly conservative assumptions and risk assessment practices.

Specifically, the commenter asserts that EPA has not concluded that

metalaxyl is useful for the purpose for which the tolerance is sought and that the tolerance is unnecessary since there is "no actual demonstrated need" for the proposed use of metalaxyl in order to produce an adequate or safe food supply and no emergency condition which is uncontrollable with fungicides for which tolerances already exist. The commenter implies that EPA should not allow the tolerance or use of metalaxyl on ginseng unless EPA can "conclusively and effectively" demonstrate that other fungicides, already registered and with tolerances for ginseng, are inadequate to provide for a safe and reliable supply of that food commodity.

EPA believes that the commenter has incorrectly interpreted the standard for approval of tolerances under FFDCA sec. 408. EPA construes the requirement in sec. 408 to consider the "necessity for the production of an adequate, wholesome and economical food supply" to prevent the Agency from denying a tolerance solely on the basis of a calculation of the risks posed by pesticide residues on agricultural products. Instead, the Agency must balance these risks against the benefits of the pesticide for food production. The commenter's reading of the FFDCA would negate this balancing by preventing issuance of a tolerance solely on the basis of failure of the pesticide to meet one possible aspect of the benefits consideration, i.e., essentiality. Although essential pesticides would clearly provide large benefits for food production, the statute in no way suggests that only essential pesticides provide benefits worthy of consideration in the risk/benefit weighing mandated by section 408.

This construction of FFDCA sec. 408 is supported by sec. 3(c)(5) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA must consider the provisions of the FFDCA and the FIFRA together and construed in a manner that is harmonious, if possible, given EPA's overlapping responsibilities under the two statutes—to regulate the use of pesticides under FIFRA and to regulate pesticide residues in food under FFDCA. FIFRA sec. 3(c)(5) provides in part the following:

The Administrator shall not make any lack of essentiality a criterion for denying registration of any pesticide. Where two pesticides meet the requirements of this paragraph, one should not be registered in preference to the other. \* \* \*

If EPA were to deny a pesticide tolerance under FFDCA solely because there are other adequate pesticides for the affected crop, EPA's registration

decisions under FIFRA would be negated by the tolerance determination. Thus, the FIFRA language on essentiality would become a nullity.

The commenter is also concerned that the tolerance would allow the unnecessary introduction of metalaxyl residues into the environment and ground and surface waters of the U.S.

The Agency points out that the Federal Food, Drug, and Cosmetic Act (FFDCA) is not the mechanism through which EPA considers pesticide effects on public health that occur through other than dietary routes. FFDCA section 408 only refers to tolerances on raw agricultural commodities. Other pesticidal effects are appropriately considered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) when a pesticide is registered. Under sec. 3(c)(5) of FIFRA, the Agency registers a pesticide, generally, if it will not cause "unreasonable adverse effects on the environment." FIFRA sec. 2(j) defines "environment" to include "water, air, land, and all plants and man and other animals living therein, and the interrelationships which exist among these."

The commenter is further concerned, in the case of metalaxyl on ginseng, that EPA's conclusion concerning utilization of RID for the overall population and resulting negligible nature of the dietary population exposure "fails to take into account of the unusual consumptive patterns connected with the use of ginseng in certain portions of the population."

Before making tolerance decisions on a pesticide, EPA uses a Dietary Risk Evaluation System (DRES) to calculate the theoretical maximum residue contribution and risk estimates for the general population and a number of subgroups. If the DRES analysis indicates that exposure, and thus estimated risk, to a subgroup is so high that adverse effects are likely to occur, the Agency will not approve a tolerance even if the estimated risks to the average population are acceptable. None of the population subgroups examined in EPA's DRES analysis had consumption patterns that raised risk concerns from metalaxyl on ginseng assumed that metalaxyl would be present on all ginseng consumed at the tolerance level. This is a very conservative assumption. Metalaxyl is unlikely to be used on all ginseng, and studies have shown that the level of residues on foods, when they reach the consumer, is typically well below the established tolerance level. Accordingly, EPA believes that the tolerance is protective of public health.

It also appears that the commenter is asserting that a certification of usefulness under section 408(l) is required before EPA may issue a tolerance regulation for metalaxyl on ginseng. This is incorrect. The metalaxyl tolerance is issued in response to a petition pursuant to section 408(e) of the FFDCA on behalf of the Agricultural Experiment Stations of North Carolina and Virginia. Tolerances issued in response to section 408(e) petitions, from persons other than registrants of the pesticides, do not require certifications of usefulness. Moreover, EPA believes the tolerance is protective of public health in view of the negligible increase in dietary exposure even assuming metalaxyl is present on all ginseng consumed.

The data submitted in the petition and other relevant material have been evaluated and discussed in the proposed rule. Based on the data and information considered, the Agency concludes that the tolerance will protect the public health. Therefore, the tolerance is established as set forth below.

Any person adversely affected by this regulation may, within 30 days after publication of this document in the Federal Register, file written objections with the Hearing Clerk, at the address given above. 40 CFR 178.20. The objections submitted must specify the provisions of the regulation deemed objectionable and the grounds for the objections. 40 CFR 178.25. Each objection must be accompanied by the fee prescribed by 40 CFR 180.33(i). If a hearing is requested, the objections must include a statement of the factual issue(s) on which a hearing is requested and the requestor's contentions on each such issue. 40 CFR 178.27. A request for a hearing will be granted if the Administrator determines that the material submitted shows the following: There is a genuine and substantial issue of fact; there is a reasonable possibility that available evidence identified by the requestor would, if established, resolve one or more of such issues in favor of the requestor, taking into account uncontested claims or facts to the contrary; and resolution of the factual issue(s) in the manner sought by the requestor would be adequate to justify the action requested. 40 CFR 178.32.

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances

or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 24950).

**List of Subjects in 40 CFR Part 180**

Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: March 15, 1993.

Douglas D. Camp, Director, Office of Pesticide Programs.

Therefore, 40 CFR part 180 is amended as follows:

**PART 180—[AMENDED]**

1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 346a and 371.

2. Section 180.408(a) is amended in the table therein by adding and alphabetically inserting the raw agricultural commodity ginseng, to read as follows:

**§ 180.408 Metalaxyl; tolerances for residues.**

(a) \* \* \*

	Commodity	Parts per million
.	.	.
Ginseng .....		3.0
.	.	.

\* \* \* \* \*  
[FR Doc. 93-6730 Filed 3-23-93; 8:45 am]  
BILLING CODE 6560-50-F

**40 CFR Part 271**

[FRL-4607-9]

**Guam; Final Authorization of Territorial Hazardous Waste Management Program**

AGENCY: Environmental Protection Agency.  
ACTION: Immediate final rule.

SUMMARY: The Territory of Guam has applied for final authorization of revisions to its hazardous waste program under the Resource Conservation and Recovery Act (RCRA), as amended. EPA has reviewed Guam's application and has made a decision, subject to public review and comment, that Guam's hazardous waste program

revision satisfies all of the requirements necessary to qualify for final authorization. Thus, EPA intends to approve Guam's hazardous waste program revisions. Guam's application for program revision is available for public review and comment.

**DATES:** Final authorization for Guam shall be effective May 24, 1993, unless EPA publishes a prior Federal Register action withdrawing this immediate final rule. All comments on Guam's program revision application must be received by the close of business April 23, 1993.

**ADDRESSES:** Copies of Guam's program revision application are available during the business hours of 9 a.m. to 5 p.m. at the following addresses for inspection and copying:

Guam Environmental Protection Agency, Solid and Hazardous Waste Management, Harmon Plaza, Complex Unit D-107, 103 Rojas Street, Harmon, Guam 96911, Phone: (671) 646-8863/4/5.

U.S. EPA Region IX Library-Information Center, 75 Hawthorne Street, San Francisco, California 94105, Phone: (415) 744-1510.

Written comments should be sent to April Katsura, U.S. EPA Region IX (H-2-2), 75 Hawthorne Street, San Francisco, California 94105, Phone: 415/744-2026.

**FOR FURTHER INFORMATION CONTACT:** April Katsura at 415/744-2030 and the address listed in the ADDRESS section.

**SUPPLEMENTARY INFORMATION:**  
**A. Background**

States with final authorization under section 3006(b) of the Resource Conservation and Recovery Act ("RCRA" or "the Act"), 42 U.S.C. 6929(b), have a continuing obligation to maintain a hazardous waste program that is equivalent to, consistent with, and no less stringent than the Federal hazardous waste program. Revisions to State hazardous waste programs are necessary when Federal or State statutory or regulatory authority is modified or when certain other changes occur. Most commonly, State program revisions are necessitated by changes to EPA's regulations in 40 CFR parts 260 through 266, 268, 124 and 270.

**B. Guam**

Guam initially received final authorization on January 27, 1986. Guam received authorizations for revisions to its program on May 22, 1989, August 11, 1989, March 3, 1992, and March 18, 1992. On February 1,

1993, Guam submitted a program revision application for additional program approvals. Today, Guam is seeking approval of its program revisions in accordance with 40 CFR 271.21(b)(3).

EPA has reviewed Guam's application, and has made an immediate final decision that Guam's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Consequently, EPA intends to grant final authorization

for the additional program modifications to Guam. The public may submit written comments on EPA's immediate final decision up until April 23, 1993. Copies of Guam's application for program revision are available for inspection and copying at the locations indicated in the "Addresses" section of this notice.

Approval of Guam's program revision shall become effective in 60 days unless an adverse comment pertaining to the Territory's revision discussed in this

notice is received by the end of the comment period. If an adverse comment is received EPA will publish either: (1) A withdrawal of the immediate final decision or (2) a notice containing a response to comments which either affirms that the immediate final decision takes effect or reverses the decision.

Guam is applying for authorization for the following Federal hazardous waste regulations:

Federal responsibility	Territory authority
Settlement Agreement (53 FR 7740, March 10, 1988) .....	10 Guam Code Annotated (GCA) §51103(a)(8) & (11); Hazardous Waste Management Regulations (HMWR) Parts II.B+C, VI.A+B, VII.A+B, and X.A+B. 10 GCA §51103(a)(8) & (11); HWMR Part III.A+B.
Listing of Spent Pickle Liquor (K062) (51 FR 33612, September 22, 1986; 52 FR 28697, August 3, 1987).	10 GCA §51103(a)(8) & (11); HWMR Part X.A+B.
Amendments to Part B Information Requirements for Land Disposal Facilities (52 FR 33936, September 9, 1987).	10 GCA §51103(a)(8) & (11); HWMR Part IV.A,B,J+K.
Exception Reporting for Small Quantity Generators of Hazardous Waste (52 FR 35894, September 23, 1987).	10 GCA §51103(a)(6) & (11); HWMR Part X.A+B.
Permit Application Requirements Regarding Corrective Action (52 FR 45788, December 1, 1987).	10 GCA §51103(a)(8) & (11); HWMR Part VI.A,B+G.
Corrective Action Beyond the Facility Boundary (52 FR 45788, December 1, 1987).	10 GCA §51103(a)(8) & (11); HWMR Parts VII.A+B and X.A+B.
Corrective Action for Injection Wells (52 FR 45788, December 1, 1987)	10 GCA §51103(a)(8) & (11); HWMR Part X.A+B.
Permit Modification (52 FR 45788, December 1, 1987) .....	10 GCA §51103(a)(8) & (11); HWMR Part X.A+B.
Permit as a Shield Provision (52 FR 45788, December 1, 1987) .....	10 GCA §51103(a)(8) & (11); HWMR Part X.A+B.
Permit Conditions to Protect Human Health and the Environment (52	10 GCA §51103(a)(8) & (11); HWMR Part X.A+B.
FR 45788, December 1, 1987).	10 GCA §51103(a)(8) & (11); HWMR Part X.A,B+C.
Post-Closure Permits (52 FR 45788, December 1, 1987) .....	10 GCA §51103(a)(8) & (11); HWMR Part III.A,B+G.
Identification and Listing of Hazardous Waste: Technical Correction (53	10 GCA §51103(a)(8) & (11); HWMR Parts IV.A+B, VI.A+B, VII.A+B,
FR 27162, July 19, 1988).	IX.A, and X.A+B.
Farmer Exemption: Technical Corrections (53 FR 27164, July 19, 1988)	10 GCA §51103(a)(8) & (11); HWMR Parts VI.A+B, VII.A+B, and
Delay of Closure Period for Hazardous Waste Management Facilities	X.A+B.
(54 FR 33376, August 14, 1989).	10 GCA §51103(a)(8) & (11); HWMR Part III.A+B.
Mining Waste Exclusion I (54 FR 36592, September 1, 1989) .....	10 GCA §51103(a)(8) & (11); HWMR Parts II.A-D and III.A+B.
Testing and Monitoring Activities (54 FR 40260, September 29, 1989) ..	10 GCA §51103(a)(8) & (11); HWMR Part III.A+B.
Reportable Quantity Requirement Methyl Bromide Production Wastes	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
(54 FR 41402, October 6, 1989).	10 GCA §521103(a)(8) & (11); HWMR Part XLA,C,D,E,I+K.
Reportable Quantity Adjustment (54 FR 50968, December 11, 1989) ....	10 GCA §521103(a)(8) & (11); HWMR Parts II.A-D, III.A+B, and
Changes to Part 124 Not Accounted for by Present Checklists (48 FR	IV.A+B.
14146, April 1, 1983; 48 FR 30113, June 30, 1983; 53 FR 28118,	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
July 26, 1988; 53 FR 37396, September 26, 1988; 54 FR 246, Janu-	10 GCA §521103(a)(8) & (11); HWMR Parts II.A-D and III.A+B.
ary 4, 1989).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Mining Waste Exclusion II (55 FR 2322, January 23, 1990) .....	10 GCA §521103(a)(8) & (11); HWMR Part VI.A+B.
Modification of FO19 Listing (55 FR 5340, February 14, 1990) .....	10 GCA §521103(a)(8) & (11); HWMR Parts II.A-D, III.A+B+I, VI.A+B,
Testing and Monitoring Activities; Technical Corrections (55 FR 8948,	VII.A+B and X.A+B.
March 9, 1990).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Listing of 1,1-Dimethylhydrazine Production Wastes (55 FR 18496,	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
May 2, 1990).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Criteria for Listing Toxic Wastes; Technical Amendment (55 FR 18726,	10 GCA §521103(a)(8) & (11); HWMR Part VI.A+B.
May 4, 1990).	10 GCA §521103(a)(8) & (11); HWMR Parts II.A-D, III.A+B+I, VI.A+B,
HSWA Codification Rule, Double Liners; Correction (55 FR 19262, May	VII.A+B and X.A+B.
9, 1990).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Organic Air Emission Standards for Process Vents and Equipment	10 GCA §521103(a)(8) & (11); HWMR Parts III.A+B, IV.A+B,
Leaks (55 FR 25454, June 21, 1990).	VI.A+B, VII.A+B, and X.A+B.
Petroleum Refinery Primary and Secondary Oil/Water/Solids Separation	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Sludge Listings (FO37 and FO38) (55 FR 46354, November 2, 1990;	10 GCA §521103(a)(8) & (11); HWMR Parts III.A-D, III.A+B, IV.A+B,
55 FR 51707, December 17, 1990).	VI.A+B, VII.A+B, and X.A+B.
Wood Preserving Listings (55 FR 50450, December 6, 1990) .....	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Toxicity Characteristics; Hydrocarbon Recovery Operations (56 FR	10 GCA §521103(a)(8) & (11); HWMR Parts II.A-D, III.A+B, VI.A+B,
5910, February 13, 1991).	VII.A+B, VIII.A, and X.A+B.
Burning of Hazardous Waste in Boilers and Industrial Furnaces (56 FR	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
7134, February 21, 1991).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Removal of Strontium Sulfide from the List of Hazardous Waste; Tech-	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
nical Amendment (56 FR 7567, February 25, 1991).	

Federal responsibility	Territory authority
Organic Air Emission Standards for Process Vents and Equipment Leaks; Technical Amendment (56 FR 19290, April 26, 1991).	10 GCA §521103(a)(8) & (11); HWMR Parts VI.A+B, VII.A+B and X.A+B.
Administrative Stay for K069 Listing (56 FR 19951, May 1, 1991) .....	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Revision to FO37 and FO38 Listings (56 FR 21955, May 13, 1991) .....	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Mining Exclusion III (56 FR 27300, June 13, 1991) .....	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B.
Administrative Stay for FO32, FO34 and FO35 Listings (56 FR 27332, June 13, 1991).	10 GCA §521103(a)(8) & (11); HWMR Part III.A+B, VI.A+B and VII.A+B.
Sharing of Information with the Agency for Toxic Substances and Disease Registry (HWSA 3019(b)).	5 GCA §§ 10101-10104.
Hazardous and Used Oil Fuel Criminal Penalties (HWSA 3006(h), 3008(d) and 3014).	10 GCA §51113(c).
Land Disposal Restrictions (51 FR 40572, November 7, 1986; 52 FR 21010, June 4, 1987; 52 FR 25760, July 8, 1987; 52 FR 41295, October 27, 1987; 53 FR 31138, August 17, 1988; 54 FR 8264, February 27, 1989; 54 FR 18836, May 2, 1989; 54 FR 26594, June 23, 1989; 54 FR 36967, September 6, 1989; 55 FR 22520, June 1, 1990; 55 FR 23935, June 13, 1990; 56 FR 3864, January 31, 1991).	10 GCA §521103(a)(8) & (11); HWMR Parts III.A+B, IV.A+B, VIII.A, IX.A,B,C+D and X.A+B.
Toxicity Characteristic Revisions (55 FR 11798, March 29, 1990; 55 FR 26986, June 29, 1990; 55 FR 40834, October 5, 1990; 56 FR 3978, February 1, 1991; 56 FR 5910, February 13, 1991; 56 FR 13406, April 2, 1991).	10 GCA §521103(a)(8) & (11); HWMR Parts III.A+B, VI.A+B, VII.A+B and IX.A+B.

Guam will not have issued any Territorial hazardous waste permits prior to being authorized for the above program revisions. The Territorial program does not include jurisdiction over Indian Lands; there are no Indian Lands on Guam.

#### C. Decision

I conclude that Guam's application for program revision meets all of the statutory and regulatory requirements established by RCRA. Accordingly, Guam is granted final authorization to operate its hazardous waste program as revised. Guam has responsibility for permitting treatment, storage, and disposal facilities within its borders and carrying out other aspects of the RCRA program described in its revised program application, subject to the limitations of the Hazardous and Solid Waste Amendments of 1984. Guam also has primary enforcement responsibilities, although EPA retains the right to conduct inspections under section 3007 of RCRA and to take enforcement actions under sections 3008, 3013 and 7003 of RCRA.

#### Compliance With Executive Order 12291

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

#### Certification Under the Regulatory Flexibility Act

Pursuant to the provisions of 4 U.S.C. 605(b), I hereby certify that this authorization will not have a significant economic impact on a substantial number of small entities. This authorization effectively suspends the applicability of certain Federal

regulations in favor of Guam's program, thereby eliminating duplicative requirements for handlers of hazardous waste in the Territory. It does not impose any new burdens on small entities. This rule, therefore, does not require a regulatory flexibility analysis.

#### List of Subjects in 40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

**Authority:** This notice is issued under the authority of Sections 2002(a), 3006 and 7004(b) of the Solid Waste Disposal Act as amended, 42 U.S.C. 6912(a), 6926, 6974(b).

Dated: March 16, 1993.

Nora L. McGee,

Acting Regional Administrator.

[FR Doc. 93-6723 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-P

#### 40 CFR Parts 761 and 763

[OPPTS-00130; FLR 4187-5]

#### Nomenclature Changes for the Polychlorinated Biphenyls and Asbestos Regulations

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule; technical amendment.

**SUMMARY:** EPA is issuing nomenclature changes to the polychlorinated biphenyl (PCB) and asbestos regulations under the Toxic Substances and Control Act (TSCA). These nomenclature changes

are necessary because of the reorganization of the Office of Pollution Prevention and Toxics (OPPT) on October 4, 1992. Changes are being made to 40 CFR parts 761 and 763.

**EFFECTIVE DATE:** The amendments to parts 761 and 763 as set forth in this Notice are effective on March 24, 1993.

**FOR FURTHER INFORMATION CONTACT:** Susan B. Hazen, Director, Environmental Assistance Division (TS-799), Office of Pollution Prevention and Toxics, Environmental Protection Agency, Rm. E543B, 401 M St., SW., Washington, DC 20460, (202) 554-1404, TDD: (202) 554-0551.

**SUPPLEMENTARY INFORMATION:** Under general rulemaking authority, 5 U.S.C. 552, EPA is issuing this technical amendment to make nomenclature changes to the regulations in 40 CFR part 761 and to update information resources listed at 40 CFR part 763.

In part 761, EPA is changing the names of the Exposure Evaluation Division and the Chemical Regulation Branch to the Chemical Management Division and the Operations Branch, respectively. References throughout part 761 to either the Director, Exposure Evaluation Division or Director, EED are being replaced with references to Director, Chemical Management Division and Director, CMD, respectively. References to the Chemical Regulation Branch at § 761.205 are being replaced with references to the Operations Branch.

Additionally, the toll free telephone number cited in 40 CFR part 763 for obtaining documents on analyzing asbestos bulk samples, reducing asbestos exposure, and asbestos-containing materials in schools has been changed. These materials may now be

obtained by calling (202) 554-1404. The toll free telephone number for obtaining a list of laboratories capable of conducting analyses of friable materials has also been changed. This material is now available from the National Voluntary Accreditation Program of the National Institute of Science and Technology at (301) 975-4016.

EPA is promulgating this technical amendment as an immediately effective final rule. Because this rule makes no changes in substantive requirements, EPA believes that notice and an opportunity for comment are unnecessary. Similarly, EPA finds, for good cause, that the rule should take effect on the date of publication, rather than being delayed for 30 days, because the rule does not modify any substantive requirements and essentially only affects internal Agency processing within OPPT.

#### I. Public Record

A public record for the action has been established under docket number "OPPTS-00130." The public record is available for inspection from 8 am to 12 noon, and 1 pm to 4 pm, Monday through Friday, excluding legal holidays. The public record is located in the OPPT Public Docket Room, Room G004, Northeast Mall, 401 M St., SW., Washington, DC 20460. The public record for this action consists of a copy of this document and a copy of the document, "Reorganization for the Office of Pollution Prevention and Toxics."

#### II. Other Regulatory Requirements

##### A. Executive Order 12291

Under Executive Order 12291, EPA is required to determine whether a rule is "major" and subject to a Regulatory Impact Analysis. EPA has determined that this action is not major as that term is defined in section 1(b) of Executive Order 12291, and that it will not have any impact on the economy.

This rule was not submitted to the Office of Management and Budget for review.

#### B. Regulatory Flexibility Act

EPA has determined that this rule is not subject to review under the Regulatory Flexibility Act, 5 U.S.C. 601, et seq.

#### C. Paperwork Reduction Act

EPA has determined that this rule is not subject to OMB review under the Paperwork Reduction Act.

#### List of Subjects

##### 40 CFR Part 761

Environmental protection, Hazardous substances, Labeling, Polychlorinated biphenyls, Reporting and recordkeeping requirements.

##### 40 CFR Part 763

Asbestos, Environmental protection, Hazardous substances, Incorporation by reference, Occupational health and safety, Recordkeeping, Schools.

Dated: March 17, 1993.

#### Mark A. Greenwood,

Director, Office of Pollution Prevention and Toxics.

Therefore, based on the general rulemaking authority in 5 U.S.C. 552, 40 CFR parts 761 and 763 are amended as follows:

#### PART 761—[AMENDED]

##### 1. In part 761:

a. The authority citation for part 761 continues to read as follows:

Authority: 15 U.S.C. 2605, 2607, 2611, 2614 and 2616.

##### §§ 761.30, 761.60 and 761.70 [Amended]

b. In §§ 761.30, 761.60 and 761.70 by revising "Director, Exposure Evaluation Division" wherever it appears to read "Director, Chemical Management Division".

##### § 761.65 [Amended]

c. By revising "Director, EED" and "Director of the Exposure Evaluation Division" to read "Director, CMD" and "Director of the Chemical Management Division", respectively, wherever the terms appear in § 761.65.

#### § 761.205 [Amended]

d. By revising "Chemical Regulation Branch" to read "Operations Branch" wherever it appears in § 761.205(a)(3) and (d).

#### PART 763—[AMENDED]

##### 2. In part 763:

a. The authority citation for part 763 continues to read as follows:

Authority: 15 U.S.C. 2605 and 2607(c).

##### § 763.109 [Amended]

b. By revising § 763.109 to read as follows:

##### § 763.109 Analyzing friable material.

Local education agencies shall have all samples of friable material analyzed for asbestos using Polarized Light Microscopy (PLM), supplemented where necessary by X-ray Diffraction, in accordance with "Interim Method for the Determination of Asbestiform Minerals in Bulk Insulation Samples," which is found under appendix A of this Subpart. Persons interested in analyzing bulk samples for asbestos can obtain copies of the document by calling 202-554-1404. A list of laboratories capable of conducting analyses of friable materials can be obtained by calling the National Voluntary Accreditation Program of the National Institute of Science and Technology at 301-975-4016. Officials should consult "Asbestos-Containing Materials in School Buildings: A Guidance Document," Part 1, Chapter 6, for further information on analysis of friable materials.

##### § 763.114 [Amended]

c. By revising the telephone number "800-424-9065" to read "202-554-1404" wherever it appears in § 763.114(a)(5).

[FR Doc. 93-6729 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-F

# Proposed Rules

Federal Register

Vol. 58, No. 55

Wednesday, March 24, 1993

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 26

RIN 3150-AE36

### Modifications to Fitness-for-Duty Program Requirements

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) proposes to amend its regulations to modify current Fitness-for-Duty Program (FFD) requirements. The proposed amendments would apply to all licensees authorized to construct or operate a nuclear power reactor pursuant to 10 CFR part 50. The proposed rule is intended to permit licensees to reduce the random testing rate for licensee employees but maintain the 100 percent random testing rate for contractor and vendor employees.

**DATES:** The comment period expires June 22, 1993. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

**ADDRESSES:** Mail comments to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, ATTN: Docketing and Service Branch.

Deliver comments to: One White Flint North, 11555 Rockville Pike, Rockville, Maryland between 7:30 am and 4:15 pm on Federal workdays.

Copies of SECY-92-271, the draft regulatory analysis, and the comments received may be examined at: the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

Copies of NUREG/CR-5758 (Volumes 1 and 2) and NUREG/CR-5784 may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. Copies are also available

from the National Technical Information Service, 5282 Port Royal Road, Springfield, VA 22161. A copy is available for inspection and/or copying for a fee in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Loren L. Bush, Jr., Reactor Safeguards Branch, Division of Radiation Safety and Safeguards, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone: (301) 504-2944.

### SUPPLEMENTARY INFORMATION:

#### Background

The NRC is proposing to amend its regulations governing "Fitness-for-Duty Programs," as part of its continuing effort to improve its regulations.

The NRC has reviewed experiences gained since publication of the current rule on June 7, 1989 (54 FR 24468) and implementation by power reactor licensees on January 3, 1990. The NRC has determined that it is appropriate to permit a reduction in the random testing rate for utility employees but maintain the 100 percent random testing rate for contractors and vendors.

During the FFD rulemaking process, the NRC had specifically invited the public to comment on the rates of random testing (53 FR 36795 at 36796; September 22, 1988). Public comments strongly opposed a proposed 300 percent rate; the Nuclear Management and Resources Council (NUMARC) and most licensees proposed a 100 percent rate. These commenters also recommended that this rate be reevaluated on the basis of utility experience and be reduced to 25 percent, if warranted (54 FR 24468 at 24472; June 7, 1989). As a result, the Commission indicated that it would consider reducing testing rates after several years if it obtained information that experience in the industry with the existing rate had been positive (54 FR 24468 at 24474; June 7, 1989). On November 7, 1991, the Commission directed the staff to report on work that has been done on the deterrent effect of different testing rates with recommendations of the applicability of the work to the nuclear industry.

SECY-92-271 informed the Commission that no research exists that

directly addresses the issue of whether reducing the random testing rate affects the deterrent effect of drug testing and presented options for consideration by the Commission. On October 20, 1992, the Commission instructed the staff to prepare a change to 10 CFR part 26 that would permit licensees to randomly test their employees at a rate equal to 50 percent.

#### Discussion

The purpose of random testing was discussed in the *Federal Register* in the Commission's notice of proposed rulemaking published on September 22, 1988 (53 FR 36795 at 36810). An extract of that discussion follows:

"The purpose of random (unannounced) testing is to provide reasonable assurance that employees are fit for duty by identifying current drug users and by deterring drug users from further use or potential users from initial use. The frequency with which an individual is tested is relevant to both the identification and deterrence goals of the drug testing program. Generally, the more frequent the testing, the greater the deterrent effect and the better the detection capabilities. However, very frequent testing may result in unacceptable economic or social costs. Although there is no research upon which the testing frequency may be based, it seems reasonable to assume that:

- Any form of unannounced testing would provide some level of deterrence.
- There would be little deterrent if the testing dates were predictable and the drug user knew he was not immediately susceptible to another test.
- Testing each day would provide more of a deterrent than testing once each week or month, especially if the daily activity was highly visible.
- Deterrence is related to either the actual or perceived probability of detection.
- The actual probability of detection is related to the type of drug, dose, frequency of use, rate of metabolism and excretion from the body, and the frequency of testing.
- The perceived probability of detection is related to the frequency of testing, the "publicity" given positive findings and sanctions imposed, and the abuser's knowledge of the rate of metabolism and actual probability of detection."

The NRC recognizes that not all workers are deterred and that random testing does contribute significantly to the detection of substance abuse by those few who are not deterred. The workforce may be divided into three

groups concerning the deterrent effect of random testing.

- The vast majority of workers do not abuse substances because of any of several reasons, usually concerns for health. Random testing does not influence the behavior of this group. There would be no deterrent effect.

- A small percentage of workers are chronic abusers. Random testing would have little, if any, influence on this group. There would be no deterrent effect. Random testing would eventually detect these people.

- An unknown percentage of workers are, or could be tempted to be, occasional users and may be able to abstain if properly encouraged. The deterrence effect of random testing would cause them to refrain from initial use or to modify their behavior if they are occasional users. Random testing would have the greatest influence on this group.

The random testing rate has been an issue with other Federally regulated or administered random testing programs. The issue is the balancing of program goals. The optimal random drug testing program is one that maximizes both detection and deterrence of substance abuse while minimizing monetary and social costs (e.g., adverse impacts on employee morale). To maximize detection, other factors remaining constant, it is assumed that more testing will result in more detection. In maximizing deterrence, random testing rates have been influenced by assumptions that the probability of being selected for testing would have a deterrent effect and that the higher the testing rate the greater the deterrent effect (although the incremental deterrent effect would likely diminish as test rates increase). These assumptions are based on both intuition and earlier efforts by the Department of Defense that indicated a greater deterrent effect at higher random testing rates. In minimizing monetary and social costs when establishing a minimum random testing rate, factors such as the level of intrusion on an individual's privacy and the incremental costs of additional testing are considered. In attempting to establish optimal testing rates that are reasonable and consistent with each agency's unique needs, Federal agencies have established programs with random testing rates that vary from 4 percent to 200 percent.

Perceptions of risk are believed to play a large role in deterring substance abuse. For example, from studies of drunk driving and deterrence measures, researchers conclude that the risk of incurring strong sanctions appears to

have a strong deterrent effect on substance abuse. In addition, research on human decisionmaking and risk assessment suggests that an individual's perceptions of the risk of being tested and the risk of drug use being detected are not based on rational calculations of probabilities alone. Individuals tend to overestimate the likelihood of low probability events (being selected for testing) and tend to incorporate into their decisionmaking the information that is most easily recalled.

Deterrence is believed to be a function of the perceived risk of being detected, the severity of the sanction, and the swiftness with which it is applied compared with the gratification derived from the illicit behavior. Several conclusions may be drawn from review of the available literature:

(1) The deterrent effect of random drug and alcohol testing programs may not be sensitive to incremental adjustments in random test rates. While random testing remains critical in deterring drug abuse, it is only one of the forces acting to deter drug use. Other important factors include the elements of a broadbrush program (e.g., awareness training, pre-access and for-cause testing, behavioral observation, counseling, and removals) as well as organizational and workforce demographic factors and drug-specific factors.

(2) Assuming equal testing rates and procedures, there will be a greater deterrent effect when the risks of drug abuse—including the probability of detection—are well understood than when they are not.

(3) Some users will remain undeterred. Based on the findings of the military and research on drunk drivers, some part of the population continues to abuse drugs or alcohol even when detection and sanctions are highly certain. Regardless of the random testing rate, some users may not cease their drug use under any condition. Thus, other program elements, such as behavioral observation, for-cause testing, and employee assistance programs, are important to provide additional assurances to detect and remove chronic drug abusers from the workforce. However, a higher random testing rate would more rapidly detect these undeterred users (see Appendix C to NUREG/CR-5784).

Studies on random testing have found that higher testing and discharge rates may result in higher overall detection of drug abuse in the workforce (see Durbin, et al., 1991). In terms of deterrence, continued drug use by identified users has been shown to be a substantial factor in overall drug use rates,

suggesting that a substantial number of those testing positive for drugs are not deterred (Osborn & Sokolov, 1990; Steloff, 1985).

The NRC considered several alternatives in determining the appropriate random drug testing rate for the nuclear power industry. The NRC considered conducting a study that would reduce the random testing rate of some licensees to 50 percent (experimental sites) and analyze that data against the data of licensees who would continue a 100 percent testing rate (control sites). The experiment would have to run for several years to allow for delayed effects caused by adjusted testing rates and to obtain a sufficient number of test results. The design of the study and the analysis of the results would have taken an additional year. The NRC has decided not to conduct such a study because: (i) The relatively long period of time required to collect and analyze the data would delay the Commission's action on this issue, and (ii) variables from site to site could mask any statistical differences between data from two test groups in the small absolute number of expected positive tests.

The NRC considered conducting an attitudinal study which would attempt to show worker attitudes toward, and their understanding of, random testing. It was hoped that this study would provide a better understanding of how this particular component of the FFD program deters substance abuse and would help determine whether the perceived deterrent effect varies as the rate of random testing varies. The NRC has decided not to conduct this study because:

(i) The appreciable time that would be required to design and administer the survey and obtain OMB approval would delay the Commission's action on the issue, (ii) the study would tap worker attitudes rather than their behavior, and (iii) the results of the survey, by themselves, would not provide a solid basis for changes in the random testing rate.

The NRC also considered awaiting and evaluating the results of the Federal Railroad Administration's test program (56 FR 22905; May 17, 1991) which is now expected to be completed in late 1993. The NRC has decided not to await the results of this study because several factors may limit the application of the study to the nuclear industry:

(i) The railroad industry has fewer units (i.e., there are fewer carriers than there are utilities) and more employees per unit than the nuclear power industry;

(ii) The flexibility provided in part 26 regarding cutoff levels, sanctions, and so forth suggests a potential for substantial variability of the deterrent effects within the nuclear power industry;

(iii) A rail line's employees are located across the country and, thus, are subject to a range of local drug-use patterns and contexts. By contrast, the employees of a particular nuclear power plant tend to be located within a single geographic region, with one prevailing set of local drug-use patterns; and

(iv) The recently reported rate of substance abuse detected through random testing in the railroad industry is quadruple that in the nuclear power industry (approximately 1 percent as against 0.25 percent for power reactor licensee employees for the first 2 years).

Taking into account the uncertainties involved and the low rate of positive tests, the NRC has concluded that lowering the random testing rate from 100 percent to 50 percent would cause little, if any, decrease in the deterrent effect of random testing when applied to

licensee employees, and that the rate of positive random tests for licensee employees is not likely to increase. However, experiences with random testing gained since publication of the rule have shown contractor and vendor employees testing positive at a rate approximately double that for licensee employees. Because of the higher rate of positive tests for contractor and vendor employees, the NRC is not proposing, at this time, to lower the rate for that population. See chart.

#### RANDOM TESTING

	1990 #tests/# positive	1991 #tests/# positive	2-year totals #tests/# positive	2-year positive rate (percent)
Long-Term Contractors/Vendors .....	8,910/044	7,500/023	16,410/067	0.41
Short-Term Contractors/Vendors .....	39,596/229	45,277/267	84,873/496	.58
All Contractors/Vendors .....	48,506/273	52,777/290	101,283/563	1.56
Licensee Employees .....	100,237/277	101,041/220	201,278/497	2.25

<sup>1</sup> The range for contractor employees during CY 1991 was between 0% and 1.53%, with 7 sites having rates greater than 1.0%.

<sup>2</sup> The range for licensee employees during CY 1991 was between 0% and 0.87%, with 5 sites having rates higher than 0.5%.

In conclusion, the NRC believes that the fitness-for-duty program can be revised to permit licensees to lower the random testing rate for licensee employees without significant impact on the overall effectiveness of the program. Therefore, the Commission is proposing that § 26.24(a)(2) be modified to permit licensees to randomly test their employees at an annual rate equal to at least 50 percent. This would not preclude licensees from testing the employee workforce, or portions thereof, at a higher rate. For the present, the minimum rate of testing for contractor and vendor employees, whether under the licensee's program or an approved contractor or vendor program will remain at 100 percent. The NRC will continue to monitor implementation of the rule and will modify the rule in response to industry experience, advances in technology, or other considerations to ensure that the rule is achieving the general performance objectives set forth in 10 CFR 26.10.

Assuming that the deterrent effect of the 50 percent random testing rate were to be about the same as that for a 100 percent rate, the proposed rule could result in a reduction in the number of cases of drug and alcohol use by licensee employees detected each year through random testing. Recognizing this potential reduction in individuals being detected, the NRC is specifically interested in comments as to whether

certain positions critical to the safe operation of a nuclear power plant, such as licensed reactor operators, should be excluded from any reduction of the random testing rate.

#### Bibliography

Durbin, N., Moore, C., Grant, T., Fleming, T., Hunt, P., Martin, R., Murphy, S., Hauth, J., Wilson, R., Bittner, A., Bramwell, A., Macaulay, J., Olson, J., Terrill, E., & Toquam, J. (1991). "Fitness for Duty in the Nuclear Power Industry: A Review of the First Year of Program Performance and an Update of the Technical Issues (NUREG/CR-5784)." Washington, DC: Nuclear Regulatory Commission.

Osborne, C.E., & Sokolov, J.J. (1990). "Drug Use Trends in a Nuclear Power Facility: Data From a Random Screening Program." In S.W. Gust, J.M. Walsh, L.B. Thomas, and D.J. Crouch, (Eds.), *Drugs in the Workplace: Research and Evaluation Data, Volume II*. NIDA Research Monograph No. 100. Rockville, MD: National Institute on Drug Abuse, 25-43.

Stoloff, P.H. (1985). *The Effectiveness of Urinalysis as a Deterrent to Drug Use*, p.11. Washington, DC: Department of the Navy.

#### Environmental Impact: Categorical Exclusion

The NRC has determined that this proposed rule is the type of action described in categorical exclusion 10 CFR 51.22(c)(2). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed rule.

#### Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). This rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

Since the proposed rule would reduce the random drug testing rate for licensee employees from 100 percent to 50 percent, public reporting and recordkeeping burden for the collection of information is expected to be reduced. The resulting reduction in burden is estimated to average 146 hours per site, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the estimated burden reduction or any other aspect of this collection of information, including suggestions for further reducing reporting burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0146), Office of Management and Budget, Washington, DC 20503.



**Regulatory Analysis**

The Commission has prepared a draft regulatory analysis on this proposed rule. The analysis examines the benefits, cost savings, and costs of the alternatives considered by the Commission. The draft analysis is available for a fee at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies may be obtained by writing to the U.S. Nuclear Regulatory Commission, Washington, DC 20555. Single copies of the analysis may be obtained from Loren L. Bush, Jr., Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

The Commission requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the **ADDRESSES** heading.

**Regulatory Flexibility Act Certification**

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule will not have a significant economic impact on a substantial number of small entities. This proposed rule affects only the licensing and operation of nuclear power plants and activities associated with the possession or transportation of Category I material. The companies that own these plants do not fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the Small Business Size Standards issued by the Small Business Administration in 13 CFR part 121.

**Backfit Analysis**

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed rule, and therefore, that a backfit analysis is not required for this proposed rule, because these amendments do not impose more stringent safety requirements on 10 CFR part 50 licensees.

**List of Subjects in 10 CFR Part 26**

Alcohol abuse, Alcohol testing, Appeals, Chemical testing, Drug abuse, Drug testing, Employee assistance programs, Fitness for duty, Management actions, Nuclear power reactors, Protection of information, Reporting and recordkeeping requirements, Sanctions.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 553, the NRC is proposing to adopt the following amendment to 10 CFR part 26.

**PART 26—FITNESS FOR DUTY PROGRAMS**

1. The authority citation for part 26 continues to read as follows:

**Authority:** Secs. 53, 81, 103, 104, 107, 161, 68 Stat. 930, 935, 936, 937, 939, 948, as amended (42 U.S.C. 2073, 2111, 2112, 2133, 2134, 2137, 2201); secs. 201, 202, 206, 88 Stat. 1242, 1244, 1246, as amended (42 U.S.C. 5841, 5842, 5846).

2. In § 26.24, paragraph (a)(2) is revised to read as follows:

**§ 26.24 Chemical testing.**

(a) \* \* \*

(2) Unannounced drug and alcohol tests imposed in a statistically random and unpredictable manner so that all persons in the population subject to testing have an equal probability of being selected and tested. The tests must be administered so that a person completing a test is immediately eligible for another unannounced test. As a minimum, tests must be administered on a nominal weekly frequency and at various times during the day. Random testing of contractor and vendor employees must be conducted at an annual rate equal to at least 100 percent of that workforce. Random testing of licensee employees must be conducted at an annual rate equal to at least 50 percent of that workforce.

\* \* \* \* \*

Dated at Rockville, Maryland, this 18th day of March, 1993.

For the Nuclear Regulatory Commission.

**Samuel J. Chilk,**

*Secretary of the Commission.*

[FR Doc. 93-6680 Filed 3-23-93; 8:45 am]

**BILLING CODE 7590-01-P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 92-NM-221-AD]

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

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to McDonnell Douglas Model DC-10 series airplanes and KC-10A (military) airplanes, that currently requires the implementation of a Structural Inspection Document (SID) program of structural inspections

to detect fatigue cracking, and repair or replacement, as necessary, to ensure continued airworthiness as these airplanes approach the manufacturer's original fatigue design life goal. This action would, among other things, revise the existing SID sampling program to include some new inspection procedures for certain Principal Structural Elements (PSE). This proposal is prompted by new data submitted by the manufacturer indicating that certain revisions to the SID program are necessary in order to increase the confidence level of the statistical program to ensure timely detection of fatigue cracks in PSE's. The actions specified by the proposed AD are intended to prevent fatigue cracking that could compromise the structural integrity of these airplanes.

**DATES:** Comments must be received by May 17, 1993.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 92-NM-221-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from McDonnell Douglas Corporation, P.O. Box 1771, Long Beach, California 90846-1771, Attention: Business Unit Manager, Technical Publications—Technical Administrative Support, C1-L5B. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California 90806-2425.

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

**SUPPLEMENTARY INFORMATION:****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 92-NM-221-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. 92-NM-221-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

#### Discussion

On December 27, 1991, the FAA issued AD 92-02-08, Amendment 39-8144 (57 FR 3931, February 3, 1992), to require structural inspections to detect fatigue cracking, reporting of the inspection results, and repair or replacement, as necessary, to ensure continued airworthiness as these airplanes approach the manufacturer's original fatigue design life goal. That action was prompted by new data submitted by the manufacturer indicating that additional inspections and an expanded sample size are necessary to increase the confidence level of the statistical program to ensure timely detection of cracks in Principal Structural Elements (PSE's). The requirements of that AD are intended to prevent fatigue cracking that could compromise the structural integrity of these airplanes.

Since the issuance of that AD, the manufacturer has issued McDonnell Douglas Report No. L26-012, "DC-10 Supplemental Inspection Document (SID)," Volume I, Revision 3, dated December 1992; Volume II, Revision 3, dated December 1992; and Volume III-92, dated October 1992. This revision of the SID revises the sampling program by:

- a. Clarifying some PSE titles;
- b. Moving portions of some PSE's under a different PSE designator;
- c. Clarifying some non-destructive inspection (NDI) procedures;
- d. Including some new NDI procedures for previously existing PSE's; and
- e. Updating the planning data contained in Volume III.

The FAA has reviewed and approved the revised SID and has determined that these revised procedures must be incorporated into the affected operators' SID programs in order to provide an acceptable level of confidence that cracks in PSE's do not exist in the fleet.

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would supersede AD 92-02-08 to clarify some PSE titles and NDI procedures, add certain new NDI procedures for previously existing PSE's, and update the planning data. The actions would be required to be accomplished in accordance with the revised SID described previously.

There are approximately 426 Model DC-10 series airplanes and KC-10A (military) airplanes of the affected design in the worldwide fleet. The FAA estimates that 269 airplanes of U.S. registry and 10 U.S. operators would be affected by this proposed AD. Incorporation of the SID program into an operator's maintenance program, as required by AD 92-02-08, is estimated to necessitate 1,250 work hours (per operator), at an average labor cost of \$55 per work hour. Based on these figures, the cost to the 10 affected U.S. operators to incorporate the SID program is estimated to be \$687,500.

The incorporation of the additional procedures proposed in this AD action would require approximately 20 additional work hours per operator to accomplish, at an average labor cost of \$55 per work hour. Based on these figures, the cost to the 10 affected U.S. operators to incorporate these additional procedures into the SID program into an operator's maintenance program is estimated to be \$11,000.

The recurring inspection costs, as required by AD 92-02-08, are estimated to be 355 work hours per airplane per year, at an average labor cost of \$55 per work hour. Based on these figures, the recurring inspection costs required by AD 92-02-08 is estimated to be \$19,525 per airplane, or \$5,252,225 for the affected U.S. fleet.

The recurring inspection procedures added to the program by this proposed AD action would require approximately 10 additional work hours per airplane

per year to accomplish. The average labor charge would be \$55 per work hour. Based on these figures, the additional recurring inspection cost impact added by this AD on U.S. operators is estimated to be \$550 per airplane, or \$147,950 for the affected U.S. fleet.

Based on the above figures, the total cost impact of this AD is estimated to be \$5,411,175 for the first year, and \$5,390,825 for each year thereafter.

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 "major rule" under Executive Order 12291; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES."

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### The Proposed Amendment

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

#### PART 39—AIRWORTHINESS DIRECTIVES

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

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

#### § 39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-8144 (57 FR 3931, February 3, 1992), and by adding

a new airworthiness directive (AD), to read as follows:

**McDonnell Douglas:** Docket 92-NM-221-AD. Supersedes AD 92-02-08, Amendment 39-8144.

**Applicability:** Model DC-10 series airplanes and KC-10A (Military) airplanes, certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To ensure the continuing structural integrity of these airplanes, accomplish the following:

(a) Within 6 months after March 9, 1992 (the effective date of AD 92-02-08, Amendment 39-8144), incorporate a revision into the FAA-approved maintenance inspection program which provides for inspection(s) of the Principal Structural Elements (PSE's) defined in Section 2 of Volume I of McDonnell Douglas Report No. L26-012, "DC-10 Supplemental Inspection Document (SID)," Revision 1, dated May 1990, in accordance with Section 2 of Volume III-90, dated May 1990, or Section 2 of Volume III-91, dated December 1991, of the SID. The non-destructive inspection (NDI) techniques set forth in Section 2 and Section 4 of Volume II, Revision 1, dated May 1990, of the SID provide acceptable methods for accomplishing the inspections required by this paragraph.

All inspection results (negative or positive) must be reported to McDonnell Douglas, in accordance with the instructions contained in Section 2 of Volume III-90, dated May 1990; or Section 2 of Volume III-91, dated December 1991, of the SID. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120-0056.

(b) Within 6 months after the effective date of this AD, replace the revision of the FAA-approved maintenance inspection program required by paragraph (a) of this AD, with a revision that provides for inspection(s) of the PSE's defined in Section 2 of Volume I of McDonnell Douglas Report No. L26-012, "DC-10 Supplemental Inspection Document (SID)," Revision 3, dated December 1992, in accordance with Section 2 of Volume III-92, dated October 1992, of the SID. The NDI techniques set forth in Section 2 and Section 4 of Volume II, Revision 3, dated December 1992, of the SID provide acceptable methods for accomplishing the inspections required by this paragraph. All inspection results (negative or positive) must be reported to McDonnell Douglas, in accordance with the instructions contained in Section 2 of Volume III-92, dated October 1992, of the SID. Information collection requirements contained in this regulation have been approved by the OMB under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) and have been assigned OMB Control Number 2120-0056.

(c) Any cracked structure detected during the inspections required by paragraph (a) or (b) of this AD must be repaired before further flight, in accordance with a method approved by the Manager, Los Angeles Aircraft

Certification Office (ACO), FAA, Transport Airplane Directorate.

**Note:** Requests for approval of any PSE repair that would affect the FAA-approved maintenance inspection program that is required by this AD should include a damage tolerance assessment for that PSE repair.

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

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

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

Issued in Renton, Washington, on March 18, 1993.

**Darrell M. Pederson,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 93-6670 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-13-P

## CONSUMER PRODUCT SAFETY COMMISSION

### 16 CFR Part 1204

#### Regulatory Flexibility Act Review, Safety Standard for Omnidirectional Citizens Band Base Station Antennas

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Notice of review and availability of report.

**SUMMARY:** The Commission has completed its review of the Safety Standard for Omnidirectional Citizens Band Base Station Antennas in accordance with provisions of the Regulatory Flexibility Act. The purpose of this review is to determine if this rule should be modified or revoked to minimize any significant economic impact it may have on small businesses.

The Commission has considered provisions of the standard, its economic impact on firms subject to its requirements, and other relevant information. The Commission has determined that the standard has not had a significant economic impact on small businesses, and for that reason no further action is warranted by the Regulatory Flexibility Act. A report on this rule review, entitled "Regulatory Flexibility Act Review, Consumer

Product Safety Rule on Omnidirectional Citizens Band Base Station Antennas," is available upon request.

**ADDRESSES:** Requests for copies of the report should be addressed to the Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207.

**FOR FURTHER INFORMATION CONTACT:** Anthony C. Homan, Directorate for Economic Analysis, Consumer Product Safety Commission, Washington, DC 20207, telephone (301) 504-0962; or Allen F. Brauninger, Attorney, Office of the General Counsel, Consumer Product Safety Commission, Washington, DC 20207, telephone (301) 504-0980.

**SUPPLEMENTARY INFORMATION:** The Regulatory Flexibility Act (RFA) (5 U.S.C. chapter 6) became effective on January 1, 1981, and generally requires Federal agencies to consider the economic impact of their rules on small entities. The term "small entity" is defined by the RFA to include small businesses, small not-for-profit organizations, and small counties, cities and other local governmental jurisdictions. Additionally, section 610 of the RFA requires agencies to review periodically those rules issued after the effective date of the RFA which have a "significant economic impact upon a substantial number of small entities." The purpose of this review is to determine whether the rules under consideration should be continued without change, amended, or revoked, consistent with the purposes of the statutes which they implement, to minimize any significant economic impact which they may have on small entities.

In the Federal Register of July 16, 1992 (57 FR 31467), the Commission announced that it would review the Safety Standard for Omnidirectional Citizens Band Base Station Antennas in accordance with provisions of section 610 of the RFA. The standard was issued under provisions of the Consumer Product Safety Act (CPSA) (15 U.S.C. 2051 *et seq.*) and is codified at 16 CFR part 1204.

The notice of July 16, 1992, gave a brief description of the provisions of the standard, the need for the rule, and its legal basis. The notice also invited written comment on the rule under consideration. No comments were received.

After considering the provisions of the standard and information about their economic effect on the regulated industry, the Commission finds that the standard has not had a significant economic impact on a substantial number of small entities, including

small businesses. For that reason, the Commission concludes that no further action with regard to the standard is warranted by section 610 of the RFA.

The Commission has prepared a report of this RFA rule review. This report, entitled "Regulatory Flexibility Act Review, Consumer Product Safety Rule on Omnidirectional Citizens Band Base Station Antennas," is available without charge by writing to the Office of the Secretary, Consumer Product Safety Commission, Washington DC 20207, or by calling (301) 504-0800.

Sadye E. Dunn,

Secretary, Consumer Product Safety Commission.

[FR Doc. 93-6747 Filed 3-23-93; 8:45 am]

BILLING CODE 6335-01-F

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

#### 18 CFR Chapter I

[Docket No. RM93-11-000]

#### Revisions to Oil Pipeline Regulations Pursuant to the Energy Policy Act of 1992

Issued: March 18, 1993.

**AGENCY:** Federal Energy Regulatory Commission, Energy.

**ACTION:** Commission staff proposal.

**SUMMARY:** The Federal Energy Regulatory Commission Staff has made available to the public a Staff proposal for revision of the regulation of oil pipelines to implement the requirements of the Energy Policy Act of 1992.

**DATES:** An original and 14 copies of written comments must be received on or before May 3, 1993.

**ADDRESSES:** All comments should refer to Docket No. RM93-11-000 and should be addressed to: Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426.

**FOR FURTHER INFORMATION CONTACT:** Harris S. Wood, Office of the General Counsel, Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, Telephone: (202) 208-0696.

#### SUPPLEMENTARY INFORMATION:

##### Notice to the Public

The Federal Energy Regulatory Commission Staff has made available to the public a Staff proposal for revision of the regulation of oil pipelines to

implement the requirements of the Energy Policy Act of 1992.

Copies of the Staff's proposal can be obtained from the Office of Public Information, room 3104, 941 North Capitol Street, NE., Washington, DC 20426. Any person desiring to file comments should submit an original and fourteen (14) copies of such comments to the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426 not later than May 3, 1993, and should refer to Docket No. RM93-11-000.

The full text of the Staff's proposal also is available through the Commission Issuance Posting System (CIPS), an electronic bulletin board service, which provides access to the texts of formal documents issued by the Commission. CIPS is available at no charge to the user and may be accessed using a personal computer with a modem by dialing (202) 208-1397. To access CIPS, communications software should be set to use 300, 1200, or 2400 bps, full duplex, no parity, 8 data bits, and 1 stop bit. CIPS can also be accessed at 9600 bps by dialing (202) 208-1781. The full text of this proposal will be available on CIPS for 30 days from the date of issuance. The complete text on diskette in WordPerfect format may also be purchased from the Commission's copy contractor, La Dorn Systems Corporation, also located in room 3104, 941 North Capitol Street, NE., Washington, DC 20426.

Lois D. Cashell,

Secretary.

[FR Doc. 93-6658 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

#### 23 CFR Chapter I

[FHWA/FTA Docket Nos. 92-14, 93-4, 93-5]

### Federal Transit Administration

#### 49 CFR Chapter VI

FHWA RIN 2125-AC97; FTA RIN 2132-AA47; FHWA RIN 2125-AC95; FTA RIN 2132-AA44; FHWA RIN 2125-AC94; FTA RIN 2132-AA48

#### Traffic Congestion, Public Transportation Facilities and Equipment, and Intermodal Transportation Facilities and Systems Management Systems; Metropolitan Planning; Statewide Transportation Planning; Public Meetings

**AGENCIES:** Federal Highway Administration (FHWA), Federal Transit Administration (FTA), DOT.

**ACTION:** Request for comments and notice of public meetings.

**SUMMARY:** The FHWA and the FTA announce that they will hold four meetings on three recently issued proposed regulations on metropolitan planning, Statewide transportation planning, and management systems. The purpose of the meetings is to obtain public input for development of final rules. Moreover, the FHWA and the FTA are soliciting additional comments on several specific issues related to the proposed metropolitan and statewide transportation planning requirements. **DATES:** Comments should be submitted on or before May 3, 1993. The public meetings will be held at the following locations and dates:

March 31-April 1, 1993

San Francisco Marriott Airport Hotel, 1800 Old Bayshore Highway, Burlingame, California 94010

April 7-8, 1993

Atlanta Airport Marriott, 4711 Best Road, College Park, Georgia, 30337

April 14-15, 1993

Wyndham Franklin Plaza, 17th and Race Street, Philadelphia, Pennsylvania 19103

April 20-21, 1993

Kansas City Convention Center, 301 West 13th Street, Kansas City, Missouri 64105

**FOR FURTHER INFORMATION CONTACT:** For FHWA: Mr. Reid Alsop, FHWA Office of the Chief Counsel (HCC-31), (202) 366-1372 or Mr. Sheldon Edner, Planning Operations Branch (HEP-21), (202) 366-4066. For the FTA: Mr. Paul Verchinski, Resource Management Division (TGM-

21), (202) 366-6385. Both agencies are located at 400 Seventh Street, SW., Washington, DC 20590. Office hours for FHWA are 7:45 a.m. to 4:15 p.m., e.t., and for the FTA are from 8:30 a.m. to 5 p.m., e.t., Monday through Friday, except legal Federal holidays.

**SUPPLEMENTARY INFORMATION:** Sections 1024, 1025 and 3012 of Public Law 102-240, 105 Stat. 1914, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), amended sections 134 and 135 of title 23 U.S.C. and section 8 of the Federal Transit Act (49 U.S.C. app. 1607) which require continuing, comprehensive, and coordinated metropolitan and statewide transportation planning processes. Section 1034 of the ISTEA also added section 303, Management Systems, to title 23 U.S.C. The FHWA and the FTA have issued NPRMs (see *Federal Register* March 2, 1993, Parts II, III, and IV) for the purposes of revising existing regulations on metropolitan planning and issuing new regulations for statewide planning and the management systems. To facilitate and encourage public input to the development of final rules, these meetings are being held to receive oral and written suggestions regarding the proposed rules. Summaries of the meetings announced in this notice will be placed in the appropriate rulemaking dockets.

#### Meeting Itinerary

The first day of each 1½-day meeting will cover the proposed metropolitan and Statewide transportation planning regulations. The relationship of the management systems to the planning processes will also be discussed. The morning of the second day will cover the traffic congestion, public transportation facilities and equipment, and intermodal transportation facilities and systems management systems as well as the general provisions in the proposed regulations.

The schedule for each 1½-day meeting is as follows (all times are local):

#### Day 1

9 a.m.

Overview of Metropolitan Planning and Statewide Planning NPRMs and Coordination of Management Systems with the Planning Processes

10 a.m.

Session for Comments on Metropolitan Planning and Statewide Planning (If attendance warrants, two concurrent sessions, metropolitan and statewide, will be held.)

12 p.m.

Break for Lunch

1 p.m.

Session for Comments (continued)

Day 2

8:30 a.m.

Overview of General, Traffic Congestion, Public Transportation, and Intermodal Management Systems provisions of the Proposed Regulations

9:30 a.m.

Comments on General, Traffic Congestion, Public Transportation, and Intermodal Management Systems provisions of the Proposed Regulations

It should be noted that the meetings are scheduled to end no later than 5 p.m. on the first day and noon on the second day, but that they will end sooner if no additional commenters remain to be heard. Therefore, anyone desiring to comment should plan to attend the entire session of interest. Scheduling conflicts at the Philadelphia location will require that the first day session end no later than 4 p.m. The second day schedule will be extended until 1 p.m. to accommodate this change, if necessary.

The FTA and the FHWA may hold a fifth meeting to consider further the issues raised in the meetings announced in this notice. The meeting would be held in Washington, DC, at a time and location to be announced.

#### Meeting Procedures

1. The meetings will involve brief presentations by the FHWA and the FTA staff on the legislative requirements and proposed rules on the metropolitan and statewide planning and on the general, traffic congestion, public transportation facilities and equipment, and intermodal transportation facilities and systems subparts of the proposed management systems regulations.

2. The meetings are designed to solicit public views and information on the implementation of sections 1024, 1025, 3012, and 1034 of the ISTEA. The meetings will be conducted in an informal and nonadversarial manner.

3. Oral statements will be received from the public during the meetings as time permits. All speakers, exclusive of the FHWA and the FTA representatives, will be limited to a five-minute statement to provide an opportunity for as many individuals as possible to make statements at the meetings. If time permits, speakers may be allowed additional time.

4. Speakers are encouraged to submit written statements. Written statements from attendees who do not speak will be accepted at the meetings.

5. Any statements made by the meeting officers or any Federal

representative to clarify issues during the meeting should not be construed as the position of the FHWA or the FTA with respect to the content of the final rules.

6. Copies of written statements and a summary of the oral testimony will be placed in the appropriate docket (or dockets) according to subject area: 92-14 for Management Systems; 93-4 for Metropolitan Planning; or 93-5 for Statewide Transportation Planning.

In addition to issues noted in the preambles of the metropolitan and statewide planning NPRMs, the FTA and the FHWA are soliciting comments on the following additional issues:

1. The approach to certification of planning processes in Transportation Management Areas (TMA) proposed in the metropolitan planning NPRM would permit the FHWA and the FTA to recognize the diversity of State and local operating contexts. In the final regulation, an option might be to specify in detail the minimum criteria and processes that must be met for certification. If such an option were adopted, should failure to comply with every provision of the criteria or step of the process automatically lead to not certifying the TMA planning process? Is this the preferable option?

2. States and Metropolitan Planning Organizations (MPOs) would be required by the proposed regulations to develop programs and, for MPOs, plans based on funding sources that can reasonably be expected to be available. Comments are sought on what funding sources can reasonably be expected to be available. Should only funding sources that are currently in place be considered reasonably available?

3. The proposed rule would allow for locally defined procedures for ensuring public participation in the planning process. Should a more detailed requirement for public participation, including federally specified minimum requirements, be adopted?

4. In order to recognize the diversity of organizational structure and procedures among the States, the proposed rules would permit the Governor to delegate approval authority for certain aspects of transportation planning and programming. The FHWA and the FTA believe that this approach reflects the appropriate partnership relation between the Federal government and the individual States, conforms to the requirements of Executive Order 12612 on Federalism, and is consistent with the approach taken by the agencies in other similar situations. Nevertheless, concerns have been raised as to whether this approach provides sufficient opportunity for

participation by other interested parties, including public health, environmental, economic development, and land use agencies. Should the DOT agencies adopt an alternative that would require that Governors exercise this authority personally, without delegation? Alternately, if delegation by the Governor is permitted, should there be a public or interagency coordination process required?

5. In an effort to structure a phase-in process, as required by 23 U.S.C. 134(i), and to recognize the legislatively mandated deadline for developing the required management systems, the proposed rules specify an interim congestion management system (CMS). We invite comments on this approach and any suggestions for other approaches to phasing-in the CMS provision. We also seek comments as to whether projects that significantly increase capacity for single occupant vehicles in TMAs that are non-attainment for carbon monoxide and ozone should be deferred until a CMS is fully implemented or if these projects should be allowed to proceed with Federal funds if they result from an interim CMS.

6. The metropolitan and statewide planning NPRMs are designed around a cooperative linkage between MPO and State transportation agencies. Does the proposed linkage provide a workable arrangement to accommodate the diversity of processes and authority across all States?

7. Provision is made in the proposed metropolitan planning NPRM for "simplified" planning procedures in small urbanized areas that have not been designated nonattainment areas for ozone or carbon monoxide. Should the proposed rules provide more detailed specifications as to where this option can be utilized?

8. The metropolitan planning NPRM retains the current policy on the make-up of MPOs that relies on the Governor and officials of general purpose governments cooperatively agreeing to form and procedures followed. In the spirit of a cooperative planning process, state and local officials are expected to develop a mutually acceptable organizational structure and representation. Recent correspondence to the Department has raised questions regarding this approach, specifically in the light of the new programming responsibilities of the MPOs. Comments on the desirability of the present approach, possible alternatives, and the role of the FHWA and the FTA in specifying alternatives are being solicited.

Both agencies encourage comments on these and any other issues of concern to the general public and agencies/interests involved or concerned with transportation issues. The FHWA and the FTA recently received an undated paper, entitled Key Concerns with ISTEA Metropolitan Planning, prepared by the Surface Transportation Policy Project, that addresses some of the issues discussed above. A copy of this has been placed in all three Dockets (92-14, 93-4, 93-5) for public review.

**Authority:** 23 U.S.C. 134, 135, 303, and 315; 49 U.S.C. app. 1607; 49 CFR 1.48.

Issued on: March 19, 1993.

**E. Dean Carlson,**  
*Executive Director, Federal Highway Administration.*

**Robert H. McManus,**  
*Acting Administrator, Federal Transit Administration.*

[FR Doc. 93-6902 Filed 3-22-93; 2:59 pm]

**BILLING CODE 4910-22-M**

## DEPARTMENT OF THE TREASURY

### Internal Revenue Service

#### 26 CFR Part 1

[PS-002-89]

RIN 1545-AM92

#### Research or Experimental Expenditures; Hearing

**AGENCY:** Internal Revenue Service, Treasury.

**ACTION:** Notice of public hearing on proposed regulations.

**SUMMARY:** This document provides notice of a public hearing on proposed Income Tax Regulations that clarify the definition of research or experimental expenditures and provide a new rule interpreting the reasonableness requirement of section 174(e), added to the Code by the Revenue Reconciliation Act of 1989.

**DATES:** The public hearing will be held on Friday, June 18, 1993, beginning at 10 a.m. Requests to speak and outlines of oral comments must be received by Friday, May 28, 1993.

**ADDRESSES:** The public hearing will be held in the IRS Auditorium, Seventh Floor, 7400 Corridor, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC. Requests to speak and outlines of oral comments should be submitted to the Internal Revenue Service, P.O. Box 7604, Ben Franklin Station, Attn: CC:CORP:T:R [PS-002-89], room 5228, Washington, DC 20044.

**FOR FURTHER INFORMATION CONTACT:** Mike Slaughter of the Regulations Unit, Assistant Chief Counsel (Corporate), 202-622-7190 (not a toll-free number).

**SUPPLEMENTARY INFORMATION:** The subject of the public hearing is proposed regulations under section 174 of the Internal Revenue Code of 1986 (Code) and supersedes the amendments to the regulations proposed in 1989. The proposed regulations appear elsewhere in this issue of the *Federal Register*.

The rules of § 601.601(a)(3) of the "Statement of Procedural Rules" (26 CFR part 601) shall apply with respect to the public hearing. Persons who have submitted written comments within the time prescribed in the notice of proposed rulemaking and who also desire to present oral comments at the hearing on the proposed regulations should submit not later than Friday, May 28, 1993, an outline of the oral comments/testimony to be presented at the hearing and the time they wish to devote to each subject.

Each speaker (or group of speakers representing a single entity) will be limited to 10 minutes for an oral presentation exclusive of the time consumed by the questions from the panel for the government and answers to these questions.

Because of controlled access restrictions, attendees cannot be admitted beyond the lobby of the Internal Revenue Building until 9:45 a.m.

An agenda showing the scheduling of the speakers will be made after outlines are received from the persons testifying. Copies of the agenda will be available free of charge at the hearing.

By direction of the Commissioner of Internal Revenue:

**Dale D. Goode,**  
*Federal Register Liaison Officer, Assistant Chief Counsel (Corporate).*

[FR Doc. 93-6641 Filed 3-23-93; 8:45 am]

**BILLING CODE 4830-01-M**

#### 26 CFR Part 1

[PS-56-90]

RIN 1545-AO78

#### Application of Section 514(c)(9)(E) of the Internal Revenue Code to Partnerships in Which One or More (But Not All) of the Partners Are Qualified Organizations Within the Meaning of Section 514(c)(9)(C); Hearing Cancellation

**AGENCY:** Internal Revenue Service, Treasury.

**ACTION:** Cancellation of notice of public hearing on proposed regulations.

**SUMMARY:** This document provides notice of cancellation of a public hearing on proposed regulations relating to the application of section 514(c)(9)(E) of the Internal Revenue Code to partnerships in which one or more (but not all) of the partners are qualified tax-exempt organizations within the meaning of section 514(c)(9)(C).

**DATES:** The public hearing originally scheduled for Wednesday, March 31, 1993, beginning at 10 a.m. is cancelled.

**FOR FURTHER INFORMATION CONTACT:** Carol Savage of the Regulations Unit, Assistant Chief Counsel (Corporate), 202 622-8452 or 202 622-7180 (not toll-free numbers).

**SUPPLEMENTARY INFORMATION:** The subject of the public hearing is proposed regulations under section 514(c)(9)(E) of the Internal Revenue Code. A notice of public hearing appearing in the *Federal Register* for Wednesday, December 30, 1992 (57 FR 62250), announced that the public hearing on the proposed regulations would be held on Wednesday, March 31, 1993, beginning at 10 a.m., in the Internal Revenue Service Auditorium, Seventh Floor, 7400 Corridor, Internal Revenue Service Building, 1111 Constitution Avenue, NW., Washington, DC.

The public hearing scheduled for Wednesday, March 31, 1993, has been cancelled.

**Dale D. Goode,**

*Federal Register Liaison Officer, Assistant Chief Counsel (Corporate).*

[FR Doc. 93-6626 Filed 3-23-93; 8:45 am]

BILLING CODE 4830-01-M

## 26 CFR Part 1

[PS-002-89]

RIN 1545-AM92

### Research or Experimental Expenditures

**AGENCY:** Internal Revenue Service, Treasury.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** This document proposes amendments to the Income Tax Regulations under section 174 of the Internal Revenue Code of 1986 (Code) and supersedes the amendments to the regulations proposed in 1989. The amendments proposed in this document clarify the definition of research or experimental expenditures. The proposed amendments also provide a new rule interpreting the reasonableness requirement of section 174(e), added to

the Code by the Revenue Reconciliation Act of 1989.

**DATES:** Written comments, requests to appear, and outlines of oral comments to be presented at a public hearing scheduled for June 18, 1993, at 10 a.m., must be received by May 28, 1993. See notice of hearing published elsewhere in this issue of the *Federal Register*.

**ADDRESSES:** Send comments, requests to appear at the public hearing, and outlines to: Internal Revenue Service, P.O. Box 7604 Ben Franklin Station, Attention: CC:CORP:T:R (PS-002-89), Room 5228, Washington, DC 20044. The public hearing will be held in the IRS Auditorium, Seventh Floor, 7400 Corridor, Internal Revenue Building, 1111 Constitution Avenue, NW., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Concerning the hearing, Michael Slaughter, at 202-622-7190 (not a toll-free number); concerning the proposed regulations, David S. Hudson, 202-622-3120 (not a toll-free number).

#### SUPPLEMENTARY INFORMATION:

##### Background

Section 174 of the Code provides two alternative methods that taxpayers may use to account for research or experimental expenditures. A taxpayer may either deduct the expenditures in the year in which they are paid or incurred, or treat the expenditures as deferred expenses, amortizable over a period of at least 60 months. In 1957, the Internal Revenue Service (Service) adopted § 1.174-2(a)(1), which defines the term research or experimental expenditures as expenditures "which represent research and development costs in the experimental or laboratory sense." 22 FR 7901 (1957).

In 1981, as part of the Economic Recovery Tax Act of 1981 (ERTA), Congress enacted section 44F of the Code, which provided a tax credit to taxpayers for incremental expenditures for qualified research. Section 44F provided that the term qualified research generally had the same meaning as the term research or experimental, as used in section 174. In its report on ERTA, the Senate Finance Committee expressed its anticipation that the Treasury Department and the Service "will provide additional guidance, not inconsistent with the existing regulations, defining qualifying research for purposes of new section 44F and section 174." S. Rep. No. 144, 97th Cong., 1st Sess. 81 (1981).

In 1983, the Service proposed a new regulation defining the term research or experimental expenditures for purposes of section 174. See 48 FR 2790 (1983).

The Service received comments on the 1983 proposed regulation, and, on April 14, 1983, held a public hearing concerning the proposed regulation.

In 1989, in response to comments received on the 1983 proposed regulation, the Service proposed another new regulation that superseded the 1983 proposed regulation. See 54 FR 21224 (1989). The Service received comments on the 1989 proposed regulation, and, on December 5, 1989, held a public hearing concerning the proposed regulation.

#### Explanation of Provisions

##### A. Definition of Research or Experimental Expenditures

The 1989 proposed regulation provided that research or experimental expenditures generally did not include costs paid or incurred for developing a new product or property after the basic design specification of the product or property was met. After that time, expenditures would have qualified as research or experimental only if the expenditures were made to cure significant design defects, obtain significant cost reductions, or achieve significantly enhanced function or performance levels. Thus, the 1989 proposed regulation conditioned qualification under section 174 on the stage in the product development process in which expenditures were incurred. Commentators argued that the "time-line" approach of the 1989 proposed regulation was unrealistic because progress in research and development is often achieved only in small, incremental steps. Thus, the commentators argued that it would be difficult to determine when a basic design specification is established, and whether subsequent design changes are significant.

The Service has determined that the definition of research or experimental expenditures provided in the existing regulations should be retained. The few amendments to section 174 since its enactment do not require any modification of that long-standing definition. Further, Congress, in enacting the research credit in 1981, anticipated that any additional guidance regarding the definition not be "inconsistent with the existing regulations." S. Rep. No. 144, 97th Cong., 1st Sess., 81 (1981). Thus, the amendments proposed by this document do not adopt the time-line approach of the 1989 proposed regulation, and continue to define research or experimental expenditures as expenditures "which represent research and development costs in the

experimental or laboratory sense." The proposed amendments merely provide further guidance regarding the application of the existing definition of research or experimental expenditures. The Proposed amendments clarify that expenditures represent research and development costs in the experimental or laboratory sense if the expenditures are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information reasonably available to the taxpayer does not establish the capability or method for developing or improving the product.

Although the proposed amendments merely clarify, rather than change, the definition of research or experimental expenditures, the further guidance provided by the proposed amendments serves three important functions. First, the proposed amendments focus the determination of whether expenditures qualify as research or experimental expenditures. Second, by focusing this determination, the proposed amendments implicitly alert taxpayers to the type of supporting documentation that is helpful in substantiating the treatment of expenditures as research or experimental expenditures. Third, as is implicit under the existing regulations, the proposed amendments provide that the determination of whether expenditures qualify as research or experimental expenditures is based on the nature of the activities funded by the expenditures. The proposed amendments make clear that the nature of the product or improvement being developed and the level of technological advancement brought about by the research activities are not considered in determining if the costs for the activities are research or experimental expenditures.

#### *B. Treatment of Computer Software*

In Revenue Procedure 69-21, 1969-2 C.B. 303, the Service announced that, as a matter of administrative practice, it would allow taxpayers to treat software development costs in a manner similar to the manner research or experimental expenditures are treated under section 174. The 1983 proposed regulation, however, would have provided additional conditions on the qualification of software development costs as research or experimental expenditures beyond those applicable to other products.

In the preamble to the 1989 proposed regulation, the Service announced that it is studying the continuing validity of Rev. Proc. 69-21. The Service has no

present intention of changing its administrative position contained in Rev. Proc. 69-21, but continues to study its viability. Taxpayers may continue to rely on Rev. Proc. 69-21. The amendments proposed in this document do not provide additional conditions applicable to computer software development costs. The Service again invites comments on the proper tax accounting treatment of software development costs that do not qualify as research or experimental expenditures.

#### *C. Excluded Expenditures*

Section 1.174-2(a)(3) of the 1989 proposed regulation provided a list of activities the costs of which would not qualify as research or experimental expenditures. Although some of these exclusions are already provided in the existing regulations, six of the exclusions proposed in 1989 were new. Among the six new excluded activities were activities relating to the taxpayer's internal management functions, activities not directed at the functional aspects of a product, and the adaptation of an existing capability to a particular requirement or customer's need.

The amendments proposed by this document retain the exclusions provided in the existing regulations and do not contain the six additional exclusions proposed in 1989. Therefore, expenditures for any of these six activities qualify as research or experimental expenditures if they fall within the general definition of the term and are not covered by one of the existing exclusions. For example, expenditures for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product qualify as research or experimental expenditures even though the product is intended for the taxpayer's own internal use for management functions, or the expenditures relate to nonfunctional aspects of the product. Similarly, expenditures incurred in connection with the adaptation of a product to a particular requirement or customer's needs would qualify as research or experimental expenditures if the taxpayer is uncertain as to the capability or method of accomplishing the adaptation.

#### *D. Reasonableness of Research or Experimental Expenditures*

The amendments proposed by this document provide guidance regarding section 174(e) of the Code. Section 174(e) was added to the Code by the Revenue Reconciliation Act of 1989 to clarify that research expenditures are

deductible under section 174 only to the extent that they are reasonable under the circumstances. Congress intended that the reasonableness requirement of section 174(e) parallel the reasonable allowance requirement for salaries and other compensation in section 162(a)(1), in that, amounts supposedly paid for research may be recharacterized as disguised dividends, gifts, loans, or other similar payments. Congress did not intend that the reasonableness requirement be used to question whether research activities themselves are of a reasonable type or nature. See H.R. Rep. No. 247, 101 Cong., 1st Sess. 1203 n.12 (1989). The proposed amendment relating to section 174(e) closely follows the language of the legislative history.

#### *E. Withdrawal of Prior Proposed Regulations*

The amendments to the regulations proposed in 1983 (47 FR 2790) and 1989 (54 FR 21224) are withdrawn by this document.

#### *Proposed Effective Date*

These amendments are proposed to be effective for taxable years beginning after [the date the amendments are published as final regulations in the *Federal Register*].

#### *Special Analyses*

It has been determined that these proposed rules are not major rules as defined in Executive Order 12291. Therefore, a Regulatory Impact Analysis is not required. It has also been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) and the Regulatory Flexibility Act (5 U.S.C. chapter 6) do not apply to these regulations, and, therefore, an initial Regulatory Flexibility Analysis is not required. Pursuant to section 7805(f) of the Internal Revenue Code, these regulations will be submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on their impact on small business.

#### *Comments and Requests for a Public Hearing*

Before adopting these proposed regulations, consideration will be given to any written comments that are submitted timely to the Internal Revenue Service (preferably a signed original and eight copies). All comments will be available for public inspection and copying. Written comments, requests to appear, and outlines of oral comments to be presented at a public hearing scheduled for June 18, 1993, at 10 a.m., must be received by May 28, 1993. See the notice of public hearing



published elsewhere in this issue of the Federal Register.

#### Drafting Information

The principal author of these proposed regulations is David S. Hudson of the Office of the Assistant Chief Counsel (Passthroughs and Special Industries). However, personnel from other offices of the Internal Revenue Service and the Treasury Department participated in their development.

#### List of Subjects in 26 CFR 1.161-1 Through 1.194-4

Income taxes, Reporting and recordkeeping requirements.

#### Proposed Amendments to the Regulations

Accordingly, 26 CFR part 1 is proposed to be amended as follows:

#### PART 1—INCOME TAX; TAXABLE YEARS BEGINNING AFTER DECEMBER 31, 1953

**Paragraph 1.** The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 \* \* \*

**Par. 2.** Section 1.174-2 is amended as follows:

1. Paragraph (a)(1) is revised.
2. Paragraphs (a) (2) and (3) are redesignated as paragraphs (a) (7) and (8), respectively.
3. New paragraphs (a) (2) through (6) are added.
4. Paragraph (c) is amended by removing the reference "sections 615" and adding "sections 617" in its place.
5. The additions and revisions read as follows:

#### § 1.174-2 Definition of research and experimental expenditures.

(a) *In general*—(1) The term *research or experimental expenditures*, as used in section 174, means expenditures incurred in connection with the taxpayer's trade or business which represent research and development costs in the experimental or laboratory sense. The term generally includes all such costs incident to the development or improvement of a product. The term includes the costs of obtaining a patent, such as attorneys' fees expended in making and perfecting a patent application. Expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information

reasonably available to the taxpayer does not establish the capability or method for developing or improving the product. Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents.

(2) For purposes of this section, the term *product* includes any pilot model, process, formula, invention, technique, patent, or similar property, and includes products to be used by the taxpayer in its trade or business as well as products to be held for sale, lease, or license.

(3) The term *research or experimental expenditures* does not include expenditures for—

- (i) The ordinary testing or inspection of materials or products for quality control;
- (ii) Efficiency surveys;
- (iii) Management studies;
- (iv) Consumer surveys;
- (v) Advertising or promotions;
- (vi) The acquisition of another's patent, model, production or process; or
- (vii) Research in connection with literary, historical, or similar projects.

(4) See section 263A and the regulations thereunder for cost capitalization rules which apply to expenditures paid or incurred for research in connection with literary, historical or similar projects involving the production of property, including the production of films, sound recordings, video tapes, books, or similar properties.

(5) Section 174 applies to a research or experimental expenditure only to the extent that the amount of the expenditure is reasonable under the circumstances. In general, the amount of an expenditure for research or experimental activities is reasonable if the amount would ordinarily be paid for like activities by like enterprises under like circumstances. Amounts supposedly paid for research that are not reasonable under the circumstances may be characterized as disguised dividends, gifts, loans, or similar payments. The reasonableness requirement of this paragraph (a)(5) does not apply to the reasonableness of the type or nature of the activities themselves.

(6) This paragraph (a) applies to taxable years beginning after [the date

the final regulations are published in the Federal Register].

\* \* \* \* \*

Michael P. Dolan,

Acting Commissioner of Internal Revenue.

[FR Doc. 93-6642 Filed 3-23-93; 8:45 am]

BILLING CODE 4830-01-M

## DEPARTMENT OF TRANSPORTATION

### Coast Guard

#### 33 CFR Part 165

[CDG1 93-003]

#### Safety Zone: Narragansett Bay, East Passage, RI

AGENCY: Coast Guard, DOT.

ACTION: Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to establish a temporary moving safety zone around the band of swimmers involved in the 17th annual Swim the Bay, on Saturday, August 14, 1993, between 11 a.m. and 1 p.m. This zone is needed to protect the swimmers from personal injury that may result if vessel traffic were allowed to transit the East Passage of Narragansett Bay, in the vicinity of the swim, while the event is in progress.

**DATES:** Comments must be received by May 10, 1993.

**ADDRESSES:** Comments should be mailed to Commanding Officer, Marine Safety Office Providence, John O. Pastore Federal Building, Providence, Rhode Island, 02903-1790, or may be delivered to room 217 at the above address between 7:30 a.m. and 4 p.m., Monday through Friday, except federal holidays. The telephone number is (401) 528-5335. The Marine Safety Office Providence maintains the public docket for this rulemaking. Comments will become part of this docket and will be available for inspection or copying at room 217, Marine Safety Office Providence.

**FOR FURTHER INFORMATION CONTACT:** LTJG Joseph Snowden at (401) 528-5335.

#### SUPPLEMENTARY INFORMATION:

##### Request for Comments

The Coast Guard encourages interested persons to participate in this rulemaking by submitting written data, views, or arguments. Persons submitting comments should include their name and address, identify this rulemaking (CGD1 93-003) and the specific section of this proposal to which each comment applies, and give a reason for each comment. Persons wanting

acknowledgment of receipt of comments should enclosed a stamped, self addressed postcard or envelope.

The Coast Guard will consider all comments received during the comment period. It may change this proposal in view of the comments. The Coast Guard plans no public hearing, but one may be held if written requests are received and it is determined that the opportunity to make an oral presentation will aid in the rulemaking.

#### Drafting Information

The drafters of this regulation are Lieutenant (junior grade) Joseph Snowden, Project Manager for the Coast Guard Captain of the Port Providence, and Lieutenant Commander J. Stieb, Project Counsel for the First Coast Guard District Legal Office.

#### Background and Purpose

On August 14, 1993, the Save the Bay organization will be sponsoring the 17th annual "Swim the Bay." For this event, approximately 130 people will swim across the East Passage of Narragansett Bay, from Coaster's Harbor Island Beach, Newport, to Jamestown Island in the vicinity of Potter's Cove. Each swimmer will be escorted by a rowboat with a spotter onboard, and orange pylons will be placed along the swim route, outside of the main ship channel, to facilitate swimming/rowing a straight course. The swim will take place between 11 a.m. and 1 p.m. on August 14, 1993. If postponed due to adverse weather, then the event will be held between 11 a.m. and 1 p.m. on August 15, 1993. Approximately a total of 85 rowboats and spectator craft are expected to attend.

The Coast Guard is proposing to establish a temporary moving safety zone around the band of swimmers and escort craft involved in Swim the Bay. The zone would encompass a three hundred yard radius around the swimmers as they cross East Passage from Coaster's Harbor Island Beach (position 41-31N, 071-19.8W) to Potter's Cove (position 41-31N, 071-22W). The safety zone will be in effect between the hours of 11 a.m. and 1 p.m. on August 14, 1993. If postponed due to adverse weather, the same safety zone would be established on August 15, 1993 between the hours of 11 a.m. and 1 p.m. This safety zone will be necessary to protect the participants and associated craft involved in Swim the Bay from inherent dangers (personal injury or property damage due to collision) associated with vessels transiting the area.

#### Regulatory Evaluation

This proposal is not major under Executive Order 12291 and not significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11040; February 26, 1979). The Coast Guard expects the economic impact of this proposal to be so minimal that a Regulatory Evaluation is unnecessary. Although the proposed safety zone affects the main shipping channel through the East Passage of Narragansett, the impact is expected to be minimal for several reasons. First the large commercial vessel traffic interest that would normally use the affected waterway have been given five months advance notice of the event and the pending safety zone time period. Second, the other interest to be affected, the recreational vessels, spectator craft, small passenger vessels, and perhaps fishing vessels, will not endure hardship because they have unlimited amount of alternate water, outside the limits of the safety zone in which they may safely operate. Lastly, the impact of the proposed safety zone on any particular area of the waterway will be of limited duration due to the short time frame of the event and also due to the nature of a moving safety zone. Once the moving zone has passed, vessels desiring to use the channel will have the opportunity to transit.

#### Small Entities

For the reasons discussed in the Regulatory Evaluation, the Coast Guard expects the economic impact of this proposal to be minimal on all entities. Therefore, the Coast Guard certifies under section 605(b) of the Regulatory Flexibility Act (5 U.S.C. 605 *et seq.*) that this proposal does not have a significant economic impact on a substantial number of small entities.

#### Collection of Information

This proposal contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

#### Federalism

The Coast Guard has analyzed this proposal in accordance with the principles and criteria contained in Executive Order 12612 and had determined that this proposal did not have sufficient federalism implication to warrant the preparation of a Federalism Assessment.

#### Environment

The Coast Guard considered the environmental impact of this proposal and concludes that under section 2.B.2.C of Commandant Instruction

M16475.1B, this proposal is an action under the Coast Guard statutory authority to protect public safety and is categorically excluded from further environmental documentation.

#### List of Subjects in 33 CFR Part 165

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

#### Proposed Regulation

For the reasons set out in the preamble the Coast Guard proposes to amend part 165 of title 33, Code of Federal Regulations, as follows:

1. The authority citation for part 165 continues to read as follows:

**Authority:** 33 U.S.C. 1231; 50 U.S.C. 191; 49 CFR 1.46; 33 CFR 1.05-1(g), 6.04-1, 6.04-6, and 160.5.2.

2. A temporary § 165.T01-003 is added to read as follows:

#### § 165.T01-003 Safety Zone: Narragansett Bay, East Passage, RI.

(a) *Location.* The following area is a safety zone: A moving safety zone encompassing a three hundred yard radius around the swimmers and escort row boats participating in Swim the Bay, as they transit from Coaster's Harbor Island Beach position (41-31N, 071-19.8W), to Potter's Cove position (41-31N, 071-22W).

(b) *Effective date.* This regulation becomes effective from 11 a.m. to 1 p.m. or until the event is completed on August 14, 1993. If the event is postponed due to weather, then this regulation will be effective between 11 a.m. and 1 p.m., on August 15, 1993, unless terminated sooner by the Captain of the Port.

(c) *Regulations.* The general regulations governing safety zones contained in § 165.23 apply.

Dated: March 9, 1993.

H.D. Robinson,

Captain, U.S. Coast Guard, Captain of the Port.

[FR Doc. 93-6703 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

#### 33 CFR Part 165

[CGD1 93-004]

#### Safety Zone; Narragansett Bay, Quonset Point, RI

**AGENCY:** Coast Guard, DOT.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Coast Guard proposes to establish a temporary safety zone on May 29, and May 30, 1993 at Quonset

Point, North Kingstown, RI, while aerial demonstrations, including those by the USAF Thunderbirds, are performed in preparation for, and during the "Rhode Island National Guard Open House". This action is necessary to protect spectator/pleasure craft, as well as other vessels in the vicinity, from the risks of low flying aircraft and aerial demonstrations.

**DATES:** Comments must be received by May 10, 1993.

**ADDRESSES:** Comments should be mailed to Commanding Officer, Marine Safety Office Providence, John O. Pastore Federal Building, Providence, Rhode Island, 02903-1790, or may be delivered to room 217 at the above address between 7:30 a.m. and 4 p.m., Monday through Friday, except federal holidays. The telephone number is (401) 528-5335. The Marine Safety Office Providence maintains the public docket for this rulemaking. Comments will become part of this docket and will be available for inspection or copying at room 217, Marine Safety Office Providence.

**FOR FURTHER INFORMATION CONTACT:**

LTJG Joseph Snowden at (401) 528-5335.

**SUPPLEMENTARY INFORMATION:**

**Request for Comments**

The Coast Guard encourages interested persons to participate in this rulemaking by submitting written data, views, or arguments. Persons submitting comments should include their name and address, identify this rulemaking (CGD1 93-004) and the specific section of this proposal to which each comment applies, and give a reason for each comment. Persons wanting acknowledgment of receipt of comments should enclose a stamped, self-addressed postcard or envelope. The Coast Guard will consider all comments received during the comment period. It may change this proposal in view of the comments.

The Coast Guard plans no public hearing, but one may be held if written requests are received and it is determined that the opportunity to make an oral presentation will aid in the rulemaking.

**Drafting Information**

The drafters of this regulation are Lieutenant (junior grade) Joseph Snowden, Project Manager for the Coast Guard Captain of the Port Providence, and Lieutenant Commander J. Stieb, Project Counsel for the First Coast Guard District Legal Office.

**Background and Purpose**

The purpose of this proposal is to protect spectators and pleasure craft, as well as other vessels, from potential hazards such as damage or personal injury, associated with low level flight demonstrations by several aircraft, including the USAF Thunderbirds. In addition, the USAF Thunderbirds require for safety purposes that a safety zone be established underneath their demonstrations. The demonstrations will take place in the airspace over the Quonset State Airport, North Kingstown, RI, a portion of the Naval Construction Battalion Center in Davisville, RI, as well as a small area of Narragansett Bay that is adjacent to the Quonset State Airport.

**Regulatory Evaluation**

This proposal is not major under Executive Order 12291 and not significant under the Department of Transportation Regulatory Policies and Procedures (44 FR 11040; February 26, 1979). The Coast Guard expects the economic impact of this proposal to be so minimal that a Regulatory Evaluation is unnecessary. The entities most likely affected are pleasure craft, fishing vessels and to an extent large commercial vessels in or outbound from the Davisville depot, that would normally use the waters contained in the safety zone. The impact is expected to be minimal because the restricted area is not heavily trafficked by large commercial vessels or commercial fishing vessels. Approximately one to two large commercial freight ships transit the Quonset Channel, a portion of the area to be restricted, per week. Commercial vessels will be notified in advance to minimize economic and scheduling concerns. Because of the infrequent visits of these type vessel and that they will be notified in advanced to plan accordingly, they will not be heavily impacted by the proposed safety zone. Commercial fishing vessels are able to conduct operations outside the Quonset Channel because they are not constrained by their draft. They have alternate areas available outside of the proposed safety zone where they may fish and conduct normal operations. Therefore, restricting access to the area as proposed will not cause undue hardship to any entity.

**Small Entities**

For the reasons discussed in the Regulatory Evaluation, the Coast Guard expects the economic impact of this proposal to be minimal on all entities. Therefore, the Coast Guard certifies under section 605(b) of the Regulatory

Flexibility Act (5 U.S.C. 605 *et seq.*) that this proposal does not have a significant economic impact on a substantial number of small entities.

**Collection of Information**

This proposal contains no collection of information requirements under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

**Federalism**

The Coast Guard has analyzed this proposal in accordance with the principles and criteria contained in Executive Order 12612 and had determined that this proposal did not have sufficient federalism implication to warrant the preparation of a Federalism Assessment.

**Environment**

The Coast Guard considered the environmental impact of this proposal and concludes that under section 2.B.2.C of Commandant Instruction M16475.1B, this proposal is an action under Coast Guard statutory authority to protect public safety and is categorically excluded from further environmental documentation.

**List of Subjects in 33 CFR Part 165**

Harbors, Marine safety, Navigation (water), Reporting and recordkeeping requirements, Security measures, Waterways.

**Proposed Regulation**

For the reasons set out in the preamble the Coast Guard proposes to amend part 165 of title 33, Code of Federal Regulations, as follows:

1. The authority citation for part 165 continues to read as follows:

**Authority:** 33 U.S.C. 1231; 50 U.S.C. 191; 49 CFR 1.46; 33 CFR 1.05-1(g), 6.04-1, 6.04-6, and 160.5.2.

2. A temporary § 165.T01-004 was added to read as follows:

**§ 165.T01-004 Safety Zone: Narragansett Bay, Quonset Point, RI.**

(a) *Location.* The following area is a safety zone: The area of water enclosed in a line from the end of the Quonset Point Jetty (41-35-10N, 071-24-29W), extending southeast to Quonset Channel buoy #7 (41-34-54, 071-23-50.5W), northeast to (41-35-07N, 071-23-21W), and northwest to the south corner of Pier #1, Davisville Depot (41-36-42N, 071-24-17W).

(b) *Effective date.* This regulation becomes effective from 8:30 a.m. to 4 p.m. on May 29, 1993, and from 8:30 a.m. to 4 p.m. on May 30 and, 1993, unless terminated sooner by the Captain of the Port.

(c) *Regulations.* The general regulations governing safety zones contained in § 165.23 apply.

Dated: March 9, 1993.

H.D. Robinson,

Captain, U.S. Coast Guard, Captain of the Port.

[FR Doc. 93-6704 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

## DEPARTMENT OF EDUCATION

### 34 CFR Part 649

RIN 1840-AB67

#### Patricia Roberts Harris Fellowship Program

AGENCY: Department of Education.

ACTION: Notice of proposed rulemaking; correction.

**SUMMARY:** This document corrects an error made in the notice of proposed rulemaking (NPRM) published in the Federal Register on March 1, 1993 (58 FR 11928) for the Patricia Roberts Harris Fellowship Program by restoring language inadvertently deleted from the definition of "Minority" in § 649.6(b) of the proposed regulations.

**DATES:** Comments must be received on or before March 31, 1993.

#### FOR FURTHER INFORMATION CONTACT:

Jane Wrenn, U.S. Department of Education, 400 Maryland Avenue, SW., room 3022, ROB-3, Washington, DC 20202-5251. Telephone: (202) 708-9403.

Dated: March 17, 1993.

Richard W. Riley,

Secretary of Education.

(Catalog of Federal Domestic Assistance Number 84.904—Patricia Roberts Harris Fellowship Program)

The following correction is made in FR Doc. 93-4623, published on March 1, 1993 (58 FR 11928):

#### § 649.6 [Amended]

1. On page 11931, column 1, in the definition of "Minority", remove the words "or Pacific Islander" and add, in their place, "Pacific Islander, or other ethnic group underrepresented in master's level, professional, or doctoral study, as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data submitted to and accepted by the Secretary".

[FR Doc. 93-6806 Filed 3-23-93; 8:45 am]

BILLING CODE 4000-01-M

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[IL 35-1-5368; FRL-4605-2]

#### Approval and Promulgation of Implementation Plans; Illinois

AGENCY: United States Environmental Protection Agency (USEPA).

ACTION: Proposed rule.

**SUMMARY:** USEPA today is proposing to approve revisions to Illinois' State Implementation Plan (SIP) for sulfur dioxide (SO<sub>2</sub>). These revisions to 35 Illinois Administrative Code (IAC) Section 214 provide SO<sub>2</sub> emission limitations for the Shell Oil complex in Roxana, Wood River Township, Illinois. The revised rules were submitted to USEPA by the State on January 4, 1989, to satisfy a September 28, 1984, notice of SIP deficiency.

**DATES:** Comments on this revision and on the proposed USEPA action must be received by April 23, 1993.

**ADDRESSES:** Copies of the SIP revision request and USEPA's analysis are available for inspection at the following address: (It is recommended that you telephone Mary Onischak at (312) 353-5954, before visiting the Region 5 Office.) U.S. Environmental Protection Agency, Region 5, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604.

Written comments should be sent to: J. Elmer Bortzer, Chief, Regulation Development Section, Regulation Development Branch (AR-18J), U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604.

#### FOR FURTHER INFORMATION CONTACT:

Mary Onischak, Regulation Development Branch, Regulation Development Section (AR-18J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 353-5954.

#### SUPPLEMENTARY INFORMATION:

##### I. Introduction

On September 28, 1984, USEPA informed the Governor of Illinois that the Illinois SO<sub>2</sub> SIP was inadequate to protect the National Ambient Air Quality Standards (NAAQS) in Alton<sup>1</sup> and Wood River Townships, Madison

<sup>1</sup> On June 26, 1986, Illinois addressed the inadequacies in both the Alton Township and Wood River Township SO<sub>2</sub> rules. USEPA will take rulemaking action on the Alton Township portion of the submittal in a subsequent Federal Register notice. USEPA will take rulemaking action today only on the Wood River Township submittal.

County, and requested that the State submit a revision to the SIP to address the inadequacy. The determination that the SIP was inadequate and needed to be revised was based on modeling performed by the Illinois Environmental Protection Agency (IEPA) for a regional study which included Madison County. Originally, Illinois was given one year, until September 28, 1985, in which to correct the SIP. Subsequent discussions with USEPA extended the submittal due date to June 30, 1986. On June 26, 1986, IEPA submitted to USEPA a rule it had proposed to the Illinois Pollution Control Board for Wood River Township, as a revision to the SIP. USEPA identified several deficiencies in the June 26, 1986, SIP submittal, which Illinois corrected before adopting its final revised rule. Illinois then withdrew its submission of June 26, 1986, and on January 4, 1989, submitted its final revised rule to USEPA as a revision to the SO<sub>2</sub> SIP to satisfy the requirements of the September 28, 1984, notice of SIP deficiency for Wood River Township. Today's rulemaking action addresses the adequacy of this January 4, 1989, SIP revision request, which would incorporate 35 IAC section 214.382 into the Illinois SO<sub>2</sub> SIP.

##### II. Summary of State Submittal

###### Background

USEPA's notice of SIP deficiency for Wood River Township was based upon modeled violations of the SO<sub>2</sub> NAAQS. IEPA attributed these potential NAAQS violations primarily to the Shell Oil refinery complex in Roxana, Illinois. IEPA was able to demonstrate NAAQS attainment in the Wood River area through significant emission reductions at the Shell Oil complex. The January 4, 1989, SIP submittal sets forth SO<sub>2</sub> emission limits for the Shell Oil facility in 35 IAC section 214.382.

In order to reduce its SO<sub>2</sub> emissions, Shell Oil agreed to retire some old SO<sub>2</sub> process sources. The company relinquished its operating permits for three of its Asphalt Convertors. Shell Oil also modified an old sulfur recovery unit process line (known as the D-train) to reduce its SO<sub>2</sub> emissions. The D-train was originally designed, according to the common practice of the time, to allow its exhaust gases to vent directly to the atmosphere. As an SO<sub>2</sub> control measure, Shell Oil rerouted the D-train's exhaust to an existing tailgas cleanup unit, which now removes much of the SO<sub>2</sub> from the exhaust stream.

Combustion units at the Shell Oil facility burn either natural gas, refinery fuel gas (RFG), or refinery flasher pitch. Combustion of RFG or refinery flasher

pitch may cause SO<sub>2</sub> emissions from the facility. Shell Oil prefers to retain permission to use RFG and refinery flasher pitch when possible, as these fuels, which are by-products of the refining process, are readily available at the plant. Shell Oil has the capability of removing some of the sulfur from these fuels before combustion in order to meet the sulfur emission limitations in Section 214.382.

#### Fuel Quality Restrictions

Section 214.382(c) places a fuel quality restriction for fuels used in any individual boiler or heater at the facility as follows: Refinery flasher pitch used at Shell Oil may not contain more than 3.0% sulfur by weight, and refinery fuel gas may not contain more than 39 grains hydrogen sulfide per 100 dry standard cubic feet.

#### Source Operating Groups

The oil refining process at Shell Oil is made up of many separate operations. The operating schedule of each component of the refining process at the large, complex facility depends upon seasonal and market-based variations in product demand. When preliminary modeling showed that additional SO<sub>2</sub> controls would be necessary to ensure attainment of the NAAQS at Shell Oil, the facility worked with Illinois to devise a system whereby emissions of SO<sub>2</sub> into the atmosphere could be decreased without hindering the facility's ability to change production focus as seasonal and market demands changed. In order to grant Shell Oil the production flexibility necessary to meet changing product demands in different seasons and different economic climates without compromising air quality, the concept of Source Operating Groups (SOGs) was developed for regulatory purposes. SOGs are groups of individual SO<sub>2</sub> emission sources such as boilers or heaters which are located close together and usually operate within the same process units. The SOGs at Shell Oil consist of small clusters of boilers and heaters which produce heat and steam for different parts of the refining process. Section 214.382(c)(3) regulates the SO<sub>2</sub> emissions of Shell Oil combustion units by SOG rather than by individual unit. The total SO<sub>2</sub> emissions from any SOG are limited to a level below that of the sum of the maximum emissions possible from the individual units within the SOG. The SOG emission limits reduce Shell Oil's overall SO<sub>2</sub> emissions but allow the facility to vary the operation of individual refining systems as necessary. While some sources in a SOG operate at rates necessary to produce the

required products, the other sources in the SOG will operate at lowered rates to keep the SO<sub>2</sub> emissions within the SOG limit. This arrangement allows Shell Oil to continue using its refinery byproducts as fuel, which eliminates the necessity for flaring off or disposing of those products, and helps Shell Oil stay economically competitive.

The January 4, 1989, SIP revision request includes overall emission limitations for nine different SOGs at Shell Oil. The following is a brief summary of the emission limits set forth in section 214.382 for the total emission of SO<sub>2</sub> from the SOGs at the Shell Oil facility. It is important to note that the fuel quality limits which were discussed earlier must always be met regardless of overall SOG limits. In addition, section 214.382(f) states that process sources, whether included in SOGs or not, are still required to comply with the emission limit set forth in section 214.301.

Section 214.382 establishes these limits for the total SO<sub>2</sub> emissions from the SOGs below:

All process heaters at distilling unit 1: 459 pounds per hour (lb/hr).

All process heaters at distilling unit 2: 1260 lb/hr.

All gas plant process heaters: 159 lb/hr.

All vacuum flasher unit heaters: 378 lb/hr.

All process heaters at the alkylation, benzene extraction unit, and catalytic feed hydrotreating units: 346 lb/hr.

All boilers generating steam for general plant use: 2400 lb/hr.

All heaters serving the hydrocracker unit catalytic reformer 1 and the saturates gas plant: 1660 lb/hr.

All process heaters at the aromatics east process: 768 lb/hr.

All catalytic cracking units: 3420 lb/hr.

All asphalt converters, distilling unit 1, the aromatics east process, all boilers generating steam for general plant use, and all gas plant process heaters: 2710 lb/hr.

The following sections discuss USEPA's analysis of the air quality modeling demonstration for Wood River Township and the enforceability of Section 214.382. For a more detailed discussion of USEPA's analysis, see the January 19, 1992, technical support document.

#### III. Analysis of State Submittal

Preliminary modeling data was submitted to USEPA in 1986. USEPA requested additional information and additional model runs to support the Wood River attainment strategy. IEPA supplied this information along with the

final January 4, 1989, SIP revision submittal. The modeling exercises in both the 1986 and the 1989 submittals were performed according to the recommendations in the most current USEPA guidance available.

IEPA's SO<sub>2</sub> SIP development efforts for the Wood River Township area have spanned nearly a decade. USEPA modeling guidance was revised several times over this period. Each necessary SO<sub>2</sub> modeling study was performed by IEPA according to the most current guidance available. The final modeling study for the January 4, 1989, Wood River Township submittal was completed in early 1988. IEPA consulted the 1986 version of USEPA's Guideline on Air Quality Models in preparing this study. While USEPA guidance on modeling has again changed in the time since 1986, USEPA proposes to accept the IEPA modeling for the January 4, 1989, submittal under the grandfathering policy. The modeling included in the January 4, 1989, submittal meets the requirements for grandfathering described in the June 6, 1988, grandfathering guidance memorandum from the Director of the Office of Air Quality Planning and Standards to the Regional Air Division Directors. The 1986 guidance was current when the modeling study was performed, and IEPA has shown evidence of good faith in using the most current available modeling guidance. While it must be noted that any future revisions to Section 214.382 must be supported by a modeled demonstration of attainment which comports with current USEPA guidance, the modeling information submitted by Illinois in support of the January 4, 1989, SIP submittal is acceptable to USEPA as an adequate demonstration that the NAAQS will be attained in Wood River Township under Section 214.382.

#### Model Selection

The January 4, 1989, submittal described the numerous modeling runs which were necessary to characterize the worstcase emission scenario at Shell Oil and demonstrate that the ambient air quality standards would be protected during those conditions. Illinois used the short-term version of the Industrial Source Complex (ISC) model to determine what SO<sub>2</sub> emission controls were necessary to bring Wood River Township into attainment of the NAAQS. The rural option of the model was selected, based on the population and land usage of the township. Since the Wood River area is flat or gently rolling, terrain effects were not considered in the modeling study. IEPA used 5 years of representative

meteorological data as an input to the model. The effect of pollutant downwash was considered for all sources, including background sources, with stacks lower than Good Engineering Practice height. In the January 4, 1989, submittal, Illinois also considered the effects of direction-dependent building downwash, in accordance with USEPA guidance. All modeling was performed by IEPA in accordance with USEPA requirements.

#### *Receptor Grid Selection*

Because of computer limitations at IEPA, it was necessary to limit the total number of receptors modeled to keep computer operating times reasonable. Therefore, IEPA used its initial model runs to establish a set of critical receptors to focus upon in the development of the attainment strategy for Shell Oil. In response to comments from USEPA, IEPA placed receptor grids with 100 meter resolution around critical receptors in the 1988 modeling study. These tighter grids helped ensure that the points of greatest air quality impacts were identified.

#### *Emissions Inventory*

The Wood River SIP SO<sub>2</sub> emissions inventory consisted of the major SO<sub>2</sub> sources in the Wood River and Alton areas. These companies include St. Joseph's Hospital, Olin Corporation, Alton Mental Health, LaCled Steel, Owens Illinois, Alton Packaging, Illinois Power Company, Clark Oil, Amoco Oil, Alton Memorial Hospital, and Lewis and Clark College. The Shell Oil complex was modeled using the emission limits contained in the January 4, 1989, SIP submittal. All other facilities, including sources at Shell Oil not specifically limited by Section 214.382, were modeled at the emission limits allowed them by existing federally approved SO<sub>2</sub> regulations, with the following notable exception. Coal-fired combustion sources included in the Wood River Township modeled attainment demonstration were modeled at emission rates corresponding to 1.8 pounds SO<sub>2</sub> per million British Thermal Units (lb/MMBTU). While Illinois' SO<sub>2</sub> rules had originally been approved by USEPA, court proceedings in 1978 invalidated certain portions of Illinois' SO<sub>2</sub> rules and rendered the emission limits for coal-fired sources in Wood River Township unenforceable at the Federal level. When the January 4, 1989, SIP revision submittal was received, the 1.8 lb/MMBTU emission limit had not been reinstated at the federal level for sources in the St. Louis (Illinois) metropolitan area. On March 13, 1985, Illinois resubmitted the SO<sub>2</sub> emission

limits for coal-fired sources in Wood River Township and other areas to USEPA as a SIP revision. USEPA approved these emission limits on September 3, 1992 (57 FR 40333). Therefore, it is now acceptable that the coal-fired sources included in the Wood River Township attainment demonstration were modeled at the 1.8 lb/MMBTU emission limit.

#### *Background Concentrations*

SO<sub>2</sub> emissions from significant facilities near Shell Oil were explicitly modeled in order to accurately reflect the actual ambient air quality in Wood River Township. Illinois used local air quality monitor data to characterize the impact of smaller or more distant SO<sub>2</sub> sources to the ambient SO<sub>2</sub> levels in Wood River Township.

#### *Modeling SOG Limits*

Shell Oil sources which were not included in SOGs were simply modeled at their maximum allowable emission rates, but the SOG limits complicated the development of representative SOG source emissions data for input into the model. Ordinarily, individual sources must be modeled at their maximum allowable emission rates. Each source within a SOG has an inherent maximum allowable emission rate, that of peak capacity operations fed by fuel with the highest allowable sulfur content. However, the SOG limits preclude the individual sources from operating simultaneously at peak capacity, because the total emissions of the individual sources are capped at a level below the sum of their maximum potential emissions. Therefore, SOG operations could not be characterized by modeling each source at its maximum allowable emission rate. It could not realistically be assumed the certain sources would always operate at full load, or that other sources would never operate at full load. Illinois thus was faced with the task of developing a set of SOG source emission rates for modeling purposes which would characterize the worst-case ambient impact of SO<sub>2</sub> emissions at the numerical SOG emission limits.

IEPA performed an impact analysis on the SO<sub>2</sub> sources at Shell oil in order to rank each source within its SOG by the level of ambient impact predicted for the source. The SO<sub>2</sub> emissions allowed in total for each SOG were apportioned to the individual SOG boilers and heaters according to the impact ranking. The SOG source causing the highest impacts was modeled either at its full capacity allowable emission rate, or at the overall SOG emission limit, whichever was lower. If the SOG limit

allowed still further SO<sub>2</sub> emissions from the SOG, the source with the second highest impacts was assumed to emit SO<sub>2</sub> up to its peak rate, but again no further than the SOG limit. Remaining allowable emissions are allocated amount the other SOG sources similarly, until the overall SOG limit has been reached. Thus, a worst-case emissions inventory was developed for modeling the maximum impact of each SOG. Although some SOG sources might have been modeled at emission rates much lower than their potential allows (or even at zero emissions), the model can be expected to predict the worst possible ambient concentrations under the SOG limits because emissions were assumed to come primarily from the highest-impacting sources. These apportionments were only used as impacts to the models to represent the emission scenario at each SOG which could be expected to cause maximum concentrations. They do not necessarily represent Shell Oil's typical operating conditions.

#### *Further Reductions*

The SOG limits established in Section 214.382(c)(3)(A-I) did not eliminate every modeled exceedance. In order to address the remaining violations, Shell Oil proposed further reducing the total emissions from a certain group of sources, which included several complete SOGs. This overall emission limit is set forth in Section 214.382(c)(3)(J), and it regulates the #5 Asphalt Converter, the Distilling Unit 1 SOG, the Gas Plant SOG, the Boiler House SOG, and the Aromatics East SOG together. IEPA performed a source culpability analysis and used a rollback technique to determine the level of further emission reduction that had to be obtained from the group of sources to demonstrate attainment. Illinois calculated the maximum emission reductions necessary to eliminate the modeled exceedances at each receptor and used the greatest reduction to set the overall emission limit for the group of sources. Illinois then modeled all critical receptors under the full attainment strategy to verify that the limits set forth in Section 214.382 would provide for attainment of the SO<sub>2</sub> NAAQS.

#### *Modeling Results*

IEPA demonstrated that worst-case emissions under Section 214.382 will not violate the SO<sub>2</sub> NAAQS. This demonstration was performed in a manner acceptable to USEPA.

#### IV. Stack Height Regulations

IEPA reviewed the SO<sub>2</sub> sources in Illinois for consistency with the July 8, 1985, stack height regulations as required by USEPA. Three sources in the Wood River area were identified for further consideration. These included the merging of the effluent from four process heaters into one common stack (Catalytic Reformer 3, Heaters 2, 4, 5, and 6); the merging of the Catalytic Reformer 1, Heater 7 (CR 1, H-7) effluent to the hydrocracking unit complex (HCU) stack; and the increase in stack height for that process heater due to merging. Both mergings were found to be in accordance with the July 8, 1985, regulations. The HCU stack is grandfathered at its height of 107 meters (m), since it was built before December 30, 1970, but the increase in the CR 1, H-7 emission height due to the merging with the HCU stack occurred in 1982 and cannot be grandfathered. The emissions from the CR 1, H-7 must therefore be modeled at the appropriate Good Engineering Practice height of 65m, rather than the actual stack height of 107m. IEPA's modeling study used the correct stack heights for these emission points.

#### V. Enforcement Issues

In the January 4, 1991, submittal, Illinois submitted revisions to State rules which support the previously discussed revisions to Section 214.382. The addition to Section 214.101(h) establishes test procedures for the measurement of hydrogen sulfide in refinery fuel gas. This new section provides for the use of the Tutwiler procedure in determining compliance with Section 214.382(c). Abbreviation definitions and conversion factors associated with the hydrogen sulfide measurement procedure were added to Sections 214.102 (a) and (b). The test procedures were incorporated by reference from 40 CFR part 60 in Sections 214.104 (b)(2) and (c). These State rule changes are necessary for the enforcement of amended Section 214.382 and are approvable.

The general SO<sub>2</sub> compliance methodology that existed in Illinois' rules in 1989 was considered inadequate for federal enforcement, and SIP revisions which relied upon it for the determination of compliance with emission limitations could not be approved by USEPA. On February 8, 1991, Illinois submitted to USEPA a corrected SO<sub>2</sub> compliance methodology as a revision to the Illinois SO<sub>2</sub> SIP. These revisions were approved by USEPA on June 26, 1992 (57 FR 28617).

Under the revised compliance methodology, Illinois' SO<sub>2</sub> SIP provides for a stack test to show compliance with SO<sub>2</sub> emission limits. The regulation of SO<sub>2</sub> sources at Shell Oil by SOG, however, complicates the process of assuring compliance through stack testing. In order to adequately determine each SOG's compliance with its overall limit, stack testing would need to be done simultaneously on all operating sources in the SOG. This test condition would be extremely difficult to meet. The Shell Oil facility currently monitors its fuel quality and usage closely in order to maintain compliance with its SO<sub>2</sub> emission limitations. Data from continuous monitoring of the hydrogen sulfide content of the refinery fuel gas and from daily analysis of the sulfur content in the refinery flasher pitch is recorded and retained at the plant for use in calculating SO<sub>2</sub> emission rates. Therefore, Shell Oil is capable of assuring continuous compliance with the emission limits in section 214.382 even without performing stack tests under Section 214.101.

A discussion of the enforceability of the January 4, 1989, submittal of revised section 214.382 can be found in a June 1, 1989, technical support document. The June 1, 1989, TSD stated that the submittal did not contain adequate recordkeeping or reporting requirements to ensure that the limits for percent sulfur content of the refinery flasher pitch and hydrogen sulfide content of the refinery fuel gas would be met at all times. In addition, while the rule did state that permit conditions would require the maintenance of data to ensure compliance with the limits on a 3 hour block averaged basis, there was no information provided to indicate what data the State would consider sufficient.

While the January 4, 1989, submittal did not contain recordkeeping and reporting requirements to adequately ensure that the emission limits at the facility would be met, it is apparent that Shell Oil is able to supply the necessary information. The facility performs extensive fuel monitoring and calculates SO<sub>2</sub> emissions to determine continuous compliance with its SO<sub>2</sub> limits. USEPA would consider the revisions to Section 214.382 set forth in the January 4, 1989, submittal federally enforceable if Shell Oil were required to report its fuel quality monitoring data, SO<sub>2</sub> emission calculations, and any exceedances of its SO<sub>2</sub> emission limitations.

Rather than pursuing the lengthy process of revising and readopting section 214.382 to include recordkeeping requirements, Illinois chose to establish a set of specific

recordkeeping and reporting requirements as conditions in a federally enforceable operating permit for the Shell Oil facility. On December 17, 1992, Illinois' operating permit program was approved by USEPA and incorporated into the Illinois SIP. Permits issued under this federally enforceable State operating permit program (FESOP) may serve as part of the SIP and may be used to address certain SIP deficiencies. USEPA agrees that the addition of specific recordkeeping and reporting requirements to the requirements within a federally enforceable State operating permit is an acceptable approach to ensure compliance with the requirements of the SIP.

In a June 12, 1992, letter, USEPA informed IEPA of the specific permit conditions which must be included in Shell Oil's federally enforceable operating permit in order to ensure that the facility will maintain and report adequate compliance records. USEPA and IEPA have discussed these conditions and developed a set of operating permit requirements which would satisfy USEPA's recordkeeping and reporting requirements. Currently, Shell Oil's operating permit requires that analysis data, the amount of refinery flasher pitch and RFG burned per hour, and the amount of SO<sub>2</sub> emitted from each heater and boiler in each SOG be recorded and the records retained for 2 years. The permit also requires that the total monthly emissions of SO<sub>2</sub> from the entire facility and the highest and second highest SO<sub>2</sub> emission rates for each month must be reported quarterly. The provisions which must be added to the existing requirements in Shell Oil's operating permit, as listed in the June 12, 1992, letter, include, but are not necessarily limited to, the following.

#### *Records which must be kept for each separate SOG for three years:*

- The amount of hydrogen sulfide in the refinery fuel gas as measured by the continuous emissions monitoring system on the RFG fuel line.
- The percent sulfur in the refinery flasher pitch as measured in daily lab analysis.
- The amount of each fuel burned in each boiler or heater in the SOG on an hourly basis, from process data.
- The hourly calculated SO<sub>2</sub> emissions from each heater or boiler in each SOG in units that correspond to the limit in the permit.

Report this information quarterly for each separate SOG:

—Summaries of any 3-hour exceedances of the SO<sub>2</sub> limit for the SOG.

Report these flags as they occur:

- Measured refinery flasher pitch sulfur content over 3 percent.
- Continuous emission monitoring system measurements of RFG hydrogen sulfide content over 39 grains per 100 dry standard cubic feet.
- Hours during which any fuel other than natural gas is burned in boilers subject to the New Source Performance Standards (NSPS).

It must also be noted in specific language in the permit that if any fuel other than natural gas is burned in the boilers or heaters which are regulated by the New Source Performance Standards (NSPS boilers), the requirements of 40 CFR part 60 will apply. This will assure that the permit does not shield the source from enforcement of the NSPS. It should be noted in the permit that if Shell Oil decides to start burning other fuels than natural gas in the NSPS boilers, the NSPS requirements will change the recordkeeping and reporting requirements for those boilers, possibly necessitating separate fuel input and pollutant emissions measurements for the NSPS boilers.

A federally enforceable operating permit that includes these requirements would address the enforcement deficiencies identified in the above cited June 1, 1989, technical support document to USEPA's satisfaction.

#### VI. Proposed Rulemaking Action and Solicitation of Public Comment

USEPA proposes to approve the January 4, 1989, submittal as a revision to the Illinois SO<sub>2</sub> SIP for Wood River Township. The submittal consists of amended 35 IAC Sections 214.101, 214.102, 214.104, and 214.382. The emission limits set forth in the submittal have been shown to protect the NAAQS, and the enforceability deficiencies in the rule have been addressed through federally enforceable operating permit conditions. When a federally enforceable operating permit for Shell Oil which includes the reporting and recordkeeping requirements identified by USEPA has been issued and has become effective, USEPA will finalize approval of the January 4, 1989, SIP submittal. If Illinois fails to issue an adequate federally enforceable operating permit for Shell Oil, USEPA will disapprove the January 4, 1989, submittal. Upon final USEPA approval of these rules, the September 28, 1984,

SIP call is considered to be satisfied for Wood River Township.

Public comments are solicited on the requested SIP revision and on USEPA's proposal to approve the requested revision. Public comments received by April 23, 1993 will be considered in the development of USEPA's final rulemaking action.

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

This action has been classified as a Table 2 action by the Regional Administrator under the procedures published in the Federal Register on January 19, 1989, (54 FR 2214-2225). On January 6, 1989, the Office of Management and Budget (OMB) waived Table 2 and 3 SIP revisions (54 FR 2222) from the requirements of Section 3 of Executive Order 12291 for a period of 2 years. USEPA has submitted a request for a permanent waiver for Table 2 and 3 SIP revisions. OMB has agreed to continue the temporary waiver until such time as it rules as USEPA's request.

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.

SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of a regulatory flexibility analysis would constitute federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids USEPA to base its actions concerning SIPs on such grounds. *Union Electric Co. v. USEPA*, 427 U.S. 246, 256-66 (S. Ct. 1976); 42 U.S.C. 7410(a)(2).

#### List of Subjects in 40 CFR Part 52

Air pollution control, Reporting and recordkeeping requirements, Sulfur oxides.

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

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

**Dated:** March 2, 1993.

**Valdas V. Adamkus,**

*Regional Administrator.*

[FR Doc. 93-6724 Filed 3-23-93; 8:45 am]

**BILLING CODE 6550-50-10**

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

RIN 1018-AB86

#### Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for Three Plants from the Island of Nihoa, Hawaii

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Fish and Wildlife Service (Service) proposes endangered status pursuant to the Endangered Species Act of 1973, as amended (Act), for three plants: *Amaranthus brownii* (no common name (NCN)), *Pritchardia remota* (loulou), and *Schiedea verticillata* (NCN). These three species are endemic to the island of Nihoa, Hawaiian Islands. Two of the species are threatened by competition with the one widespread alien plant that has established on the island. Two of the species grow in steep, rocky habitats and are threatened by natural and human-caused substrate loss such as erosion and rock slides. Because of the steep and easily disturbed habitat, these species are threatened by degradation of their environment due to human impact. Because of the small numbers of existing individuals and populations and their narrow distributions, which are limited to the 0.25 square mile (sq mi) (0.65 sq kilometer (km)) island, these species are subject to an increased likelihood of extinction and/or reduced reproductive vigor from stochastic events. This proposal, if made final, would implement the Federal protection and recovery provisions provided by the Act. Comments and materials related to this proposal are solicited.

**DATES:** Comments from all interested parties must be received by May 24, 1993. Public hearing requests must be



received by May 10, 1993.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to Robert P. Smith, Field Supervisor, Pacific Islands Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, room 6307, P.O. Box 50167, Honolulu, Hawaii 96850. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Robert P. Smith, at the above address (808/541-2749 or FTS 551-2749).

**SUPPLEMENTARY INFORMATION:**

**Background**

*Amaranthus brownii*, *Pritchardia remota*, and *Schiedea verticillata* are endemic to the island of Nihoa, Hawaii. Nihoa is the largest and highest of the uninhabited islands of Hawaii. The Hawaiian Archipelago is made up of 132 islands, reefs, and shoals forming an arch 1,600 statute mi (2,580 km) long in the middle of the Pacific Ocean. The eight major Hawaiian Islands occur in the southeast 400 mi (650 km) of the arch. Northwest of Nihoa, small islands and atolls are widely scattered over the remaining 1,100 mi (1,750 km) of the arch and make up the Northwestern Hawaiian Islands (NWHI) (formerly called the Leeward Islands) (Department of Geography 1983, Macdonald *et al.* 1983, Walker 1990). Nihoa, the largest of the lava islands west of Nihoa, is the closest to the main islands, situated 170 mi (275 km) northwest of Kauai. Over many years, waves driven by prevailing trade winds eroded the island into its current shape, which is the remnant southwest quadrant of the original huge volcanic cone. The east, west, and north sides of Nihoa are sheer cliffs, and the south coast comprises low cliffs with rock benches and one small beach (Cleghorn 1987, Gagne and Conant 1983, Macdonald *et al.* 1983). The island, formed about 7.5 million years ago by a single shield volcano, now measures only 0.85 mi (1.4 km) long, an average of 0.3 mi (0.5 km) wide, and 156 acres (ac) (63.1 hectares (ha)) in area (Macdonald *et al.* 1983, Walker 1990). The highest point, 896 feet (ft) (273 meters (m)) in elevation (Conant 1985), is located at one of the two peaks on Nihoa, which are separated by a depression dissected by six valleys (Macdonald *et al.* 1983). The elevation of the island is not sufficient to increase precipitation from that which would fall on a flat island, and the yearly rainfall of 20 to 30 inches (in) (508 to 762 millimeters (mm)) per year, usually concentrated in the winter months, is

the result of unpredictable rain squalls passing over the island (Carlquist 1980, Cleghorn 1987). Valleys are deep and have little sediment, indicating that their streams were once powerful, but the only water on the island now is found in three freshwater seeps (Cleghorn 1987).

Nihoa, with the most diverse flora and fauna of any of the NWHI, presents a relatively intact low-elevation dryland ecosystem with a complement of plants, arthropods, and birds (Gagne 1982). Such areas were probably common in the main Hawaiian Islands prior to their disturbance by Polynesian agricultural practices (Cuddihy and Stone 1990). Nihoa was inhabited, beginning in the thirteenth century by a small group of Polynesian settlers, who terraced and cultivated most of the gently sloping area of the island, a total of 12 to 31 ac (4.9 to 12.5 ha) or 7.7 to 20 percent of the area of the island. Most of the island was unsuitable for cultivation, and habitation did not persist for a long period of time, so much of the natural ecosystem remained intact (Cleghorn 1987, Emory 1928, Harrison 1990). Animals now found on or near Nihoa include: a small, resident population of *Monachus schauinslandi* (Hawaiian monk seal), a listed endangered species; *Chelonia mydas* (green sea turtle), a listed threatened species; 17 species of breeding seabirds; several migratory seabirds; 2 endemic land birds, *Acrocephalus familiaris* (Nihoa millerbird) and *Telespiza ultima* (Nihoa finch), both listed endangered species; 6 species of endemic land snails; and 35 endemic and 26 indigenous arthropods, many only recently discovered. A total of 26 vascular plant species have been found on Nihoa: 3 species endemic to Nihoa, *Amaranthus brownii*, *Pritchardia remota* (loulou), and *Schiedea verticillata*; 9 species endemic to the Hawaiian Islands, *Chamaesyce celastroides* var. *celastroides* ('akoko), *Chenopodium oahuense* ('aheahea), *Eragrostis variabilis* (kawelu), *Panicum torridum* (kakonakona), *Portulaca villosa* ('ihi), *Rumex albescens* (hu'ahu'ako), *Sesbania tomentosa* ('ohai), *Sicyos pachycarpus* (kupala), and *Solanum nelsonii* (popolo); 8 species indigenous to Hawaii, *Boerhavia diffusa* (alena), *Heliotropium curassavicum* (seaside heliotrope), *Ipomoea indica* (koali 'awa), *Ipomoea pes-caprae* ssp. *brasiliensis* (pohuehue), *Portulaca lutea* ('ihi), *Sida fallax* ('ilima), *Solanum americanum* (glossy nightshade), and *Tribulus cistoides* (nohu); and 6 alien species which have naturalized in Hawaii, *Cenchrus echinatus* (common sandbur),

*Nephrolepis multiflora* (sword fern), *Paspalum* sp., *Portulaca oleracea* (pigweed), *Setaria verticillata* (bristly foxtail), and *Tetragonia tetragonoides* (New Zealand spinach) (Conant 1985, Conant and Herbst 1983, Gagne and Conant 1983, Harrison 1990, Herbst 1977).

Bare rock and unvegetated soil make up about one-third of the surface of Nihoa. All vegetation is classified as being part of Coastal Communities, including Coastal Dry Communities and a Coastal Mesic Community. Coastal Dry Shrublands include two forms of 'ilima (*Sida*) Shrubland; prostrate plants near the shore and erect plants in more sheltered sites. The 'Aweoweo (*Chenopodium* or 'aheahea) Coastal Shrubland includes 'aheahea and popolo as codominants, as well as 'ilima and several other less frequent species. The Loulu (*Pritchardia*) Coastal Forest, a type of Coastal Mesic Forest, contains *Pritchardia remota* as the only dominant (Gagne and Cuddihy 1990).

Nihoa is owned by the Federal government and is included within the boundaries of the City and County of Honolulu. It is part of the State of Hawaii Wildlife Refuge and is classified as Conservation District land, the island itself in the Protective Subzone and the surrounding water in the Resource Subzone. Nihoa is part of the Hawaiian Islands National Wildlife Refuge, which is managed by the Service, and has been designated a Research Natural Area (Clapp *et al.* 1977; Conant 1985; Department of the Interior 1986a, 1986b; Harrison 1990; Honolulu 1988; Miller 1983).

*Discussion of the Three Species Proposed for Listing*

*Amaranthus brownii* was first collected by Edward L. Caum during the Tanager Expedition in 1923. Erling Christophersen and Caum named it in honor of Dr. F.B.H. Brown in 1931.

*Amaranthus brownii*, a member of the amaranth family (Amaranthaceae), is an annual herb with leafy upright or ascending stems, 1 to 3 ft (30 to 90 centimeters (cm)) long. The slightly hairy, alternate leaves are long and narrow, 1.6 to 2.8 in (4 to 7 cm) long, 0.06 to 0.16 in (1.5 to 4 mm) wide, and more or less folded in half lengthwise. Flowers are either male or female, and both sexes are found on the same plant. The green flowers are subtended by two oval, bristle-tipped bracts about 0.04 in (1 mm) long and 0.03 in (0.7 mm) wide. Each flower has three bristle-tipped sepals which are lance-shaped and 0.05 in (1.3 mm) long by 0.03 in (0.8 mm) wide in male flowers and spatula-

shaped and 0.03 to 0.04 in (0.8 to 1 mm) long by 0.01 to 0.02 in (0.2 to 0.5 mm) wide in female flowers. Male flowers have three stamens; female flowers have two stigmas. The flattened, oval fruit, which does not split open at maturity, is 0.03 to 0.04 in (0.8 to 1 mm) long and 0.02 to 0.03 in (0.6 to 0.8 mm) wide and contains one shiny, lens-shaped, reddish black seed. This species can be distinguished from other Hawaiian members of the genus by its spineless leaf axils, its linear leaves, and its fruit which does not split open when mature (Wagner *et al.* 1990).

When *Amaranthus brownii* was first collected in 1923, it was "most common on the ridge leading to Millers Peak, but abundant also on the ridges to the east" (Herbst 1977). The 2 known populations are separated by a distance of 0.25 mi (0.4 km) and contain approximately 35 plants: about 23 plants near Millers Peak and about a dozen plants in Middle Valley. During its growing season of December through July, *Amaranthus brownii* typically grows on rocky outcrops in fully exposed locations at elevations between 390 and 700 ft (120 and 213 m). Associated species include 'aheahea, kakanakona, and kupala. Pigweed, an invasive alien species, is widespread on Nihoa and grows in habitat similar to *Amaranthus brownii*. Because it grows on rocky outcrops, *Amaranthus brownii* is more likely to be affected by substrate changes. Due to the small numbers of populations and individuals and its limited distribution, this species is threatened by stochastic extinction and/or reduced reproductive vigor. This species may have experienced a reduction in total numbers due to disturbances resulting from Polynesian settlement of Nihoa. Seeds have been collected for cultivation, but resulting germination and survival rates were very low, indicating that there may have been a reduction in the reproductive vigor of the species (Hawaii Heritage Program (HHP) 1990a1, 1990a2; Wagner *et al.* 1985, 1986, 1990).

In 1858, Dr. Rooke brought seed of a palm from Nihoa and planted it on the palace grounds in Honolulu (Hillebrand 1888). A Hillebrand specimen, probably collected from this cultivated tree, was used by Odoardo Beccari (1890) to describe *Pritchardia remota*. Otto Kuntze transferred the species to other genera, resulting in *Washingtonia remota* (Kuntze 1891) and later *Eupritchardia remota* (Kuntze 1898). In their 1921 monograph of the genus, Beccari and Joseph Rock included the species in *Pritchardia*, as do the authors of the current treatment (Read and Hodel 1990).

*Pritchardia remota*, a member of the palm family (Arecaceae), is a tree 13 to 16 ft (4 to 5 m) tall with a ringed, wavy trunk about 5.9 in (15 cm) in diameter. The rather ruffled, fan-shaped leaves are about 31 in (80 cm) in diameter and are somewhat waxy to pale green with a few tiny scales on the lower surface. The flowering stalks, up to 12 in (30 cm) long, are branched and have flowers arranged spirally along the hairless stalks. Below each flower is a bract 0.08 to 0.1 in (2 to 3 mm) long. The flower consists of a cup-shaped, three-lobed calyx (fused sepals); three petals, each about 0.2 in (6 mm) long; six stamens; and a three-lobed stigma. The pale greenish brown fruit is almost globose, 0.7 to 0.8 in (1.9 to 2 cm) long and about 0.7 in (1.8 to 1.9 cm) in diameter. This is the only species of *Pritchardia* on Nihoa and can be distinguished from other species of the genus in Hawaii by its wavy leaves; its short, hairless inflorescences; and its small, globose fruits (Beccari and Rock 1921, Read and Hodel 1990).

*Pritchardia remota* is known from two presently extant populations along 0.1 mi (0.2 km) of the length of each of two valleys which are about 0.4 mi (0.6 km) apart on opposite sides of Nihoa. Including seedlings, 680 plants are found in scattered groups: 387 plants in West Palm Valley and 293 in East Palm Valley (Herbst 1977). Earlier totals were somewhat smaller, probably because younger seedlings were not counted (Herbst 1977). An uncollected palm, no longer extant, was observed growing on Laysan Island and may have been this species (Ely and Clapp 1973, Rock 1913). Most of the populations of *Pritchardia remota* are crowded into scattered, small groves on abandoned agricultural terraces lower in the valleys. A few trees also grow at the bases of basaltic cliffs on the steep outer slopes of each of the two valleys. Plants grow from 660 to 2600 ft (200 to 800 m) in elevation (Wagner *et al.* 1990). *Pritchardia remota* is unusual among Hawaiian members of the genus in that it occurs in a dry area. Fossil loulou stems have been found near sea level on Oahu, which may indicate that the genus was more widespread before so much lowland habitat was altered for human use (Carlquist 1980, Cuddihy and Stone 1990). Within the Loulu Coastal Forest Community, *Pritchardia remota* assumes complete dominance with a closed canopy and thick layers of fallen fronds in the understory (Gagne and Cuddihy 1990). Plants growing near the groves and in association with the single individuals include 'aheahea, 'ilima, popolo, and some 'ohai. Lichens

grow on the trunks of the trees (Sheila Conant, University of Hawaii, pers. comm., 1991; Derral Herbst, U.S. Fish and Wildlife Service (USFWS), pers. comm., 1991). *Pritchardia remota* provides nesting and other habitat for *Sula sula rubripes* (red-footed boobies) as well as occasional perching space for *Anous stolidus pileatus* (brown noddies), two of the resident seabirds on Nihoa (Conant 1985). *Pritchardia remota* is in cultivation in several botanical gardens. The species is threatened by stochastic extinction due to the small number of populations and the plant's narrow range (Conant 1985; Karen Shigematsu, Lyon Arboretum, pers. comm., 1991).

The first specimens of *Schiedea verticillata* were collected near Derbys Landing in 1923. Brown (in Christophersen and Caum 1931) chose the specific epithet to refer to the verticillate (whorled) arrangement of the leaves. Although Sherff (1944) transferred the species to the genus *Alsinidendron*, current workers (Wagner *et al.* 1990) consider it to be a species of *Schiedea*.

*Schiedea verticillata*, a member of the pink family (Caryophyllaceae), is a perennial herb which dies back to an enlarged root during dry seasons. The stems, which can reach 1.3 to 2 ft (0.4 to 0.6 m) in length, are upright or sometimes pendent. The stalkless leaves are fleshy, broad, and pale green; are usually arranged in threes; and measure 3.5 to 5.9 in (9 to 15 cm) long and 2.8 to 3.5 in (7 to 9 cm) wide. Flowers are arranged in open, branched clusters, usually 6.7 to 9.8 in (17 to 25 cm) long. Opposite or whorled pale green bracts, located at inflorescence branches and underneath the flowers, measure 0.2 to 1.6 in (6 to 40 mm) long at the central branch and 0.1 to 0.2 in (3.5 to 6 mm) long on the side branches and underneath the flowers. Each petalless flower is positioned on a stalk 0.2 to 0.8 in (5 to 20 mm) long and has 5 lance-shaped sepals 0.3 to 0.4 in (8 to 10 mm) long, 5 nectaries, 10 stamens, and 4 or 5 styles. The ovoid capsule measures 0.3 to 0.4 in (7 to 9 mm) long and releases reddish to grayish brown seeds, about 0.03 in (0.7 to 0.8 mm) long. This species, the only member of its genus to grow in the NWHI, is distinguished from other species of the genus by its exceptionally large sepals and the usually three leaves per node (Wagner *et al.* 1990).

All historically known populations of *Schiedea verticillata* are known to be extant. Five populations are scattered in the western 10 percent of the island in an area about 0.06 mi (0.1 km) by 0.4 mi (0.6 km), and a sixth population is

found on the far eastern end of the island 0.7 mi (1.2 km) away. The 6 populations contain a total of 385 to 414 individuals: At Dogs Head, at least 95 plants have been observed; a population at Devils Slide consists of 96 to 100 plants; in West Palm Valley, 2 or 3 plants have been seen in the upper portion and 30 to 38 plants have been counted in the lower portion; the Pinnacle Peak population contains 12 to 25 individuals; at Millers Peak, 2 to 5 plants have been observed; and another population on the east spur of the island contains 148 plants (HHP 1990b1 to 1990b6). *Schiedea verticillata* typically grows in soil pockets and cracks on coastal cliff faces at elevations between 100 and 890 ft (30 and 270 m) (Wagner *et al.* 1990, Weller *et al.* 1990). Associated species include 'aheahea, beach morning glory, koali 'awa, kupala, kawelu, and lichens on surrounding rock. *Schiedea verticillata* is threatened by competition with pigweed, which is widespread on Nihoa and grows in habitats similar to this species. It is also threatened by stochastic extinction due to its very restricted range and the vulnerability of plants to disturbance events in their steep, rocky habitat (Conant 1985; S. Conant, pers. comm., 1991).

#### Previous Federal Action

Federal action on these plants began as a result of section 12 of the Act, 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, *Pritchardia remota* was considered to be endangered. On July 1, 1975, the Service published a notice in the *Federal Register* (40 FR 27823) of its acceptance

of the Smithsonian report as a petition within the context of section 4(c)(2) (now section 4(b)(3)) of the Act, and giving notice of its intention to review the status of the plant taxa named therein. 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 taxa. *Amaranthus brownii* and *Schiedea verticillata* were considered to be endangered in the proposed rule, but *Pritchardia remota* was not included. The list of 1,700 plant taxa 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.

General comments received in response to the 1976 proposal are summarized in an April 26, 1978, *Federal Register* publication (43 FR 17909). 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, along with four other proposals that had expired. The Service published updated notices of review for plants on December 15, 1980 (45 FR 82479), September 27, 1985 (50 FR 39525), and February 21, 1990 (55 FR 6183). In these notices, *Amaranthus brownii* and *Schiedea verticillata*, which were in the proposed rule, were treated as Category 1 candidates for Federal listing. Category 1 taxa are those for which the Service has on file substantial information on biological vulnerability and threats to support preparation of

listing proposals. The two taxa that were proposed as endangered in the June 16, 1976, proposed rule were considered Category 1 candidates on all three of these notices. *Pritchardia remota* was included as a Category 1 species on the 1980 notice and remained so on the 1985 and 1990 notices.

Section 4(b)(3)(B) of the Act requires the Secretary to make findings on certain 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 the date. On October 13, 1983, the Service found that the petitioned listing of these taxa was warranted but precluded by other pending listing actions, in accordance with section 4(b)(3)(B)(iii) of the Act; notification of this finding was published on January 20, 1984 (49 FR 2485). Such a finding requires the petition to be recycled, pursuant to section 4(b)(3)(C)(i) of the Act. The finding was reviewed in October of 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991. Publication of the present proposal constitutes the final 1-year finding for these species.

#### Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act (16 U.S.C. 1533) and regulations (50 CFR Part 424) promulgated to implement the Act set forth the procedures for adding species to the Federal Lists. 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). The threats facing these three species are summarized in Table 1.

TABLE 1.—SUMMARY OF THREATS

Species	Rats	Alien plants	Fire	Substrate loss*	Human impacts	Limited numbers**
<i>Amaranthus brownii</i> .....		X	P	X	X	X <sup>1,2</sup>
<i>Pritchardia remota</i> .....	P	P	P		X	X <sup>1</sup>
<i>Schiedea verticillata</i> .....	P	X	P	X	X	

X = Immediate and significant threat.

P = Potential threat.

\* = Substrate loss includes erosion, rock slides, and landslides.

\*\* = No more than 100 individuals and/or no more than 5 populations.

1 = No more than 5 populations.

2 = No more than 50 individuals.

These factors and their application to *Amaranthus brownii* Christoph. & Caum (NCN), *Pritchardia remota* Becc. (loulou), and *Schiedea verticillata* F. Brown (NCN) are as follows:

**A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range**

Nihoa's plant populations, as well as its many birds, are vulnerable to the intentional or inadvertent introduction of alien animals. The difficulty in landing on the island provides a degree of protection from animal introductions, but a wrecked fishing boat might accidentally introduce rats, which could cause a severe and rapid degradation of both the flora and fauna of Nihoa.

Alien plant species naturalizing on Nihoa compete with native plant species for space, water, nutrients, and light and would disturb ecosystems which include not only native plants, but also native arthropods and birds. Six alien plant species, which are naturalized in other parts of the Hawaiian Islands, have been found on Nihoa. Three alien plant species were first recorded in the area of Millers Peak, where a military installation was located during the 1960s. Common sandbur was first noticed between 1961 and 1969. In 1962, a soldier's towel at the military camp was found with six sandbur fruits stuck to it. This was burned, but it illustrates how easily alien propagules can be brought to Nihoa by human visitors. Service policy has been to destroy all sandbur plants, and none were seen after 1969 until 1981, when 1 plant with fewer than 10 fruits was discovered and destroyed. An unidentified species of the grass genus *Paspalum* was observed in 1962 near the military camp, but it has not been found since so has evidently not established. Three small colonies of pigweed were found in 1977 near the military installation. It has now spread over the entire island, having become the only widespread exotic plant present. Pigweed grows in shallow soil pockets, especially near ridge tops, the sort of habitat in which *Amaranthus brownii* and *Schiedea verticillata* grow. It may be replacing individuals of two native species of *Portulaca* and potentially could threaten *Amaranthus brownii* and *Schiedea verticillata*. Two introduced species have been found near the southern coast. Bristly foxtail was found in 1969 but has not been collected since, so it has probably not become established. New Zealand spinach was collected in 1977 and again in 1991. In 1981 one colony of sword fern, an alien species established in the main Hawaiian Islands, was found in

the southern part of Nihoa some distance from the usual landing site. Two other colonies were found in 1983 in the northwestern part of the island. This is the first fern naturalized in the main Hawaiian Islands to have reached the NWHI and is thought to have arrived by wind dispersal. Caution on the part of personnel working on the island and frequent monitoring of the vegetation and removal of alien plants have helped keep established exotics to a minimum on Nihoa (Conant 1983a, 1983b, 1985; Herbst 1980; Marshall 1964).

With its low amount of rainfall, Nihoa often has much dry vegetation, which is very susceptible to fire. An 1885 trip to Nihoa by a group led by Queen Liliuokalani illustrates this vulnerability. The group had to leave the island abruptly after they started a fire which quickly swept across the island (Culliney 1988). Fires caused by smoking or cooking remain potential threats.

Erosion, landslides, rock slides, and flooding due to natural causes potentially could result in the death of individual plants as well as habitat destruction. This especially affects the continued existence of taxa or populations with limited numbers and/or narrow ranges, including all three proposed species. Evidence of heavy flash floods has been noted in the lower part of East Palm Valley, where there are specimens of *Pritchardia remota* (Kramer 1962). *Amaranthus brownii* and *Schiedea verticillata* grow on rocky outcrops and cliff faces, making these plants vulnerable to substrate changes. This process can be exacerbated by human disturbance.

Because of the steep slope and rocky nature of Nihoa, people walking from place to place on the island can cause a great deal of damage. Currently, the only legal visitors are those with Service approval, usually Refuge personnel or scientific researchers who are very aware of the fragile nature of the island's environment (Conant 1985). Access to this island for Hawaiian religious ceremonies would be a permitted action, but visitors would be accompanied by Refuge personnel (Jerry Leinecke, USFWS, pers. comm., 1991). With increased commercial fishing in the NWHI, a policy adopted by the State of Hawaii and supported by the Department of Land and Natural Resources (Harrison 1985), there is a greater possibility of mishaps and unauthorized landings on Nihoa (Gagne and Conant 1983). Recreational boaters might be tempted to land illegally on the island. Conant (pers. comm., 1991) related a 1981 incident in which people on a yacht had an inflatable boat ready

to approach the island, but, upon seeing the camp of researchers working on the island, they made a hasty retreat.

**B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes**

Illegal collecting for scientific or horticultural purposes or visits by individuals interested in seeing rare plants could result from increased publicity, and would threaten these three species, especially *Amaranthus brownii* and *Schiedea verticillata*. The limited legal access to Nihoa and the island's distance from the inhabited main Hawaiian Islands reduces the effect of this impact. However, the island's isolation also decreases the amount of monitoring which can be provided by Federal and State authorities.

**C. Disease or Predation**

*Rattus* spp. (rats) and *Mus musculus* (house mouse), which have made their way to several small islands and islets in the Hawaiian chain (Tomich 1986), could be introduced to Nihoa from a nearby ship. Rodent predation could prove disastrous for *Pritchardia remota*; predation of seeds by rodents has reduced the reproductive capacity of other Hawaiian *Pritchardia* species (Center for Plant Conservation (CPC) 1990b, Cuddihy and Stone 1990). Rodents might also find the fleshy roots of *Schiedea verticillata* palatable (CPC 1990a). The former presence of *Felis catus* (house cat) and the current presence of *Lepidodactylus lugubris* (gecko) and at least 70 species of alien insects are proof that introductions to the island occur (Beardsley 1966; Bryan 1978; Conant et al. 1984; John Strazanac, Bishop Museum, pers. comm., 1991). *Tetranychus cinnabarinus* (carmine spider mite) has been collected several times on Nihoa and could threaten *Schiedea verticillata* (CPC 1990a; J. Strazanac, pers. comm., 1991).

**D. The Inadequacy of Existing Regulatory Mechanisms**

Hawaii's Endangered Species Act states, "Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the (Federal) Endangered Species Act shall be deemed to be an endangered species under the provisions of this chapter \* \* \*" (HRS, sect. 195D-4(a)). Federal listing would automatically invoke listing under Hawaii State law, which prohibits taking of endangered plants in the State and encourages conservation by State agencies (HRS, sect. 195D-4).

All populations of the three proposed species are located on Federal land which is within the boundaries of the City and County of Honolulu and the State of Hawaii and is managed as a National Wildlife Refuge by the Service. The land is also classified as a State Wildlife Refuge (Miller 1983), although all management is performed by the Federal government. All populations of the three proposed species occur on land classified within conservation districts. Lands in these districts, among other purposes, are regarded as necessary for the protection of endemic biological resources and the maintenance or enhancement of the conservation of natural resources (HRS, sect. 205-2). The State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (HRS, sect. 195D-5(c)). If these species were listed, funds for these activities could be made available under section 6 of the Federal Act (State Cooperative Agreements). Despite the existence of various State laws and regulations which give protection to Hawaii's native plants, their enforcement is difficult due to limited funding and personnel. Listing of these three plant species would reinforce and supplement the protection available under the State Act and other laws.

#### E. Other Natural or Manmade Factors Affecting its Continued Existence

The very limited range of all three of the proposed species, the small number of populations of two of the species, and the small number of individuals of one of the species increases the potential for extinction from stochastic events. The limited gene pool may depress reproductive vigor, or a single human-caused or natural environmental disturbance could destroy a significant percentage of the individuals or an entire population. All three of the proposed species, *Amaranthus brownii*, *Pritchardia remota*, and *Schiedea verticillata*, are restricted in their natural range to small portions of an island with an area of only 0.25 sq mi (0.65 sq km). Two of the species, *Amaranthus brownii* and *Pritchardia remota*, have only two populations each. Fewer than 40 individuals of *Amaranthus brownii* have ever been counted. Attempts to grow *Amaranthus brownii* in cultivation have not succeeded, with only a few seeds germinating and those seedlings not surviving (Conant 1985).

The Service has carefully assessed the best scientific and commercial

information available regarding the past, present, and future threats faced by these species in determining to propose this rule. Based on this evaluation, the preferred action is to list these three plant species as endangered. Two of the species proposed for listing are known from only two populations; the other species is known from only one population. One of the species numbers fewer than 40 individuals. Each of the three species is threatened by one or more of the following: Competition with the alien plant pigweed, substrate loss, and increased likelihood of extinction and/or reduced reproductive vigor due to small numbers of individuals and populations and their extremely limited range. Because these three species are in danger of extinction throughout all or a significant portion of their ranges, they fit the definition of endangered as defined in the Act. Therefore, the determination of endangered status for these three plant species appears warranted.

Critical habitat is not being proposed for these species for reasons discussed in the "Critical Habitat" section of this proposal.

#### 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 a species is determined to be endangered or threatened. The Service finds that determination of critical habitat is not presently prudent for *Amaranthus brownii*, *Pritchardia remota*, and *Schiedea verticillata*. Such a determination would result in no known benefit to the species. The publication of precise maps and descriptions of critical habitat in the Federal Register and local newspapers as required in a proposal for critical habitat would increase the degree of threat to these plants by making them more vulnerable to take or vandalism and their fragile habitat more susceptible to damage. The listing of these species as endangered also publicizes their rarity and, thus, can make these plants attractive to researchers, collectors, and those wishing to see rare plants. This could contribute to their decline and/or increase enforcement problems. The only known populations of the proposed species occur on land owned and managed by the Federal government, which is aware of the general location and importance of protecting the plants and their habitat. Protection of the species' habitat will be addressed through the recovery process and, in some cases, through the section

7 consultation process. All the plants are located on a National Wildlife Refuge, one of the policies of which is to conserve native vegetation, so it is unlikely that Federal activities would negatively affect the continued existence of these plants.

Therefore, the Service finds that designation of critical habitat for these species is not prudent at this time, because such designation would increase the degree of threat from vandalism, collecting, or other human activities and because it is unlikely to aid in the conservation of these species.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the State 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 and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act, requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. All populations of the three proposed species occur on land managed by the Service as a National Wildlife Refuge. There are no other known Federal activities that occur within the present known habitat of these three plant species.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 for endangered species set forth a series of general prohibitions and exceptions that apply to all endangered plant species. With respect to the three plant species from the island of Nihoa, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50 CFR 17.61, would apply. These prohibitions, in part, make it illegal with respect to any endangered plant, 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 these species in interstate or foreign commerce; or to remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any area under Federal jurisdiction; or remove, cut, dig up, damage or destroy any such species on any other area 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 plant species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued because the species are not common in cultivation nor in the wild.

Requests for copies of the regulations on plants and inquiries regarding prohibitions and permits may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, room 432, Arlington, Virginia 22203-3507 (703/358-2104 or FTS 921-2104; FAX 703/358-2281).

**Public Comments Solicited**

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to these species;
- (2) The location of any additional populations of these species and the reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;
- (3) Additional information concerning the range, distribution, and population size of these species; and
- (4) Current or planned activities in the subject area and their possible impacts on these species.

The final decision on this proposal will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Endangered Species Act provides for at least one public hearing on this proposal, if requested. Hearing requests must be received within 45 days of the date of publication of the proposal. Such requests must be made in writing and addressed to the Field Supervisor (see ADDRESSES section).

**National Environmental Policy Act**

The 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 is available upon request from the Pacific Islands Office (see ADDRESSES section).

**Author**

The primary author of this proposed rule is Zella E. Ellshoff, Fish and Wildlife Enhancement, Pacific Islands Office, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, room 6307, P.O. Box 50167, Honolulu, Hawaii 96850 (808/541-2749).

**List of Subjects in 50 CFR Part 17**

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

**Proposed Regulations Promulgation**

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, 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; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order under the families indicated, to the List of Endangered and Threatened Plants:

**§ 17.12 Endangered and threatened plants.**  
 \* \* \* \* \*  
 (h) \* \* \*

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Amaranthaceae—Amaranth family:						
<i>Amaranthus brownii</i> .....	None .....	U.S.A. (HI) .....	E	NA	NA	.
Arecaceae—Palm family:						
<i>Pritchardia remota</i> .....	Loulu .....	U.S.A. (HI) .....	E	NA	NA	.

Species		Historic range	Status	When listed	Critical habi- tat	Special rules
Scientific name	Common name					
Caryophyllaceae—Pink fam- ily:						
<i>Schiedea verticillata</i> .....	None .....	U.S.A. (HI) .....	E	NA	NA	

Dated: March 11, 1993.

**Richard N. Smith**

Acting Director, Fish and Wildlife Service.

[FR Doc. 93-6678 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-55-M

# Notices

Federal Register

Vol. 58, No. 55

Wednesday, March 24, 1993

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

### Food and Nutrition Service

#### Special Supplemental Food Program for Women, Infants and Children (WIC): Poverty Income Guidelines

AGENCY: Food and Nutrition Service, USDA.

ACTION: Poverty income guidelines.

**SUMMARY:** The Department announces adjusted poverty income guidelines to be used by State agencies in determining the income eligibility of persons applying to participate in the Special Supplemental Food Program for Women, Infants and Children (WIC Program). These poverty income guidelines are to be used in conjunction with the WIC Regulations, 7 CFR part 246.

**EFFECTIVE DATE:** July 1, 1993.

**FOR FURTHER INFORMATION CONTACT:** Barbara Hallman, Branch Chief, Policy and Program Development Branch, Supplemental Food Programs Division, FNS, USDA, 3101 Park Center Drive, Alexandria, Virginia 22302, (703) 305-2730.

#### SUPPLEMENTARY INFORMATION:

##### Classification

##### Executive Order 12291

The final action has been reviewed under Executive Order 12291 and has been determined to be not major. The Department does not anticipate that this notice will have an annual effect on the economy of \$100 million or more. This

action will not result in a major increase in costs or prices for consumers; individual industries; Federal, State, or local government agencies; or geographic regions. Further, this action will not have a significant adverse effect on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

##### Regulatory Flexibility Act

This action is not a rule as defined by the Regulatory Flexibility Act (5 U.S.C. 601-612) and thus is exempt from the provisions of this Act.

##### Paperwork Reduction Act

This notice does not contain reporting or recordkeeping requirements subject to approval by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3507).

##### Executive Order 12372

This program is listed in the Catalog of Federal Domestic Assistance Programs under No. 10.557 and is subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials (7 CFR part 3015, subpart V, 48 FR 29112).

##### Description

Section 17 (d)(2)(A) of the Child Nutrition Act of 1966 (42 U.S.C. 1786 (d)(2)(A)) requires the Secretary to establish income criteria to be used with nutritional risk criteria in determining a person's eligibility for participation in the WIC program. The law provides that persons will be eligible for the WIC Program only if they are members of families that satisfy the income standard prescribed for reduced price school meals under section 9(b) of the National School Lunch Act (42 U.S.C. 1758(b)). Under section 9(b), the income limit for reduced price school meals is 185

percent of the Federal poverty income guidelines, as adjusted.

Section 9(b) also requires that these guidelines be revised annually to reflect changes in the Consumer Price Index. The annual revision for 1993 was published by the Department of Health and Human Services (DHHS) in the *Federal Register* on February 12, 1993 at 58 FR 8287. The guidelines published by DHHS are referred to as the poverty income guidelines.

Section 246.7(c)(1) of the WIC regulations specifies that State agencies may prescribe income guidelines either equaling the income guidelines established under section 9(b) of the National School Lunch Act for reduced price school meals or identical to State or local guidelines for free or reduced price health care. However, in conforming WIC income guidelines to State or local health care guidelines, the State cannot establish WIC guidelines which exceed the guidelines established under section 9(b) of the National School Lunch Act for reduced price school meals, or which are less than 100 percent of the Federal poverty income guidelines.

Consistent with the method used to compute eligibility guidelines for reduced price meals under the National School Lunch Program, the poverty income guidelines were multiplied by 1.85 and the results rounded upward to the next whole dollar.

At this time the Department is publishing the maximum and minimum WIC poverty income limits by household size for the period July 1, 1993 through June 30, 1994. The first table of this notice contains the income limits by household size for the 48 contiguous States, the District of Columbia and all Territories, including Guam. Because the poverty income guidelines for Alaska and Hawaii are higher than for the 48 contiguous States, separate tables for Alaska and Hawaii have been included for the convenience of the State agencies.

EFFECTIVE JULY 1, 1993—JUNE 30, 1994

Family size	Annual poverty income guidelines (PIG)	Annual FNS income guidelines for reduced-price lunches (185% of PIG)
48 States, District of Columbia, Puerto Rico, Virgin Islands, and Territories, including Guam:		
1 .....	6,970	12,895



EFFECTIVE JULY 1, 1993—JUNE 30, 1994—Continued

Family size	Annual poverty income guidelines (PIG)	Annual FNS income guidelines for reduced-price lunches (185% of PIG)
2 .....	9,430	17,446
3 .....	11,890	21,997
4 .....	14,350	26,548
5 .....	16,810	31,099
6 .....	19,270	35,650
7 .....	21,730	40,201
8 .....	24,190	44,752
For each additional family member add .....	2,460	4,551
<b>Alaska:</b>		
1 .....	8,700	16,095
2 .....	11,780	21,793
3 .....	14,860	27,491
4 .....	17,940	33,189
5 .....	21,020	38,887
6 .....	24,100	44,585
7 .....	27,180	50,283
8 .....	30,260	55,981
For each additional family member add .....	3,080	5,698
<b>Hawaii</b>		
1 .....	8,040	14,874
2 .....	10,860	20,091
3 .....	13,680	25,308
4 .....	16,500	30,525
5 .....	19,320	35,742
6 .....	22,140	40,959
7 .....	24,960	46,176
8 .....	27,780	51,393
For each additional family member add .....	2,820	5,217

Dated: March 16, 1993.  
 Andrew P. Hornsby,  
 Acting Administrator.

INCOME ELIGIBILITY GUIDELINES

[Effective from July 1, 1993 to June 30, 1994]

Household size	Federal poverty guidelines			Reduced price meals—185%			Free meals—130%		
	Annual	Month	Week	Annual	Month	Week	Annual	Month	Week
<b>48 Contiguous United States, District of Columbia, Guam and Territories</b>									
1 .....	6,970	581	135	12,895	1,075	248	9,061	756	175
2 .....	9,430	786	182	17,446	1,454	336	12,259	1,022	236
3 .....	11,890	991	229	21,997	1,834	424	15,457	1,289	298
4 .....	14,350	1,196	276	26,548	2,213	511	18,655	1,555	359
5 .....	16,810	1,401	324	31,099	2,592	599	21,853	1,822	421
6 .....	19,270	1,606	371	35,650	2,971	686	25,051	2,088	482
7 .....	21,730	1,811	418	40,201	3,351	774	28,249	2,355	544
8 .....	24,190	2,016	466	44,752	3,730	861	31,447	2,621	605
For each add'l family member add .....	+2,460	+205	+48	+4,551	+380	+88	+3,198	+267	+62
<b>Alaska</b>									
1 .....	8,700	725	168	16,095	1,324	310	11,310	943	218
2 .....	11,780	982	227	21,793	1,817	420	15,314	1,277	295
3 .....	14,860	1,239	286	27,491	2,291	529	19,318	1,610	372
4 .....	17,940	1,495	345	33,189	2,766	639	23,322	1,944	449
5 .....	21,020	1,752	405	38,887	3,241	748	27,326	2,278	526
6 .....	24,100	2,009	464	44,585	3,716	858	31,330	2,611	603
7 .....	27,180	2,265	523	50,283	4,191	967	35,334	2,945	680
8 .....	30,260	2,522	582	55,981	4,666	1,077	39,338	3,279	757
For each add'l family member add .....	+3,080	+257	+60	+5,698	+475	+110	+4,004	+334	+77

## INCOME ELIGIBILITY GUIDELINES—Continued

[Effective from July 1, 1993 to June 30, 1994]

Household size	Federal poverty guidelines			Reduced price meals—185%			Free meals—130%		
	Annual	Month	Week	Annual	Month	Week	Annual	Month	Week
<b>Hawaii</b>									
1 .....	8,040	670	155	14,874	1,240	287	10,452	871	201
2 .....	10,860	905	209	20,091	1,675	387	14,118	1,177	272
3 .....	13,680	1,140	264	25,308	2,109	487	17,784	1,482	342
4 .....	16,500	1,375	318	30,525	2,544	588	21,450	1,788	413
5 .....	19,320	1,610	372	35,742	2,979	688	25,116	2,093	483
6 .....	22,140	1,845	426	40,959	3,414	788	28,782	2,399	554
7 .....	24,960	2,080	480	46,176	3,848	888	32,448	2,704	624
8 .....	27,780	2,315	535	51,393	4,283	989	36,114	3,010	695
For each add'l family member add .....	+2,820	+235	+55	+5,217	+435	+101	+3,666	+306	+71

[FR Doc. 93-6663 Filed 3-23-93; 8:45 am]  
BILLING CODE 3410-30-M

### Commodity Supplemental Food Program: Elderly Poverty Income Guidelines

**AGENCY:** Food and Nutrition Service, USDA.

**ACTION:** Elderly poverty income guidelines.

**SUMMARY:** The Department announces adjusted poverty income guidelines to be used by State agencies in determining the income eligibility of elderly persons applying to participate in the Commodity Supplemental Food Program (CSFP). These poverty income guidelines are to be used in conjunction with the CSFP Regulations, 7 CFR part 247.

**EFFECTIVE DATE:** July 1, 1993.

**FOR FURTHER INFORMATION CONTACT:** Barbara Hallman, Branch Chief, Policy and Program Development Branch, Supplemental Food Programs Division, FNS, USDA, 3101 Park Center Drive, Alexandria, Virginia 22302, (703) 305-2730.

#### SUPPLEMENTARY INFORMATION:

##### Classification

##### Executive Order 12291

This final action has been reviewed under Executive Order 12291 and has been determined to be not major. The Department does not anticipate that this notice will have an annual effect on the economy of \$100 million or more. This action will not result in a major increase in costs or prices for consumers; individual industries; Federal, State, or local government agencies; or geographic regions. Further, this action will not have a significant adverse effect on competition, employment,

investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

##### Regulatory Flexibility Act

This action is not a rule as defined by the Regulatory Flexibility Act (5 U.S.C. 601-612) and thus is exempt from the provisions of that Act.

##### Paperwork Reduction Act

This notice does not contain reporting or recordkeeping requirements subject to approval by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3507).

##### Executive Order 12372

This program is listed in the Catalog of Federal Domestic Assistance Programs under No. 10.565 and is subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials (7 CFR part 3015, subpart V, 48 FR 29112).

##### Description

On December 23, 1985 the President signed the Food Security Act of 1985 (Pub. L. 99-198). This legislation amended section 5 (f) and (g) of the Agriculture and Consumer Protection Act of 1973 (7 U.S.C. 612c note) to require that the Secretary permit agencies administering the CSFP to serve elderly persons if such service can be provided without reducing service levels for women, infants, and children. The law also mandates establishment of income eligibility requirements for elderly participation. Prior to enactment of Public Law 99-198, elderly participation was restricted by law to three designated pilot projects which

served the elderly in accordance with agreements with the Department.

In order to implement the CSFP mandates of Public Law 99-198, the Department published interim rules on September 17, 1986 at 51 FR 32895 and a final rule on February 18, 1988 at 58 8287. These regulations defined "elderly persons" as those who are 60 years of age or older. The final rule further stipulated that elderly persons certified on or after September 17, 1986 must have "household income at or below 130 percent of the Federal Poverty Income Guidelines published annually by the Department of Health and Human Services" (7 CFR 247.7(a)(3)).

These poverty income guidelines are revised annually to reflect changes in the Consumer Price Index. The revision for 1993 was published by the Department of Health and Human Services (DHHS) in the *Federal Register* for February 12, 1993 at 58 FR 8287. At this time the Department is publishing the income limit of 130 percent of the poverty income guidelines by household size to be used for elderly certification in the CSFP for the period July 1, 1993-June 30, 1994.

The poverty income guidelines were multiplied by 1.30 and the results rounded up to the next whole dollar. The first table in this notice contains the income limits by household size for the 48 contiguous States, the District of Columbia, and all the Territories including Guam. Because the poverty income guidelines for Alaska and Hawaii are higher than for the 48 contiguous States, separate tables for Alaska and Hawaii have been included for the convenience of the State agencies.

EFFECTIVE JULY 1, 1993—JUNE 30, 1994		EFFECTIVE JULY 1, 1993—JUNE 30, 1994—Continued		EFFECTIVE JULY 1, 1993—JUNE 30, 1994—Continued	
Family size	Annual FNS poverty income guidelines for elderly in CSFP (130% of PIG)	Family size	Annual FNS poverty income guidelines for elderly in CSFP (130% of PIG)	Family size	Annual FNS poverty income guidelines for elderly in CSFP (130% of PIG)
48 States, District of Columbia, Puerto Rico, Virgin Islands, and Territories, including Guam:		2	15,314	5	25,116
1	9,061	3	19,318	6	28,782
2	12,259	4	23,322	7	32,448
3	15,457	5	27,326	8	36,114
4	18,655	6	31,330	For each additional family member add	3,666
5	21,853	7	35,334		
6	25,051	8	39,338		
7	28,249	For each additional family member add	4,004		
8	31,447	Hawaii:			
For each additional family member add	3,198	1	10,452		
Alaska:		2	14,118		
1	11,310	3	17,784		
		4	21,450		

Dated: March 16, 1993.

Andrew P. Hornsby,  
Acting Administrator.

**INCOME ELIGIBILITY GUIDELINES**  
(Effective from July 1, 1993 to June 30, 1994)

Household size	Federal poverty guidelines			Reduced price meals—185%			Free meals—130%		
	Annual	Month	Week	Annual	Month	Week	Annual	Month	Week
<b>48 Contiguous United States, District of Columbia, Guam and Territories</b>									
1	6,976	581	135	12,895	1,075	248	9,061	756	175
2	9,430	786	182	17,446	1,454	336	12,259	1,022	236
3	11,890	991	229	21,997	1,834	424	15,457	1,289	296
4	14,350	1,196	276	26,548	2,213	511	18,655	1,555	359
5	16,810	1,401	324	31,099	2,592	599	21,853	1,822	421
6	19,270	1,606	371	35,650	2,971	686	25,051	2,088	482
7	21,730	1,811	418	40,201	3,351	774	28,249	2,355	544
8	24,190	2,016	466	44,752	3,730	861	31,447	2,621	605
For each add'l family member add	+2,460	+205	+48	+4,551	+380	+88	+3,198	+267	+62
<b>Alaska</b>									
1	8,700	725	168	16,095	1,342	310	11,310	943	218
2	11,790	982	227	21,793	1,817	420	15,314	1,277	295
3	14,860	1,239	286	27,491	2,291	529	19,318	1,610	372
4	17,940	1,495	345	33,189	2,766	639	23,322	1,944	449
5	21,020	1,752	405	38,887	3,241	748	27,326	2,278	526
6	24,100	2,009	464	44,585	3,716	858	31,330	2,611	603
7	27,180	2,265	523	50,283	4,191	967	35,334	2,945	680
8	30,260	2,522	582	55,981	4,666	1,077	39,338	3,279	757
For each add'l family member add	+3,080	+257	+60	+5,698	+475	+110	+4,004	+334	+77
<b>Hawaii</b>									
1	8,040	670	155	14,874	1,240	287	10,452	871	201
2	10,860	905	209	20,091	1,675	387	14,118	1,177	272
3	13,680	1,140	264	25,308	2,109	487	17,784	1,482	342
4	16,500	1,375	318	30,525	2,544	588	21,450	1,788	413
5	19,320	1,610	372	35,742	2,979	688	25,116	2,093	483
6	22,140	1,845	426	40,959	3,414	788	28,782	2,399	554
7	24,960	2,080	480	46,176	3,848	888	32,448	2,704	624
8	27,780	2,315	535	51,393	4,283	988	36,114	3,010	695
For each add'l family member add	+2,820	+235	+55	+5,217	+435	+101	+3,666	+306	+71

[FR Doc. 93-6662 Filed 3-23-93; 8:45 am]  
BILLING CODE 3410-30-M

## DEPARTMENT OF COMMERCE

### Agency Form Under Review by the Office of Management and Budget

DOC has submitted to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35).

Agency: National Oceanic and Atmospheric Administration (NOAA).  
Title: Statement of Financial Interests.  
Agency Form Number: NOAA 88-195.  
OMB Approval Number: 0648-0192.  
Type of Request: Extension of the expiration date of a currently approved collection.

Burden: 25 hours.

Number of Respondents: 50.

Avg Hours Per Response: 30 minutes.

Needs and Uses: The Magnuson Fishery Conservation Act requires

disclosure of financial interests in any harvesting, processing, or marketing activities by nominees for the position of Executive Director and Membership on the Fishery Management Councils. The information is intended to inform the public and the Secretary of Commerce of any potential "conflicts of interest."

Affected Public: Individuals.

Frequency: Once every 3 years per respondent.

Respondent's Obligation: Required to obtain or retain a benefit.

OMB Desk Officer: Ron Minsk, (202) 395-3084.

Copies of the above information collection proposal can be obtained by calling or writing Edward Michals, DOC Forms Clearance Officer, (202) 482-3271, Department of Commerce, room 5327, 14th and Constitution Avenue, NW., Washington, DC 20230.

Written comments and recommendations for the proposed information collection should be sent to Ron Minsk, OMB Desk Officer, room

3019, New Executive Office Building, Washington, DC 20503.

Dated: March 18, 1993

Edward Michals,

Departmental Forms Clearance Officer, Office of Management and Organization.

[FR Doc. 93-6657 Filed 3-23-93; 8:45 am]

BILLING CODE 3510-CW-F

### Economic Development Administration

#### Petitions by Producing Firms for Determination of Eligibility To Apply for Trade Adjustment Assistance

AGENCY: Economic Development Administration (EDA), Commerce.

ACTION: To give firms an opportunity to comment.

Petitions have been accepted for filing on the dates indicated from the firms listed below.

Firm name	Address	Date petition accepted	Product
Geo. E. Keith Company, Inc .....	31 Perkins Street, Bridgewater, MA 02324.	01/25/93	Footwear—Men's Shoes of Leather and Suede.
Kibak Tile aka Susanne Kibak-Redfield ...	334 Southwest Glacier Street, Redmond, OR 97756.	02/17/93	Handpainted ceramic wall tiles.
Stallion Oil Company .....	909 NE. Loop 410, Suite 715, San Antonio, TX 78209.	02/18/93	Hydrocarbons (Crude oil and natural gas).
Coiling Technologies, Inc .....	7777 Wright Road, Houston TX 77041 ....	02/22/93	Helical springs.
Barry Avenue Plating Company, Inc .....	2210 Barry Avenue, Los Angeles, CA 90064.	02/25/93	Aluminum and alloy aerospace body components such as: Wing spans, landing gear, wing spars and struts.
Gowanda Electrons Corp .....	1 Industrial Place, Gowanda, NY 14070 ..	02/25/93	Inductors (filters out noise from electronic components).
PDQ Manufacturing Co., Inc .....	P.O. Box 37, Route 9, Staatsburg, NY 12508.	02/25/93	Sheet metal fabricated enclosures weldments for computer industry.
OCHS Industry, Inc .....	849 Scholtz Drive, Vandalia, OH 45337 ..	03/02/93	Stamped metal parts for desk top computer processing units.
Toombs County Mfg. Co. ....	Hwy. 292 West, Lyons, GA 30436 .....	03/02/93	Ladies sleepwear and lingerie made of MMF.
Electri-Wire Corporation .....	N26 W23315 Paul Road, Pewaukee, WI 53072-4061.	03/03/93	Medical cables used for patient monitoring, wire harnesses.
Charter Technologies, Inc .....	5533 New Perry Highway, Erie, PA 16509.	03/04/93	Telephone power systems and line interface devices and magnetic power conversion units.
Circuit Services, Inc .....	1300 Bel-Red, #105, Bellevue, WA 98005.	03/04/93	Electronics—Printed circuit boards.
Condar Company .....	10500 Industrial Drive, Box 287, Garrettsville, OH 44231.	03/05/93	Thermometers of Aluminum and porcelain, catalytic combustors, cast-iron fireplaces and ceramic tile.
Eastern Rochester Mfg. Co., Inc .....	850 St. Paul Street Rochester, NY 14605	03/08/93	Roller Assemblies and heat sinks (heat dispersion apparatus).
Decorative Novelty Co., Inc .....	70 20th Street, Brooklyn, NY 11232 .....	03/08/93	Plastic Christmas garland, ornaments and trees.
Verlink Corporation .....	145 Baytech Drive, San Jose, CA 95134	03/08/93	Channel service units for use in telecommunications network.
Petro Chem Industries, Inc .....	5629 Cheswood, Houston, TX 77087 .....	03/09/93	Machinery and Equipment—compressor parts.
La'Spec Industries, Inc .....	2328 E. 49th Street, Los Angeles, CA 90058.	03/09/93	Custom lighting.
Advanced Controls, Incorporated .....	16901 Jamboree Boulevard, Irvine, CA 92714.	03/09/93	Machinery and Equipment—spindle drilling machines.

Firm name	Address	Date petition accepted	Product
Dynasound Organizer, Inc .....	1801 Old Highway 8, suite 124, New Brighton, MN 55112.	03/09/93	Racks, cases and organizers of plastics and carrying cases and totes of nylon.
W.H. Autopilots, Inc .....	655 Northeast Northlake Place, Seattle, WA 98105.	03/11/93	Machinery & equipment—Marine autopilots, electronic boxes, cables, compasses, Remote controls, etc.
Quiet Sport, Inc .....	60 Southeast Kennedy Drive, Duval, WA 98019.	03/11/93	Neoprene waders and hip boots.
Orion Instruments, Inc .....	180 Independence Drive, Merilo Park, CA 94025.	03/15/93	Electronic—Electronic Test and Measurement Equipment.

The petitions were submitted pursuant to section 251 of the Trade Act of 1974 (19 U.S.C. 2341). Consequently, the United States Department of Commerce has initiated separate investigations to determine whether increased imports into the United States of articles like or directly competitive with those produced by each firm contributed importantly to total or partial separation of the firm's workers, or threat thereof, and to a decrease in sales or production of each petitioning firm.

Any party having a substantial interest in the proceedings may request a public hearing on the matter. A request for a hearing must be received by the Trade Adjustment Assistance Division, room 7023, Economic Development Administration, U.S. Department of Commerce, Washington, DC 20230, no later than the close of business of the tenth calendar day following the publication of this notice.

The Catalog of Federal Domestic Assistance official program number and title of the program under which these petitions are submitted is 11.313, Trade Adjustment Assistance.

Dated: March 17, 1993.

David L. McIlwain,  
Acting Deputy Assistant Secretary for  
Program Operations.  
[FR Doc. 93-6656 Filed 3-23-93; 8:45 am]  
BILLING CODE 3510-24-M

#### International Trade Administration

##### Export Trade Certificate of Review

AGENCY: International Trade Administration, Commerce.

ACTION: Notice of revocation of export trade certificate of review no. 84-00068.

SUMMARY: The Secretary of Commerce issued an export trade certificate of review to Opti-Copy, Inc. Because this certificate holder has failed to file an annual report as required by law, the Secretary is revoking the certificate. This notice summarizes the notification letter sent to Opti-Copy, Inc.

FOR FURTHER INFORMATION CONTACT:

George Muller, Director, Office of Export Trading Company Affairs, International Trade Administration, 202/482-5131.

This is not a toll-free number.

SUPPLEMENTARY INFORMATION: Title III of the Export Trading Company Act of 1982 ("Act") (Pub. L. No. 97-290, 15 U.S.C. 4011-21) authorizes the Secretary of Commerce to issue export trade certificates of review. The regulations implementing title III ("Regulations") are found at 15 CFR part 325 (1986). Pursuant to this authority, a certificate of review was issued on November 26, 1984 to Opti-Copy, Inc.

A certificate holder is required by law to submit to the Department of Commerce annual reports that update financial and other information relating to business activities covered by its certificate (Section 308 of the Act, 15 U.S.C. 4018; § 325.14(a) of the Regulations). The annual report is due within 45 days after the anniversary date of the issuance of the certificate of review (§ 325.14(b) of the Regulations). Failure to submit a complete annual report may be the basis for revocation (§§ 325.10(a) and 325.14(c) of the Regulations).

An annual report was due from Opti-Copy, Inc. on January 10, 1992. No annual report was received. On February 10, 1992, the Department of Commerce contacted Opti-Copy, Inc. to remind it that the January 10, 1992 annual report was overdue, and an additional set of the annual report questions was sent by facsimile. On April 10, 1992, the Department of Commerce contacted Opti-Copy, Inc. again, and another set of the annual report questions was sent to it by facsimile. On November 10, 1992, the Department of Commerce contacted Opti-Copy, Inc. one more time to remind it that the Department still had not received its response to the annual report questions. The Department has received no written response from Opti-Copy, Inc. to any of these contacts.

On January 28, 1993, in accordance with § 325.10(c)(2) of the Regulations, a letter was sent by certified mail to notify Opti-Copy, Inc. that the Department was

formally initiating the process to revoke its certificate. The letter stated that this action was being taken for the certificate holder's failure to file an annual report, and that Opti-Copy, Inc. had thirty days to respond.

In addition, a summary of this letter was published in the Federal Register on February 5, 1993 (58 FR 7212). Pursuant to § 325.10(c)(2) of the Regulations, the Department considers the failure of Opti-Copy, Inc. to respond to be an admission of the statements contained in the notification letter.

The Department has determined to revoke the certificate issued to Opti-Copy, Inc. for its failure to file an annual report. The Department has sent a letter, dated March 18, 1993, to notify Opti-Copy, Inc. of its determination. The revocation is effective thirty (30) days from the date of publication of this notice. Any person aggrieved by this decision may appeal to an appropriate U.S. district court within 30 days from the date on which this notice is published in the Federal Register (§§ 325.10(c)(4) and 325.11 of the Regulations).

Dated: March 18, 1993.

George Muller,  
Director, Office of Export Trading Company Affairs.  
[FR Doc. 93-6700 Filed 3-23-93; 8:45 am]  
BILLING CODE 3510-DR-M

#### DEPARTMENT OF DEFENSE

##### Public Information Collection Requirement Submitted to OMB for Review

AGENCY: Department of Defense.  
ACTION: Notice.

The Department of Defense has submitted to OMB for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35).

Title, Applicable Form, and Applicable OMB Control Number: Food/Exercise Diary; AF Form 3529.  
Type of Request: Existing collection.

*Average Burden Hours/Minutes Per Response:* 15 minutes.

*Responses Per Respondent:* 1.

*Number of Respondents:* 3,000.

*Annual Burden Hours:* 750.

*Annual Responses:* 3,000.

**Needs and Uses:** The information collected on AF Form 3529 is used in conjunction with Air Force Pamphlet 166-27, "Improving Eating Habits," to teach persons on the U.S. Air Force Weight Control Program, and those on calorie-controlled diets, to make an accurate and objective self-analysis of their own food habits, as well as motivate them to take control of their own behavior.

**Affected Public:** Individuals or households; Federal agencies or employees.

**Frequency:** On occasion.

**Respondent's Obligation:** Voluntary.

**OMB Desk Officer:** Mr. Joseph F. Lackey. Written comments and recommendations on the proposed information collection should be sent to Mr. Lackey at the Office of Management and Budget, Desk Officer for DoD, room 3002, New Executive Office Building, Washington, DC 20503.

**DOD Clearance Officer:** Mr. William P. Pearce. Written requests for copies of the information collection proposal should be sent to Mr. Pearce, WHS/DIOR, 1215 Jefferson Davis Highway, suite 1204, Arlington, Virginia 22202-4302.

Dated: March 18, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93-6645 Filed 3-23-93; 8:45 am]

BILLING CODE 3810-01-M

#### Public Information Collection Requirement Submitted to OMB for Review

**AGENCY:** Department of Defense.

**ACTION:** Notice.

The Department of Defense has submitted to OMB for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35).

**Title, Applicable Form, and Applicable OMB Control Number:** Nutritional Medicine Service Patient's Evaluation; AF Form 2503.

**Type of Request:** Existing collection.  
**Average Burden Hours/Minutes Per Response:** 5 minutes.

**Responses Per Respondent:** 1.

**Number of Respondents:** 3,000.

**Annual Burden Hours:** 240.

**Annual Responses:** 3,000.

**Needs and Uses:** The information collected on AF Form 2503 is used to determine patient perceptions of how well Nutritional Medicine Service provides food and nutrition education services.

**Affected Public:** Individuals or households; Federal agencies or employees.

**Frequency:** On occasion.

**Respondent's Obligation:** Voluntary.

**OMB Desk Officer:** Mr. Joseph F. Lackey. Written comments and recommendations on the proposed information collection should be sent to Mr. Lackey at the Office of Management and Budget, Desk Officer for DoD, room 3002, New Executive Office Building, Washington, DC 20503.

**DOD Clearance Officer:** Mr. William P. Pearce. Written requests for copies of the information collection proposal should be sent to Mr. Pearce, WHS/DIOR, 1215 Jefferson Davis Highway, suite 1204, Arlington, Virginia 22202-4302.

Dated: March 18, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93-6646 Filed 3-23-93; 8:45 am]

BILLING CODE 3810-01-M

#### Office of the Secretary

##### Defense Technology Conversion, Reinvestment, and Transition Assistance

**AGENCY:** Advanced Research Projects Agency, DOD.

**ACTION:** Notice.

**SUMMARY:** This announces plans for the execution of the technology portion of the Defense Conversion, Reinvestment, and Transition Act of 1992. This is a broad-reaching program that will invest \$600 million (including some FY 1992 funds) in dual-use technology partnerships, manufacturing technology, regional technology alliances, manufacturing extension and assistance programs, and manufacturing education initiatives. The effort is being planned and conducted by the Technology Reinvestment Project (TRP), and interagency team led by the Department of Defense (Advanced Research Projects Agency), which includes the Department of Commerce (through NIST), Department of Energy (Defense Programs), National Aeronautics and Space Administration, and the National Science Foundation. Funds will be invested (as outlined below) to develop critical dual-use technologies, deploy existing technologies which address

defense needs and have potential for commercial viability, and stimulate the integration of military and commercial research and production bases. A total of eleven programs are authorized under title IV of the FY 1993 DoD Authorization Act. Three of these programs—Agile Manufacturing and Enterprise Integration (\$30 million), Advanced Materials Synthesis and Processing (\$30 million), and U.S. Japan Management Training (\$10 million)—will be executed by mechanisms outside of this announcement. Each of the remaining eight statutory programs covered by this announcement has a unique focus, however, three statutory requirements remain: All programs require competitive awards; all programs have specific requirements on the types of proposing and participating organizations; all require cost sharing of at least 50%. The eight programs covered in this announcement are:

(1) Defense Dual Use-Critical Technology Partnerships will support the research and development of critical technologies that meet defense needs and have commercial potential.

(2) Commercial-Military Integration Partnerships will develop and mature dual-use technologies with clear commercial viability in and potential military applications.

(3) The Regional Technology Alliances Assistance Program will support regional efforts to apply and commercialize critical dual-use technologies. These alliances will bring state, industry and federal resources together to provide key infrastructural service to regional clusters of associated firms.

(4) Defense Advanced Manufacturing Technology Partnerships will encourage research and development of advanced manufacturing technologies with the potential for a broad range of military and dual-use applications.

(5) The Manufacturing Extension Program will assist small manufacturers in upgrading their capabilities to serve both commercial and defense needs. Modeled after the Agricultural Extension Service, this effort will build on manufacturing extension programs sponsored by regional, state, or local governments and private, nonprofit organizations.

(6) The Dual-Use Assistance Extension Program will assist businesses economically dependent on Department of Defense expenditures to acquire dual-use capabilities through a variety of assistance mechanisms.

(7) The Manufacturing Engineering Education Grant Program will support the enhancement of existing programs and the establishment of new programs

in manufacturing engineering education and training. Grants will be made under this program to institutions of higher education and consortia of such institutions. Eligible firms and other support entities may participate.

(8) Manufacturing Experts in the Classroom will support teaching, curriculum development, and other activities of manufacturing experts at institutions of higher education. Eligible firms and other support entities may participate in this program. As mandated by Public Law 102-564, 1.5% of all program funds is set aside for Small Business Innovative Research (SBIR). The TRP will solicit, separate from the existing SBIR programs of the participating agencies, Phase I proposals that address scientific and technical innovation in areas specifically identified as relevant to the Technology Reinvestment Project. The eight statutory programs will involve key R&D and service activities. Each activity is designed to stimulate the integration of the military and commercial industrial bases as follows: Technology Development Activities will create new or apply existing technologies to demonstrate the viability of new products and processes and include (1) Spin-off activities that demonstrate commercial feasibility of technologies originally developed for defense, (2) Dual-Use activities that develop technologies that have both defense and commercial utility, and (3) Spin-on activities that demonstrate the defense feasibility of technologies already developed commercially. Technology Deployment Activities will disseminate existing technology for commercial and military products and processes and involve: (1) Manufacturing Extension Service activities that target small business with an emphasis on assisting enterprises currently dependent upon defense to increase their competitiveness through technical and management advancement, redirection or restructuring of business practices, assistance in accessing training and consulting services, and the transition of technologies from research to commercially viable products and processes, (2) Extension Enabling Services that demonstrate activities that link together providers of extension services with each other as well as with the developers of technology, (3) Alternate Deployment Pilot Projects that explore innovative modes of technology deployment which are alternatives to traditional extension services, and (4) Technology Access Services to assist the private sector to acquire existing and emerging dual-use and commercial

technologies from defense and government sources. Manufacturing Education and Training Activities will strengthen education and work force capabilities necessary to maintain and improve competitive industrial bases—ideas that improve the general state of U.S. competitiveness and productivity and provide a high quality work force for the 21st century. Emphasis will be on teaming of industry and organizations of higher education to enhance the development of dual-use technical capabilities at the university, college, and vocational levels. The use of experienced manufacturing experts and engineers in classroom settings, including the structuring of alternative curricula, will be encouraged. Regional meetings are planned for the week of April 12-17 in New York, NY; Orlando, FL; Dallas, TX; Detroit, MI; and Los Angeles, CA. Specific times and locations will be published as details become available. An official solicitation is planned for publication in both the Commerce Business Daily and the Federal Register in May 1993 with full proposals due in July. Questions at this time will not be accepted, however as indicated in the Program Information Package, ample opportunity for dialogue will be provided prior to the official release of the solicitation. Interested parties are invited to request a complete Program Information Package. To obtain a complete information package: Call—1-800-DUAL-USE, (8 a.m. through 7 p.m. e.s.t., Monday through Friday) or Write—The Technology Reinvestment Program, 3701 N. Fairfax Drive, Arlington, VA. 22203-1714, or Fax—703-461-2372 (Addressed to: TRP, PA 93-21), or Electronic Mail—Internet Address: PA93-21@darpa.mil. Interested parties may expect the Program Information Package within ten (10) days from written or oral request unless overnight mail account information is provided.

Dated: March 18, 1993.

L.M. Bynum,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 93-6644 Filed 3-23-93; 8:45 am]

BILLING CODE 3010-01-M

#### Department of the Air Force

##### Intent to Prepare an Environmental Impact Statement for Increased Commercial Operations at Palmdale Regional Airport, CA

In an effort to provide for increased commercial aircraft operations in and around Los Angeles, CA, the City of Los Angeles Department of Airports

(LADOA) in cooperation with the US Air Force is proposing to increase commercial operations at the Palmdale Regional Airport located at Air Force Plant 42. The proposed action will increase in stages, based on monthly averages, the number of daily commercial flights from the current level of 50 to a potential 400.

The proposed action will consist of the following; construction of a new terminal building of up to 700,000 square feet; increased automobile parking for up to 9,000 vehicles; construction of apron and taxiway for existing runway 4/22 along with 36 new aircraft parking positions; ground access improvements including entrance enhancements; additional traffic lanes in and out of the terminal; and the addition of edge and runway lighting as well as approach lighting for runway 4/22.

There are four preliminary identified alternatives that have been considered to the proposed action. These alternatives include: expansion of existing commercial airports; establishment of a new airport at a deactivated Air Force base; construction of a new airport on adjacent Los Angeles property; and the no action alternative.

A public scoping meeting will be held: Thursday, April 8, 1993 at 7 p.m. Ramada Inn, 300 West Palmdale Blvd., Palmdale, CA.

Public inputs and comments are solicited to determine the environmental impacts of the proposed program. To be included in the draft EIS, written comments must be received no later than forty-five (45) days from the publication of this notice. The Air Force is open to public comments on this EIS throughout the environmental impact analysis process.

Interested persons who wish to comment or seek more information on this proposed action and the EIS should contact: Mr. Peter K. Mok, Chief of Engineering, Air Force Plant 42, Det 1 ASC/EM, 2503 East Avenue P, Palmdale CA, 93550-2196.

Patsy J. Conner,

Air Force Federal Register Liaison Officer.

[FR Doc. 93-6629 Filed 3-23-93; 8:45 am]

BILLING CODE 3010-01-M

#### Department of the Navy

##### Board of Visitors to the United States Naval Academy; Meeting

Pursuant to the provisions of the Federal Advisory Committee Act (5 U.S.C. app. 2), notice is hereby given that the Board of Visitors to the United States Naval Academy will meet April

26, 1993, at the U.S. Naval Academy, Annapolis, Maryland. The session, which is open to the public, will commence at 8:30 a.m. and terminate at 2:30 p.m., April 26, 1993, in the Bo Coppedge Dining Room of Alumni Hall.

The purpose of the meeting is to make such inquiry as the Board shall deem necessary into the state of morale and discipline, the curriculum, instruction, physical equipment, fiscal affairs, and academic method of the Naval Academy.

For further information concerning this meeting contact: Lieutenant Commander Craig M. Diffie, U.S. Navy, Secretary to the Board of Visitors, Administration Building, United States Naval Academy, Annapolis, Maryland 24102, Telephone (410) 267-2402.

Dated: March 15, 1993.

**Michael P. Rummel,**  
LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 93-6634 Filed 3-23-93; 8:45 am]

BILLING CODE 3810-AE-F

#### Navy Exchange System Advisory Committee; Closed Meeting

Pursuant to the provisions of the Federal Advisory Committee Act (5 U.S.C. App. 2) notice is hereby given that the Navy Exchange System Advisory Committee will meet March 26, 1993, in the Macklowe Conference Center, New York City. The meeting will commence at 9:00 a.m. and will be closed to the public because it is likely to relate solely to internal agency personnel rules and practices; may disclose confidential commercial or financial information, and may involve information which, if disclosed prematurely would be likely to significantly frustrate implementation of proposed agency action. The Secretary of the Navy has determined, in writing, that the public interest requires the meeting be closed to the public because it will be concerned with matters listed in subsection 552b(c)(4) and (9)(B) of title 5, United States Code.

This Notice is being published late because of administrative delays which constitute an exceptional circumstance, not allowing Notice to be published in the *Federal Register* at least 15 days before the date of the meeting.

For further information concerning this meeting, contact: Captain Roger J. Blood, SC, USN, Naval Supply Systems Command (SUP 09B), 1931 Jefferson Davis Highway, Crystal Mall 3, Room

508, Arlington, VA 22202, Telephone Number: (703) 607-0072/3.

March 17, 1993.

**Michael P. Rummel**  
LCDR, JAGC, USN, Federal Register Liaison Officer.

[FR Doc. 93-6853 Filed 3-23-93; 8:45 am]

BILLING CODE 3810-AE-F

## DEPARTMENT OF DEFENSE

### GENERAL SERVICES ADMINISTRATION

### NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000-0069]

#### Clearance Request for Indirect Cost Rates

**AGENCIES:** Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Notice of request for an extension to an existing OMB clearance (9000-0069).

**SUMMARY:** Under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501), the Federal Acquisition Regulation (FAR) Secretariat has submitted to the Office of Management and Budget (OMB) a request to review and approve an extension of a currently approved information collection requirement concerning Indirect Cost Rates.

**FOR FURTHER INFORMATION CONTACT:** Beverly Fayson, Office of Federal Acquisition Policy, GSA (202) 501-4755.

#### SUPPLEMENTARY INFORMATION:

##### A. Purpose

The contractor's proposal of final indirect cost rates is necessary for the establishment of rates used to reimburse the contractor for the costs of performing under the contract. The supporting cost data are the cost accounting information normally prepared by organizations under sound management and accounting practices.

The proposal and supporting data is used by the contracting official and auditor to verify and analyze the indirect costs and to determine the final indirect cost rates or to prepare the Government negotiating position if negotiation of the rates is required under the contract terms.

## B. Annual Reporting Burden

The annual reporting burden is estimated as follows: Respondents, 9,800; responses per respondent, 1; total annual responses, 9,800; preparation hours per response, 1; and total response burden hours, 9,800.

**Obtaining Copies of Proposals:** Requester may obtain copies of OMB applications or justifications from the General Services Administration, FAR Secretariat (VRS), room 4037, Washington, DC 20405, telephone (202) 501-4755. Please cite OMB Control No. 9000-0069, Indirect Cost Rates, in all correspondence.

Dated: February 23, 1993.

**Beverly Fayson,**  
FAR Secretariat.

[FR Doc. 93-6635 Filed 3-23-93; 8:45 am]

BILLING CODE 6820-34-M

[OMB Control No. 9000-0074]

#### Clearance Request for Limitation of Costs/Funds

**AGENCIES:** Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

**ACTION:** Notice of request for an extension to an existing OMB clearance (9000-0074).

**SUMMARY:** Under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501), the Federal Acquisition Regulation (FAR) Secretariat has submitted to the Office of Management and Budget (OMB) a request to review and approve an extension of a currently approved information collection requirement concerning Limitation of Costs/Funds.

**FOR FURTHER INFORMATION CONTACT:** Beverly Fayson, Office of Federal Acquisition Policy, GSA (202) 501-4755.

#### SUPPLEMENTARY INFORMATION:

##### A. Purpose

Firms performing under Federal cost-reimbursement contracts are required to notify the contracting officer in writing whenever they have reason to believe—

(1) The costs the contractors expect to incur under the contracts in the next 60 days, when added to all costs previously incurred, will exceed 75 percent of the estimated cost of the contracts; or

(2) The total cost for the performance of the contracts will be greater or substantially less than estimated. As a



part of the notification, the contractors must provide a revised estimate of total cost.

#### B. Annual Reporting Burden

The annual reporting burden is estimated as follows: Respondents, 63,456; responses per respondent, 1; total annual responses, 63,456; preparation hours per response, 5; and total response burden hours, 31,728.

**Obtaining Copies of Proposals:** Requester may obtain copies of OMB applications or justifications from the General Services Administration, FAR Secretariat (VRS), room 4037, Washington, DC 20405, telephone (202) 501-4755. Please cite OMB Control No. 9000-0074, Limitation of Costs/Funds, in all correspondence.

Dated: February 23, 1993.

Beverly Fayson,  
FAR Secretariat.

[FR Doc. 93-6636 Filed 3-23-93; 8:45 am]

BILLING CODE 6820-34-M

## DEPARTMENT OF ENERGY

### Availability of the Waste Isolation Pilot Plant Test Phase Plan and Waste Retrieval Plan

**AGENCY:** U.S. Department of Energy.

**ACTION:** Notice of availability of the Waste Isolation Pilot Plant Test Phase Plan and Waste Retrieval Plan.

**SUMMARY:** The Department of Energy (DOE) announces the public availability of the Waste Isolation Pilot Plant (WIPP) Test Phase Plan and the WIPP Waste Retrieval Plan. These two plans were recently submitted to the Environmental Protection Agency (EPA) for review in accordance with section 5(a) of Public Law 102-579, the Waste Isolation Pilot Plant Land Withdrawal Act (the Act).

The WIPP Test Phase Plan: (1) Describes the Test Phase activities to be conducted at WIPP; (2) specifies the quantities and types of transuranic waste required for such activities; (3) describes how the activities will provide information directly relevant to a certification of compliance with the final disposal regulations or compliance with the Solid Waste Disposal Act (SWDA); and (4) provides justification for the activities.

The WIPP Waste Retrieval Plan describes the plan for the removal of the waste emplaced during the WIPP Test Phase, if such removal is required under the Act.

EPA will now review these plans and determine, through a rulemaking, whether to approve, in whole or in part, or disapprove the Test Phase Plan and

whether to approve or disapprove the Waste Retrieval Plan.

**ADDRESSES:** Requests for copies of the WIPP Test Phase Plan and the WIPP Waste Retrieval Plan should be directed to W. John Arthur, III, Project Director, WIPP Project Integration Office, U.S. Department of Energy, One Park Square, 6501 Americas Parkway, NE., suite 903, Albuquerque, New Mexico 87110, (505) 845-5977. Copies of each plan have also been placed in the DOE Public Reading Rooms and libraries listed below.

#### SUPPLEMENTARY INFORMATION:

##### 1. Background

The Department of Energy National Security and Military Applications Act of 1980 (Public Law 96-194) authorized DOE to construct a research and development facility to demonstrate the safe disposal of transuranic radioactive waste generated in national defense activities. The WIPP facility has been constructed in Eddy County in southeastern New Mexico, 26 miles east of Carlsbad, New Mexico, on land owned by the Federal Government. The site encompasses 10,240 acres in a sparsely populated area. WIPP consists of surface structures, underground facilities and four connecting shafts to the underground. The primary surface structure is the waste handling building, which supports the primary operations of receiving and inspecting waste containers and preparing those containers for transfer to the underground. The underground facilities are 2,150 feet below the surface in the bedded salt of the Salado Formation.

In October 1992, the WIPP site was withdrawn from the public domain under the Act, which also provides additional authorization to continue the project and establishes a statutory framework for subsequent phases of the project. For example, the EPA must certify that the WIPP facility will comply with certain regulations before the facility can be used to dispose of transuranic waste. It is the view of the Department of Energy that the WIPP Test Phase Plan results will aid EPA in making that determination.

##### 2. Document Availability

Copies of the Test Phase Plan for the Waste Isolation Pilot Plant (DOE/WIPP 89-011, Rev. 1, dated 3/93) and the Waste Retrieval Plan (DOE/WIPP 89-022, Rev. 1, dated 3/93) already have been distributed to individuals who have shown an interest in the WIPP Project in the past. In addition, a copy of each of the documents has been

placed in the following DOE Public Reading Rooms and libraries.

- U.S. Department of Energy—HQ, Public Reading Room, room 1E-190, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-6020.
- U.S. Department of Energy—Idaho, Public Reading Room, University Place, 1776 Science Center Drive, Idaho Falls, Idaho 83402, (208) 526-1144.
- U.S. Department of Energy—Nevada, Public Reading Room, 2753 South Highland Street, Las Vegas, Nevada 89109, (702) 295-1274.
- U.S. Department of Energy—Oak Ridge, Public Reading Room, Federal Building, 200 Administration Road, Oak Ridge, Tennessee 37830, (615) 576-1216.
- U.S. Department of Energy—Richland, Public Reading Room, Hanford Science Center, 825 Jadwin Avenue, Richland, Washington 99352, (509) 376-8583.
- U.S. Department of Energy—Savannah River, FOI Publication/Document Room, University of South Carolina-Aiken, Gregg-Graniteville Library, 171 University Parkway, Aiken, South Carolina 29801, (803) 725-1406.
- U.S. Department of Energy—San Francisco, Public Reading Room, 1333 Broadway, 7th Floor, Oakland, California 94612, (415) 273-4426.
- U.S. Department of Energy—Chicago, Public Document Department, University of Illinois at Chicago, 801 South Morga Street, Chicago, Illinois 60607, (312) 996-2738.
- U.S. Department of Energy—Rocky Flats, Public Reading Room, Front Range Community College, 3645 West 112th Avenue, Westminster, Colorado 80030, (303) 469-4435.
- National Atomic Museum, Public Reading Room, Wyoming Boulevard South, Kirtland Air Force Base, Albuquerque, New Mexico 87115, (505) 844-4376.
- Defense Nuclear Facilities Safety Board, 625 Indiana Avenue, NW., suite 700, Washington, DC 20585, (202) 208-6400.
- Office of Scientific and Technical Information, Technical Information Center, Post Office Box 62, Oak Ridge, Tennessee 37830, (615) 576-2268.
- Thomas Brannigan Memorial Library, 200 E. Pichaco, Las Cruces, New Mexico 88005, (505) 625-1045.
- New Mexico State Library, 325 Don Gaspar, Santa Fe, New Mexico 87503, (505) 827-3800.
- Pannell Library, New Mexico Junior College, 5317 Lovington Highway, Hobbs, New Mexico 88240, (505) 392-4510.
- Carlsbad Public Library, 101 S. Halagueno, Carlsbad, New Mexico 88220, (505) 885-6776.
- Zimmerman Library, Government Publications Department, University of New Mexico, Albuquerque, New Mexico 87138, (505) 277-5441.
- Martin Speare Memorial Library, New Mexico Tech, Campus Station, Socorro, New Mexico 87801, (505) 835-5614.

The documents may be obtained by contacting the WIPP Project Integration

Office Project Director at the address given above.

Issued in Washington, DC on March 19, 1993.

**Paul D. Grimm,**

*Acting Assistant Secretary for Environmental Restoration and Waste Management.*

[FR Doc. 93-6739 Filed 3-23-93; 8:45 am]

BILLING CODE 6450-01-M

#### Office of Arms Control and Nonproliferation Policy; Proposed Subsequent Arrangement

Pursuant to Section 131 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2160), notice is hereby given of a proposed "subsequent arrangement" under the Additional Agreement for Cooperation between the Government of the United States of America and the European Atomic Energy Community (EURATOM) concerning Peaceful Uses of Atomic Energy, as amended, and the Agreement for Cooperation between the Government of the United States of America and the Government of Sweden concerning Peaceful Uses of Nuclear Energy.

The subsequent arrangement to be carried out under the above-mentioned agreements involves approval of the following retransfer: RTD/SW(EU)-154, for the transfer from the Federal Republic of Germany to Sweden of 4 fuel assemblies containing 946 kilograms of uranium enriched to approximately 4.93 percent in the isotope uranium-235 for use as fuel in the Oskarshamn 3 power reactor.

In accordance with Section 131 of the Atomic Energy Act of 1954, as amended, it has been determined that this subsequent arrangement will not be inimical to the common defense and security.

This subsequent arrangement will take effect no sooner than fifteen days after the date of publication of this notice.

Issued in Washington, DC on March 19, 1993.

**Edward T. Fei,**

*Acting Director, Office of Nonproliferation Policy.*

[FR Doc. 93-6744 Filed 3-23-93; 8:45 am]

BILLING CODE 6450-01-M

#### Office of Arms Control and Nonproliferation Policy; Proposed Subsequent Arrangement

Pursuant to section 131 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2160), notice is hereby given of a proposed "subsequent arrangement" under the Additional Agreement for

Cooperation between the Government of the United States of America and the European Atomic Energy Community (EURATOM) concerning Peaceful Uses of Atomic Energy, as amended, and the Agreement for Cooperation between the Government of the United States of America and the Government of Sweden concerning Peaceful Uses of Nuclear Energy.

The subsequent arrangement to be carried out under the above-mentioned agreements involves approval of the following retransfer: RTD/SW(EU)-155, for the transfer from the Federal Republic of Germany to Sweden of 140 fuel elements, containing approximately 2,151 kilograms of natural uranium and approximately 24,446 kilograms of uranium enriched to an average of 3.38 percent in the isotope uranium-235 for use as fuel in the Forsmark 1 power reactor.

In accordance with section 131 of the Atomic Energy Act of 1954, as amended, it has been determined that this subsequent arrangement will not be inimical to the common defense and security.

This subsequent arrangement will take effect no sooner than fifteen days after the date of publication of this notice.

Issued in Washington, DC on March 19, 1993.

**Edward T. Fei,**

*Acting Director, Office of Nonproliferation Policy.*

[FR Doc. 93-6743 Filed 3-23-93; 8:45 am]

BILLING CODE 6450-01-M

#### Office of Fossil Energy

[FE Docket No. 93-27-NG]

#### Centra Gas Ontario, Inc.; Order Granting Blanket Authorization To Export Natural Gas to Canada

**AGENCY:** Office of Fossil Energy, DOE.

**ACTION:** Notice of an order.

**SUMMARY:** The Office of Fossil Energy of the Department of Energy gives notice that it has issued an order granting Centra Gas Ontario, Inc. authorization to export up to 16 billion cubic feet of natural gas to Canada over a two-year term beginning on the date of first export.

A copy of this order is available for inspection and copying in the Office of Fuels Programs Docket Room, 3F-056, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9478. The docket room is open between the hours of 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, March 16, 1993.

**Clifford P. Tomaszewski,**

*Director, Office of Natural Gas, Office of Fuels Programs, Office of Fossil Energy.*

[FR Doc. 93-6741 Filed 3-23-93; 8:45 am]

BILLING CODE 6450-01-M

[Docket No. FE C&E 93-04-Certification Notice-114]

#### Filing Certification of Compliance: Coal Capability of New Electric Powerplant; Powerplant and Industrial Fuel Use Act

**AGENCY:** Office of Fossil Energy, Department of Energy.

**ACTION:** Notice of filing.

**SUMMARY:** Harriman Energy Partners, Ltd. has submitted a coal capability self-certification pursuant to section 201 of the Powerplant and Industrial Fuel Use Act of 1978, as amended.

**ADDRESSES:** Copies of the self-certification filing is available for public inspection upon request in the Office of Fuels Programs, Fossil Energy, room 3F-056, FE-52, Forrestal Building, 1000 Independence Avenue SW., Washington, DC 20585.

**FOR FURTHER INFORMATION CONTACT:** Ellen Russell at (202) 586-9624.

**SUPPLEMENTARY INFORMATION:** Title II of the Powerplant and Industrial Fuel Use Act of 1978 (FUA), as amended (42 U.S.C. 8301 *et seq.*), provides that no new baseload electric powerplant may be constructed or operated without the capability to use coal or another alternate fuel as a primary energy source. In order to meet the requirement of coal capability, the owner or operator of such facilities proposing to use natural gas or petroleum as its primary energy source shall certify, pursuant to FUA section 201(d), to the Secretary of Energy prior to construction, or prior to operation as a base load powerplant, that such powerplant has the capability to use coal or another alternate fuel.

Such certification establishes compliance with section 201(a) on the day it is filed with the Secretary. The Secretary is required to publish a notice in the *Federal Register* that a certification has been filed. The following owner/operator of a proposed new baseload powerplant has filed a self-certification in accordance with section 201(d).

**Owner:** Harriman Energy Partners, Ltd., Saddle Brook, NJ

**Operator:** Harriman Energy Partners, Ltd.

**Location:** Orange County, New York  
**Plant Configuration:** Combined cycle, cogeneration

**Capacity:** 57 megawatts  
**Fuel:** Natural gas  
**Purchasing Utilities:** Orange and  
 Rockland Utilities, Inc.  
**Expected In-Service Date:** early 1995.

Issued in Washington, DC on March 3, 1993.

**Anthony J. Como,**

Director, Office of Coal & Electricity, Office  
 of Fuels Programs, Office of Fossil Energy.

[FR Doc. 93-6740 Filed 3-23-93; 8:45 am]

BILLING CODE 4450-01-M

#### Federal Energy Regulatory Commission

[Docket Nos. ER92-850-002, et al.]

**Louis Dreyfus Electric Power, Inc., et  
 al.; Electric Rate, Small Power  
 Production, and Interlocking  
 Directorate Filings**

Take notice that the following filings  
 have been made with the Commission:

##### 1. Louis Dreyfus Electric Power, Inc.

[Docket No. ER92-850-002]

March 12, 1993.

Take notice that on February 1, 1993,  
 Louis Dreyfus Electric Power, Inc.  
 (Dreyfus) filed certain information as  
 required by the Commission's letter  
 order dated December 2, 1992 in this  
 proceeding. 61 FERC ¶ 61,303. Copies of  
 Dreyfus' informational filing are on file  
 with the Commission and are available  
 for public inspection.

##### 2. Boston Edison Company

[Docket No. ER93-437-000]

March 16, 1993.

Take notice that on December 28,  
 1993, Boston Edison Company (Boston)  
 tendered for filing the 1991 true up to  
 actual for the Substation 402 Agreement  
 (FPC Rate No. 149).

*Comment date:* March 26, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 3. Western Massachusetts Electric Company

[Docket Nos. ER92-66-000 and ER93-219-  
 000]

March 17, 1993.

Take notice that on March 11, 1993,  
 Massachusetts Electric Company  
 (WMECO) submitted additional  
 information in support of its  
 distribution transformation rate for  
 service to Groton Electric Light  
 Department (Groton).

WMECO states that copies of its  
 submission have been mailed or  
 delivered to each of the parties.

*Comment date:* March 31, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 4. Portland General Electric Company

[Docket No. ER93-445-000]

March 17, 1993.

Take notice that on March 11, 1993,  
 Portland General Electric (PGE)  
 tendered for filing an amended Exhibit  
 D to the General Transfer Agreement  
 Between the Bonneville Power  
 Administration (BPA) and PGE. This  
 amendment will permit BPA to  
 compensate PGE for the actual costs of  
 a distribution level 13 kV feeder line  
 that PGE constructed at BPA's request to  
 accommodate BPA's wholesale power  
 service to the Canby Utility Board. PGE  
 requests waivers and a March 12, 1993  
 effective date.

Copies of this agreement have been  
 served on BPA.

*Comment date:* March 31, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 5. Union Electric Company

[Docket No. ER93-440-000]

March 17, 1993.

Take notice that on March 11, 1993,  
 Union Electric Company (Union)  
 tendered for filing a Notice of  
 Cancellation of FERC Rate Schedule No.  
 88.

*Comment date:* March 31, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 6. Arizona Public Service Company

[Docket No. ER93-438-000]

March 17, 1993.

Take notice that on March 10, 1993,  
 Arizona Public Service Company  
 tendered for filing the proposed  
 Principles for the Continuation of  
 Wholesale Power Supply (Principles) to  
 the Navajo Tribal Utility Authority  
 (NTUA). The Principles propose to  
 provide existing services to NTUA  
 through midnight May 31, 1993.

No change to the current rate or  
 revenue levels presently on file with the  
 Commission is proposed herein.

No new facilities or modifications to  
 existing facilities are required as a result  
 of this revision.

A copy of this filing has been served  
 on NTUA and the Arizona Corporation  
 Commission.

*Comment date:* March 31, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 7. Gulf States Utilities Company

[Docket No. ES93-24-000]

March 17, 1993.

Take notice that on March 12, 1993,  
 Gulf States Utilities Company (Gulf  
 States) filed an application with the  
 Federal Energy Regulatory Commission

under section 204 of the Federal Power  
 Act requesting authorization to issue not  
 more than 1.5 million shares of New  
 Preferred Stock, \$100 par value, or 8  
 million shares of New Preference Stock,  
 without part value, or a combination  
 thereof, in an aggregate amount of not  
 more than \$150 million over a two-year  
 period. Also, Gulf States requests  
 exemption from the Commission's  
 competitive bidding regulations.

*Comment date:* April 12, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 8. Delmarva Power & Light Company

[Docket No. EL93-24-000]

March 17, 1993.

Take notice that Delmarva Power &  
 Light Company (DP&L) on March 8,  
 1993, tendered for filing a petition for  
 waiver of § 35.14 of the Regulations.

The affected customers and their  
 FERC rate schedules are as follows:

Customers	FERC rate schedule Nos.
Old Dominion Electric Coop- erative .....	51, 52, 53
Lewes, Delaware .....	61
Seaford, Delaware .....	62
Berlin, Maryland .....	63
Clayton, Delaware .....	64
Middletown, Delaware .....	65
New Castle, Delaware .....	66
Milford, Delaware .....	67
Smyrna, Delaware .....	68
Newark, Delaware .....	69

The proposed changes would modify  
 the fuel adjustment clause so that the  
 fuel adjustment charges will not be  
 affected by energy produced by facilities  
 undergoing test operation.

The proposed modification is  
 required to ensure that the value of test  
 power produced by the Company's Hay  
 Road No. 4 during its test operation in  
 1993 will be accounted for properly.  
 Copies of the filing were served upon  
 Delmarva's jurisdictional customers  
 named above and upon the Delaware  
 and Maryland Public Service  
 Commissions, as well as the Virginia  
 State Corporation Commission.

*Comment date:* April 2, 1993, in  
 accordance with Standard Paragraph E  
 at the end of this notice.

##### 9. Arkansas Power & Light Company

[Docket No. ER93-436-000]

March 17, 1993.

Take notice that on March 9, 1993,  
 Entergy Services, Inc., on behalf of  
 Arkansas Power & Light Company  
 (AP&L) filed revised rates and revised  
 transmission loss factors in accordance  
 with the 1992 Settlement Agreement in  
 Docket No. ER92-341-000; the Power

Coordination, Interchange and Transmission Service Agreements between AP&L and Conway, West Memphis, and Osceola, Arkansas; Campbell and Thayer, Missouri; City of Water & Light Plant of Jonesboro, Arkansas; Arkansas Electric Cooperative Corporation; the Power Coordination, Interchange and Transmission Service Agreement between AP&L and Entergy Power, Inc.; the Transmission Service Agreement between AP&L and the Louisiana Energy & Power Authority; the Transmission Service Agreement between AP&L and the City of Distribution Service Agreement between AP&L and the City of North Little Rock, Arkansas; and the Interchange Agreement between AP&L and Oglethorpe Power Corporation.

*Comment date:* March 31, 1993, in accordance with Standard Paragraph E at the end of this notice.

#### 10. Kansas Gas and Electric Company

[Docket No. ER93-439-000]

March 17, 1993.

Take notice that on March 11, 1993, Western Resources, Inc., on behalf of Kansas Gas and Electric Company (KG&E), tendered for filing a proposed change to its Federal Energy Regulatory Commission Electric Service Tariff No. 93 between KG&E and the KPL division of Western Resources, Inc. (KPL). KG&E states that the proposed change is to add one additional year of the current Short Term Peaking Capacity Service Schedule, effective June 1, 1993.

Copies of the filing have been served upon KPL and the Kansas Corporation Commission

*Comment date:* March 31, 1993, in accordance with Standard Paragraph E at the end of this notice.

#### 11. Union Electric Company

[Docket No. ER93-441-000]

March 17, 1993.

Take notice that on March 11, 1993, Union Electric Company (Union) tendered for filing an Amendment dated September 25, 1992, to the Interchange Agreement dated June 28, 1978, between Associated Electric Cooperative, Incorporated and UE. UE asserts that the Amendment primarily provides for new and revised interconnection points, delivery points and intertie points.

*Comment date:* March 31, 1993, in accordance with Standard Paragraph E end of the notice.

#### 12. United Illuminating Company

[Docket No. ER93-3-000]

March 17, 1993.

Take notice that on March 8, 1993, United Illuminating Company (UI) tendered for filing an amendment in the above-referenced docket.

*Comment date:* March 31, 1993, in accordance with Standard Paragraph E at the end of this notice.

#### 13. Entergy Services, Inc.

[Docket No. ER93-447-000]

March 17, 1993.

Take notice that on March 12, 1993, Entergy Services, Inc. on behalf of Arkansas Power & Light Company (AP&L), filed the First Amendment to Interconnection Agreement between Arkansas Power & Light Company and Associated Electric Cooperative, Inc., dated February 10, 1993 (First Amendment). Entergy Services states that the purpose of the First Amendment is to amend Section 11.07, "Successors and Assigns," of the Interconnection Agreement between AP&L and Associated Electric Cooperative, Inc., to conform to the requirements of the Rural Electrification Administration. Entergy Services requests that the Commission grant waiver of its notice requirements and make the First Amendment effective as of February 10, 1993.

*Comment date:* April 1, 1993, in accordance with Standard Paragraph E end of this notice.

#### 14. Public Service Company of Colorado

[Docket No. ER93-446-000]

March 17, 1993.

Take notice that on March 12, 1993, Public Service Company of Colorado tendered for filing proposed changes in its FERC Electric Service Rate Schedule, FERC No. 52. The net effect of the proposed changes would reduce revenues by \$602,400 from jurisdictional sales and service based on the 12 month period ending December 1993.

Public Service requests an effective date of April 15, 1992, for certain of the changes to Rate Schedule FERC No. 52, and an effective date of January 1, 1993, for others. Accordingly, Public Service requests waiver of the Commission's notice regulations for good cause shown. 18 CFR 35.3, 35.11.

Copies of the filing were served upon Holy Cross Electric Association, Inc. 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:* April 1, 1993, 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, NE., Washington DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 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. 93-6654 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

#### [Project No. 2336-009 Georgia]

#### Georgia Power Co.; Availability of Environmental Assessment

March 18, 1993.

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission's) regulations, 18 CFR part 380 (Order No. 486, 52 FR 47897), the Office of Hydropower Licensing has reviewed the application for new major license for the existing Lloyd Shoals Project, located on the Ocmulgee River in Butts, Henry, Jasper, and Newton Counties, Georgia, and has prepared an Environmental Assessment (EA) for the project. In the EA, the Commission's staff has analyzed the project and has concluded that issuance of a new license for the project, with appropriate mitigative measures, would not constitute a major federal action significantly affecting the quality of the human environment.

Copies of the EA are available for review in the Public Reference Branch, room 3308, of the Commission's offices at 941 North Capitol Street, NE., Washington, DC 20426.

Lois D. Cashell,

Secretary.

[FR Doc. 93-6687 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket Nos. ST93-2021-000 through ST93-2454-000].

### United Gas Pipe Line Co.; Self-Implementing Transactions

March 18, 1993.

Take notice that the following transactions have been reported to the Commission as being implemented pursuant to part 284 of the Commission's regulations, sections 311 and 312 of the Natural Gas Policy Act of 1978 (NGPA), section 7 of the NGA and section 5 of the Outer Continental Shelf Lands Act.<sup>1</sup>

The "Recipient" column in the following table indicates the entity receiving or purchasing the natural gas in each transaction.

The "Part 284 Subpart" column in the following table indicates the type of transaction.

A "B" indicates transportation by an interstate pipeline on behalf of an intrastate pipeline or a local distribution company pursuant to § 284.102 of the Commission's regulations and section 311(a)(1) of the NGPA.

A "C" indicates transportation by an intrastate pipeline on behalf of an interstate pipeline or a local distribution company served by an interstate

pipeline pursuant to § 284.122 of the Commission's regulations and section 311(a)(2) of the NGPA.

A "D" indicates a sale by an intrastate pipeline to an interstate pipeline or a local distribution company served by an interstate pipeline pursuant to § 284.142 of the Commission's Regulations and section 311(b) of the NGPA. Any interested person may file a complaint concerning such sales pursuant to § 284.147(d) of the Commission's Regulations.

An "E" indicates an assignment by an intrastate pipeline to any interstate pipeline or local distribution company pursuant to § 284.163 of the Commission's regulations and section 312 of the NGPA.

A "G" indicates transportation by an interstate pipeline on behalf of another interstate pipeline pursuant to § 284.222 and a blanket certificate issued under § 284.221 of the Commission's regulations.

A "G-I" indicates transportation by an intrastate pipeline company pursuant to a blanket certificate issued under § 284.227 of the Commission's regulations.

A "G-S" indicates transportation by interstate pipelines on behalf of

shippers other than interstate pipelines pursuant to § 284.223 and a blanket certificate issued under § 284.221 of the Commission's regulations.

A "G-LT" or "G-LS" indicates transportation, sales or assignments by a local distribution company on behalf of or to an interstate pipeline or local distribution company pursuant to a blanket certificate issued under § 284.224 of the Commission's regulations.

A "G-HT" or "G-HS" indicates transportation, sales or assignments by a Hinshaw Pipeline pursuant to a blanket certificate issued under § 284.224 of the Commission's regulations.

A "K" indicates transportation of natural gas on the Outer Continental Shelf by an interstate pipeline on behalf of another interstate pipeline pursuant to § 284.303 of the Commission's regulations.

A "K-S" indicates transportation of natural gas on the Outer Continental Shelf by an interstate pipeline on behalf of shippers other than interstate pipelines pursuant to § 284.303 of the Commission's regulations.

Lola D. Cashell,  
Secretary.

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2021	United Gas Pipe Line Co.	Shell Gas Trading Co.	01-04-93	G-S	209,000	N	I	12-17-92	04-16-93
ST93-2022	United Gas Pipe Line Co.	Chevron U.S.A., Inc.	01-04-93	G-S	78,600	N	I	12-16-92	04-15-93
ST93-2023	United Gas Pipe Line Co.	Mobil Natural Gas, Inc.	01-04-93	G-S	54,400	N	I	12-17-92	04-16-93
ST93-2024	United Gas Pipe Line Co.	Vesta Energy Co.	01-04-93	G-S	104,800	N	I	12-17-92	04-16-93
ST93-2025	Panhandle Eastern Pipe Line Co.	Associated Natural Gas, Inc.	01-04-93	G-S	1,000	N	F	12-01-92	Indef.
ST93-2026	ONG Transmission Co.	Natural Gas Pipeline Co. of America.	01-05-93	C	50,000	N	I	12-10-92	Indef.
ST93-2027	Noark Pipeline System, L.P.	Texas Eastern Trans. Corp., et al.	01-05-93	C	50,000	N	I	11-01-92	10-31-97
ST93-2028	ONG Transmission Co.	Williams Natural Gas Co.	01-05-93	C	50,000	N	I	12-12-92	Indef.
ST93-2029	ONG Transmission Co.	Panhandle Eastern Pipe Line Co.	01-05-93	C	50,000	N	I	12-16-92	Indef.
ST93-2030	Arkansas Western Gas Co.	Arka Energy Resources.	01-05-93	G-HT	5,000	N	I	11-01-92	Indef.
ST93-2031	Kern River Gas Transmission Co.	Chevron U.S.A., Inc.	01-06-93	G-S	100,000	N	F	12-11-92	Indef.
ST93-2032	Transok Gas Transmission Co.	ANR Pipeline Co., et al.	01-06-93	C	20,000	N	I	12-09-92	Indef.

<sup>1</sup> Notice of a transaction does not constitute a determination that the terms and conditions of the proposed service will be approved or that the

noticed filing is in compliance with the Commission's regulations.

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2033	Transok Gas Transmission Co.	ANR Pipeline Co., et al.	01-06-93	C	12,000	N	I	12-10-92	Indef.
ST93-2034	Northwest Pipeline Corp.	Ranch Oil Co .....	01-06-93	G-S	1,000	N	I	09-13-92	Indef.
ST93-2035	United Gas Pipe Line Co.	Prior Intrastate Corp.	01-06-93	G-S	524,000	N	I	12-22-92	04-21-93
ST93-2036	United Gas Pipe Line Co.	United Gas Services Co.	01-06-93	G-S	628,000	Y	I	12-22-92	04-21-93
ST93-2037	United Gas Pipe Line Co.	KCS Energy Marketing, Inc.	01-06-93	G-S	78,600	N	I	12-22-92	04-21-93
ST93-2038	Great Lakes Gas Transmission LP.	Transcanada Pipelines Limited.	01-06-93	G-S	450,000	A	I	09-05-92	Indef.
ST93-2039	Great Lakes Gas Transmission LP.	Coenergy Ventures, Inc.	01-06-93	G-S	100,000	N	I	12-23-92	Indef.
ST93-2040	Great Lakes Gas Transmission LP.	Unigas Energy Inc	01-06-93	G-S	400,000	A	I	12-01-92	Indef.
ST93-2041	Southern Natural Gas Co.	Stone Savannah River.	01-07-93	G-S	7,000	N	F	12-11-92	12-31-92
ST93-2042	Southern Natural Gas Co.	James River Corp	01-07-93	G-S	10,000	N	F	01-01-93	02-28-93
ST93-2043	Southern Natural Gas Co.	AMAX Gas Marketing.	01-07-93	G-S	50,000	N	I	12-19-92	Indef.
ST93-2044	Southern Natural Gas Co.	Howard Energy Co., Inc.	01-07-93	G-S	200,000	N	I	12-23-92	Indef.
ST93-2045	Sea Robin Pipeline Co.	Mid Louisiana Gas Co.	01-07-93	G-S	6,000	N	F	01-01-93	08-31-97
ST93-2046	Sea Robin Pipeline Co.	Sonat Marketing Co.	01-07-93	G-S	12,983	N	F	01-01-93	01-31-93
ST93-2047	Algonquin Gas Transmission Co.	Yuma Gas Corp ..	01-07-93	G-S	71,000	N	I	12-12-92	Indef.
ST93-2048	Algonquin Gas Transmission Co.	Continental Energy Marketing, Inc.	01-07-93	G-S	50,000	N	I	12-11-92	Indef.
ST93-2049	Algonquin Gas Transmission Co.	Continental Energy Marketing, Inc.	01-07-93	G-S	50,000	N	I	12-10-92	Indef.
ST93-2050	Algonquin Gas Transmission Co.	Continental Energy Marketing, Inc.	01-07-93	G-S	50,000	N	I	12-11-92	Indef.
ST93-2051	Texas Eastern Transmission Co.	Winnie Pipeline Co.	01-07-93	B	9,000	N	I	12-10-92	Indef.
ST93-2052	Texas Eastern Transmission Co.	Ocean State Power.	01-07-93	G-S	120,000	N	I	12-18-92	Indef.
ST93-2053	Texas Eastern Transmission Co.	T.W. Phillips Gas & Oil Co.	01-07-93	G-S	20,000	N	I	12-13-92	Indef.
ST93-2054	Transcontinental Gas P/L Corp.	ARCO Natural Gas Marketing, Inc.	01-07-93	G-S	8,459,000	N	I	12-23-92	Indef.
ST93-2055	Transcontinental Gas P/L Corp.	MG Natural Gas Corp.	01-07-93	G-S	900,000	N	I	12-23-92	Indef.
ST93-2056	Transok, Inc .....	Arka Energy Resources.	01-07-93	C	50,000	N	I	12-09-92	Indef.
ST93-2057	Williams Natural Gas Co.	Kansas Gas Supply.	01-07-93	G-S	260	N	I	12-12-92	Indef.
ST93-2058	Tennessee Gas Pipeline Co.	Xenergy, Inc .....	01-07-93	G-S	7,500	N	I	12-14-92	Indef.
ST93-2059	Lone Star Gas Co	Northern Natural Gas Co., et al.	01-08-93	C	100,000	N	I	12-09-92	Indef.
ST93-2060	ANR Pipeline Co .	Torch Energy Marketing, Inc.	01-08-93	G-S	365,000	N	I	12-11-92	Indef.
ST93-2061	ANR Pipeline Co .	Wisconsin Power & Light Co.	01-08-93	G-S	50,000	N	I	12-17-92	Indef.

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2062	ANR Pipeline Co.	NGC Transportation, Inc.	01-08-93	G-S	300,000	N	F	12-15-92	Indef.
ST93-2063	ANR Pipeline Co.	Unigas Energy, Inc.	01-08-93	G-S	50,000	N	F	12-15-92	Indef.
ST93-2064	ANR Pipeline Co.	Monterey Pipeline Co.	01-08-93	B	100,000	N	I	12-08-92	Indef.
ST93-2065	ANR Pipeline Co.	Valero Gas Marketing, L.P.	01-08-93	G-S	200,000	N	I	12-11-92	Indef.
ST93-2066	Tennessee Gas Pipeline Co.	Encina Transmission Co.	01-08-93	G-S	3,500	N	I	01-01-93	Indef.
ST93-2067	Tennessee Gas Pipeline Co.	Seagull Marketing Services, Inc.	01-08-93	G-S	250,000	N	I	01-01-93	Indef.
ST93-2068	Tennessee Gas Pipeline Co.	Encina Transmission Co.	01-08-93	G-S	1,688	N	F	12-09-92	03-31-93
ST93-2069	Viking Gas Transmission Co.	Peoples Natural Gas Co.	01-08-93	B	1,098	N	F	12-19-92	02-28-93
ST93-2070	Trunkline Gas Co	Town of Colfax ....	01-08-93	G-S	500	N	I	12-09-92	Indef.
ST93-2071	Natural Gas P/L Co. of America.	Nichols-Homeshield.	01-08-93	G-S	20,000	N	F	01-01-93	11-30-93
ST93-2072	Trailblazer Pipeline Co.	Mobil Natural Gas Inc.	01-08-93	G-S	353,000	N	I	12-23-92	Indef.
ST93-2073	Transok, Inc .....	ANR Pipeline Co., et al.	01-08-93	C	100,000	N	I	12-15-92	Indef.
ST93-2074	Transok, Inc .....	ANR Pipeline Co., et al.	01-08-93	C	30,000	N	I	12-11-92	Indef.
ST93-2075	Delhi Gas Pipeline Corp.	Williams Natural Gas Co.	01-08-93	C	375,000	N	I	12-08-92	Indef.
ST93-2076	Arkla Energy Resources.	Jerrico Energy, Inc.	01-08-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2077	Arkla Energy Resources.	Reynolds Metals Co.	01-08-93	G-S	7,100	N	F	01-01-93	Indef.
ST93-2078	Arkla Energy Resources.	Vesta Energy Co.	01-08-93	G-S	2,800	N	F	01-01-93	Indef.
ST93-2079	Houston Pipe Line Co.	Black Marin Pipeline Co.	01-08-93	C	50,000	N	I	12-16-92	Indef.
ST93-2080	Houston Pipe Line Co.	Natural Gas P/L Co. of America.	01-08-93	C	50,000	N	I	12-01-92	Indef.
ST93-2081	Houston Pipe Line Co.	Transcontinental Gas P/L Corp.	01-08-93	C	5,000	N	I	12-11-92	Indef.
ST93-2082	Houston Pipe Line Co.	Tennessee Gas Pipeline Co.	01-08-93	C	5,000	N	I	11-06-92	Indef.
ST93-2083	Houston Pipe Line Co.	Tennessee Gas Pipeline Co.	01-08-93	C	50,000	N	I	12-08-92	Indef.
ST93-2084	Houston Pipe Line Co.	Natural Gas P/L Co. of America.	01-08-93	C	15,000	N	I	12-24-92	Indef.
ST93-2085	Houston Pipe Line Co.	United Gas Pipe Line Co.	01-08-93	C	20,000	N	I	12-15-92	Indef.
ST93-2086	Williams Natural Gas Co.	Anadarko Trading Co.	01-08-93	B	5,779	N	I	12-17-92	04-01-93
ST93-2087	National Fuel Gas Supply Corp.	Mid American Natural Gas Res., Inc.	01-08-93	G-S	3,000	N	I	12-08-92	04-07-93
ST93-2088	National Fuel Gas Supply Corp.	Meridian Marketing & Transmission.	01-08-93	G-S	5,000	N	I	12-22-92	04-21-93
ST93-2089	Tennessee Gas Pipeline Co.	Continental Energy Marketing, Inc.	01-11-93	G-S	735	N	F	01-01-93	Indef.
ST93-2090	Tennessee Gas Pipeline Co.	Kerr McGee Corp	01-11-93	G-S	1,215,000	N	I	01-01-93	Indef.
ST93-2091	Tennessee Gas Pipeline Co.	Selkirk Cogen Partners, L.P.	01-11-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2092	Texas Gas Transmission Corp.	Bridgeline Gas Distribution Co.	01-11-93	B	100,000	N	I	12-16-92	Indef.
ST93-2093	Texas Gas Transmission Corp.	Conoco, Inc .....	01-11-93	G-S	10,000	N	I	12-19-92	Indef.
ST93-2094	Northern Natural Gas Co.	Iowa Electric Light & Power Co.	01-11-93	G-S	4,480	N	F/I	01-01-93	Indef.
ST93-2095	Northern Natural Gas Co.	Coastal Gas Marketing Co.	01-11-93	G-S	100,000	N	F/I	09-01-92	Indef.

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ST93-2096	Northern Natural Gas Co.	Anadarko Trading Co.	01-11-93	G-S	10,000	N	F/I	12-01-92	Indef.
ST93-2097	Northern Natural Gas Co.	Mobil Natural Gas, Inc.	01-11-93	G-S	150,000	N	F/I	12-01-92	Indef.
ST93-2098	Transwestern Pipeline Co.	Enron Gas Marketing, Inc.	01-11-93	G-S	100,000	A	I	12-14-92	Indef.
ST93-2099	Transwestern Pipeline Co.	Wallace Oil & Gas, Inc.	01-11-93	G-S	5,000	N	I	12-11-92	Indef.
ST93-2100	Williston Basin Inter. P/L Co.	Wyoming Gas Co	01-11-93	B	3,620	N	I	12-11-92	09-30-93
ST93-2101	Transcontinental Gas P/L Corp.	Coastal Eagle Point Oil Co.	01-11-93	G-S	16,000	N	I	12-12-92	Indef.
ST93-2102	Louisiana Resources Pipeline Co.	Louisiana Gas Pipeline Co., L.P.	01-11-93	C	30,000	N	I	01-01-93	12-31-94
ST93-2103	Columbia Gas Transmission Corp.	Binghamton Cogeneration L.P.	01-11-93	G-S	40,000	N	I	12-24-92	Indef.
ST93-2104	Columbia Gas Transmission Corp.	Riley Natural Gas Co.	01-11-93	G-S	160	N	F	01-01-93	Indef.
ST93-2105	Columbia Gas Transmission Corp.	Global Petroleum Corp.	01-11-93	G-S	10,000	Y	I	12-23-92	Indef.
ST93-2106	Columbia Gas Transmission Corp.	Stand Energy Corp.	01-11-93	G-S	200	N	F	01-01-93	03-31-93
ST93-2107	Columbia Gas Transmission Corp.	Access Energy Corp.	01-11-93	G-S	400	N	F	12-15-92	03-31-93
ST93-2108	Columbia Gas Transmission Corp.	Access Energy Corp.	01-11-93	G-S	1,230	Y	F	12-15-92	03-31-93
ST93-2109	Columbia Gas Transmission Corp.	Columbia Gas of Ohio, Inc.	01-11-93	B	6,535	Y	F	01-01-93	Indef.
ST93-2110	Columbia Gas Transmission Corp.	Centran Corp .....	01-11-93	G-S	78	Y	F	01-01-93	Indef.
ST93-2111	Panhandle Eastern Pipe Line Co.	Centra Gas Ontario Inc.	01-12-93	G-S	15,331	N	F	11-02-92	Indef.
ST93-2112	Panhandle Eastern Pipe Line Co.	Village of Divernon.	01-12-93	G-S	1,300	N	I	12-01-92	Indef.
ST93-2113	Panhandle Eastern Pipe Line Co.	Vesgas Co .....	01-12-93	G-S	5,000	N	I	12-12-92	Indef.
ST93-2114	Panhandle Eastern Pipe Line Co.	Snyder Oil Corp ..	01-12-93	G-S	10,000	N	I	12-18-92	Indef.
ST93-2115	Enogex Inc .....	Arkla Energy Resources.	01-12-93	C	50,000	N	I	12-24-92	Indef.
ST93-2116	Enogex Inc .....	Panhandle Eastern Pipeline Co.	01-12-93	C	50,000	N	I	12-30-92	Indef.
ST93-2117	Colorado Interstate Gas Co.	Chevron USA, Inc	01-12-93	G-S	20,000	N	I	12-11-92	Indef.
ST93-2118	Colorado Interstate Gas Co.	Williams Gas Marketing Co.	01-12-93	G-S	20,000	N	I	12-11-92	Indef.
ST93-2119	Colorado Interstate Gas Co.	Conoco, Inc .....	01-12-93	G-S	20,000	N	I	12-11-92	Indef.
ST93-2120	Colorado Interstate Gas Co.	Marathon Oil Co ..	01-12-93	G-S	500	N	I	12-11-92	Indef.
ST93-2121	Colorado Interstate Gas Co.	Coastal Oil & Gas Corp.	01-12-93	G-S	100,000	Y	I	12-06-92	Indef.
ST93-2122	Texas Eastern Transmission Corp.	Polaris Corp .....	01-12-93	G-S	25,200	N	I	12-18-92	Indef.
ST93-2123	Tennessee Gas Pipeline Co.	Entrade Corp .....	01-12-93	G-S	12,000	A	F	01-01-93	Indef.



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ST93-2124	Tennessee Gas Pipeline Co.	Monterey Pipeline Co.	01-12-93	G-S	35,000	N	I	12-21-92	Indef.
ST93-2125	CNG Transmission Corp.	Iroquois Gas Trans. System, L.P.	01-12-93	G	30,000	N	I	12-18-92	Indef.
ST93-2126	CNG Transmission Corp.	Transcontinental Gas Pipe Line Corp.	01-12-93	G	10,000	N	I	12-21-92	Indef.
ST93-2127	CNG Transmission Corp.	New York State Ele & Gas Corp.	01-12-93	B	10,000	N	I	12-18-92	Indef.
ST93-2128	CNG Transmission Corp.	Peoples Natural Gas Co.	01-12-93	B	30,000	N	I	12-18-92	Indef.
ST93-2129	CNG Transmission Corp.	Baltimore Gas & Electric Co.	01-12-93	B	12,000	N	I	12-18-92	Indef.
ST93-2130	CNG Transmission Corp.	Virginia Natural Gas, Inc.	01-12-93	B	10,000	N	I	12-16-92	Indef.
ST93-2131	CNG Transmission Corp.	Niagara Mohawk Power Corp.	01-12-93	G-S	50,000	N	I	12-12-92	Indef.
ST93-2132	CNG Transmission Corp.	Hanley & Bird, Inc	01-12-93	B	100,000	N	I	12-19-92	Indef.
ST93-2133	Gateway Pipeline Co.	Brooklyn Interstate Nat. Gas Corp.	01-13-93	G-S	75,000	N	I	01-01-93	05-01-93
ST93-2134	El Paso Natural Gas Co.	Western Natural Gas & Trans. Corp.	01-13-93	G-S	103	N	I	01-01-93	Indef.
ST93-2135	Northern Natural Gas Co.	Mobil Natural Gas Inc.	01-13-93	G-S	150,000	N	F/I	12-23-92	Indef.
ST93-2136	Transcontinental Gas P/L Corp.	Howard Energy Co., Inc.	01-13-93	G-S	200,000	N	I	12-23-92	Indef.
ST93-2137	United Gas Pipe Line Co.	Louis Dreyfus Energy Corp.	01-13-93	G-S	104,800	N	I	01-04-93	04-04-93
ST93-2138	United Gas Pipe Line Co.	American Hunter Exploration Ltd.	01-13-93	G-S	50,000	N	I	01-12-93	05-12-93
ST93-2139	United Gas Pipe Line Co.	Mobil Natural Gas Inc.	01-13-93	G-S	52,400	N	I	01-04-93	05-04-93
ST93-2140	United Gas Pipe Line Co.	Oryx Gas Marketing Ltd., Partner.	01-13-93	G-S	62,880	N	I	12-30-92	04-29-93
ST93-2141	United Gas Pipe Line Co.	Endevco Oil & Gas Co.	01-13-93	G-S	26,200	N	I	01-07-93	05-07-93
ST93-2142	United Gas Pipe Line Co.	Aquila Energy Marketing Corp.	01-13-93	G-S	28,600	N	I	12-18-92	04-17-93
ST93-2143	United Gas Pipe Line Co.	MG Natural Gas Corp.	01-13-93	G-S	41,920	N	I	12-30-92	04-29-93
ST93-2144	United Gas Pipe Line Co.	Hadson Gas Systems, Inc.	01-13-93	G-S	20,000	N	I	01-05-93	05-05-93
ST93-2145	United Gas Pipe Line Co.	Brooklyn Interstate Nat. Gas Corp.	01-13-93	G-S	104,800	N	I	01-06-93	05-06-93
ST93-2146	United Gas Pipe Line Co.	Western Gas Resources, Inc.	01-13-93	G-S	75,000	N	I	01-06-93	05-06-93
ST93-2147	United Gas Pipe Line Co.	Enron Gas Marketing, Inc.	01-13-93	G-S	524,000	N	I	12-30-92	04-29-93
ST93-2148	Channel Industries Gas Co.	Corpus Christi Industrial P/L Co.	01-13-93	C	50,000	N	I	12-14-92	Indef.
ST93-2149	Tennessee Gas Pipeline Co.	CNG Transmission Corp.	01-13-93	G	200,000	N	I	01-01-93	Indef.
ST93-2150	Tennessee Gas Pipeline Co.	Columbia Gulf Transmission Co.	01-13-93	G	200,000	N	I	12-22-92	Indef.
ST93-2151	Tennessee Gas Pipeline Co.	Mobil Natural Gas, Inc.	01-13-93	G-S	100,000	N	I	12-24-92	Indef.
ST93-2152	ANR Pipeline Co.	Peoples Gas Light and Coke Co.	01-13-93	G-S	50,000	N	I	12-25-92	Indef.
ST93-2153	ANR Pipeline Co.	Kaztex Energy Management, Inc.	01-13-93	G-S	1,295	N	F	12-17-92	03-31-94
ST93-2154	ANR Pipeline Co.	Continental Natural Gas, Inc.	01-13-93	G-S	30,000	N	I	12-24-92	Indef.
ST93-2155	ANR Pipeline Co.	Central Illinois Light Co.	01-13-93	B	11,000	N	F	12-15-92	12-14-00

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ST93-2156	ANR Pipeline Co.	Clinton Gas Marketing, Inc.	01-13-93	G-S	10,000	N	I	12-31-92	Indef.
ST93-2157	ANR Pipeline Co.	Anadarko Trading Co.	01-13-93	G-S	10,000	N	I	12-23-92	Indef.
ST93-2158	Colorado Interstate Gas Co.	Coastal Gas Marketing Co.	01-13-93	B	32,000	N	I	12-24-92	Indef.
ST93-2159	Colorado Interstate Gas Co.	Fuel Resource Development Co.	01-13-93	G-S	15,000	N	I	12-17-92	Indef.
ST93-2160	Colorado Interstate Gas Co.	Western Natural Gas & Trans. Corp.	01-13-93	G-S	10,000	N	I	12-18-92	Indef.
ST93-2161	Colorado Interstate Gas Co.	Conoco, Inc .....	01-13-93	G-S	10,000	N	I	12-16-92	Indef.
ST93-2162	Texas Gas Transmission Corp.	Amerada Hess Corp.	01-14-93	G-S	100,000	Y	I	12-19-92	Indef.
ST93-2163	Texas Gas Transmission Corp.	City of Jasonville	01-14-93	G-S	1,850	N	I	01-01-93	Indef.
ST93-2164	Texas Gas Transmission Corp.	City of Hardin .....	01-14-93	G-S	509	N	I	01-01-93	Indef.
ST93-2165	Texas Gas Transmission Corp.	Tejas Power Corp	01-14-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2166	Texas Gas Transmission Corp.	Village of Flat Rock.	01-14-93	G-S	541	N	I	01-01-93	Indef.
ST93-2167	Texas Gas Transmission Corp.	CNG Producing Co.	01-14-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2168	ONG Transmission Co.	Arkda Energy Resources.	01-14-93	C	50,000	N	I	12-20-92	Indef.
ST93-2169	Valero Transmission, L.P.	El Paso Natural Gas Co.	01-14-93	C	20,000	N	I	12-11-92	Indef.
ST93-2170	Williston Basin Inter. P/L Co.	Hiland Partners ...	01-14-93	G-S	76,350	A	I	12-23-92	05-31-93
ST93-2171	Sabine Pipe Line Co.	Western Gas Resources, Inc.	01-14-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2172	Sabine Pipe Line Co.	GGR Energy .....	01-14-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2173	Sabine Pipe Line Co.	Panhandle Trading Co.	01-14-93	G-S	75,000	N	I	01-01-93	Indef.
ST93-2174	Sabine Pipe Line Co.	Enron Gas Marketing, Inc.	01-14-93	G-S	100,000	N	I	11-21-92	Indef.
ST93-2175	Sabine Pipe Line Co.	Yuma Gas Corp ..	01-14-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2176	Sabine Pipe Line Co.	Commodity Trading.	01-14-93	G-S	500,000	N	I	01-01-93	Indef.
ST93-2177	Sabine Pipe Line Co.	Enemax .....	01-14-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2178	Sabine Pipe Line Co.	IGM Pipeline Co ..	01-14-93	G-S	50,000	N	I	12-23-92	Indef.
ST93-2179	Magnolia Pipeline Corp.	Transcontinental Gas Pipe Line Corp.	01-14-93	C	150,000	N	I	06-22-92	06-22-04
ST93-2180	Trunkline Gas Co	George R. Brown Partnership.	01-14-93	G-S	600	N	I	12-31-92	Indef.
ST93-2181	Trunkline Gas Co	Enron Gas Marketing, Inc.	01-14-93	G-S	150,000	N	I	12-23-92	Indef.
ST93-2182	Trunkline Gas Co	Centran Corp .....	01-14-93	G-S	50,000	N	I	12-29-92	Indef.
ST93-2183	Trunkline Gas Co	Marathon Oil Co ..	01-14-93	G-S	30,000	N	I	12-20-92	Indef.
ST93-2184	Trunkline Gas Co	Polaris Pipeline Corp.	01-14-93	G-S	25,000	N	I	12-19-92	Indef.
ST93-2185	Trunkline Gas Co	O&R Energy, Inc.	01-14-93	G-S	50,000	N	I	12-18-92	Indef.
ST93-2186	Trunkline Gas Co	Fuel Services Group, Inc.	01-14-93	G-S	11,000	N	I	12-18-92	Indef.
ST93-2187	Trunkline Gas Co	CMS Gas Marketing Co.	01-14-93	G-S	30,000	N	I	12-17-92	Indef.
ST93-2188	Williston Basin Inter. P/L Co.	Marathon Oil Co ..	01-15-93	G-S	10,200	A	I	12-16-92	01-31-94
ST93-2189	Williston Basin Inter. P/L Co	Unigas Corp .....	01-15-93	G-S	150,000	N	I	12-18-92	12-14-94
ST93-2190	Tennessee Gas Pipeline Co.	Entrade Corp .....	01-15-93	G-S	350,000	N	I	12-29-92	Indef.

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ST93-2191	El Paso Natural Gas Co.	Aquila Energy Marketing Corp.	01-15-93	G-S	50,000	N	I	12-24-92	Indef.
ST93-2192	Webb/Duval Gatherers.	Texas Eastern Transmission Co.	01-15-93	C	30,000	N	I	07-01-92	Indef.
ST93-2193	Webb/Duval Gatherers.	Natural Gas P/L Co. of America.	01-15-93	C	30,000	N	I	08-01-92	Indef.
ST93-2194	Webb/Duval Gatherers.	Tennessee Gas Pipeline Co.	01-15-93	C	30,000	N	I	07-01-92	Indef.
ST93-2195	Acadian Gas Pipeline System.	Natural Gas P/L Co. of Am., et al.	01-15-93	C	50,000	N	I	01-01-93	Indef.
ST93-2196	Valero Transmission, L.P.	Northern Natural Gas Co.	01-15-93	C	10,000	N	I	12-18-92	Indef.
ST93-2197	Transok Gas Transmission Co.	Arkla Energy, Inc., et al.	01-15-93	C	10,000	N	I	01-01-93	Indef.
ST93-2198	Natural Gas P/L Co. of America.	Northern Illinois Gas Co.	01-15-93	G-S	25,000	N	F	03-01-92	11-30-95
ST93-2199	Northern Border Pipeline Co.	Unigas Corp .....	01-15-93	G-S	100,000	Y	I	12-18-92	02-28-94
ST93-2200	Northern Border Pipeline Co.	Minnegasco .....	01-15-93	B	200,000	Y	I	12-24-92	10-31-07
ST93-2201	Questar Pipeline Co.	Universal Resources Corp.	01-19-93	G-S	350,000	Y	I	12-20-92	Indef.
ST93-2202	Dow Pipeline Co.	Natural Gas P/L Co. of America.	01-19-93	C	35,000	Y	I	12-01-92	11-30-94
ST93-2203	East Tennessee Natural Gas Co.	AFC Industries ....	01-19-93	G-S	25,000	Y	I	01-01-93	Indef.
ST93-2204	K N Energy, Inc ...	Cimarron Gas Companies, Inc.	01-19-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2205	Monterey Pipeline Co.	Columbia Gulf Transmission Co.	01-19-93	C	80,000	N	I	11-18-92	Indef.
ST93-2206	Monterey Pipeline Co.	Texas Eastern Gas Pipe Line Co.	01-19-93	C	80,000	N	I	10-09-92	Indef.
ST93-2207	Monterey Pipeline Co.	Trunkline Gas Co	01-19-93	C	80,000	N	I	10-09-92	Indef.
ST93-2208	Monterey Pipeline Co.	Tennessee Gas Pipeline Co.	01-19-93	C	80,000	N	I	10-31-92	Indef.
ST93-2209	Algonquin Gas Transmission Co.	Coastal Gas Marketing Co.	01-19-93	G-S	7,900,000	N	I	12-24-92	Indef.
ST93-2210	Algonquin Gas Transmission Co.	Distrigas of Massachusetts Corp.	01-19-93	G-S	10,200,000	N	I	12-24-92	Indef.
ST93-2211	Trunkline Gas Co	NGC Transportation, Inc.	01-19-93	G-S	5,000	N	I	01-06-93	Indef.
ST93-2212	Trunkline Gas Co	Tylex, Inc .....	01-19-93	G-S	1,200	N	F/I	01-01-93	Indef.
ST93-2213	Trunkline Gas Co	KCS Energy Marketing, Inc.	01-19-93	G-S	20,000	N	I	01-01-93	Indef.
ST93-2214	Transok Gas Transmission Co.	ANR Pipeline Co., et al.	01-19-93	C	100,000	N	I	01-01-93	Indef.
ST93-2215	Valero Transmission, L.P.	Natural Gas Pipeline Co. of America.	01-19-93	C	14,500	N	I	01-01-93	Indef.
ST93-2216	Northern Natural Gas Co.	Oxy USA, Inc .....	01-19-93	G-S	32,600	N	F/I	01-01-93	Indef.
ST93-2217	Northern Natural Gas Co.	Great Falls Gas Co.	01-19-93	G-S	2,000	N	F/I	01-01-93	05-31-93
ST93-2218	Viking Gas Transmission Co.	City of Lake Park	01-19-93	G-S	357	N	F	01-01-93	11-01-02
ST93-2219	Viking Gas Transmission Co.	City of Argyle .....	01-19-93	G-S	369	N	F	01-01-93	11-01-02
ST93-2220	Tennessee Gas Pipeline Co.	NGC Transportation, Inc.	01-19-93	G-S	600,000	N	I	01-01-93	Indef.
ST93-2221	Tennessee Gas Pipeline Co.	Yuma Gas Corp ..	01-19-93	G-S	125,000	N	I	01-01-93	Indef.

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ST93-2222	Tennessee Gas Pipeline Co.	KCS Energy Marketing, Inc.	01-19-93	G-S	200,000	N	I	01-01-93	Indef.
ST93-2223	Tennessee Gas Pipeline Co.	Equitable Resources Marketing Co.	01-19-93	G-S	307,500	N	I	01-01-93	Indef.
ST93-2224	Williams Natural Gas Co.	Farmland Industries, Inc.	01-19-93	G-S	500,000	N	I	12-15-92	Indef.
ST93-2225	Williams Natural Gas Co.	City of Granby .....	01-19-93	G-S	718	N	F	01-01-93	11-01-93
ST93-2226	Arkla Energy Resources.	Aquila Energy Marketing Corp.	01-19-93	G-S	100,000	N	I	01-13-93	Indef.
ST93-2227	Transcontinental Gas P/L Corp.	Heath Petra Resources, Inc.	01-19-93	G-S	846,000	N	I	02-22-92	Indef.
ST93-2228	Transcontinental Gas P/L Corp.	Utilities, Inc .....	01-19-93	B	1,300	N	F	12-22-92	07-31-01
ST93-2229	Transcontinental Gas P/L Corp.	Endevco Marketing Co.	01-19-93	G-S	4,246,420	N	I	12-22-92	Indef.
ST93-2230	United Gas Pipe Line Co.	United Gas Services Co.	01-19-93	G-S	31,556	Y	F	12-23-92	04-22-93
ST93-2231	El Paso Natural Gas Co.	Enserch Gas Co ..	01-19-93	G-S	300,000	N	I	10-07-92	Indef.
ST93-2232	El Paso Natural Gas Co.	Chevron U.S.A. Production Co.	01-19-93	G-S	5,923	N	I	10-01-92	Indef.
ST93-2233	Delhi Gas Pipeline Corp.	Panhandle Eastern Pipeline Co.	01-19-93	G-S	3,150	N	I	12-18-92	Indef.
ST93-2234	East Texas Gas Systems.	Texas Gas Transmission Corp.	01-19-93	C	50,000	N	I	12-17-92	Indef.
ST93-2235	Monterey Pipeline Co.	United Gas Pipe Line Co.	01-19-93	C	25,000	N	I	12-01-92	Indef.
ST93-2236	Questar Pipeline Co.	NGC Transportation, Inc.	01-21-93	G-S	90,000	N	I	01-14-93	Indef.
ST93-2237	Transcontinental Gas P/L Corp.	CNG Trading Co .	01-21-93	G-S	420,000	N	I	12-14-93	Indef.
ST93-2238	Northern Border Pipeline Co.	Enron Gas Marketing, Inc.	01-21-93	G-S	500,000	A	I	01-12-93	02-14-94
ST93-2239	Northern Border Pipeline Co.	Minnegasco .....	01-21-93	B	200,000	Y	I	01-13-93	10-31-07
ST93-2240	Northern Border Pipeline Co.	Amerada Hess Corp.	01-21-93	G-S	50,000	Y	I	01-13-93	01-11-95
ST93-2241	Tennessee Gas Pipeline Co.	Entrade Corp .....	01-21-93	G-S	1,310,000	Y	I	01-01-93	Indef.
ST93-2242	Tennessee Gas Pipeline Co.	Exxon Corp .....	01-21-93	G-S	200,000	N	I	01-18-93	Indef.
ST93-2243	Tennessee Gas Pipeline Co.	National Fuel Gas Supply Corp.	01-21-93	B	100,000	N	I	01-14-93	Indef.
ST93-2244	Tennessee Gas Pipeline Co.	Vintage Gas, Inc .	01-21-93	G-S	601	N	I	01-01-93	Indef.
ST93-2245	Viking Gas Transmission Co.	City of Stephen ...	01-21-93	G-S	408	N	F	01-01-93	11-01-02
ST93-2246	Viking Gas Transmission Co.	City of Hallock .....	01-21-93	G-S	774	N	F	01-01-93	11-01-02
ST93-2247	Channel Industries Gas Co.	NGC Transportation, Inc.	01-21-93	G-I	25,000	N	I	01-01-93	Indef.
ST93-2248	Westar Transmission Co.	Northern Natural Gas Co.	01-21-93	C	10,000	N	I	12-01-92	Indef.
ST93-2249	Transok Gas Transmission Co.	ANR Pipeline Co, et al.	01-21-93	C	100,000	N	I	01-01-93	Indef.
ST93-2250	Natural Gas P/L Co of America.	Koch Hydrocarbon Co.	01-21-93	G-S	50,000	N	I	12-23-92	Indef.
ST93-2251	Natural Gas P/L Co of America.	Polaris Pipeline Corp.	01-21-93	G-S	200,000	N	I	12-23-92	Indef.
ST93-2252	Natural Gas P/L Co of America.	Philbro Energy, Inc.	01-21-93	G-S	100,000	N	I	12-30-92	Indef.
ST93-2253	Panhandle Eastern Pipe Line Co.	Amgas, Inc .....	01-21-93	G-S	100	N	I	12-22-92	Indef.
ST93-2254	Delhi Gas Pipeline Corp.	Panhandle Eastern Pipeline Co.	01-21-93	C	20,000	N	I	12-21-92	Indef.
ST93-2255	Enogex Inc .....	Williams Natural Gas Co.	01-21-93	C	50,000	N	I	01-07-93	Indef.

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ST93-2256	Enogex Inc .....	Arkla Energy Resources:	01-21-93	C	5,000	N	I	01-01-93	Indef.
ST93-2257	Enogex Inc .....	Panhandle Eastern Pipeline Co.	01-21-93	C	50,000	N	I	01-01-93	Indef.
ST93-2258	Enogex Inc .....	Panhandle Eastern Pipeline Co.	01-21-93	C	50,000	N	I	01-01-93	Indef.
ST93-2259	High Island Off-shore System.	ANR Pipeline Co.	01-21-93	K	2,900,000	N	I	01-19-93	Indef.
ST93-2260	United Texas Transmission Co.	Transcontinental Gas P/L Corp.	01-22-93	C	7,000	N	I	12-21-92	Indef.
ST93-2261	Acadian Gas Pipeline System.	Natural Gas P/L Co of Am., et al.	01-22-93	C	50,000	N	I	01-18-93	Indef.
ST93-2262	Questar Pipeline Co.	Nephil City Corp ...	01-22-93	B	2,000	N	I	01-01-93	11-30-93
ST93-2263	Neches Pipeline System.	Sabine Pipe Line Co.	01-22-93	C	20,000	N	I	12-01-92	Indef.
ST93-2264	ANR Pipeline Co.	Tenaska Marketing Ventures.	01-22-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2265	ANR Pipeline Co.	Enron Gas Marketing, Inc.	01-22-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2266	ANR Pipeline Co.	AGIP Petroleum Co., Inc.	01-22-93	G-S	100,000	N	F	01-01-93	Indef.
ST93-2267	ANR Pipeline Co.	Gas Energy Development Co.	01-22-93	G-S	20,000	N	F	01-01-93	Indef.
ST93-2268	ANR Pipeline Co.	O & R Energy, Inc	01-22-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2269	ANR Pipeline Co.	Ohio Gas Co .....	01-22-93	B	70,000	N	I	01-01-93	Indef.
ST93-2270	ANR Pipeline Co.	Natural Gas Marketers, Inc.	01-22-93	B	2,000	N	F	01-01-93	05-31-06
ST93-2271	Valero Transmission, L.P.	Natural Gas P/L Co. of America.	01-22-93	C	6,427	N	I	01-01-93	Indef.
ST93-2272	Northern Natural Gas Co.	Terra International, Inc.	01-22-93	G-S	35,000	N	FA	09-22-92	04-30-93
ST93-2273	Transwestern Pipeline Co.	Enron Gas Marketing, Inc.	01-22-93	G-S	250,000	Y	I	01-06-93	Indef.
ST93-2274	Transwestern Pipeline Co.	Enron Gas Marketing, Inc.	01-22-93	G-S	100,000	N	I	01-02-93	Indef.
ST93-2275	Transwestern Pipeline Co.	Integrated Services, Inc.	01-22-93	B	2,000	N	I	01-04-93	Indef.
ST93-2276	Transwestern Pipeline Co.	Gas Co. of New Mexico.	01-22-93	G-S	70,000	N	I	01-11-93	Indef.
ST93-2277	Transwestern Pipeline Co.	Yuma Gas Corp ..	01-22-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2278	Transwestern Pipeline Co.	Schuller International, Inc.	01-22-93	G-S	10,000	N	I	01-14-93	Indef.
ST93-2279	Transwestern Pipeline Co.	NGC Transportation, Inc.	01-22-93	G-S	750,000	N	I	01-07-93	Indef.
ST93-2280	United Gas Pipe Line Co.	Enermax, Div. of Nukem, Inc.	01-22-93	G-S	147,800	N	I	01-12-93	05-12-93
ST93-2281	United Gas Pipe Line Co.	Texaco Gas Marketing Inc.	01-22-93	G-S	41,920	N	I	01-11-93	05-11-93
ST93-2282	United Gas Pipe Line Co.	Trunkline Gas Co	01-22-93	G-S	209,600	N	I	01-09-93	05-09-93
ST93-2283	United Gas Pipe Line Co.	Western Gas Resources, Inc.	01-22-93	G-S	75,000	N	I	01-11-93	05-11-93
ST93-2284	Panhandle Eastern Pipe Line Co.	Battle Creek Gas Co.	01-22-93	B	7,423	N	I	12-23-92	Indef.
ST93-2285	Panhandle Eastern Pipe Line Co.	K N Energy, Inc ...	01-22-93	G-S	300,000	N	I	12-30-92	Indef.
ST93-2286	Tennessee Gas Pipeline Co.	American Central Gas Marketing Co.	01-22-93	G-S	200,000	N	I	12-31-92	Indef.
ST93-2287	Natural Gas P/L Co. of America.	Tristar Gas Co .....	01-22-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2288	Natural Gas P/L Co. of America.	TXO Gas Marketing Corp.	01-22-93	G-S	250,000	N	I	12-30-93	Indef.
ST93-2289	Columbia Gas Transmission Corp.	Dayton Power and Light Co.	01-22-93	B	500	N	F	10-01-92	Indef.

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ST93-2290	Columbia Gas Transmission Corp.	Timken Co .....	01-22-93	G-S	1,000	N	F	11-01-92	Indef.
ST93-2291	Columbia Gas Transmission Corp.	Timken Co .....	01-22-93	G-S	5,000	N	F	11-01-92	Indef.
ST93-2292	Texas Gas Transmission Corp.	Power Authority of the State of NY.	01-22-93	G-S	200,000	N	I	01-14-93	Indef.
ST93-2293	Texas Gas Transmission Corp.	Polaris Pipeline Corp.	01-22-93	G-S	100,000	N	I	01-09-93	Indef.
ST93-2294	Texas Gas Transmission Corp.	NGC Transportation, Inc.	01-22-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2295	Texas Eastern Transmission Corp.	Western Gas Resources, Inc.	01-25-93	G-S	300,000	N	I	01-14-93	Indef.
ST93-2296	Texas Eastern Transmission Corp.	Ledco, Inc .....	01-25-93	G-S	160,000	N	I	01-09-93	Indef.
ST93-2297	Algonquin Gas Transmission Co.	Gasiantic Corp ....	01-25-93	G-S	100,000	N	I	01-02-93	Indef.
ST93-2298	Algonquin Gas Transmission Co.	Distrigas of Massachusetts Corp.	01-25-93	B	290	N	I	01-03-93	Indef.
ST93-2299	Algonquin Gas Transmission Co.	Distrigas of Massachusetts Corp.	01-25-93	G-S	10,200,000	N	I	01-09-93	Indef.
ST93-2300	Algonquin Gas Transmission Co.	Continental Energy Marketing, Inc.	01-25-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2301	Algonquin Gas Transmission Co.	Continental Energy Marketing, Inc.	01-25-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2302	Algonquin Gas Transmission Co.	Coastal Gas Marketing Co.	01-25-93	G-S	7,900,000	N	I	01-02-93	Indef.
ST93-2303	Algonquin Gas Transmission Co.	Yankee Gas Services Co.	01-25-93	G-S	230,000	N	I	11-01-92	Indef.
ST93-2204	Midwestern Gas Transmission Co.	American Central Gas Cos., Inc.	01-25-93	G-S	10,000	N	F	01-01-93	Indef.
ST93-2305	Tennessee Gas Pipeline Co.	Centran Corp .....	01-25-93	G-S	20,000	N	I	01-06-93	Indef.
ST93-2306	Delhi Gas Pipeline Corp.	Arkia Energy Resources, et al.	01-25-93	C	60,000	N	I	01-24-92	Indef.
ST93-2307	Oasis Pipe Line Co.	El Paso Natural Gas Co.	01-25-93	C	100,000	N	I	01-02-93	Indef.
ST93-2308	Oasis Pipe Line Co.	El Pasc Natural Gas Co.	01-25-93	C	50,000	N	I	01-15-93	Indef.
ST93-2309	Oasis Pipe Line Co.	Natural Gas P/L Co. of America.	01-25-93	C	100,000	N	I	01-02-93	Indef.
ST93-2310	Houston Pipe Line Co.	Transcontinental Gas P/L Corp.	01-25-93	C	100,000	N	I	12-31-92	Indef.
ST93-2311	Houston Pipe Line Co.	Texas Eastern Transmission Corp.	01-25-93	C	100,000	N	I	01-13-93	Indef.
ST93-2312	Houston Pipe Line Co.	Trunkline Gas Co	01-25-93	C	15,000	N	I	01-16-93	Indef.
ST93-2313	Houston Pipe Line Co.	Trunkline Gas Co	01-25-93	C	15,000	N	I	01-16-93	Indef.
ST93-2314	Kentucky West Virginia Gas Co.	John B. and Nancy J. Ballard.	01-25-93	G-S	100	N	I	01-01-93	Indef.
ST93-2315	Ozark Gas Transmission System.	Brooklyn Interstate Nat. Gas Corp.	01-25-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2316	Ozark Gas Transmission System.	Seagull Marketing Services, Inc.	01-25-93	G-S	10,000	N	I	01-06-93	Indef.
ST93-2317	Northwest Pipeline Corp.	Grand Valley Gas Co.	01-25-93	G-S	7,250	N	I	01-02-93	Indef.

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ST93-2318	South Georgia Natural Gas Co.	Peoples Gas System, Inc.	01-25-93	B	10,000	N	I	11-10-92	04-30-04
ST93-2319	South Georgia Natural Gas Co.	Petroleum Source & Systems Group.	01-25-93	G-S	4,000	N	I	11-01-92	Indef.
ST93-2320	South Georgia Natural Gas Co.	City of Andersonville.	01-25-93	G-S	5,000	N	I	12-24-92	Indef.
ST93-2321	High Island Off-shore System.	Panhandle Eastern Pipe Line Co.	01-25-93	K	1,000	N	I	11-03-92	Indef.
ST93-2322	El Paso Natural Gas Co.	Anthem Energy Co., L.P.	01-26-93	G-S	50,000	N	I	12-17-92	Indef.
ST93-2323	Viking Gas Transmission Co.	City of Warren .....	01-26-93	G-S	824	N	F	01-01-93	11-01-02
ST93-2324	Viking Gas Transmission Co.	City of New York Mills.	01-26-93	G-S	644	N	F	01-01-93	11-01-02
ST93-2325	United Gas Pipe Line Co.	Mid Louisiana Gas Transmission Co.	01-26-93	B	25,000	N	I	12-29-92	Indef.
ST93-2326	Arkla Energy Resources.	Agriculture Minerals Corp.	01-26-93	G-S	45,000	A	I	01-01-93	Indef.
ST93-2327	Arkla Energy Resources.	Trans Arkoma Gas Corp.	01-26-93	G-S	20,000	N	I	01-01-93	Indef.
ST93-2328	Arkla Energy Resources.	Boyd Rose & Associates.	01-26-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2329	Arkla Energy Resources.	Cibola Corp .....	01-26-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2330	Arkla Energy Resources.	Seagull Marketing Services Inc.	01-26-93	G-S	15,000	N	I	01-01-93	Indef.
ST93-2331	Arkla Energy Resources.	VHC Gas System, Ltd..	01-26-93	G-S	200,000	N	I	01-01-93	Indef.
ST93-2332	Arkla Energy Resources.	Gaylord Container Corp.	01-26-93	G-S	2,000	N	F	01-01-93	Indef.
ST93-2333	Arkla Energy Resources.	Con Agra Frozen Foods.	01-26-93	G-S	1,000	N	F	01-01-93	Indef.
ST93-2334	Arkla Energy Resources.	Red River Gas Co	01-26-93	G-S	20,000	N	I	01-01-93	Indef.
ST93-2335	Arkla Energy Resources.	Mid Con Marketing Corp.	01-26-93	G-S	30,000	N	I	01-01-93	Indef.
ST93-2336	Arkla Energy Resources.	Texaco Gas Marketing Inc.	01-26-93	G-S	30,000	N	I	01-01-93	Indef.
ST93-2337	Arkla Energy Resources.	Georgia Pacific Ashdown Operations.	01-26-93	G-S	23,000	N	F	01-01-93	Indef.
ST93-2338	Arkla Energy Resources.	Arkansas Electric Cooperative.	01-26-93	G-S	16,560	N	I	01-01-93	Indef.
ST93-2339	Arkla Energy Resources.	Enrow Gas Marketing, Inc.	01-26-93	G-S	150,000	N	I	01-01-93	Indef.
ST93-2340	Arkla Energy Resources.	Amoco Energy Trading Corp.	01-26-93	G-S	16,606	N	F	01-01-93	Indef.
ST93-2341	Arkla Energy Resources.	Calumet Refining Co.	01-26-93	G-S	4,000	N	F	01-01-93	Indef.
ST93-2342	Arkla Energy Resources.	Clinton Gas Transmission Inc.	01-26-93	G-S	2,000	N	I	01-01-93	Indef.
ST93-2343	Arkla Energy Resources.	Arkla Energy Marketing Co.	01-26-93	G-S	458	A	F	01-01-93	Indef.
ST93-2344	Arkla Energy Resources.	Arkla Energy Marketing Co.	01-26-93	G-S	25,000	A	F	01-01-93	Indef.
ST93-2345	Arkla Energy Resources.	Arkla Energy Marketing Co.	01-26-93	G-S	150,000	A	I	01-01-93	Indef.
ST93-2346	Arkla Energy Resources.	Arkla Energy Marketing Co.	01-26-93	G-S	115,000	A	F	01-01-93	Indef.
ST93-2347	Arkla Energy Resources.	Arkla Energy Marketing Co.	01-26-93	G-S	125,000	A	I	01-01-93	Indef.
ST93-2348	Sabine Pipe Line Co.	Neste OY .....	01-26-93	G-S	200,000	N	I	01-01-93	Indef.
ST93-2349	Natural Gas P/L Co. of America.	Panhandle Trading Co.	01-26-93	G-S	50,000	N	I	03-01-93	Indef.
ST93-2350	Natural Gas P/L Co. of America.	Northern Illinois Gas Co.	01-26-93	G-S	35,000	N	I	03-01-93	11-30-95

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2351	Natural Gas P/L Co. of America.	Midcon Marketing Corp.	01-26-93	G-S	200,000	N	I	01-10-93	Indef.
ST93-2352	Natural Gas P/L Co. of America.	O & R Energy, Inc	01-26-93	G-S	100,000	N	I	01-08-93	Indef.
ST93-2353	Natural Gas P/L Co. of America.	TXO Gas Marketing Corp.	01-26-93	G-S	75,000	N	I	01-10-93	Indef.
ST93-2354	Natural Gas P/L Co. of America.	Centran Corp .....	01-26-93	G-S	30,000	N	I	01-08-93	Indef.
ST93-2355	Natural Gas P/L Co. of America.	Mercado Gas Services, Inc.	01-26-93	G-S	10,000	N	I	12-18-92	Indef.
ST93-2356	Natural Gas P/L Co. of America.	Seagull Marketing Services, Inc.	01-26-93	G-S	60,000	N	I	12-10-92	Indef.
ST93-2357	Natural Gas P/L Co. of America.	Enron Gas Marketing, Inc.	01-26-93	G-S	150,000	N	I	01-08-93	Indef.
ST93-2358	Natural Gas P/L Co. of America.	Texas-Ohio Gas, Inc.	01-26-93	G-S	30,000	N	I	01-02-93	Indef.
ST93-2359	Natural Gas P/L Co. of America.	CNG Producing Co.	01-26-93	G-S	30,000	N	I	01-02-93	Indef.
ST93-2360	Columbia Gulf Transmission Co.	Victoria Gas Corp	01-26-93	G-S	100,000	N	I	12-30-92	Indef.
ST93-2361	Columbia Gulf Transmission Co.	Tenngasco Corp ..	01-26-93	G-S	55,000	N	I	01-01-93	Indef.
ST93-2362	Columbia Gulf Transmission Co.	Seagull Marketing Services, Inc.	01-26-93	G-S	75,000	N	I	01-01-93	Indef.
ST93-2363	Columbia Gulf Transmission Co.	J. Aron & Co .....	01-26-93	G-S	150,000	N	I	01-01-93	Indef.
ST93-2364	Columbia Gulf Gas Corp.	Enmark Gas Corp	01-26-93	G-S	50,000	A	I	01-01-93	Indef.
ST93-2365	ANR Pipeline Co.	Aquila Energy Marketing Corp.	01-26-93	G-S	50,000	Y	I	01-01-93	Indef.
ST93-2366	ANR Pipeline Co.	Howard Energy Co.	01-26-93	G-S	10,000	N	I	01-01-93	Indef.
ST93-2367	Mid Louisiana Gas Co.	International Paper Co.	01-27-93	G-S	50,000	N	I	01-13-93	06-02-93
ST93-2368	Mid Louisiana Gas Co.	Mid Louisiana Gas Transmission Co.	01-27-93	G-S	50,000	A	I	01-01-93	12-31-93
ST93-2369	United States Pipe Line Co.	Yuma Gas Corp ..	01-27-93	G-S	78,600	N	I	01-18-93	05-18-93
ST93-2370	United States Pipe Line Co.	Amoco Energy Trading Corp.	01-27-93	G-S	317,544	N	I	01-20-93	05-20-93
ST93-2371	United States Pipe Line Co.	Texaco Gas Marketing Inc.	01-27-93	G-S	104,800	N	I	01-20-93	05-20-93
ST93-2372	United States Pipe Line Co.	Texaco Gas Marketing Inc.	01-27-93	G-S	41,920	N	I	01-20-93	05-20-93
ST93-2373	Nycotex Gas Transport.	Columbia Gas Transmission Corp.	01-27-93	C	10,000	N	I	01-01-93	Indef.
ST93-2374	Panhandle Eastem Pipe Line Co.	K N Gas Marketing, Inc.	01-27-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2375	Panhandle Eastem Pipe Line Co.	Barrett Resources Corp.	01-27-93	G-S	10,000	N	I	01-01-93	Indef.
ST93-2376	Panhandle Eastem Pipe Line Co.	O & R Energy, Inc	01-27-93	G-S	25,000	N	I	01-01-93	Indef.
ST93-2377	Panhandle Eastem Pipe Line Co.	Amgas, Inc .....	01-27-93	G-S	200	N	I	01-01-93	Indef.
ST93-2378	Panhandle Eastem Pipe Line Co.	Amgas, Inc .....	01-27-93	G-S	40	N	I	01-01-93	Indef.
ST93-2379	Columbia Gas Transmission Corp.	Columbia Gas of Kentucky, Inc.	01-27-93	B	5,211	Y	F	01-01-93	Indef.



Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2380	Columbia Gas Transmission Corp.	Continental Reserves Oil Co.	01-27-93	G-S	6,826	N	F	01-01-93	Indef.
ST93-2381	Columbia Gas Transmission Corp.	Panhandle Trading Co.	01-27-93	G-S	6,225	Y	F	01-06-93	02-28-93
ST93-2382	Columbia Gas Transmission Corp.	Access Energy Corp.	01-27-93	G-S	50	Y	F	01-13-93	03-13-93
ST93-2383	Columbia Gas Transmission Corp.	Columbus Hobbs	01-27-93	G-S	2,932	Y	F	01-01-93	Indef.
ST93-2384	Columbia Gas Transmission Corp.	Columbia Gas Development Corp.	01-27-93	G-S	80	A	F	01-01-93	03-31-93
ST93-2385	Columbia Gas Transmission Corp.	Shangas Marketing Co.	01-27-93	G-S	25	N	I	01-01-93	Indef.
ST93-2386	Columbia Gas Transmission Corp.	Stand Energy Corp.	01-27-93	G-S	61,000	N	I	12-26-93	Indef.
ST93-2387	Colorado Interstate Gas Co.	Coastal Gas Marketing Co.	01-27-93	G-S	500	A	F	01-01-93	12-31-93
ST93-2388	Colorado Interstate Gas Co.	CNG Producing Co.	01-27-93	G-S	12,000	N	F	01-01-93	12-06-02
ST93-2389	Colorado Interstate Gas Co.	Snyder Oil Co .....	01-27-93	G-S	20,000	N	I	01-01-93	Indef.
ST93-2390	Colorado Interstate Gas Co.	Union Pacific Fuels, Inc.	01-27-93	G-S	50,000	N	I	01-01-93	Indef.
ST93-2391	Transok, Inc .....	ANR Pipeline Co, et al.	01-27-93	C	20,000	N	I	01-01-93	Indef.
ST93-2392	Transok, Inc .....	ANR Pipeline Co, et al.	01-27-93	C	200,000	N	I	01-02-93	Indef.
ST93-2393	Transok, Inc .....	ANR Pipeline Co, et al.	01-27-93	C	50,000	N	I	01-15-93	Indef.
ST93-2394	Transok Gas Transmission Co.	ANR Pipeline Co, et al.	01-27-93	C	1,000	N	I	01-14-93	Indef.
ST93-2395	Transok, Inc .....	ANR Pipeline Co, et al.	01-27-93	C	50,000	N	I	01-01-93	Indef.
ST93-2396	Transok, Inc .....	ANR Pipeline Co, et al.	01-27-93	C	100,000	N	I	01-05-93	Indef.
ST93-2397	Gulf States Transmission Corp.	Gulf States Pipeline Corp.	01-27-93	G-S	100,000	Y	I	01-07-93	Indef.
ST93-2398	Overland Trail Trans. Co.	Kern River Gas Transmission Co.	01-28-93	C	50,000	Y	I	01-05-93	Indef.
ST93-2399	Tennessee Gas Pipeline Co.	Highland Energy Co.	01-28-93	G-S	544	N	I	01-01-93	Indef.
ST93-2400	El Paso Natural Gas Co.	GPM Gas Corp ...	01-28-93	G-S	41,200	N	I	01-25-93	Indef.
ST93-2401	El Paso Natural Gas Co.	National Gas Resources L.P.	01-28-93	G-S	103,000	N	I	01-18-93	Indef.
ST93-2402	Trunkline Gas Co	CNG Producing Co.	01-28-93	G-S	30,000	N	I	01-07-93	Indef.
ST93-2403	Trunkline Gas Co	Peoples Gas, Light and Coke Co.	01-28-93	G-S	48,544	N	F	01-01-93	Indef.
ST93-2404	Trunkline Gas Co	Vesta Energy Co.	01-28-93	G-S	30,000	N	I	01-01-93	Indef.
ST93-2405	Trunkline Gas Co	Peoples Gas, Light and Coke Co.	01-28-93	G-S	48,544	N	F	01-01-93	Indef.
ST93-2406	Texas Eastern Transmission Corp.	Central Illinois Public Service Co.	01-28-93	G-S	8,000	N	F	01-01-93	Indef.
ST93-2407	Texas Eastern Transmission Corp.	North Alabama Gas District.	01-28-93	B	200,000	N	I	01-01-93	Indef.
ST93-2408	Florida Gas Transmission Co.	Citrus Marketing, Inc.	01-28-93	G-S	600,000	N	I	01-06-93	Indef.

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date com- menced	Projected termi- nation date
ST93-2409	Louisiana Re- sources Pipe- line Co.	Texas Eastern Transmission Co.	01-28-93	C	10,000	N	I	01-09-93	Indef.
ST93-2410	Louisiana Re- sources Pipe- line Co.	Texas Gas Trans- mission Corp.	01-28-93	C	20,000	N	I	01-08-93	Indef.
ST93-2411	Panhandle East- ern Pipe Line Co.	Yuma Gas Corp ..	01-28-93	G-S	20,000	N	I	01-16-93	Indef.
ST93-2412	Panhandle East- ern Pipe Line Co.	City of Hazelton ...	01-28-93	G-S	100	N	I	01-01-93	Indef.
ST93-2413	Panhandle East- ern Pipe Line Co.	Midland Cogen- eration Venture, L.P.	01-28-93	G-S	35,000	N	I	01-11-93	Indef.
ST93-2414	Panhandle East- ern Pipe Line Co.	Aquila Energy Marketing Corp.	01-28-93	G-S	9,500	N	I	01-01-93	Indef.
ST93-2415	Panhandle East- ern Pipe Line Co.	Panhandle Trad- ing Co.	01-28-93	G-S	50,000	A	I	01-08-93	Indef.
ST93-2416	Panhandle East- ern Pipe Line Co.	Coenergy Ven- tures, Inc.	01-28-93	G-S	100,000	N	I	01-01-93	Indef.
ST93-2417	Northwest Pipe- line Corp.	Brymore Energy Inc.	01-28-93	G-S	200,000	N	I	01-01-93	Indef.
ST93-2418	Northwest Pipe- line Corp.	LFC Gas Co .....	01-28-93	G-S	30,000	N	I	01-01-93	Indef.
ST93-2419	Natural Gas P/L Co. of America.	MG Natural Gas Corp.	01-28-93	G-S	25,000	N	I	01-15-93	Indef.
ST93-2420	Natural Gas P/L Co. of America.	Coastal Gas Mar- keting Co.	01-28-93	G-S	100,000	N	I	12-29-92	Indef.
ST93-2421	Natural Gas P/L Co. of America.	Energy Dynamics, Inc.	01-28-93	G-S	25,000	N	I	01-07-93	Indef.
ST93-2422	Natural Gas P/L Co. of America.	Midcon Marketing Corp.	01-28-93	G-S	100,000	N	I	01-20-93	Indef.
ST93-2423	Natural Gas P/L Co. of America.	Tristar Gas Mar- keting Co.	01-28-93	G-S	50,000	N	I	12-09-92	Indef.
ST93-2424	Natural Gas P/L Co. of America.	Intercon Gas, Inc .	01-28-93	G-S	85,000	N	I	08-04-88	Indef.
ST93-2425	Valero Trans- mission, L.P.	El Paso Natural Gas Co.	01-29-93	C	9,000	N	I	01-13-93	Indef.
ST93-2426	Valero Trans- mission, L.P.	Transwestern Pipeline Co.	01-29-93	C	7,800	N	I	01-01-93	Indef.
ST93-2427	Valero Trans- mission, L.P.	Natural Gas P/L Co. of America.	01-29-93	C	15,000	N	I	01-01-93	Indef.
ST93-2428	Lone Star Gas Co	Tennessee Gas Pipeline Co., et al.	01-29-93	C	25,000	N	I	12-30-92	Indef.
ST93-2429	Lone Star Gas Co	El Paso Natural Gas Co.	01-29-93	C	25,000	N	I	01-01-92	Indef.
ST93-2430	Overthrust Pipe- line Co.	Questar Pipeline Co.	01-29-93	G	400,000	Y	I	01-04-93	07-31-01
ST93-2431	KN Energy, Inc ....	Panhandle East- ern Pipe Line Co.	01-29-93	G	300,000	N	I	12-30-92	Indef.
ST93-2432	El Paso Natural Gas Co.	Colorado Inter- state Gas Co.	01-29-93	G	30,900	N	I	01-21-93	Indef.
ST93-2433	Texas Eastern Transmission Corp.	Elizabethtown Gas Co.	01-29-93	G-S	14,257	N	F	01-01-93	Indef.
ST93-2434	Williston Basin Inter. P/L Co.	Merrion Oil & Gas Corp.	01-29-93	G-S	5	N	I	01-01-93	12-31-94
ST93-2435	Williston Basin Inter. P/L Co.	Amerada Hess Corp.	01-29-93	G-S	45,000	N	I	01-01-93	12-31-94
ST93-2436	Transok Gas Transmission Co.	ANR Pipeline Co., et al.	01-29-93	C	100,000	N	I	12-18-92	Indef.
ST93-2437	Dethi Gas Pipeline Corp.	El Paso Natural Gas Co., et al.	01-29-93	C	20,000	N	I	01-01-93	Indef.

Docket No. <sup>1</sup>	Transporter/seller	Recipient	Date filed	Part 284 subpart	Est. max. daily quantity <sup>2</sup>	Aff. Y/ A/N <sup>3</sup>	Rate sch.	Date commenced	Projected termination date
ST93-2438	Delhi Gas Pipeline Corp.	El Paso Natural Gas Co., et al.	01-29-93	C	1,100	N	I	01-01-93	Indef.
ST93-2439	Delhi Gas Pipeline Corp.	KN Energy, Inc., et al.	01-29-93	C	4,000	N	I	01-01-93	Indef.
ST93-2440	Delhi Gas Pipeline Corp.	El Paso Natural Gas Co., et al.	01-29-93	C	5,000	N	I	01-01-93	Indef.
ST93-2441	Columbia Gas Transmission Corp.	Access Energy Corp.	01-29-93	G-S	2,000	Y	F	01-15-93	03-31-93
ST93-2442	Columbia Gas Transmission Corp.	Access Energy Corp.	01-29-93	G-S	2,355	Y	F	01-15-93	03-31-93
ST93-2443	Columbia Gas Transmission Corp.	Elizabethtown Gas Co.	01-29-93	B	20,000	Y	F	12-01-92	Indef.
ST93-2444	Columbia Gas Transmission Corp.	Bluefield Gas Co.	01-29-93	B	2,000	Y	F	01-01-93	Indef.
ST93-2445	Columbia Gas Transmission Corp.	Kalida Natural Gas Co.	01-29-93	B	400	N	F	02-01-93	Indef.
ST93-2446	Northern Natural Gas Co.	City of Tipton .....	01-29-93	G-S	969	N	F/I	01-01-93	Indef.
ST93-2447	Northern Natural Gas Co.	Wisconsin Gas Co	01-29-93	G-S	57,440	N	F/I	01-01-93	Indef.
ST93-2448	Northern Natural Gas Co.	Peoples Natural Gas Co.	01-29-93	G-S	5,000	N	F/I	01-01-93	01-02-96
ST93-2449	Natural Gas P/L Co. of America.	Tejas Power Corp	01-29-93	G-S	60,000	N	I	04-01-88	Indef.
ST93-2450	Panhandle East-ern Pipe Line Co.	K N Energy, Inc ...	01-29-93	G	15,000	N	I	01-13-93	Indef.
ST93-2451	Panhandle East-ern Pipe Line Co.	MG Natural Gas Corp.	01-29-93	G-S	21,030	N	F	01-01-93	Indef.
ST93-2452	ANR Pipeline Co.	International Specialty Prod. Inc.	01-29-93	G-S	1,200	N	F	01-01-93	Indef.
ST93-2453	Colorado Interstate Gas Co.	Gulf Gas Utilities Co.	01-29-93	G-S	500	N	I	01-01-93	Indef.
ST93-2454	Colorado Interstate Gas Co.	SDS Petroleum Products, Inc.	01-29-93	G-S	1,000	N	I	01-14-93	Indef.

<sup>1</sup> Notice of transactions does not constitute a determination that filings comply with commission regulations in accordance with order no. 436 (final rule and notice requesting supplemental comments, 50 FR 42,372, 10/10/85).

<sup>2</sup> Estimated Maximum Daily Volumes Includes Volumes Reported by the Filing Company in MMBTU, MCF and DT.

<sup>3</sup> Affiliation of Reporting Company to Entities Involved in the Transaction. A "Y" Indicates Affiliation, an "A" Indicates Marketing Affiliation, and an "N" Indicates No Affiliation.

[FR Doc. 93-6685 Filed 3-23-93; 8:45 am]  
BILLING CODE 6717-01-M

[Docket Nos. CP93-247-000, et al.]

**Southern Natural Gas Co., et al.;  
Natural Gas Certificate Filings**

Take notice that the following filings have been made with the Commission:

**1. Southern Natural Gas Company**

[Docket No. CP93-247-000]

March 16, 1993.

Take notice that on March 12, 1993, Southern Natural Gas Company (Southern), Post Office Box 2563, Birmingham, Alabama 35202-2563, filed in Docket No. CP93-247-000 an application pursuant to section 7(b) of

the Natural Gas Act for authorization to abandon four segments of pipeline crossing the Mississippi River, all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Specifically, Southern requests authority to abandon four 12¼ inch outside diameter Duck Lake-Franklinton Line River Crossing pipelines located in Iberville Parish, Louisiana. Southern states that the river crossings as well as its 20-inch Duck Lake-Franklinton Line were constructed in 1953 in order to deliver natural gas from wells in the Duck Lake-gas field near Verdunville, St. Mary Parish, Louisiana. It is also stated that the United States Corps of Engineers and the State of Louisiana (collectively known as the agencies) are

presently planning the implementing of the second phase of their Mississippi River Deepening Project (Deep Draft Project). Southern states that the agencies project that work on the Deep Draft Project would commence during the summer of 1993 and would consist of the deepening channel of the Mississippi River to a depth of fifty-five feet.

Southern asserts that the proposed limits of the Deep Draft Project would impact Southern's Duck Lake-Franklinton River Crossing at White Castle to the extent that the existing four 12¼ inch river lines must be removed and abandoned. Southern submits that since it has a 24-inch and a 30-inch pipeline crossing at the same location and that those pipelines have existing

operational capacity and capacity sufficient to flow the remaining natural gas volumes to Southern's system, abandonment of the four river crossing segments would have a *de minimis* impact on Southern's operations. It is indicated that, upon receipt of abandonment authorization, Southern proposes to abandon the segments by removal.

*Comment date:* April 6, 1993, in accordance with Standard Paragraph F at the end of this notice.

## 2. Northern Natural Gas Company

[Docket No. CP93-244-000]

March 16, 1993.

Take notice that on March 11, 1993, Northern Natural Gas Company (Northern), 1111 South 103rd Street, Omaha, Nebraska 68124-1000, filed in Docket No. CP93-244-000 an application pursuant to section 7(b) of the Natural Gas Act for permission and approval to abandon firm transportation service to Midwest Gas Company, a division of Midwest Power Systems Inc. (Midwest Gas), pursuant to Rate Schedule T-17 in Northern's FERC Gas Tariff, Original Volume No. 2, all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Northern states that it entered into a gas transportation agreement with Midwest Gas on June 10, 1975. Northern states that the Commission granted a certificate to Northern authorizing the transportation service on March 31, 1976 in Docket No. CP76-4. According to Northern, Midwest Gas advised Northern by letter dated January 5, 1993, that Midwest Gas desired to abandon Rate Schedule T-17. Northern further states that no facilities are proposed to be abandoned.

*Comment date:* April 6, 1993 in accordance with Standard Paragraph F at the end of the notice.

## 3. Equitrans, Inc.

[Docket No. CP93-241-000]

March 16, 1993.

Take notice that on March 11, 1993, Equitrans, Inc. (Equitrans), 3500 Park Lane, Pittsburgh, PA 15275, filed in Docket No. CP93-241-000 a request pursuant to §§ 157.205 and 157.211 of the Commission's Regulations under the Natural Gas Act for authorization to construct and operate a sales tap, under the blanket certificate issued in Docket No. CP83-508-000 pursuant to section 7 of the Natural Gas Act, all as more fully set forth in the request which is on file with the Commission and open for public inspection.

Equitrans proposes that the new sales tap be constructed on its transmission line in Center Township, Greene County, Pennsylvania to provide gas service to Equitable Gas Company, a division of Equitable Resources, Inc. (Equitable). Equitrans projects that the quantity of gas to be delivered through the new sales tap will be approximately 1 Mcf on a peak day.

*Comment date:* April 30, 1993, in accordance with Standard Paragraph G at the end of this notice.

## 4. Panhandle Eastern Pipe Line Company

[Docket No. CP93-236-000]

March 16, 1993.

Take notice that on March 8, 1993, Panhandle Eastern Pipe Line Company (Panhandle), P.O. Box 1642, Houston, Texas 77251-1642, filed in Docket No. CP93-236-000 a request under section 7(b) of the Commission's Regulations under the Natural Gas Act for a certificate permitting and approving abandonment of a certificated exchange agreement with KN Energy, Inc. (KN), under Rate Schedule E-16 of Panhandle's FERC Gas Tariff, Original Volume No. 2, all as more fully set forth in the request which is on file with the Commission and open to public inspection.

Panhandle states that Panhandle and KN have mutually agreed to terminate the subject exchange service, effective March 1, 1993. Panhandle further states that the existing interconnections with KN will continue to be available for open access transportation service. No facilities are proposed to be abandoned herein.

*Comment date:* April 6, 1993, in accordance with Standard Paragraph F at the end of this notice.

## 5. Florida Gas Transmission Company

[Docket No. CP93-242-000]

March 17, 1993.

Take notice that on March 11, 1993, Florida Gas Transmission Company (FGT), 1400 Smith Street, Houston, Texas 77002, filed in Docket No. CP93-189-000, a request pursuant to § 157.205 of the Commission's Regulations under the Natural Gas Act (18 CFR 157.205) for authorization to add an existing delivery point to two existing sales service agreements under which FGT is currently serving West Florida Natural Gas Company (West Florida), under the authorization issued in Docket No. CP82-553-000, pursuant to section 7 of the Natural Gas Act, all as more fully set forth in the request which is on file with the Commission and open to public inspection.

At the request of West Florida, FGT proposes to add the Okaloosa County delivery point located in Okaloosa County, Florida to the firm sales for resale service agreement dated November 1, 1989, as amended (Rate Schedule G) and the preferred sales for resale service agreement dated November 1, 1989 (Rate Schedule I) under which FGT is currently serving West Florida. It is stated that West Florida and Okaloosa County Natural Gas District (Okaloosa) have advised FGT that their pipeline systems are physically connected downstream of the subject delivery point and that Okaloosa has agreed to provide firm transportation service for West Florida from the subject delivery point to the interconnection between Okaloosa's and West Florida's pipeline systems. It is further stated that adding the subject delivery point will not increase FGT's contractual gas deliveries to West Florida and therefore, will not impact FGT's peak or annual deliveries, nor will it disadvantage FGT's other existing customers.

*Comment date:* April 30, 1993, in accordance with Standard Paragraph G at the end of this notice.

## 6. ANR Pipeline Company

[Docket No. CP93-248-000]

March 17, 1993.

Take notice that on March 15, 1993, ANR Pipeline Company (ANR), 500 Renaissance Center, Detroit, Michigan 48243, filed in Docket No. CP93-248-000 an application pursuant to section 7(b) of the Natural Gas Act for permission and approval to abandon a natural gas transportation service for Trunkline Gas Company (Trunkline), all as more fully set forth in the application on file with the Commission and open to public inspection.

It is stated that as part of the negotiations in Docket No. RP89-161, et al., ANR and Trunkline have agreed to terminate Rate Schedule X-151, under Original Volume No. 2 of ANR's FERC Gas Tariff and have agreed to replace it with open-access transportation. It is stated that Rate Schedule X-151 represents an agreement dated June 15, 1984, which was authorized in Docket No. CP85-329-000 wherein ANR is authorized to transport for Trunkline up to 4,000 Mcf of natural gas per day from High Island Block A-355 to High Island Block A-343. ANR requests that the abandonment be made effective November 1, 1992, coincident with the effective date of ANR's Interim Settlement in Docket No. RP89-161, et al.

*Comment date:* April 7, 1993, in accordance with Standard Paragraph F at the end of this notice.

#### 7. Northern Natural Gas Company

[Docket No. CP93-243-000]

March 17, 1993.

Take notice that on March 11, 1993, Northern Natural Gas Company (Northern), 1111 South 103rd Street, Omaha, Nebraska 68124-1000, filed in Docket No. CP93-243-000 an application pursuant to section 7(b) of the Natural Gas Act for permission and approval to abandon partially the sale of natural gas to the Producers Utilities Corp. (PUC), a local distribution company serving customers in Armstrong and Carson Counties, Texas, all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Northern proposes to abandon the sale of 2,935 Mcf of natural gas per day to PUC on a firm basis during the period from April through October of each year and the sale of 2,600 Mcf of gas per day on an interruptible basis for the period from November through March of each year. It is stated that the proposed abandonment would reduce PUC's daily entitlements from Northern from 3,000 Mcf to 65 Mcf on a firm basis and from 3,000 to 400 Mcf on an interruptible basis. It is explained that Northern makes sales to PUC under the terms of Northern's Rate Schedule X-16.

It is asserted that no facilities are proposed to be abandoned herein. It is further asserted that on approval of the proposed abandonment Northern would file new tariff sheets to reflect the reduced level of service to PUC.

*Comment date:* April 7, 1993, in accordance with Standard Paragraph F at the end of this notice.

#### 8. Midwestern Gas Transmission Company

[Docket No. CP93-246-000]

March 17, 1993.

Take notice that on March 12, 1993, Midwestern Gas Transmission Company (Midwestern), P.O. Box 2511, Houston, Texas 77252, filed in Docket No. CP93-246-000 an application pursuant to section 7(b) of the Natural Gas Act for authorization to abandon the portable use of certain compressor facilities, all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Midwestern states that it was authorized to use, on a temporary basis, a portable 3,500 horsepower compressor unit at various existing permanent compressor stations during routine

maintenance procedures. Midwestern further states that it desires to upgrade the horsepower of the portable unit and use it on a permanent basis to replace a 4,000 horsepower unit that is being retired. Midwestern therefore seeks abandonment of only the authorization to operate the compressor unit on a portable basis.

Midwestern asserts that the requested abandonment will allow it to operate the compressor on a permanent basis and eliminate the need to buy a new compressor unit.

*Comment date:* April 7, 1993, in accordance with Standard Paragraph F at the end of this notice.

#### Standard Paragraphs

F. Any person desiring to be heard or make any protest with reference to said filing should on or before the comment date file with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, a motion to intervene or a protest in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214) and the Regulations under the Natural Gas Act (18 CFR 157.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a motion to intervene in accordance with the Commission's Rules.

Take further notice that, pursuant to the jurisdiction contained in and subject to jurisdiction conferred upon the Federal Energy Regulatory Commission by sections 7 and 15 of the Natural Gas Act and the Commission's Rules of Practice and Procedure, a hearing will be held without further notice before the Commission or its designee on this filing if no motion to intervene is filed within the time required herein, if the Commission on its own review of the matter finds that a grant of the certificate is required by the public convenience and necessity. If a motion for leave to intervene is timely filed, or if the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for the applicant to appear or be represented at the hearing.

G. Any person or the Commission's staff may, within 45 days after the issuance of the instant notice by the Commission, file pursuant to Rule 214

of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to § 157.205 of the Regulations under the Natural Gas Act (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefore, the proposed activity shall be deemed to be authorized effective the day after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to section 7 of the Natural Gas Act.

**Lois D. Cashell,**

*Secretary.*

[FR Doc. 93-6655 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. JD93-05557T Texas-127]

#### State of Texas; NGPA Notice of Determination by Jurisdictional Agency Designating Tight Formation

March 18, 1993.

Take notice that on March 15, 1993, the Railroad Commission of Texas (Texas) submitted the above-referenced notice of determination pursuant to § 271.703(c)(3) of the Commission's regulations, that the Frio M-50 Sand Formation, La Sal Vieja Field, underlying a portion of Willacy County, Texas, qualifies as a tight formation under section 107(b) of the Natural Gas Policy Act of 1978. The designated area is in Railroad Commission District No. 4 underlying approximately 4,400 acres in the Harding-Lindahl Subdivision of the San Juan de Carricitos Grant A-8, as shown on Exhibit 2 of the application.

The notice of determination also contains Texas' findings that the referenced portion of the Frio M-50 Sand Formation meets the requirements of the Commission's regulations set forth in 18 CFR part 271.

The application for determination is available for inspection, except for material which is confidential under 18 CFR 275.206, at the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426. Persons objecting to the determination may file a protest, in accordance with 18 CFR 275.203 and 275.204, within 20 days after the date this notice is issued by the Commission.

**Lois D. Cashell,**

*Secretary.*

[FR Doc. 93-6697 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

**[Docket No. FA92-9-000]****Central Louisiana Electric Co., Inc.;  
Consent to Shortened Procedures**

Issued March 18, 1993.

On January 26, 1993, Chief Accountant issued a report on the examination of the books and records of Central Louisiana Electric Company, Inc. (the Company) for the period January 1, 1987 through December 31, 1991. 62 FERC ¶ 62,054. As noted in that report, the Company disagrees with Exception No. 1 in Part I of the report. By letter filed February 23, 1993, the Company consented to disposition of this matter under the shortened procedures set forth in 18 CFR part 41.

Under those procedures, initial memoranda of facts and arguments shall be due on or before April 19, 1993. Replies shall be due on or before May 10, 1993.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6688 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

**[Docket Nos. TQ93-2-22-000; TM93-4-22-000]****CNG Transmission Corp.; Proposed  
Changes in FERC Gas Tariff**

March 16, 1993.

Take notice that CNG Transmission Corporation ("CNG"), on March 10, 1993, pursuant to section 4 of the Natural Gas Act, part 154 of the Commission's regulations, and Sections 12, 15, and 16 of the General Terms and Conditions of CNG's FERC Gas Tariff, filed six copies of the following tariff sheets for its FERC Gas Tariff, First Revised Volume No. 1:

Twenty-Eighth Revised Sheet No. 31  
Twentieth Revised Sheet No. 32  
Eighth Revised Sheet No. 33  
Twenty-Fourth Revised Sheet No. 34  
Nineteenth Revised Sheet No. 35

The tariff sheets are proposed to become effective April 1, 1993. CNG states that the purpose of this filing is to institute a PGA rate to be effective for the period April 1, 1993, through June 30, 1993.

CNG requests the following waivers in the filing:

(1) Waiver of § 154.305(d) of the Commission's Regulations to allow CNG to remove the commodity gas cost surcharge component from its rates.

(2) Waiver of § 154.304 of the Commission's Regulations to allow CNG to consider April through June, 1993 as CNG's three-month quarterly PGA period.

(3) Waiver of § 154.308 of the Commission's Regulations to allow this rate change to take effect before the end of the normal 30 day notice period.

(4) Waiver of Section 15 of the General Terms and Conditions of CNG's Tariff to allow CNG to base its Transportation Cost Recovery Adjustment on the three month period beginning April 1993 instead of the annual period beginning April 1993.

CNG states that copies of the filing are being mailed to CNG customers and interested parties.

Any person desiring to be heard or to protest said filing should file a protest or motion to intervene with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 214 and 211 of the Commission's Rules of Practice and Procedure, 18 CFR 285.214 and 385.211. All motions or protests should be filed on or before March 23, 1993. 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. 93-6652 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

**[Docket No. TM93-4-2-000]****East Tennessee Natural Gas Co.; Rate  
Filing**

March 18, 1993.

Take notice that on March 15, 1993, East Tennessee Natural Gas Company ("East Tennessee"), P.O. Box 2511, Houston, Texas 77252, filed its Third Revised Tariff Sheet No. 7 with a proposed effective date of April 1, 1993. The purpose of this filing is to pass through take-or-pay transition costs assessed to East Tennessee by Tennessee Gas Pipeline Company (Tennessee) pursuant to Section 26.5 of the General Terms and Conditions of Volume 1 of East Tennessee's tariff. Tennessee made its filing assessing costs against East Tennessee in Docket No. RP93-37-060 on December 1, 1992 for a proposed effective date of January 1, 1993. The provision of Section 26.5 of East Tennessee's tariff require East Tennessee to file to pass through the Tennessee charges within thirty days of billing by Tennessee. Tennessee billed East Tennessee for the increase on February 15, 1993.

East Tennessee states that copies of the filing have been mailed to all of its jurisdictional customers and affected state regulatory commission.

Any person desiring to be heard or to make any protest with reference to said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Sections 211 and 214 of the Commission's Rules of Practice and Procedure, 18 CFR 385.211 and 385.214. All such petitions or protests should be filed on or before March 26, 1993. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to this proceeding. Any person wishing to become a party must file a petition to intervene. Copies of this filing are on file and available for public inspection.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6696 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

**[Docket No. TM93-1-23-000]****Eastern Shore Natural Gas Co.;  
Proposed Changes in FERC Gas Tariff**

March 18, 1993.

Take notice that Eastern Shore Natural Gas Company (ESNG) tendered for filing on March 15, 1993 certain revised tariff sheet included in Appendix A attached to the filing. Such sheet is proposed to be effective April 1, 1993.

ESNG states that the purpose of the instant filing is to revise the fuel retention percentages applicable to its storage rate schedules effective April 1, 1993. ESNG is "tracking" the revised fuel retention percentages from a filing made by Transco on March 2, 1993. (See Transco's Second Revised Sheet No. 29).

ESNG states that copies of the filing have been served upon its jurisdictional customers 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 Rule 211 and Rule 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 March 26, 1993. Protest 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 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. 93-6690 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. CP93-249-000]

### El Paso Natural Gas Co.; Application

March 18, 1993.

Take notice that on March 15, 1993, El Paso Natural Gas Company (El Paso), Post Office Box 1492, El Paso, Texas 79978, filed in Docket No. CP93-249-000 an application with the Commission, pursuant to section 7(b) of the Natural Gas Act (NGA), for permission and approval to abandon two certificated exchange services with Warren Petroleum Company, a division of Chevron U.S.A. Inc. (Warren), all as more fully set forth in the application which is open to public inspection.

El Paso requests permission and approval to abandon exchange services with Warren under El Paso's FERC Rate Schedules X-57 and X-58. El Paso states that via letter dated December 3, 1992, Warren and El Paso agreed to terminate their respective exchange services. El Paso also states that it would then transport natural gas volumes for Warren under part 284 of the Commission's Regulations upon abandonment of their exchange services. El Paso indicates that Warren will file a separate application with the Commission to abandon its corresponding services for El Paso.

No facilities would be abandoned in this proposal.

Any person desiring to be heard or to make any protest with reference to said application should on or before April 8, 1993, file with the Federal Energy Regulatory Commission, Washington, DC 20426, a motion to intervene or a protest in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the NGA (18 CFR 157.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a motion to intervene in accordance with the Commission's Rules.

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by sections 7 and 15 of the NGA and the Commission's Rules of Practice and Procedure, a hearing will be held without further notice before the Commission or its designee on this application if no motion to intervene is filed within the time required herein, if the Commission on its own review of the matter finds that permission and approval for the proposed abandonment are required by the public convenience and necessity. If a motion for leave to intervene is timely filed, or if the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for El Paso to appear or be represented at the hearing.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6693 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket Nos. RP89-186-054 and RP90-20-000]

### Great Lakes Gas Transmission Limited Partnership; Proposed Changes in FERC Gas Tariff

March 18, 1993.

Take notice that Great Lakes Gas Transmission Limited Partnership ("Great Lakes"), on March 9, 1993, tendered to the Federal Energy Regulatory Commission ("Commission") for filing as part of its FERC Gas Tariff, the following primary and alternate tariff sheets, to become effective on April 1, 1993:

#### Primary Tariff Sheets

##### First Revised Volume No. 1

Twenty-Fifth Revised Sheet No. 4  
Forty-First Revised Sheet No. 57(i)

##### Original Volume No. 2

Twenty-Seventh Revised Sheet No. 53  
First Revised Sheet No. 53-G.1  
Nineteenth Revised Sheet No. 77  
Fifth Revised Sheet No. 78  
Fifteenth Revised Sheet No. 151  
Twelfth Revised Sheet No. 223  
Twelfth Revised Sheet No. 245  
Sixth Revised Sheet No. 269  
Twelfth Revised Sheet No. 294  
Seventh Revised Sheet No. 603  
Fourth Revised Sheet No. 604  
Fifth Revised Sheet No. 865  
Fifth Revised Sheet No. 866  
Fourth Revised Sheet No. 905  
Fifth Revised Sheet No. 906  
Second Revised Sheet No. 1008

#### Original Volume No. 3

Sixth Revised Sheet No. 2  
Second Revised Sheet No. 2-A  
Seventh Revised Sheet No. 3

#### Alternate Tariff Sheets

##### First Revised Volume No. 1

Alternate Twenty-Fifth Revised Sheet No. 4  
Alternate Forty-First Revised Sheet No. 57(i)

##### Original Volume No. 2

Alternate Twenty-Seventh Revised Sheet No. 53  
Alternate First Revised Sheet No. 53-G.1  
Alternate Nineteenth Revised Sheet No. 77  
Alternate Fifth Revised Sheet No. 78  
Alternate Fifteenth Revised Sheet No. 151  
Alternate Twelfth Revised Sheet No. 223  
Alternate Twelfth Revised Sheet No. 245  
Alternate Sixth Revised Sheet No. 269  
Alternate Twelfth Revised Sheet No. 294  
Alternate Seventh Revised Sheet No. 603  
Alternate Fourth Revised Sheet No. 604  
Alternate Fifth Revised Sheet No. 865  
Alternate Fifth Revised Sheet No. 866  
Alternate Fourth Revised Sheet No. 905  
Alternate Fifth Revised Sheet No. 906  
Alternate Second Revised Sheet No. 1008

##### Original Volume No. 3

Alternate Sixth Revised Sheet No. 2  
Alternate Second Revised Sheet No. 2-A  
Alternate Seventh Revised Sheet No. 3

Great Lakes states that the purpose of its filing is to comply with Opinion Nos. 368, Great Lakes Gas Transmission Limited Partnership, "Opinion and Order Affirming in Part and Reversing in Part Initial Decision" 57 FERC ¶ 61,141 (1991), and 368-A, Great Lakes Gas Transmission Limited Partnership, "Opinion and Order Denying Rehearing" Docket Nos. RP89-186-008, et al. (issued February 3, 1993). In this regard, Opinions Nos. 368 and 368-A resolved three issues previously reserved for hearing and decision by the settlement in Great Lakes' prior general rate case proceeding:

- Whether Great Lakes' rates for firm transportation services authorized in Docket Nos. CP88-542-000 and CP88-805-000 be determined on an incremental or rolled-in cost basis;
- The rate design methodology to be utilized to determine Great Lakes' interruptible and authorized overrun transportation rates; and
- Whether Great Lakes should continue to utilize the Modified Fixed Variable (MFV) methodology to design its system rates.

Great Lakes states that its primary tariff proposal reflects incremental rates for the services authorized under Docket Nos. CP88-542-000 and CP88-805-000, a 140 percent load factor design for its Rate Schedules IT and AOS interruptible and authorized overrun transportation rates, respectively, and

use of the Straight Fixed Variable (SFV) rate methodology.

Great Lakes further states that although no party raised the matter on rehearing, there is a sentence in Opinion 368-A which could be read as suggesting implementation of SFV rates will be accomplished as part of Great Lakes' restructuring under Order No. 636. In light of this uncertainty, it avers, Great Lakes is including alternate tariff sheets which reflect incremental rate treatment and 140 percent load factor design basis for its Rate Schedule IT and AOS rates, but retains its existing Modified Fixed Variable rate methodology.

Both the primary and alternate rate proposals utilize the settlement cost of service and throughput levels approved by the Commission's order issued to Great Lakes on February 3, 1993 at Docket No. RP91-143-000, it is stated.

Great Lakes states that it is tendering the proposed tariff sheets without prejudice to: (1) Its position, on appeal, that its system rates should be designed on a rolled-in basis; (2) its position as to the implementation of incremental rate-making on the Great Lakes' system in the litigation phase of Docket No. RP91-143-000; and (3) Great Lakes' position in its restructuring proceedings in Docket No. RS92-63-000.

Great Lakes states that copies of this filing were posted and served on all of its customers, upon the Public Service Commissions of the States of Minnesota, Michigan, and Wisconsin, and upon all parties listed on the service list maintained by the Commission's Secretary in this proceeding.

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 March 26, 1993. 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. 93-6691 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-06

[Docket Nos. ES93-20-000, ES93-20-001 and ES93-20-002]

**Multitrade of Pittsylvania County, L.P.; Issuance of Commission Letter Order and Comment Period**

March 16, 1993.

Take notice that on March 12, 1993, the Chief Accountant, pursuant to delegated authority, issued a Letter Order to Multitrade of Pittsylvania County L.P. (MPC) conditionally granting blanket approval under 18 CFR part 34 of all future issuances of securities and assumptions of liabilities by MPC.

The March 12, 1993 Letter Order, in ordering paragraphs (B)(1), (B)(2) and (B)(3), reads as follows:

(B)(1) Within 30 days of the date of this letter order, any person desiring to be heard or to protest this blanket approval of the issuances of securities or assumptions of liabilities by MPC should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214).

(B)(2) Absent a request for hearing within the period set forth above, MPC is authorized to issue securities and assume obligations or liabilities as guarantor, endorser, surety, or otherwise in respect of any security of another person; provided that such issue or assumption is for some lawful object within the corporate purposes of the applicant, and compatible with the public interest, and is reasonably necessary or appropriate for such purposes.

(B)(3) The Commission reserves the right to require a further showing that neither public nor private interests will be adversely affected by continued Commission approval of MPC's issuances of securities or assumption of liabilities.

Notice is hereby given that the deadline for filing a motion to intervene or protest, as set forth above, is April 12, 1993.

Copies of the full text of the Letter Order are available from the Commission's Public Reference Branch, room 3308, 941 North Capitol Street, NE., Washington, DC 20426.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6653 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-06

[Docket No. RP93-62-000]

**Panhandle Eastern Pipe Line Co.; Filing in Compliance With Section 18.9 of Panhandle's Tariff**

March 18, 1993.

Take notice that on March 10, 1993, Panhandle Eastern Pipe Line Company (Panhandle) filed in compliance with the provisions of Section 18.9 of the General Terms and Conditions of Original Volume No. 1 of its FERC Gas Tariff to recover from certain former sales customers and refund to certain former sales customers their proportional share of the total unrecovered amounts remaining in Panhandle's Account 191 at the time Section 18 through 18.9 of Panhandle's General Terms and Conditions became inapplicable to them. Panhandle requests immediate authority to direct bill or issue refunds for the amounts included in Appendix A of its filing, without further notice, notice of the applicability of this tariff provision having already been provided.

Panhandle states that it has previously filed for and received authority to abandon sales service to the affected parties and thus, the provisions of Section 18.9 of its tariff are applicable to them. Panhandle has included in its filing workpapers setting forth the calculation of the former sales customers direct bill responsibility to Panhandle or the refunds due such former sales customers. Panhandle states that its filing is without prejudice to its rights to the full recovery of the costs encompassed by section 18.9 of the General Terms and Conditions in the event of changes in Commission orders.

Panhandle states that copies of this filing is being mailed to each affected customers and the appropriate state commissions.

Any person desiring to be heard or to protest said filing should file a petition to intervene or protest with the Federal Energy Regulatory Commission, Union Center Plaza Building, 825 North Capitol Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such petitions or protests should be filed on or before March 26, 1993. 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 in the Public Reference Room.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6695 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. RP89-185-007]

**Panhandle Eastern Pipe Line Co.;  
Response of Panhandle Eastern Pipe  
Line Co. to Order on Remand**

March 18, 1993

Take notice that on March 1, 1993, Panhandle Eastern Pipe Line Company (Panhandle) submitted information required by the Commission's Order on Remand issued January 21, 1993, in Docket No. RP89-185-007.

The Commission's January 21 order on remand directed Panhandle to file information regarding the recovery of fuel costs under the Seasonal Sales Program (SSP). The SSP was in effect for the period July 1989 through March 1991. Panhandle's response provides support for the fuel component of the SSP rate, claiming this information shows there is no overrecovery of fuel costs during the 21 months the SSP was in effect.

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 March 26, 1993. 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. 93-6694 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. MT88-5-004]

**Phillips Gas Pipeline Co.; Filing of  
Revised Tariff Sheets**

March 18, 1993

Take notice that on March 5, 1993, Phillips Gas Pipeline Company ("PGPL") tendered for filing the following revised tariff sheets Third Revised Sheet No. 4; Third Revised Sheet No. 4A; Third Revised Sheet No. 4B; Third Revised Sheet No. 4D; and First Revised Sheet No. 4E, all to be effective on April 2, 1993.

PGPL states that the revised tariff sheets are required to reflect: (1) The significant enhancement of PGPL's interactive electronic bulletin board; and (2) reorganization changes to permit PGPL to enter into intercorporate service contracts with employees of a marketing affiliate of PGPL, Seagas Pipeline Company. PGPL states that this filing reflects no changes in its transportation rates.

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 March 26, 1993. 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. 93-6698 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. FA91-47-000]

**Public Service Company of Colorado;  
Consent to Shortened Procedures**

Issued March 18, 1993.

On January 19, 1993, Chief Accountant issued a report on the examination of the books and records of Public Service Company of Colorado (the Company) for the period January 1, 1986 through December 31, 1990. 62 FERC ¶ 62,049. As noted in that report, the Company disagrees with certain matters discussed in Part I of the report. By letter filed February 25, 1993, the Company consented to disposition of this matter under the shortened procedures set forth in 18 CFR part 41.

Under those procedures, initial memoranda of facts and arguments shall be due on or before April 19, 1993. Replies shall be due on or before May 10, 1993.

Lois D. Cashell,  
Secretary.

[FR Doc. 93-6689 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

[Docket No. TA93-1-43-001]

**Williams Natural Gas Co.; Proposed  
Changes in FERC Gas Tariff**

March 18, 1993.

Take notice that Williams Natural Gas Company (WNG) on March 10, 1993, tendered for filing Sixteenth Revised Sheet No. 9 to its FERC Gas Tariff, First Revised Volume No. 1.

WNG states that it filed its Annual PGA on March 1, 1993 in the above referenced docket. The sheet No. 9 included in the Annual PGA did not reflect a tariff filing made February 1, 1993 in Docket No. CP92-351-000, in which WNG removed tariff references to its Rodman gathering area. Sixteenth Revised Sheet No. 9 is being filed to reflect tariff changes proposed in Docket No. CP92-351-000, which were approved by Commission letter order dated February 25, 1993.

WNG states that the magnetic tape included with the Annual PGA contained an old version of Schedule D-1, Code 0. A revised magnetic tape is being filed which includes the correct Schedule D-1, Code 0.

WNG states that a copy of its filing was served on all jurisdictional customers and interested state commissions.

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 March 26, 1993. 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. 93-6692 Filed 3-23-93; 8:45 am]

BILLING CODE 6717-01-M

**Office of Hearings and Appeals, Cases  
Filed During the Week of February 19,  
Through February 26, 1993**

During the Week of February 19 through February 26, 1993, the appeals and applications for other relief listed in the Appendix to this Notice were filed with the Office of Hearings and Appeals of the Department of Energy. A submission inadvertently omitted from an earlier list has also been included.

Under DOE procedural regulations, 10 CFR part 205, any person who will be

aggrieved by the DOE action sought in these cases may file written comments on the application within ten days of service of notice, as prescribed in the procedural regulations. For purposes of the regulations, the date of service of

notice is deemed to be the date of publication of this Notice or the date of receipt by an aggrieved person of actual notice, whichever occurs first. All such comments shall be filed with the Office

of Hearings and Appeals, Department of Energy, Washington, DC 20585.

Dated: March 18, 1993.

George B. Breznay,

Director, Office of Hearings and Appeals.

LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS

[Week of Feb. 19 through Feb. 26, 1993]

Date	Name and location of applicant	Case No.	Type of submission
Dec. 4, 1992	True/Little America Refining Co., Salt Lake City, UT.	RR195-3	Request for modification/rescission in the true refund proceeding. If granted: The October 22, 1987 Decision and Order (Case No. RF195-8) issued to Little America Refining Company would be modified regarding the firm's application for refund submitted in the True Refund Proceeding.
Feb. 23, 1993	Marathon/Independent Oil & Tire Company, Washington, D.C.	RR250-9	Request for modification/rescission in the Marathon refund proceeding. If granted: The January 22, 1992 Decision and Order (Case No. RF250-2750) issued to Independent Oil & Tire Company would be modified regarding the firm's application for refund submitted in Marathon Refund Proceeding.
Feb. 24, 1993	David Rodriguez Soler, Cranbury, NJ	LFA-0272	Appeal of an information request denial. If granted: David Rodriguez Soler would receive sections of a contractor's Personnel Manual and EEO-1 reports pertaining to him from the years 1985 through 1991.
Do	Gulf/Associated Radio Service Company, Washington, D.C.	RR300-243	Request for modification/rescission in the Gulf refund proceeding. If granted: The November 7, 1988 Decision and Order (Case No. RR300-5088) issued to Associated Radio Service Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/Carlsbad Oil Company, Washington, D.C.	RR300-238	Request for modification/rescission in the Gulf refund proceeding. If granted: The March 21, 1989 Decision and Order (Case No. RF300-4260) issued to Carlsbad Oil Company would be modified regarding the firm's application for refund submitted in Gulf Refund Proceeding.
Do	Gulf/Dea & Dee Oil Company, Washington, D.C.	RR300-241	Request for modification/rescission in the Gulf refund proceeding. If granted: The November 7, 1988 Decision and Order (Case No. RF300-5087) issued to Dea & Dee Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/General Aviation of New Orleans, Inc., Washington, D.C.	RR300-327	Request for modification/rescission in the Gulf refund proceeding. If granted: The November 7, 1988 Decision and Order (Case No. RF300-4995) issued to General Aviation of New Orleans, Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/Gogel's Gulf Service, Washington, D.C.	RR300-245	Request for modification/rescission in the Gulf refund proceeding. If granted: The June 21, 1991 Decision and Order (Case No. RF300-11637) issued to Gogel's Gulf Service would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/Horn Distributing Co., Inc., Washington, D.C.	RR300-242	Request for modification/rescission in the Gulf refund proceeding. If granted: The March 15, 1989 Decision and Order (Case No. RF300-5762) issued to Horn Distributing Co., Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/L.E. Shifflet, Washington, D.C.	RR300-234	Request for modification/rescission in the Gulf refund proceeding. If granted: The April 2, 1990 Decision and Order (Case No. RF300-6038) issued to L.F. Shifflet would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/Meador Oil Company, Washington, D.C.	RR300-240	Request for modification/rescission in the Gulf refund proceeding. If granted: The November 9, 1988 Decision and Order (Case No. RF300-5201) issued to Meador Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do	Gulf/Morgan Oil Company, Washington, D.C.	RR300-235	Request for modification/rescission in the Gulf refund proceeding. If granted: The September 28, 1988 Decision and Order (Case No. RF300-5315) issued to Morgan Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.

## LIST OF CASES RECEIVED BY THE OFFICE OF HEARINGS AND APPEALS—Continued

[Week of Feb. 19 through Feb. 26, 1993]

Date	Name and location of applicant	Case No.	Type of submission
Do .....	Gulf/Ortego Services, Inc., Washington, D.C.	RR300-235	Request for modification/rescission in the Gulf refund proceeding. If granted: The April 23, 1990 Decision and Order (Case No. RF300-8767) issued to Ortego Services, Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/Purmax Oil Company, Washington, D.C.	RR300-231	Request for modification/rescission in the Gulf refund proceeding. If granted: The March 15, 1989 Decision and Order (Case No. RF300-5704) issued to Purmax Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/R.F. White Co., Inc., Washington, D.C.	RR300-239	Request for modification/rescission in the Gulf refund proceeding. If granted: The October 18, 1989 Decision and Order (Case No. RF300-8397) issued to R.F. White Company, Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/Reinhart Oil, Inc., Washington, D.C.	RR300-229	Request for modification/rescission in the Gulf refund proceeding. If granted: The February 26, 1990 Decision and Order (Case No. RF300-6099) issued to Reinhart Oil Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/Silco Oil Company, Washington, D.C.	RR300-233	Request for modification/rescission in the Gulf refund proceeding. If granted: The May 10, 1989 Decision and Order (Case No. RF300-3583) issued to Silco Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/Sturdy Oil Company, Washington, D.C.	RR300-230	Request for modification/rescission in the Gulf refund proceeding. If granted: The May 10, 1989 Decision and Order (Case No. RF300-3733) issued to Sturdy Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/Swansea Oil Co., Inc., Washington, D.C.	RR300-244	Request for modification/rescission in the Gulf refund proceeding. If granted: The February 18, 1993 Dismissal Letter (Case No. RF300-15167) issued to Swansea Oil Company, Inc. would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.
Do .....	Gulf/T.W. Brown Oil Company, Washington, D.C.	RR300-232	Request for modification/rescission in the Gulf refund proceeding. If granted: The March 15, 1989 Decision and Order (Case No. RF300-5763) issued to T.W. Brown Oil Company would be modified regarding the firm's application for refund submitted in the Gulf Refund Proceeding.

## REFUND APPLICATIONS RECEIVED

[Week of Feb. 19 through Feb. 26, 1993]

## REFUND APPLICATIONS RECEIVED—Continued

[Week of Feb. 19 through Feb. 26, 1993]

## REFUND APPLICATIONS RECEIVED—Continued

[Week of Feb. 19 through Feb. 26, 1993]

Date received	Name of refund proceeding/name of refund applicant	Case No.	Date received	Name of refund proceeding/name of refund applicant	Case No.	Date received	Name of refund proceeding/name of refund applicant	Case No.
2/22/93 .....	Vickers/Kansas.	RQ1-567.	2/23/93 .....	Ed Yarbrough Texas Service.	RF321-19618.	2/19/93 thru 2/26/93.	Crude Oil Refund Applications Received.	RF272-84244 thru RF272-84376.
2/19/93 .....	C.A. Beard Memorial Sch.	RA272-53.	2/23/93 .....	Nabisco Brands, Inc.	RC272-170.	2/19/93 thru 2/26/93.	Atlantic Richfield Applications Received.	RF304-13616 thru RF304-13646.
2/22/93 .....	Bancroft Oil Co.	RF321-19616.	2/24/93 .....	Annie L. Anderson.	RF321-19619.			
2/22/93 .....	Campiti Texaco.	RF321-19617.	2/25/93 .....	San Jose Mercury-News.	RC272-171.			
2/22/93 .....	Opelousas Canal.	RF346-35.	2/25/93 .....	Village Texaco	RF321-19620.			
2/22/93 .....	West End Canal.	RF346-36.	2/19/93 thru 2/26/93.	Gulf Oil Refund Applications Received.	RF300-21091 thru RF300-21313.			
2/22/93 .....	Lee Street Canal.	RF346-37.						
2/22/93 .....	Youngsville Canal.	RF346-38.						

[PR Doc. 93-6742 Filed 3-23-93; 8:45 am]  
BILLING CODE 0450-01-M

**ENVIRONMENTAL PROTECTION AGENCY**

[OPP-00352A; FRL-4578-5]

**Agency Information Collection Activities Under OMB Review; Correction**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

**SUMMARY:** In the Federal Register of March 12, 1993 (58 FR 13591), EPA issued in compliance with the Paperwork Reduction Act, a notice announcing a Information Collection Request (ICR), which had been forwarded to the Office of Management and Budget (OMB) for review and comment. On page 13594, column 1, paragraph 7, line 9, the EPA's requested OMB clearance date was incorrectly stated. The date should have read, "April 12, 1993."

**FOR FURTHER INFORMATION CONTACT:** Sandy Farmer, Information Policy Branch, Environmental Protection Agency (PM-223Y), 401 M St., SW., Washington, DC 20460, Telephone: (202) 260-2740.

Dated: March 17, 1993.

Paul Lapsley,

Director, Regulatory Management Division,  
Office of Policy Planning and Evaluation

[FR Doc. 93-6605 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-F

[PP 2G4157/T635; FRL 4571-6]

**Entomopathogen; Establishment of an Exemption from the Requirement of a Tolerance**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

**SUMMARY:** EPA has established an exemption from the requirement of a tolerance for residues of the insecticide fungal entomopathogen *Beauveria bassiana*, Naturalis-L strain, in or on certain raw agricultural commodities.

**DATES:** This temporary exemption from the requirement of a tolerance expires January 18, 1994.

**FOR FURTHER INFORMATION CONTACT:** By mail: Phil Hutton, Product Manager (PM 18), Registration Division (H7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: Rm. 213, CM#2, 1921 Jefferson Davis Highway, Arlington, VA, (703-305-7690).

**SUPPLEMENTARY INFORMATION:** Fermone Corporation, Incorporated, 2620, 37th Drive, Phoenix, AZ 85009, has requested in pesticide petition (PP) 2G4157 the establishment of an exemption from the requirement of a tolerance for residues of the insecticide fungal entomopathogen *Beauveria bassiana*, Naturalis-L strain, in or on the following raw agricultural commodities: Cotton seed; peanuts; peanut forage; peanut hay; tomatoes; lettuce; cantaloupe; and lettuce for control of boll weevil, whiteflies and leafhoppers.

This temporary exemption from the requirements of a tolerance will permit the marketing of the above raw agricultural commodities when treated in accordance with the provisions of experimental use permit 53871-EUP-1, which is being issued under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended (Pub. L. 95-396, 92 Stat. 819; 7 U.S.C. 136).

The scientific data reported and other relevant material were evaluated, and it was determined that the exemption from the requirement of a tolerance will protect the public health. Therefore, the temporary exemption from the requirement of tolerance has been established on the condition that the pesticide be used in accordance with the experimental use permit and with the following provisions:

1. The total amount of the active ingredient to be used must not exceed the quantity authorized by the experimental use permit.

2. Fermone Corporation, Incorporated must immediately notify the EPA of any findings from the experimental use permit that have a bearing on safety. The company must also keep records of production, distribution, and performance and on request make the records available to any authorized officer or employee of the EPA or the Food and Drug Administration.

This temporary exemption from the requirement of a tolerance expires January 18, 1994. Residues remaining in or on the raw agricultural commodities after this expiration date will not be considered actionable if the pesticides are legally applied during the term of, and in accordance with, the provisions of the experimental use permit and temporary exemption from the requirement of a tolerance. This temporary exemption from the requirement of a tolerance may be revoked if the experimental use permit is revoked or if any experience with or scientific data on this pesticide indicate that such revocation is necessary to protect the public health.

The Office of Management and Budget has exempted this notice from the

requirement of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 24950).

Authority: 21 U.S.C. 346a(j).

Dated: March 12, 1993.

Lawrence E. Cullen,  
Acting Director, Registration Division, Office  
of Pesticide Programs.

[FR Doc. 93-6603 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-F

[PP 1G4012/T633; FRL 4189-9]

**Mitsui Petrochemicals Ltd., Establishment of Temporary Tolerances**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

**SUMMARY:** EPA has established temporary tolerances for residues of the herbicide PAL6000 (UMP-488) in or on certain raw agricultural commodities. These temporary tolerances were requested by Mitsui Petrochemicals (America), Ltd.

**DATES:** These temporary tolerances expire December 22, 1993

**FOR FURTHER INFORMATION CONTACT:** By mail: Joanne Miller, Product Manager (PM) 23, Registration Division (H7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: Rm. 237, CM#2, 1921 Jefferson Davis Highway, Arlington, VA, 703-305-7830.

**SUPPLEMENTARY INFORMATION:** Mitsui Petrochemicals (America), Ltd., 250 Park Avenue, Suite 950, New York, NY 10177, has requested in pesticide petition (PP) 1G4012 the establishment of temporary tolerances for use of 49.95 pounds of the herbicide PAL6000 (UMP-488) in or on the raw agricultural commodities field corn grain, forage, fodder and silage. These temporary tolerances will permit the marketing of the above raw agricultural commodities when treated in accordance with the provisions of the experimental use permit 63098-EUP-2, which is being issued under the Federal Insecticide,

Fungicide, and Rodenticide Act (FIFRA), as amended (Pub. L. 95-396, 92 Stat. 819; 7 U.S.C. 136).

The scientific data reported and other relevant material were evaluated, and it was determined that establishment of the temporary tolerances will protect the public health. Therefore, the temporary tolerances have been established on the condition that the pesticide be used in accordance with the experimental use permit and with the following provisions:

1. The total amount of the active ingredient to be used must not exceed the quantity authorized by the experimental use permit.

2. Mitsui Petrochemicals (America), Ltd., must immediately notify the EPA of any findings from the experimental use that have a bearing on safety. The company must also keep records of production, distribution, and performance and on request make the records available to any authorized officer or employee of the EPA or the Food and Drug Administration.

These tolerances expire December 22, 1993. Residues not in excess of these amounts remaining in or on the raw agricultural commodities after this expiration date will not be considered actionable if the pesticide is legally applied during the term of, and in accordance with, the provisions of the experimental use permit and temporary tolerances. These tolerances may be revoked if the experimental use permit is revoked or if any experience with or scientific data on this pesticide indicate that such revocation is necessary to protect the public health.

The Office of Management and Budget has exempted this notice from the requirement of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 24950).

Authority: 21 U.S.C. 346a(j).

Dated: March 12, 1993.

Lawrence E. Cullen,  
Acting Director, Registration Division, Office  
of Pesticide Programs.

[FR Doc. 93-6602 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-F

[PF-572; FRL-4572-3]

#### DowElanco; Pesticide Petition Amendment

AGENCY: Environmental Protection  
Agency (EPA).

ACTION: Notice.

**SUMMARY:** This notice announces that DowElanco has filed an amendment to pesticide petition (PP) 1F3991 for the pesticide triclopyr. DowElanco has requested changes in the petition to establish tolerances for triclopyr in or on rice grain, rice straw, poultry meat, fat and meat byproducts (except liver and kidneys), and eggs.

**ADDRESSES:** By mail, submit written comments to: Public Response and Program Resources Branch, Field Operations Division (H7506C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring comments to: Rm. 1128, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202.

Information submitted as a comment concerning this notice 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. 1128 at the address given above, from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:** By mail: Robert Taylor, Product Manager (PM 25), Registration Division (H-7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location/telephone number: Rm. 245, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA 22202, (703)-557-1800.

**SUPPLEMENTARY INFORMATION:** EPA has received an amended pesticide petition for PP 1F3991. In the Federal Register of December 13, 1991 (56 FR 65080), EPA issued notice of PP 1F3991 filed by DowElanco, 9200 Purdue Rd., Indianapolis, IN 46268-1189, proposing to amend 40 CFR 180.417 by establishing a regulation to permit combined residues of the herbicide triclopyr (3,5,6-trichloro-2-pyridinyloxy acetic acid) and its metabolite, 2-methoxy-3,5,6-trichloro pyridine, in or

on a number of agricultural commodities.

Dow Elanco has amended PP 1F3991 to request tolerances as follows: A tolerance for combined residues of the herbicide triclopyr, [(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid, and its metabolites, 2-methoxy-3,5,6-trichloropyridine and 3,5,6-trichloro-2-pyridinol, is proposed in addition to tolerances established under 40 CFR 180.417 as follows: Rice grain at 0.30 part per million (ppm) and rice straw at 8.00 ppm. A tolerance for combined residues of the herbicide triclopyr, [(3,5,6-trichloro-2-pyridinyl)oxy]acetic acid, and its metabolite, 3,5,6-trichloro-2-pyridinol, is proposed as follows: Poultry meat, fat, and mbyp (except liver and kidneys) at 0.10 ppm and eggs at 0.05 ppm.

The analytical method used is gas chromatography.

Authority: 7 U.S.C. 136a.

Dated: March 12, 1993.

Lawrence E. Cullen,

Acting Director, Registration Division, Office  
of Pesticide Programs.

[FR Doc. 93-6728; Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-F

[OPP-30349; FRL 4574-8]

#### Allergy Control Products, Inc.; Application to Register a Pesticide Product

AGENCY: Environmental Protection  
Agency (EPA).

ACTION: Notice.

**SUMMARY:** This notice announces receipt of an application to conditionally register the pesticide product, Mite-a-Salt, a miticide containing an active ingredient involving a changed use pattern pursuant to the provisions of section 3(c)(4) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended.

**DATES:** Written comments must be submitted by April 23, 1993.

**ADDRESSES:** By mail submit comments identified by the document control number [OPP-30349] and the file symbol (65640-R) to: Public Response and Program Resources Branch, Field Operations Division (H7506C), Attention PM 18, Registration Division (H7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring comments to: Rm. 1128, Environmental Protection Agency, CM #2, 1921 Jefferson Davis Highway, Arlington, VA.

Information submitted in any comment concerning this notice 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 to the submitter. All written comments will be available for public inspection in rm. 1128 at the address given above, from 8 a.m. to 4 p.m., Monday through Friday, except legal holidays.

**FOR FURTHER INFORMATION CONTACT:** PM 18, Phil Hutton, rm. 213, CM #2, (703-305-7690).

**SUPPLEMENTARY INFORMATION:** EPA received an application from Allergy Control Products, Inc., 96 Danbury Road, Ridgefield, CT 06877, to conditionally register the pesticide product Mite-a-Salt, (File Symbol 65640-R). This miticide contains the active ingredient sodium chloride at 98.5 percent and involves a change in use pattern pursuant to the provisions of section 3(c)(4) of FIFRA. The product was classified for general use to include in its presently registered use, a new use to kill dust mites in carpets and upholstery. Notice of receipt of the application does not imply a decision by the Agency on the application.

Notice of approval or denial of an application to register a pesticide product will be announced in the *Federal Register*. The procedure for requesting data will be given in the *Federal Register* if an application is approved.

Comments received within the specified time period will be considered before a final decision is made; comments received after the time specified will be considered only to the extent possible without delaying processing of the application.

Written comments filed pursuant to this notice, will be available in the Public Response and Program Resources Branch, Field Operations Division office at the address provided from 8 a.m. to 4 p.m., Monday through Friday, except legal holidays. It is suggested that persons interested in reviewing the application file, telephone the FOD office (703-305-5805), to ensure that the file is available on the date of intended visit.

**Authority:** 7 U.S.C. 136.

Dated: March 17, 1993.

**Lawrence E. Cullen,**  
Acting Director, Registration Division, Office  
of Pesticide Programs.

[FR Doc. 93-6725 Filed 3-23-93; 8:45 am]

**BILLING CODE 6560-60-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 May 24, 1993.

**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 Gary Waxman, 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 Linda Borrer, FEMA Information Collections Clearance Officer, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646-2624.

*Type:* Extension of 3067-0001.

*Title:* National Defense Executive Reserve Personal Qualifications Statement.

*Abstract:* The National Defense Executive Reserve (NDER) is a Federal Government program coordinated by the Federal Emergency Management Agency. The program provides a reserve of highly qualified individuals from industry, organized labor, professional groups, and academia to serve in executive positions in time of national emergency. FEMA Form 85-3, National Defense Executive Reserve Personal Qualifications Statement, is used by the sponsors of NDER units to fill their NDER vacancies with skilled individuals possessing the expertise needed for their unit.

*Type of Respondents:* Individuals and households.

*Estimate of Total Annual Reporting and Recordkeeping Burden:* 50 hours.  
*Number of Respondents:* 100.

*Estimated Average Burden Time per Response:* 30 minutes.

*Frequency of Response:* On occasion.

Dated: March 18, 1993.

**Wesley C. Moore,**  
Director, Office of Administrative Support.  
[FR Doc. 93-6717 Filed 3-23-93; 8:45 am]

**BILLING CODE 6710-01-M**

### Adjustments to the Mortgage Portfolio Protection Program

**AGENCY:** Federal Insurance Administration, FEMA.

**ACTION:** Notice.

**SUMMARY:** The Federal Insurance Administration (FIA) requests public comments on its pilot Mortgage Portfolio Protection Program (MPPP). Lending institutions, mortgage servicing companies, and others servicing mortgage loan portfolios use the MPPP to bring applicable loans into compliance with the flood insurance purchase requirements of the Flood Disaster Protection Act of 1973.

**DATES:** April 23, 1993.

**ADDRESSES:** Comments on the MPPP or any recommended changes to the MPPP are invited and may be addressed to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street SW., room 840, Washington, DC 20472, (fax) (202) 646-4536.

**FOR FURTHER INFORMATION CONTACT:** H. Joseph Coughlin, Jr., Federal Insurance Administration, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-2780.

**SUPPLEMENTARY INFORMATION:** The Federal Insurance Administration (FIA) developed the Mortgage Portfolio Protection Program (MPPP) to encourage property owners whose structures are located on floodplains to purchase flood insurance or to have the lending institution purchase flood insurance on the owner's behalf. The MPPP is a means to bring lending institutions' mortgage loan portfolios into compliance with the flood insurance purchase requirements of the National Flood Insurance Act, as amended, 42 U.S.C. 4001 et seq.

During 1990, all insurance companies participating in FIA's National Flood Insurance Program (NFIP) were notified of the MPPP. The MPPP was introduced on January 1, 1991 and has been in

effect for two years. Notice of the MPPP was published in the *Federal Register* on March 1, 1991, 56 FR 8882.

In order to assess the MPPP's effectiveness as a compliance tool, FLA requests that those with an interest in the MPPP submit their views on the program. FLA is particularly interested in comments on these questions:

- (1) Does the MPPP work as designed?
- (2) What improvements should be made to the program?
- (3) Should the MPPP become a permanent part of the National Flood Insurance Program? and
- (4) What data and indicators are available for determining how many conventionally underwritten flood insurance policies have been written as a result of the pilot MPPP?

#### Background

The MPPP policy is a compliance tool of last resort for lenders. Notification by lenders that they intend to purchase the MPPP policy serves as an incentive for property owners to purchase conventionally underwritten flood insurance policies in lieu of more expensive MPPP policies. At the end of 1992, about 1600 MPPP policies were in effect throughout the country. FEMA estimates, however, that an additional 5,000-10,000 conventionally underwritten policies have been purchased as a result of the incentives created by the MPPP.

Interest in the MPPP has come from two principal sources. First, Federal entities responsible for the supervision, approval, regulation, or insuring of banks and savings and loan associations and similar institutions which must ensure compliance of member lending institutions with the flood insurance purchase requirements to the National Flood Insurance Act, as amended. Second, recently proposed legislation addressing lender compliance with flood insurance requirements. In spite of industry interest in the MPPP, a number of lenders have indicated that they await the outcome of these legislative initiatives before using the program. FEMA intends to use the lessons learned from the two-year pilot test of the MPPP to improve its current implementation pending legislative action on lender compliance.

Dated: March 16, 1993.

**Francis V. Reilly,**

*Acting Administrator, Federal Insurance Administration.*

[FR Doc. 93-6716 Filed 3-23-93; 8:45 am]

BILLING CODE 6718-05-M

#### FEDERAL MARITIME COMMISSION

##### Agreement Filed; ATFI Advisory Group Agreement

The Federal Maritime Commission hereby gives notice of the filing of the following agreement(s) pursuant to section 5 of the Shipping Act of 1984.

Interested parties may inspect and obtain a copy of each agreement at the Washington, DC Office of the Federal Maritime Commission, 800 North Capitol Street, NW., 9th floor. Interested parties may submit comments on each agreement to the Secretary, Federal Maritime Commission, Washington, DC 20573, within 10 days after the date of the *Federal Register* in which this notice appears. The requirements for comments are found in § 572.603 of title 46 of the Code of Federal Regulations. Interested persons should consult this section before communicating with the Commission regarding a pending agreement.

*Agreement No.:* 203-011405

*Title:* ATFI Advisory Group

##### Agreement

##### Parties:

Caribbean and Central America Discussion Agreement  
Crowley American Transport, Inc.  
The "8900" Lines Agreement  
Israel Trade Conference  
Seaboard Marine Ltd.  
Sea-Land Service, Inc.  
South Europe/U.S.A. Freight Conference  
Transpacific Westbound Rate Agreement  
United States Atlantic & Gulf/Western Mediterranean Rate Agreement  
United States/Southern and Eastern Africa Conference  
Wilhelmsen Lines AS  
Zim-Israel Navigation Co.

*Synopsis:* The proposed Agreement establishes an advisory group of common carriers, conference and other agreements to pursue common industry approaches regarding the Commission's implementation of the Automated Tariff Filing and Information System ("ATFI") in the trade between the United States and worldwide ports and points. Adherence to any agreement reached on rate or service items subject to tariff filing shall be strictly voluntary by each party.

Dated: March 18, 1993.

By Order of the Federal Maritime Commission.

**Joseph C. Polking,**  
*Secretary.*

[FR Doc. 93-6659 Filed 3-23-93; 8:45 am]

BILLING CODE 6730-01-M

##### Security for the Protection of the Public Financial Responsibility To Meet Liability Incurred for Death or Injury to Passengers or Other Persons on Voyages; Issuance of Certificate (Casualty)

Notice is hereby given that the following have been issued a Certificate of Financial Responsibility to Meet Liability Incurred for Death or Injury to Passengers or Other Persons on Voyages pursuant to the provisions of Section 2, Public Law 89-777 (46 U.S.C. 817(d)) and the Federal Maritime Commission's implementing regulations at 46 CFR part 540, as amended: Delphin Seereisen GmbH and Black Sea Shipping Company, Blumenstrasse 20, 6050 Offenbach am Main, Germany. Vessel: KAZAKHSTAN

Dated: March 18, 1993.

**Joseph C. Polking,**  
*Secretary.*

[FR Doc. 93-6671 Filed 3-23-93; 8:45 am]

BILLING CODE 6730-01-M

##### Security for the Protection of the Public Indemnification of Passengers for Nonperformance of Transportation; Issuance of Certificate (Performance)

Notice is hereby given that the following have been issued a Certificate of Financial Responsibility for Indemnification of Passengers for Nonperformance of Transportation pursuant to the provisions of Section 3, Public Law 89-777 (46 U.S.C. 817(e)) and the Federal Maritime Commission's implementing regulations at 46 CFR part 540, as amended: Delphin Seereisen GmbH, Blumenstrasse 20, 6050 Offenbach am Main, Germany. Vessel: KAZAKHSTAN.

Dated: March 18, 1993.

**Joseph C. Polking,**  
*Secretary.*

[FR Doc. 93-6672 Filed 3-23-93; 8:45 am]

BILLING CODE 6730-01-M

#### FEDERAL TRADE COMMISSION

##### Granting of Request for Early Termination of the Waiting Period Under the Premerger Notification Rules

Section 7A of the Clayton Act, 15 U.S.C. 18a, as added by title II of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, requires persons contemplating certain mergers or acquisitions to give the Federal Trade Commission and the Assistant Attorney General advance notice and to wait designated periods before

consummation of such plans. Section 7A(b)(2) of the Act permits the agencies, in individual cases, to terminate this waiting period prior to its expiration and requires that notice of this action be published in the Federal Register.

The following transactions were granted early termination of the waiting period provided by law and the premerger notification rules. The grants were made by the Federal Trade Commission and the Assistant Attorney

General for the Antitrust Division of the Department of Justice. Neither agency intends to take any action with respect to these proposed acquisitions during the applicable waiting period.

## TRANSACTIONS GRANTED EARLY TERMINATION BETWEEN: 03-01-93 AND 03-12-93

Name of acquiring person, name of acquired person, name of acquired entity	PMN No.	Date terminated
Steven M. Rales, Richard Eaton Trust, United Broadcasting Company, Inc .....	93-0597	03/01/93
Mitchell P. Rales, Richard Eaton Trust, United Broadcasting Company, Inc .....	93-0598	03/01/93
Tosco Corporation, Exxon Corporation, Exxon, Corporation .....	93-0635	03/01/93
Big B, Inc., J.C. Penney Company, Inc., Thrift Drug, Inc .....	93-0640	03/01/93
UAL Corporation, UAL Corporation, Covia Partnership .....	93-0647	03/01/93
USAir Group, Inc., UAL Corporation, Covia Partnership .....	93-0648	03/01/93
FPL Group, Inc., Dr. Frank B. Stanton, National Cable Ltd .....	93-0664	03/01/93
Franz Haniel & Cie. GmbH, Office Commercial Pharmaceutique, Office Commercial Pharmaceutique .....	93-0681	03/01/93
OCLC OnLine Computer Library Center, Incorporated, Battelle Memorial Institute, Information Dimensions, Inc .....	93-0691	03/01/93
Aon Corporation, Booke & Company, Booke & Company .....	93-0699	03/01/93
Illinois Tool Works, Inc., The Miller Group, Ltd., The Miller Group, Ltd .....	93-0703	03/01/93
Antti Aamio-Wihuri, Consolidated Enfield Corporation, Portion Packaging, Inc .....	93-0641	03/02/93
Alexander M. Vik, American Reliance Insurance Company, American Reliance Insurance Company .....	93-0689	03/02/93
Union Pacific Corporation, East Carbon Development Corporation, East Carbon Development Corporation .....	93-0566	03/03/93
Petrolite Corporation, Amoco Corporation, Welch Inc .....	93-0616	03/03/93
Siemens Aktiengesellschaft, Ceridian Corporation, EMPROS Systems International Division .....	93-0623	03/03/93
Scripps Institutions of Medicine and Science, EPIC Holdings, Inc., Valley Medical Center (Hospital) .....	93-0659	03/03/93
Nelson Peltz, DWG Corporation, DWG Corporation .....	93-0680	03/03/93
Honmachi Central Industry Corp., Itoman Corp., Itoman (America) Inc .....	93-0675	03/04/93
Marubeni Corporation, Masaru Tsuzuki, Swift Spinning Mills, Inc .....	93-0692	03/04/93
New World Development Company Limited, Deutsche Lufthansa A.G., Penta Hotels Florida, Inc .....	93-0667	03/05/93
Ryland Group, Inc., Scott Felder, Inc., Scott Felder, Inc .....	93-0679	03/05/93
Atlantic Equity Partners, L.P., Kyotaru Co., Ltd., Center of the Plates Food Inc., Best Western Foods Inc .....	93-0690	03/05/93
Burton E. Sorenson, Marks & Spencer p.l.c., Brooks Brothers, Inc .....	93-0696	03/05/93
Abraxas Petroleum Corporation, Mobil Corporation, Mobil Producing Texas & New Mexico Inc .....	93-0702	03/05/93
Joseph Littlejohn & Levy Fund, L.P., Doskocil Companies Incorporated, Doskocil Companies Incorporated .....	93-0704	03/05/93
Cox Enterprises, Inc., Keith Samples, RYSHER Entertainment, Inc .....	93-0705	03/05/93
Bausch & Lomb Incorporated, Ralph Stern and Suzanne Stern, Steri-Oss Inc .....	93-0706	03/05/93
Ford Motor Company, Winterthur Swiss Insurance Company, Allied Finance Company .....	93-0713	03/05/93
MDU Resources Group, Inc., Alaska Basic Industries, Inc., Alaska Basic Industries, Inc .....	93-0714	03/05/93
Ekco Group, Inc., Kellogg Brush Manufacturing Co., Kellogg Brush Manufacturing Co .....	93-0723	03/05/93
Water Street Corporate Recovery Fund I, L.P., Jack E. Brown, Insilco Corporation .....	93-0735	03/05/93
Water Street Corporate Recovery Fund I, L.P., Cyril Wagner, Jr., Insilco Corporation .....	93-0736	03/05/93
Robert Stephen Holdings Limited, Alfred and Deanna Stauder, Woods Wire Products Inc .....	93-0668	03/08/93
P.M.I. Holdings N.V., Royal Dutch Petroleum Company, Shell Oil Company .....	93-0688	03/08/93
Mr. Keith Rupert Murdoch, Warburg, Pincus Capital Company, L.P., Renaissance Communications Corp .....	93-0701	03/08/93
MLGA Fund II, L.P., Sebastiano Cameli, Quaker Fabric Corporation .....	93-0707	03/08/93
MLGA Fund II, L.P., Luigi Regis-Milano, Quaker Fabric Corporation .....	93-0740	03/08/93
Johnson Controls, Inc., JMB Realty Corporation, Urban Engineering Co .....	93-0715	03/09/93
Robert Castello, Aaron H. Brenner, M. Brenner and Sons Inc .....	93-0738	03/09/93
Federal Signal Corporation, Powerscreen International, PLC, Guzzler Manufacturing, Inc .....	93-0652	03/10/93
Hanson PLC, Santa Fe Pacific Corporation, Cerrillos Land Company .....	93-0636	03/11/93
Santa Fe Pacific Corporation, Hanson PLC, Hanson Natural Resources Company .....	93-0638	03/11/93
IDB Communications Group, Inc., PacifiCorp, TRT Communications, Inc .....	93-0654	03/12/93
PacifiCorp, IDB Communications Group, Inc., IDB Communications Group, Inc .....	93-0656	03/12/93
InterMedia Capital Management V, L.P., John Hancock Mutual Life Insurance Company, Daniels Communications Partners, L.P .....	93-0700	03/12/93
Sumitomo Metal Industries, Ltd., Itoman Corporation, Itoman (USA) Inc .....	93-0718	03/12/93
Hellman & Friedman Capital Partners II, L.P., Century Communications Corp., Century Neb. Cellular Corp. & Century Lin. Cellular Corp .....	93-0731	03/12/93
Morgan Stanley Leveraged Equity Fund II, PageMart, Inc., PageMart, Inc .....	93-0759	03/12/93
AMERCO, Paul F. Schoen, Pafran, Inc .....	93-0767	03/12/93
TIG Holdings, Inc., Transamerica Corporation, Transamerica Insurance Group .....	93-0773	03/12/93

**FOR FURTHER INFORMATION CONTACT:**  
Sandra M. Peay or Renee A. Horton,  
Contact Representatives, Federal Trade  
Commission, Premerger Notification  
Office, Bureau of Competition, room

303, Washington, DC 20580, (202) 326-3100.

By Direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 93-6746 Filed 3-23-93; 8:45 am]

BILLING CODE 6750-01-M



**DEPARTMENT OF HEALTH AND HUMAN SERVICES****Food and Drug Administration**

[Docket No. 93N-0061]

**Drug Export; Gabapentin (Bulk); Correction****AGENCY:** Food and Drug Administration, HHS.**ACTION:** Notice; correction.

**SUMMARY:** The Food and Drug Administration is correcting a notice that appeared in the *Federal Register* of February 22, 1993 (58 FR 9567), that announced that Parke-Davis Holland Chemical Facility, Warner Lambert Co., has filed an application requesting approval for the export of the human drug Gabapentin in bulk. The docket number provided in the heading was incorrect. This document corrects that error.

**FOR FURTHER INFORMATION CONTACT:** Robin Thomas Johnson, Office of Policy (HF-27), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-2994.

In FR Doc. 93-4024, appearing on page 9567, in the *Federal Register* of Monday, February 22, 1993, the following correction is made: On the same page, in the third column, the docket number "93-0061" is corrected to read "93N-0061".

Dated: March 17, 1993.

**Paul F. Vogel,***Acting Director, Office of Compliance, Center for Drug Evaluation and Research.*

[FR Doc. 93-6675 Filed 3-23-93; 8:45 am]

BILLING CODE 4160-01-F

[Docket No. 93M-0086]

**Spectranetics Corp.; Premarket Approval of the Spectranetics CVX-300™ Excimer Laser System****AGENCY:** Food and Drug Administration, HHS.**ACTION:** Notice.

**SUMMARY:** The Food and Drug Administration (FDA) is announcing its approval of the application by Spectranetics Corp., Colorado Springs, CO, for premarket approval, under section 515 of the Federal Food, Drug, and Cosmetic Act (the act), of the Spectranetics CVX-300™ Excimer Laser System. After reviewing the recommendation of the Circulatory System Devices Panel, FDA's Center for Devices and Radiological Health (CDRH) notified the applicant, by letter of February 19, 1993, of the approval of the application.

**DATES:** Petitions for administrative review by April 23, 1993.

**ADDRESSES:** Written requests for copies of the summary of safety and effectiveness data and petitions for administrative review to the Dockets Management Branch (HFA-305), Food and Drug Administration, rm. 1-23, 12420 Parklawn Dr., Rockville, MD 20857.

**FOR FURTHER INFORMATION CONTACT:** Brad C. Astor, Center for Devices and Radiological Health (HFZ-450), Food and Drug Administration, 1390 Piccard Dr., Rockville, MD 20850, 301-427-1197.

**SUPPLEMENTARY INFORMATION:** On June 6, 1991, Spectranetics Corp., Colorado Springs, CO 80907, submitted to CDRH an application for premarket approval of the Spectranetics CVX-300™ Excimer Laser System, including the Models PC1014 and PC1017 Laser Catheters. This system is indicated for use in patients with single or multivessel coronary artery disease either as a stand alone modality or in conjunction with Percutaneous Transluminal Coronary Balloon Angioplasty (PTCA) and who are acceptable candidates for coronary artery bypass graft (CABG) surgery. Adjunctive balloon angioplasty was performed, at the clinical investigator's discretion, in 84 percent of the lesions treated. Clinical experience has provided reasonable assurance that the Spectranetics CVX-300™ Excimer Laser System and multifiber laser catheters are safe and effective for the following indications: (1) Occluded saphenous vein bypass grafts, (2) ostial lesions, (3) long lesions (greater than 20 millimeters in length), (4) moderately calcified stenoses (Heavily calcified stenoses are those lesions that demonstrate complete calcification when identified under fluoroscopy prior to the procedure. Moderately and slightly calcified stenoses are all others.), (5) total occlusions traversable by a guidewire, and (6) lesions which have previously failed balloon angioplasty (This includes those lesions that were treated unsuccessfully by PTCA. Lesions that have undergone a complicated PTCA procedure are not included in this category.). These lesions must be traversable by a guidewire and composed of atherosclerotic plaque and/or calcified material. The lesions should be well defined by angiography.

On November 26, 1991, the Circulatory System Devices Panel of the Medical Devices Advisory Committee, an FDA advisory committee, reviewed and recommended approval of the application. On February 19, 1993,

CDRH approved the application by a letter to the applicant from the Acting Director of the Office of Device Evaluation, CDRH.

A summary of the safety and effectiveness data on which CDRH based its approval is on file in the Dockets Management Branch (address above) and is available from that office upon written request. Requests should be identified with the name of the device and the docket number found in brackets in the heading of this document

**Opportunity for Administrative Review**

Section 515(d)(3) of the act (21 U.S.C. 360e(d)(3)) authorizes any interested person to petition, under section 515(g) of the act (21 U.S.C. 360e(g)), for administrative review of CDRH's decision to approve this application. A petitioner may request either a formal hearing under part 12 (21 CFR part 12) of FDA's administrative practices and procedures regulations or a review of the application and CDRH's action by an independent advisory committee of experts. A petition is to be in the form of a petition for reconsideration under § 10.33(b) (21 CFR 10.33(b)). A petitioner shall identify the form of review requested (hearing or independent advisory committee) and shall submit with the petition supporting data and information showing that there is a genuine and substantial issue of material fact for resolution through administrative review. After reviewing the petition, FDA will decide whether to grant or deny the petition and will publish a notice of its decision in the *Federal Register*. If FDA grants the petition, the notice will state the issue to be reviewed, the form of review to be used, the persons who may participate in the review, the time and place where the review will occur, and other details.

Petitioners may, at any time on or before April 23, 1993, file with the Dockets Management Branch (address above) two copies of each petition and supporting data and information, identified with the name of the device and the docket number found in brackets in the heading of this document. Received petitions may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

This notice is issued under the Federal Food, Drug, and Cosmetic Act (secs. 515(d), 520(h) (21 U.S.C. 360e(d), 360j(h))) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10) and redelegated to the Director, Center for Devices and Radiological Health (21 CFR 5.53).

Dated: March 15, 1993.

Joseph A. Levitt,

Deputy Director for Regulations Policy, Center for Devices and Radiological Health.

[FR Doc. 93-6673 Filed 3-23-93; 8:45 am]

BILLING CODE 4160-01-F

## Public Health Service

[GN 2022]

### The ICD-9-CM Coordination and Maintenance Committee

AGENCY: National Center for Health Statistics, PHS, HHS.

ACTION: Notice of meeting.

**SUMMARY:** The ICD-9 CM Coordination and Maintenance Committee (C&M) will be holding its first meeting of the year on May 6, 1993. The C&M is a public forum for the presentation of proposed modifications to the International Classification of Diseases, ninth-revision, clinical modification.

**DATES:** The meeting will be held on May 6, 1993 from 9 a.m. to 4 p.m.

**ADDRESSES:** The Hubert H. Humphrey building, room 703-A, 200 Independence Avenue., Washington, DC 20201.

**FOR FURTHER INFORMATION CONTACT:**

Amy Blum (301) 436-4216.

**SUPPLEMENTARY INFORMATION:** Tentative Agenda—

Chronic viral hepatitis  
Fragile X syndrome  
Pain/symptom codes  
Defibrillators  
Iatrogenic pneumothorax  
Ulcerative colitis  
Excludes notes  
Cerebrovascular disease.

Dated: March 17, 1993.

Sue Meads,

R.R.A., Co-chair, ICD-9-CM Coordination and Maintenance Committee.

[FR Doc. 93-6702 Filed 3-23-93; 8:45 am]

BILLING CODE 4160-10-M

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[ES-943-01-4120-14-241A; ALES 44853]

#### Alabama: Request for Public Comment on Fair Market Value, Maximum Economic Recovery and the Environmental Assessment; Coal Lease Application ALES 44853

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of public hearing and comment period.

**SUMMARY:** The Bureau of Land Management requests public comments on the fair market value, maximum economic recovery and the environmental assessment of certain coal resources it proposes to offer for competitive lease sale. The coal to be offered is underground-minable, bypass coal. The lands included in Coal Lease Application ALES 44853 are located on scattered tracts in Jefferson, Tuscaloosa and Walker Counties, Alabama and are more particularly described as follows:

#### Jefferson County

T. 18 S., R. 7 W., Huntsville Meridian,  
Sec. 19, NESE, SENE;  
Sec. 20, E2NE, NESE, W2SW;  
Sec. 21, SWNW;  
Sec. 33, NW.

#### Tuscaloosa County

T. 18 S., R. 7 W., Huntsville Meridian,  
Sec. 5, S2NW;  
Sec. 7, NWNW.  
T. 17 S. R. 8 W., Huntsville Meridian,  
Sec. 25, SENE, NESE;  
Sec. 26, NENE.  
T. 18 S., R. 8 W., Huntsville Meridian,  
Sec. 1, S2SW, NWSW, SWNW;  
Sec. 11, N2NE, SWNE, NESW, SENE,  
E2SE, NWSE;  
Sec. 13, Fractional NWNW.

#### Walker County

T. 17 S., R. 7 W., Huntsville Meridian,  
Sec. 30, N2NE, N2NW, SWNW, NWSW;  
Sec. 32, NW.  
Containing 1,609.50 acres.

The proximate analysis of the coal in the proposed lease is as follows:

#### Mary Lee-Blue Creek Seam

Estimated recoverable coal.....8.065  
million short tons

#### Proximate Analysis (%) Dry Basis

Moisture.....	.....
Ash.....	.....9.44
Volatile.....	.....25.34
Fixed Carbon.....	.....65.20
Btu/lb.....	.....13,872
Sulfur.....	.....0.66

(Float composite for the two coal beds)

The public is invited to submit written comments on the fair market value and the maximum economic recovery of the tract. In addition, notice is also given that a public hearing will be held on April 27, 1993 on the environmental assessment, the proposed sale, the fair market value and the maximum economic recovery of the proposed lease tracts.

**DATES:** Written comments must be received on or before April 23, 1993.

**ADDRESSES:** The public hearing will be held on April 27, 1993 at the Residence Inn, Number 3 Greenhill Parkway at Highway 280 in Birmingham, Alabama 35203 at 1 p.m. in the Inverness Room.

**FOR FURTHER INFORMATION CONTACT:**

For more complete data on this lease application, please contact Pearl Flaver Tillman at (703) 440-1531 or Ian J. Senio at (703) 440-1526, at the Bureau of Land Management, Eastern States, 7450 Boston Boulevard, Springfield, Virginia 22153.

**SUPPLEMENTARY INFORMATION:** In accordance with the Federal Coal Management Regulations 43 CFR 3422 and 3425, not less than 30 days prior to the publication of a notice of sale, the Secretary shall solicit public comments on the fair market value appraisal and maximum economic recovery and on factors which may effect these two determinations. Proprietary data marked as confidential may be submitted to the Bureau of Land Management, Eastern States, at the above address, in response to solicitation of public comments. Data so marked shall be treated in accordance with the laws and regulations governing confidentiality of such information.

A copy of the comments submitted by the public on fair market value and maximum economic recovery, except those portions identified as confidential by the author and meeting exemptions stated in the Freedom of Information Act, will be available for public inspection at the Bureau of Land Management, Eastern States, at the above address and should address, but not necessarily be limited to the following information:

1. The method of mining to be employed in order to obtain maximum economic recovery of the coal;
2. The impact that mining the coal in the proposed leasehold may have on the area, including, but not limited to, impacts on the environment; and
3. Methods of determining the fair market value of the coal to be offered.

The coal characteristics given above may or may not change as a result of comments received from the public and changes in market conditions that occur between now and the time at which final economic evaluations are completed.

Dated: March 17, 1993.

Larry Hamilton,

Associate State Director.

[FR Doc. 93-6699 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-GJ-M

(AZ-020-4333-01)

**Intent To Prepare an Environmental Assessment To Amend the Phoenix Resource Management Plan and the Lower Gila North Management Plan and To Invite Participation in the Identification of Issues for Determining the Eligibility of Segments of the Agua Fria and the Hassayampa Rivers for Possible Inclusion in the National Wild and Scenic River System**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Intent To Prepare an Environmental Assessment To Amend a Resource Management Plan and a Management Framework Plan.

**SUMMARY:** The Bureau of Land Management, Phoenix District, is preparing an Environmental Assessment to amend the Phoenix Resource Management Plan and the Lower Gila North Management Framework Plan to determine the eligibility of identified River Areas for potential inclusion in the National Wild and Scenic Rivers System. The action complies with Public Law 91-190 (National Environmental Policy Act), Public Law 94-579 (Federal Land Policy and Management Act), and Public Law 90-542 (Wild and Scenic Rivers Act).

Management actions proposed in the Environmental Assessment for the Resource Management Plan and the Management Framework Plan amendments include the analysis of criteria to determine the eligibility/non-eligibility of segments of the Agua Fria River and Hassayampa River associated with lands administered by the Phoenix District, Phoenix Resource Area.

**DATES:** Comments related to the identification of issues will be accepted until April 30, 1993. The draft Environmental Assessment will be available May 15, 1993, for a 30-day comment period, ending June 14, 1993.

**ADDRESSES:** Send comments to: Bureau of Land Management, Phoenix Resource Area, Attn: Gail Acheson, Area Manager, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

**FOR FURTHER INFORMATION CONTACT:** Kathryn Pedrick, Phoenix Resource Area, (602) 780-8090.

**SUPPLEMENTARY INFORMATION:** Public scoping meeting for river eligibility will be held from 2 p.m. until 7 p.m. in Wickenburg on April 7, 1993, at the Wickenburg Community Center, and in Phoenix on April 14, 1993, at the Bureau of Land Management Arizona State Office. Suitability issues and concerns pertaining to recommendations for designation of the

river segments to the National Wild and Scenic Rivers System will also be encouraged. This is consistent with the initiation of a Legislative Environmental Impact Statement for suitability/non-suitability recommendations for inclusion of Arizona rivers in the National Wild and Scenic Rivers System. (See Federal Register Notice Vol. 58, No. 37, Friday, February 19, 1993).

The Environmental Assessment to amend the Resource Management Plan and the Management Framework Plan will identify a proposed action, and a no action alternative, for each identified river segment. An analysis of specific direct and indirect impacts, and cumulative impacts of the identified alternatives will be documented in the Environmental Analysis.

The Environmental Assessment to amend the Resource Management Plan and the Management Framework Plan and complete records of the environmental analysis process will be available for public review at the Phoenix District Office.

Dated: March 15, 1993.

Paul Buff,

Acting District Manager.

[FR Doc. 93-6631 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-32-M

(OR-010-02-4320-02: GP3-146)

**Lakeview District Advisory Board; Meeting**

**AGENCY:** Department of the Interior, Bureau of Land Management.

**ACTION:** Notice.

**SUMMARY:** The meeting of the Lakeview District Grazing Advisory Board is scheduled for April 28, 1993, beginning at 10 a.m. in the Lakeview District Office, located at 1000 South Ninth Street, Lakeview, Oregon. The purpose of this meeting is to examine the new administration's initiatives, elect officers, update the board on allotment evaluations & Allotment Management Plans for both the Lakeview and Klamath Falls Resource Areas, look at the recent Wood River Ranch acquisition and finally, determine a date and consider an itinerary for a June tour. The public is welcome.

**DATES:** Wednesday, April 28, 1993, 10 a.m.

**FOR FURTHER INFORMATION CONTACT:** Judy Nelson or Lisa Swinney, Lakeview District Office, Post Office Box 151,

1000 South Ninth Street, Lakeview, OR 97630, (Telephone 503-947-2177).

Terry H. Sodorff,

Acting District Manager.

[FR Doc. 93-6666 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-33-M

(OR-050-4410-10:G73-143)

**Meeting of Prineville District Grazing Advisory Board**

March 11, 1993.

**AGENCY:** Bureau of Land Management, Interior, Prineville District.

**ACTION:** There will be a meeting of the Prineville District Grazing Advisory Board on Tuesday, April 20, 1993.

Instead of a traditional meeting, the Board will meet at the BLM office at 9 a.m. and travel to the Bridge Creek/Sutton Mountain area (west of Mitchell) for a resource tour and discussion. Participants may also join the group at the junction of U.S. Highway 126 and the Bridge Creek Road at 10 a.m. Topics for discussion will include the status of the Bridge Creek area since the volunteer project in 1990; results of individual projects including juniper thinning, fish habitat improvement, riparian fencing and tree planting; proposed projects and management direction for the area; Salmon Summit funding and work priorities related to anadromous fisheries; and the current status of the drought. All participants need to contact the Prineville District Manager at 503-447-4115 prior to the tour. The meeting is open to the public; however, public transportation will not be provided.

James L. Hancock,

District Manager, Prineville District Office.

[FR Doc. 93-6628 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-33-M

(ID-060-03-4210-04; IDI-28748)

**Realty Action; Exchange of Public Lands in Kootenai and Bonner County, Idaho.**

**AGENCY:** Bureau of Land Management, Interior.

**SUMMARY:** This Notice is to advise the public that the Emerald Empire Resource Area, Coeur d'Alene District of the Bureau of Land Management has determined that the following described public lands are suitable for disposal by exchange to DAW Forest Products, L.P., under section 206 of the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1716:

Boise Meridian, Idaho:

T.48N., R.1E.,

Sec. 21, W $\frac{1}{2}$ SE $\frac{1}{4}$  ..... 80.00 acres

- Sec. 22, NW¼NW¼ . 40.00 acres.
- T.55N., R.2W.,
- Sec. 9, lots 1,2, 155.96 acres.
- SW¼NE¼.
- Sec. 32, SE¼SW¼, 80.00 acres.
- SW¼SE¼.
- T.55., R.3W.,
- Sec. 2, SE¼NE¼ ..... 40.00 acres.
- Sec. 10, E½NE¼ ..... 80.00 acres.
- Sec. 17, NW¼NE¼ .. 40.00 acres.
- Sec. 18, E½E½ ..... 160.00 acres.
- T.57N., R.3W.,
- Sec. 22, NE¼NE¼ .... 40.00 acres.

The area described above contains approximately 715.96 acres in Kootenai and Bonner County.

In exchange for these lands, the United States will acquire the following described lands from DAW Forest Products Co., L.P.:

Boise Meridian, Idaho  
T.49N., R.3W.,

- Sec. 1, Tax lot #3468 contained in Government lots 1,2,4,&5

The area described above contains approximately 57.78 acres of private land in Kootenai County.

The purpose of the land exchange is to benefit the public interest by obtaining important resource values. The public lands to be exchanged are isolated and difficult to manage parcels with limited resource values. The private lands being offered have important values for access, wildlife, and recreation that merit acquisition for public ownership. There are no grazing leases, grazing permits, or range improvements on any of the above described public lands. The exchange is consistent with the Bureau of Land Management land use plans and the public interest will be well served by completing this exchange. Final determination on disposal will await completion of an environmental analysis, which will be made available to the public. The value of the lands to be exchanged will be approximately equal.

Lands to be transferred from the United States will be subject to the following reservations, terms, and conditions:

1. All valid existing rights, including any right-of-way, easement, permit or lease of record.

2. A reservation to the United States of a right-of-way for ditches and canals constructed by the authority of the United States under the Act of August 30, 1890 (43 U.S.C. 945).

The publication of this notice in the Federal Register will segregate the public lands described above to the extent that they will not be subject to appropriation under the public land laws, including the mining laws but not from exchange pursuant to section 206

of the Federal Land Policy and Management Act of 1976. As provided by the regulations of 43 CFR 2201.1(b), any subsequently tendered application, allowance of which is discretionary, shall not be accepted, shall not be considered as filed and shall be returned to the applicant. The segregative effect of this Notice will terminate upon issuance of patent or in two years, whichever occurs first.

**ADDRESSES:** Detailed information concerning the exchange is available for review at the Coeur d'Alene District Office, 1808 North Third Street, Coeur d'Alene, Idaho 83814.

**SUPPLEMENTARY INFORMATION:** For a period of 45 days from the date of publication of this notice in the Federal Register, interested parties may submit comments to the District Manager at the above address. 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 the Interior.

Dated: March 2, 1993.

**Fritz U. Rennebaum,**  
District Manager.

[FR Doc. 93-6632 Filed 3-23-93; 8:45 am]  
BILLING CODE 4310-GG-M

[MT-030-4210-05]

**Realty Action, Sale of Public Land in North Dakota**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of realty action, sale of public land in North Dakota.

**SUMMARY:** The following lands have been found suitable for sale under Section 203 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2750, 43 U.S.C. 1713), at not less than the estimated Minimum Bid Price.

**DATES:** June 2, 1993.

**ADDRESSES:** 2933 Third Avenue West; Dickinson, North Dakota 58601.

**FOR FURTHER INFORMATION CONTACT:** William C. Monahan, Dickinson District Office, 701-225-9148.

**SUPPLEMENTARY INFORMATION:**

Parcel	Legal description
NDM81969 .....	Fifth Principal Meridian T. 139 N., R. 70 W., sec. 10: Lot 4, 7.54 acres, Kidder County, Minimum Bid Price \$940.

Parcel	Legal description
NDM81970 .....	T. 137 N., R. 71 W., sec. 24: Lot 5, 8.58 acres, Kidder County, Minimum Bid Price \$990.
NDM81971 .....	T. 141 N., R. 72 W., sec. 22: Lot 1, 25.2 acres, Kidder County, Minimum Bid Price \$690.
NDM81972 .....	T. 142 N., R. 72 W., sec. 34: NESE, 40.0 acres, Kidder County, Minimum Bid Price \$620.
NDM81973 .....	T. 143 N., R. 72 W., sec. 6: Lot 3, 22.0 acres, Kidder County, Minimum Bid Price \$220.
NDM81974 .....	T. 153 N., R. 77 W., sec. 25: E2SW, 80.0 acres, McHenry County, Minimum Bid Price \$825.
NDM81975 .....	T. 153 N., R. 77 W., sec. 23: SWSE, 40.0 acres, McHenry County, Minimum Bid Price \$50.
NDM81976 .....	T. 153 N., R. 75 W., sec. 3: Lot 6, 18.7 acres, McHenry County, Minimum Bid Price \$560.
NDM81977 .....	T. 154 N., R. 75 W., sec. 17: SESW, 40.0 acres, McHenry County, Minimum Bid Price \$1,400.
NDM81978 .....	T. 154 N., R. 75 W., sec. 30: Lot 3, 38.12 acres, McHenry County, Minimum Bid Price \$1,330.
NDM81979 .....	T. 155 N., R. 76 W., sec. 14: SENE, 40.0 acres, McHenry County, Minimum Bid Price \$1,400.
NDM81980 .....	T. 155 N., R. 77 W., sec. 7: SWSE, 40.0 acres, McHenry County, Minimum Bid Price \$1,400.
NDM81981 .....	T. 155 N., R. 77 W., sec. 18: NENE, 40.0 acres, McHenry County, Minimum Bid Price \$1,400.
NDM81982 .....	T. 156 N., R. 77 W., sec. 15: NWNE, 40.0 acres, McHenry County, Minimum Bid Price \$1,400.
NDM81983 .....	T. 156 N., R. 77 W., sec. 31: Lot 1, 35.83 acres, McHenry County, Minimum Bid Price \$1,250.
NDM81984 .....	T. 156 N., R. 77 W., sec. 31: Lot 2, 35.51 acres, McHenry County, Minimum Bid Price \$1,240.
NDM81985 .....	T. 152 N., R. 74 W., sec. 8: Lot 1, 4.57 acres, Pierce County, Minimum Bid Price \$50.
NDM81986 .....	T. 154 N., R. 74 W., sec. 30: NESW, 40.0 acres, Pierce County, Minimum Bid Price \$50.
NDM79599 .....	T. 152 N., R. 87 W., sec. 1: Lot 6, 16.50 acres, Ward County, Minimum Bid Price \$1,300.

The lands described are hereby segregated from appropriation under the public land laws, including the mining laws, but not from sale, pending disposition of this action or 270 days from the date of publication of this Notice, whichever occurs first.

The lands will be offered for sale at public auction beginning at 10 a.m., MDT, on Wednesday, June 2, 1993, at 2933 Third Avenue West, Dickinson, North Dakota 58601. The sale will be by modified competitive procedures. Tract lessees or adjoining land owners must submit a bid the day of sale to retain preference rights. The sale will be by sealed bid only.

All sealed bids must be submitted to the BLM's Dickinson District Office at 2933 Third Avenue West, Dickinson, North Dakota 58601, no later than 4:30 p.m., MDT, on Tuesday, June 1, 1993. Bid envelopes must be marked on the left front corner with the parcel number and the sale date. Bids must be for not less than the appraised Minimum Bid Price specified in this Notice. Each sealed bid shall be accompanied by a certified check, postal money order, bank draft or cashier's check made payable to the United States Department of the Interior, BLM, for not less than 10 percent or more than 30 percent of the amount of the bid. Applicants should submit a Statement of Eligibility form with the bid.

Bids on unsold parcels will be opened each Wednesday after the date of the sale at 10 a.m., MDT, until the parcels are sold. The terms and conditions applicable to the sale are:

1. All minerals shall 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.

2. A right-of-way is reserved for ditches and canals constructed by the authority of the United States under the authority of the Act of August 30, 1980, (26 Stat. 291; 43 U.S.C. 945).

3. The patents will be subject to all valid existing rights including rights-of-way.

Federal law requires that all bidders must be U.S. citizens 18 years old or older, or in the case of corporations, be subject to the laws of any State of the U.S. Proof of these requirements must accompany the bid.

Under modified competitive sale procedures, an apparent high bid will be declared at the public auction. The apparent high bidder, lessees and adjoining land owners will be notified. Lessees and adjoining land owners will

have five (5) working days from the date of the sale to exercise the preference consideration given to meet the high bid. Refusal or failure to meet the highest bid shall constitute a waiver of such bidding provisions. Once the qualified high bidder is determined, the balance of the purchase price shall be paid within 180 days of the date of the sale. Failure to submit the full bid price prior to, but not including the 180th day following the day of sale, shall result in cancellation of the sale of the specific parcel and the deposit shall be forfeited and disposed of as other receipts of sale.

Detailed information concerning the sale, including the reservations, procedures for conditions of sale, and planning and environmental documents, is available at the Dickinson District Office, Bureau of Land Management, 2933 Third Avenue West, Dickinson, North Dakota 58601.

**COMMENTS:** For a period of 45 days from the date of this Notice, interested parties may submit comments to the District Manager, Dickinson District, at the above address. In the absence of objections, this proposal will become the final determination of the Department of the Interior.

Dated: March 18, 1993.

Donald J. Burger,

District Manager.

[FR Doc. 93-6668 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-04-M

#### Minerals Management Service

#### Information Collection Submitted to the Office of Management and Budget for Review Under the Paperwork Reduction Act

The proposal for the collection of information listed below has been submitted to the Office of Management and Budget for approval under the provisions of the Paperwork Reduction Act (44 U.S.C. chapter 35). An expedited review has been requested in accordance with the Act, since allowing for the normal review period would adversely affect the public interest for the reason given below. Approval has been requested by March 31, 1993. Copies of the information collection requirement and related explanatory material may be obtained by contacting Jeane Kalas at 303-231-3046. Comments and suggestions on the proposal should be made directly to the bureau clearance officer listed below and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503, telephone 202-395-7340.

#### Title: Gas Contract Settlement Agreements

OMB approval number: None

**Abstract:** Information is to be collected on settlements reached by purchasers and pipeline companies who have negotiated, or are negotiating, to rescind, terminate, limit, or otherwise modify gas sales contracts under dispute. The information is to be used to determine the extent to which any proceeds paid to settle disputes are royalty bearing and whether royalties have been paid on those proceeds. The Minerals Management Service will require that all companies involved in gas sales contract settlements provide a list of all settlements taking place after January 1, 1980

**Reason for expedited review:** Some gas sales contracts are nearing the end of time limits set by the Federal Statute of Limitations. This information collection must be implemented quickly in order to determine if audits of some settlements are necessary. Some proceeds paid to settle contractual obligations may be royalty bearing. Royalties may be lost to the Federal Treasury, States, Indian tribes, and Indian allottees if royalty determinations are not made promptly.

**Frequency:** One time only

**Description of respondents:** Companies holding gas sales contracts.

**Estimated completion time:** 1.5 hours per settlement

**Estimated responses:** 1,600 settlements

**Estimated burden hours:** 2,400

**Bureau Clearance Officer:** Arthur Quintana, 703-787-1238

Dated: March 9, 1993.

William D. Bettenberg,

Acting Director, Office of Program Analysis.

[FR Doc. 93-6570 Filed 3-23-93; 8:45 am]

BILLING CODE 4310-MR-M

#### INTERSTATE COMMERCE COMMISSION

[Ex Parte No. 399]

#### Publication of the Cost Recovery Percentage

**AGENCY:** Interstate Commerce Commission.

**ACTION:** Publication of the Cost Recovery Percentage.

**SUMMARY:** Section 202 of the Staggers Rail Act of 1980 requires the Commission to calculate an annual Cost Recovery Percentage (CRP) for all railroad traffic. The CRP is a revenue to variable cost percentage calculated

using Uniform Railroad Costing System (URCS) railroad unit costs and a statistical sample (the I.C.C. Waybill Sample) of railroad traffic. If the CRP falls between 170 percent and 180 percent it becomes the jurisdictional threshold for rate regulation of market dominant traffic. The Commission found that it was not possible to calculate a CRP for 1993 because 1991 railroad revenues, upon which the calculation was based, did not exceed total 1991 costs. Therefore, the jurisdictional threshold remains at 180 percent.

**FOR FURTHER INFORMATION CONTACT:** Thomas A. Schmitz (202) 927-5720, H. Jeff Warren (202) 927-6242, [TDD for hearing impaired: (202) 927-5721].

**SUPPLEMENTARY INFORMATION:** Additional information is contained in the Commission's decision. To purchase a copy of the full decision write to, call, or pick up in person from: Dynamic Concepts, Inc., room 2229, Interstate Commerce Commission Building, Washington, DC 20423, or Telephone (202) 289-4357/4359. [Assistance for the hearing impaired is available through TDD services (202) 927-5721.]

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

**Authority:** 49 U.S.C. 10321, 10709, 5 U.S.C. 553.

Decided: March 15, 1993.

By the Commission, Chairman McDonald, Vice Chairman Simmons, Commissioners Phillips, Philbin, and Walden.

**Sidney L. Strickland, Jr.,**

*Secretary.*

[FR Doc. 93-6731 Filed 3-23-93; 8:45 am]

BILLING CODE 7035-01-M

notification was filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, the ALABC advised that written commitments to become members of the ALABC have been received from Bridgestone Corporation, Toyko, JAPAN; Hammond Lead Products, Pittsburgh, PA; and Sumitomo Metal Mining Company (originally listed as a verbal commitment), Tokyo, JAPAN. Verbal commitments to become members of the ALABC have been received from Teledyne Battery Products, Redlands, CA and W.R. Grace & Company, Lexington, MA. Heubach & Lindgens of Langelehlem, GERMANY has withdrawn their written commitment to the ALABC.

No other changes have been made in either the membership or planned activity of the ALABC. Membership in the ALABC remains open and the ALABC intends to file additional written notification disclosing any future changes in membership.

On June 15, 1992, the ALABC filed its original notification pursuant to section 6(a) of the Act. The Department of Justice published a notice in the *Federal Register* pursuant to section 6(b) of the Act on July 29, 1992, 57 FR 33522. The last notification was filed with the Department on December 7, 1992. A notice was published in the *Federal Register* pursuant to section 6(b) of the Act on January 22, 1993, 58 FR 5758.

**Joseph H. Widmar,**

*Director of Operations, Antitrust Division.*

[FR Doc. 93-6637 Filed 3-23-93; 8:45 am]

BILLING CODE 4410-01-M

23, 1981, for the unlawful distribution of heroin; that as a result of this felony conviction the Administrator, Drug Enforcement Administration, revoked the Respondent's prior DEA Certificate of Registration on October 18, 1983; and that subsequently on March 5, 1986, and April 1, 1988, the States of New York and Pennsylvania, respectively, revoked his license to practice medicine.

Respondent, through counsel, filed a request for hearing on the issues raised by the Order to Show Cause, and the matter was docketed before Administrative Law Judge Paul A. Tenney. Following prehearing procedures, a hearing was held in Costa Mesa, California on May 19, 1992. On August 21, 1992, in his findings of fact, conclusions of law, and recommended ruling, the administrative law judge recommended that the Respondent's application for a DEA Certificate of Registration be granted upon completion of a course of appropriate content and length on the proper prescribing of controlled substances.

No exceptions were filed to Judge Tenney's opinion. On September 25, 1992, the administrative law judge transmitted the record to the Administrator. On November 16, 1992, the administrative law judge forwarded to the Administrator, for inclusion in the record, a letter indicating that Dr. Motamed had completed a 47 hour mini-residency on the proper prescribing of controlled dangerous substances at the University of Medicine and Dentistry of New Jersey on October 19-24, 1992.

The Administrator has carefully considered the entire record in this matter and, pursuant to 21 CFR 1316.67, hereby issues his final order in this matter based upon findings of fact and conclusions of law as hereinafter set forth.

The administrative law judge found that the Respondent graduated medical school at the University of Paris and returned to the United States where he completed an internship and a residency in general surgery. He entered private practice in Philadelphia and subsequently moved to California.

The administrative law judge found that the Administrator, Drug Enforcement Administration, previously revoked the Respondent's registration. 48 FR 49392 (1983). Following a hearing in that proceeding the Administrator found that the Respondent and his wife, during the late 1970's and into 1980, were abusers of the controlled substances heroin and cocaine. During an investigation, the DEA learned that the Respondent was selling heroin in Los Angeles and subsequently arranged

## DEPARTMENT OF JUSTICE

### Antitrust Division

#### Notice Pursuant to the National Cooperative Research Act of 1984; Advanced Lead-Acid Battery Consortium

Notice is hereby given that, on March 4, 1993, pursuant to section 6(a) of the National Cooperative Research Act of 1984, 15 U.S.C. § 4301 *et seq.* ("the Act"), the Advanced Lead-Acid Battery Consortium ("ALABC"), a discrete program of the International Lead Zinc Research Organization, Inc. ("ILZRO"), filed a written notification simultaneously with the Attorney General and the Federal Trade Commission disclosing the addition of five members to and the withdrawal of one member from the ALABC. The

## Drug Enforcement Administration

[Docket No. 92-15]

### Michael Motamed, M.D.; Granting of Registration

On November 7, 1991, the Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration (DEA), issued an Order to Show Cause to Michael Motamed, M.D. (Respondent), of Los Angeles, California proposing to deny his application for registration as a practitioner. The statutory basis for seeking the denial of the registration was that Respondent's registration would be inconsistent with the public interest, as set forth in 21 U.S.C. 823(f).

The Order to Show Cause alleged that Dr. Motamed had been convicted before the United States District Court for the Central District of California on March

an undercover purchase of heroin from him. The Respondent ultimately pled guilty before the United States District Court for the Central District of California on March 23, 1981, to one count of distributing a controlled substance in violation of 21 U.S.C. 841(a)(1).

As a result of this conviction and the DEA revocation, several states took action against Respondent's medical license. The States of California, New York, and Pennsylvania revoked his medical license. The State of California stayed its revocation and placed Respondent on five years probation. After completion of probation, the State of California restored Respondent's medical license on October 12, 1989.

The administrative law judge found that the Respondent has accepted full responsibility for his past conduct. In the previous proceeding, the Administrator commented that it was commendable that Respondent had taken steps toward rehabilitation, which included a six month voluntary admission into a rehabilitation and mental health facility. Respondent also entered a halfway house after completion of twelve months in prison. The Respondent acknowledged that he did violate his probation on one occasion by ingesting cocaine.

In this proceeding, the Respondent presented testimony from a clinical psychologist who had treated Respondent in his first residential treatment program and who has continued to treat him since 1986. This psychologist concluded that Respondent was capable of handling controlled substances without posing a threat to the public. The administrative law judge credited this opinion testimony on the basis of the psychologist's background and long term treatment of the Respondent. Further testimony was presented by a former State Medical Board of California investigator who had supervised the Respondent. He concluded that the Respondent was rehabilitated and could safely handle a DEA registration. The Respondent also presented physician witnesses who praised his work ethic and professional manner and presented opinions that Respondent could competently handle a DEA registration. The government argued that Dr. Motamed's rehabilitation was incomplete since he had not shown that he had educated himself on the responsibilities of properly handling controlled substances.

The administrative law judge concluded that Respondent had successfully rehabilitated himself based upon the extensive and uncontested

testimony regarding Respondent's rehabilitative efforts.

The Administrator may deny an application for registration if he determines that such registration would be inconsistent with the public interest. Pursuant to 21 U.S.C. 823(f), "[i]n determining the public interest, the following factors will be considered:

(1) The recommendation of the appropriate State licensing board or 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 as may threaten the public health or safety."

It is well established that these factors are to be considered in the disjunctive, i.e., the Administrator may properly rely on any one or a combination of factors, and give each factor the weight he deems appropriate. Henry J. Schwarz, Jr., M.D., Docket No. 88-42, 54 FR 16422 (1989).

The administrative law judge found that all five factors were pertinent and found that as to the first factor, the State of California has restored the Respondent to full medical privileges; as to the second factor that there was no indication that Respondent improperly used this DEA registration, but was involved in personal abuse of illicit street drugs; that as to the third factor, the Respondent was convicted of the felony of distributing the controlled substance heroin; that as to the fourth factor, the Respondent violated State and Federal law by his use of cocaine in 1982; and that as to the fifth factor, the Respondent has exhibited a decade of commitment to his personal and professional rehabilitation.

The Administrator agrees that the prior conduct of the Respondent in unlawfully distributing the Schedule I controlled substance heroin is grave in nature. The passage of over twelve years since this crime is not adequate in itself to enable a favorable ruling. The offense is extremely serious and is entitled to great weight in evaluating the public interest in licensing an individual to prescribe and dispense controlled substances, even after the lapse of considerable time. The fact that the Respondent's rehabilitative efforts have been constant and extensive has changed the balance in favor of the public interest.

The Government did not object to the inclusion on the record of documents

evidencing that the Respondent and recently completed a course on the proper prescribing of controlled substances. Accordingly, the Administrator also finds that the Respondent has satisfied the recommendation of the Government and administrative law judge that he complete such a course.

The Administrator concurs with the administrative law judge's findings of fact, conclusions of law, and recommended ruling in its entirety. Accordingly, the 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), hereby orders that the application for a DEA Certificate of Registration of Michael M. Motamed, M.D., be, and it hereby is, granted. This order is effective March 24, 1993.

Dated: March 18, 1993.

**Robert C. Bonner,**

*Administrator of Drug Enforcement.*

[FR Doc. 93-6732 Filed 3-23-93; 8:45 am]

BILLING CODE 4410-08-M

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## NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

### National Endowment for the Arts

#### Notice of Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Public Law 92-463), as amended, notice is hereby given that a meeting of the Visual Arts Advisory Panel (Other Genres Fellowships Section) to the National Council on the Arts will be held on April 12-15, 1993 from 9 a.m.-8 p.m. and April 16 from 9:30 a.m.-5 p.m. in room 716 at the Nancy Hanks Center, 1100 Pennsylvania Avenue, NW., Washington, DC 20506.

A portion of this meeting will be open to the public on April 16 from 3:30 p.m.-5 p.m. The topics will be policy discussion and guidelines review.

The remaining portions of this meeting on April 12-15 from 9 a.m.-8 p.m. and April 16 from 9 a.m.-3:30 p.m. are for the purpose of Panel review, discussion, evaluation, and recommendation on applications for financial assistance under the National Foundation on the Arts and the Humanities Act of 1965, as amended, including information given in confidence to the agency by grant applicants. In accordance with the determination of the Chairman of November 24, 1992, these sessions will be closed to the public pursuant to subsection (c) (4), (6) and (9)(B) of

section 552b of title 5, United States Code.

Any person may observe meetings, or portions thereof, of advisory panels which are open to the public, and may be permitted to participate in the panel's discussions at the discretion of the panel chairman and with the approval of the full-time Federal employee in attendance.

If you need special accommodations due to a disability, please contact the Office of Special Constituencies, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW., Washington, DC 20506, 202/682-5332, TTY 202/682-5496, at least seven (7) days prior to the meetings.

Further information with reference to this meeting can be obtained from Ms. Yvonne M. Sabine, Advisory Committee Management Officer, National Endowment for the Arts, Washington, DC 20506, or call (202) 682-5439.

Yvonne M. Sabine,

Director, Panel Operations, National Endowment for the Arts.

[FR Doc. 93-6627 Filed 3-23-93; 8:45 am]

BILLING CODE 7537-01-M

## NUCLEAR REGULATORY COMMISSION

### Documents Containing Reporting or Recordkeeping Requirements; Office of Management and Budget (OMB); Review

**AGENCY:** U.S. Nuclear Regulatory Commission (NRC).

**ACTION:** Notice of the OMB review of information collection.

**SUMMARY:** The NRC has recently submitted to the OMB for review the following proposal for the collection of information under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. chapter 35).

1. Type of submission, new, revision, or extension: Revision.

2. The title of the information collection: Proposed Rule, "10 CFR part 26: Modification to the Random Drug Testing Rate for Licensee Employees".

3. The form number if applicable: Not applicable.

4. How often the collection is required: On occasion.

5. Who will be required to report: Nuclear power plant licensees.

6. An estimate of the number of reports annually: A reduction of 50,000 drug tests and associated records.

7. An estimate of the total number of hours needed annually to complete the requirement: 10,833 hours of burden reduction (an average of 146 hours of burden reduction per site).

8. An indication of whether section 3504(h), Public Law 96-511 applies: Applicable.

9. Abstract. 10 CFR part 26 of NRC's regulations: "Fitness-for-Duty Programs," requires licensees authorized to construct or operate a nuclear power plant pursuant to Part 50 to implement fitness-for-duty programs to assure that personnel are not under the influence of any substance or mentally or physically impaired, to retain certain records associated with the management of these programs, and to provide reports concerning significant events. A proposed amendment to this regulation would permit licensees to reduce the random testing rate of licensee employees for drugs and alcohol to 50 percent but maintain the 100 percent random testing rate for contractor and vendor employees.

Copies of the submittal may be inspected or obtained for a fee from the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC 20555.

Comments and questions should be directed to the OMB reviewer: Ronald Minsk, Office of Information and Regulatory Affairs (3150-0146), NEOB-3019, Office of Management and Budget, Washington, DC 20503

Comments can also be submitted by telephone at (202) 395-3084.

The NRC Clearance Officer is Brenda Jo Shelton, (301) 492-8132.

Dated at Bethesda, Maryland, this 16th day of March, 1993.

For the Nuclear Regulatory Commission.

Gerald F. Cranford,

Designated Senior Official for Information Resources Management.

[FR Doc. 93-6683 Filed 3-23-93; 8:45 am]

BILLING CODE 7590-01-M

## Application for a License To Export a Utilization Facility

Pursuant to 10 CFR 110.70(b) "Public notice of receipt of an application", please take notice that the Nuclear Regulatory Commission has received the following request to amend Export License XR137. A copy of the amendment request is on file in the Nuclear Regulatory Commission's Public Document Room located at 2120 L Street, NW., Washington, D.C.

A request for a hearing or petition for leave to intervene may be filed within 30 days after publication of this notice in the *Federal Register*. Any request for hearing or petition for leave to intervene shall be served by the requestor or petitioner upon the applicant, the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555; the Secretary, U.S. Nuclear Regulatory Commission; and the Executive Secretary, U.S. Department of State, Washington, DC 20520.

In its review of a request to amend a license to export a utilization facility as defined in 10 CFR part 110 and noticed herein, the Commission does not evaluate the health, safety or environmental effects in the recipient nation of the facility to be exported. The information concerning this request to amend follows:

### NRC EXPORT LICENSE AMENDMENT

Name of applicant, date of appl., date received, application number	Description	Value	End use	Country of destination
ABB Combustion Eng., 03/09/93, 03/11/93, XR137/02.	\$3,700,000,000 .....	4128 MW, Taiwan Power Nuclear Units, Lungmen 1 and 2	Amended to increase power to 4128 MW (-1350 MWe); increase \$ value from \$600,000,000 to \$3,700,000,000; change names from Taiwan Power Nuclear Units 7 and 8 to Taiwan Power Nuclear Units Lungmen 1 and 2; and revise description of items authorized for export..	Taiwan.



Dated this 18th day of March 1993 at Rockville, Maryland.

For the Nuclear Regulatory Commission.

Ronald D. Hauber,

Assistant Director for Exports, Security, and Safety Cooperation Office of International Programs.

[FR Doc. 93-6682 Filed 3-23-93; 8:45 am]

BILLING CODE 7590-01-M

### Proposed Generic Communication; Availability and Adequacy of Design Bases Information

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Notice of opportunity for public comment.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is proposing to issue a generic letter. A generic letter is an NRC document that (1) Requests licensees to submit analyses or descriptions of proposed corrective actions, or both, regarding matters of safety, safeguards, or environmental significance, or (2) requests licensees to submit information to the NRC on other technical or administrative matters, or (3) transmits information to licensees regarding approved changes to rules or regulations, the issuance of reports or evaluations of interest to the industry, or changes to NRC administrative procedures. This draft generic letter requests power reactor licensees to describe the programs that are implemented or planned to ensure design information for their facilities is correct, accessible, and maintained.

The NRC is seeking comment from interested parties regarding both the technical and regulatory aspects of the proposed generic letter presented under the Supplementary Information heading. This proposed generic letter and supporting documentation were discussed in meeting number 229 of the Committee to Review Generic Requirements (CRGR). The relevant information that was sent to the CRGR to support their review of the proposed generic letter is available in the Public Document Rooms under accession number 9303090140. The NRC will consider comments received from interested parties in the final evaluation of the proposed generic letter. The NRC's final evaluation will include a review of the technical position and, when appropriate, an analysis of the value/impact on licensees. Should this generic letter be issued by the NRC, it will become available for public inspection in the Public Document Rooms.

**DATES:** Comment period expires April 23, 1993. Comments submitted after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except for comments received on or before this date.

**ADDRESSES:** Submit written comments to Chief, Rules and Directives Review Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Written comments may also be delivered to room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, 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, 2120 L Street, NW. (Lower Level), Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Eugene Imbro at (301) 504-2967.

#### SUPPLEMENTARY INFORMATION:

##### Availability and Adequacy of Design Bases Information

The Commission recently issued a policy statement<sup>1</sup> describing its expectations and the Agency's future actions to verify the availability and adequacy of design information. In the policy statement, the Commission concluded that maintaining current and accessible design documentation is important to ensure that (1) plant physical and functional characteristics are maintained and are consistent with the design bases as required by U.S. Nuclear Regulatory Commission (NRC) regulations; (2) systems, structures, and components can perform their intended functions; and (3) the plant is operated in a manner consistent with the design bases.

In October 1990, the Nuclear Management and Resources Council (NUMARC) issued NUMARC 90-12, "Design Basis Program Guidelines," containing guidance for organizing and collating the design bases for each nuclear power plant in a manner consistent with the definition of design bases information in § 50.2 of title 10 of the Code of Federal Regulations (10 CFR 50.2). NUMARC issued this document for voluntary use by NUMARC member organizations as a basis against which they could review their existing or planned efforts to collate supporting design information. On November 9, 1990, the NRC staff sent comments on the guidelines to NUMARC.<sup>2</sup>

<sup>1</sup> "Availability and Adequacy of Design Bases Information at Nuclear Power Plants," *Federal Register*, Volume 57, Number 154, page 35455, August 10, 1992.

<sup>2</sup> Letter from W.T. Russell, NRC, to W.H. Rasin, NUMARC, November 9, 1990.

To ensure that the NRC is apprised of the industry's activities, the NRC hereby requests power reactor licensees to describe the programs that are implemented or planned to ensure design information is correct, accessible, and maintained.

To assist the staff in prioritizing its inspection program, the NRC requests that each addressee voluntarily submit the following information which would be particularly useful if submitted within 120 days:

1. Submit a description of any programs already completed, planned, or being conducted to ensure the correctness and accessibility of the design bases information for your facility and to ensure that it is maintained current.

2. If you are not implementing a design reconstitution program at your facility, submit your rationale for not implementing such a program and submit a description of the extent of the design information you have obtained from the nuclear steam supply system (NSSS) vendor and architect-engineer (A/E). Describe the extent of any information not obtained from the NSSS vendor or A/E, but which is accessible at the NSSS vendor or A/E offices.

3. If your design reconstitution program is planned or being conducted but has not been completed, submit your schedule for implementation and the expected completion date.

This generic letter does not impose any new requirements or modify any existing regulatory requirements.

This request is covered by the Office of Management and Budget Clearance Number 3150-0011, which expires June 30, 1994. The estimated average number of burden hours is 200 person hours for each licensee response.

#### Backfit Discussion

This generic letter is a request to submit information voluntarily. This letter does not require modifications or additions to systems, structures, or components of a facility, the design of a facility, or the procedures or organization to design, construct, or operate a facility. Therefore, this letter does not impose any backfits, as defined in 10 CFR 50.109(a). The staff evaluated this letter in accordance with the charter of the Committee to Review Generic Requirements (CRGR) and will place a copy of that evaluation in the public document room with the minutes of the CRGR meeting 229 at which this letter was considered.

Dated at Rockville, Maryland, this seventeenth day of March, 1993.

For the Nuclear Regulatory Commission.  
**Gail H. Marcus,**  
*Chief, Generic Communications Branch,  
 Division of Operating Reactor Support, Office  
 of Nuclear Reactor Regulation.*  
 [FR Doc. 93-6676 Filed 3-23-93; 8:45 am]  
 BILLING CODE 7590-01-M

**Biweekly Notice; Applications and  
 Amendments to Facility Operating  
 Licenses Involving No Significant  
 Hazards Considerations; Correction**

**AGENCY:** Nuclear Regulatory  
 Commission.

**ACTION:** Biweekly notice; correction.

**SUMMARY:** We are withdrawing the  
 publication of the Biweekly notice of  
 March 17, 1993 (58 FR 14433) and  
 replacing it with a new Biweekly notice  
 to be published in the near future.

**FOR FURTHER INFORMATION CONTACT:**  
 Michael T. Lesar, Chief, Rules Review  
 Section, Rules Review and Directives  
 Branch, Division of Freedom of  
 Information and Publications Services,  
 Office of Administration, U.S. Nuclear  
 Regulatory Commission, Washington,  
 DC 20555, Telephone: 301-492-7758.

Dated at Bethesda, Maryland, this 19th day  
 of March 1993.

For the Nuclear Regulatory Commission.  
**Donnie H. Grimsley,**  
*Director, Division of Freedom of Information  
 and Publications Services, Office of  
 Administration.*  
 [FR Doc. 93-6770 Filed 3-23-93; 8:45 am]  
 BILLING CODE 7590-01-M

**License Termination for the Amax Site,  
 Parkersburg, WV**

**AGENCY:** Nuclear Regulatory  
 Commission.

**ACTION:** Notice of license termination.

This notice is to inform the public  
 that the United States Nuclear  
 Regulatory Commission (the  
 Commission) is terminating the Material  
 License No. SMB-1418 issued to Amax,  
 Inc. for rare earth recovery operations  
 near Parkersburg, WV. The Commission  
 will terminate the license upon receipt  
 of appropriate closing or conveyance  
 documents from the Department of  
 Energy (DOE). Receipt of the documents  
 will result in the site being transferred  
 to DOE under authority of the Nuclear  
 Waste Policy Act (NWSA) section  
 151(c). The Amax, Inc. site is listed in  
 the Commission's Site  
 Decommissioning Management Plan.

The Amax, Inc. site is subject to a  
 provision of NWSA that requires DOE to  
 assume title and custody of low-level

radioactive waste that originated in the  
 processing of zirconium, hafnium or  
 rare earth ores. The legislation stipulates  
 that DOE assume title and custody of  
 the site, once the owner of the site  
 requests transfer, the site is  
 "decontaminated and stabilized" in  
 accordance with the Commission  
 requirements, and the owner has made  
 financial arrangements, approved by the  
 NRC, for the "long-term maintenance  
 and monitoring" of the site.

These conditions have been satisfied  
 for the Amax, Inc. site and the staff  
 proposes to terminate the Amax license  
 upon formal notification from DOE that  
 it has assumed title and custody.

Dated at Rockville, Maryland this 17th day  
 of March, 1993.

For the Nuclear Regulatory Commission.  
**John H. Austin,**  
*Chief, Decommissioning and Regulatory  
 Issues Branch, Division of Low-Level Waste  
 Management and Decommissioning, Office of  
 Nuclear Material Safety and Safeguards.*  
 [FR Doc. 93-6679 Filed 3-23-93; 8:45 am]  
 BILLING CODE 7590-01-M

**SECURITIES AND EXCHANGE  
 COMMISSION**

[Release No. 34-32002; File No. SR-CBOE-  
 93-04]

**Self-Regulatory Organizations; Filing  
 of Proposed Rule Change by the  
 Chicago Board Options Exchange,  
 Inc., Relating To Capped Index Options  
 With Quarterly Expirations**

March 16, 1993.

Pursuant to section 19(b)(1) of the  
 Securities Exchange Act of 1934, 15  
 U.S.C. 78s(b)(1), notice is hereby given  
 that on January 19, 1993, the Chicago  
 Board Options Exchange, Inc. ("CBOE"  
 or "Exchange") filed with the Securities  
 and Exchange Commission ("SEC" or  
 "Commission") the proposed rule  
 change as described in Items I, II, and  
 III below, which Items have been  
 prepared by the CBOE. 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 CBOE proposes to amend its rules  
 to provide that capped-style index  
 options ("CAPS")<sup>1</sup> on the Standard &  
 Poor's Corporation ("S&P") 100 and 500  
 stock indexes may include those subject

to quarterly expiration ("QIXs")<sup>2</sup> and  
 that series of such options may be  
 introduced with expirations of up to  
 eight near-term quarters.

The text of the proposed rule change  
 is available at the Office of the  
 Secretary, CBOE, and at the  
 Commission.

**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  
 CBOE included statements concerning  
 the purpose of and basis for the  
 proposed rule change and discussed any  
 comments it received on the proposed  
 rule change. The text of these statements  
 may be examined at the places specified  
 in Item IV below. The CBOE has  
 prepared summaries, set forth in  
 sections (A), (B), and (C) below, of the  
 most significant aspects of such  
 statements.

**A. Self-Regulatory Organization's  
 Statement of the Purpose of, and  
 Statutory Basis for, the Proposed Rule  
 Change**

The purpose of the proposed rule  
 change is to enable the Exchange to list  
 capped-style quarterly index expiration  
 options ("CAPS QIXs") on the S&P 100  
 and 500 stock indexes. QIX options  
 generally have the same contract terms  
 as regular options, except that they  
 expire on the first business day of the  
 month following the end of a calendar  
 quarter. The proposed rule change  
 reflects this difference by providing for  
 up to eight near-term quarterly  
 expirations for CAPS on the S&P 100  
 and 500 stock indexes.

The CBOE believes that the proposed  
 rule change is consistent with section  
 6(b)(5) of the Act because it is designed  
 to provide a basis for trading CAPS QIX  
 options in a manner that promotes just  
 and equitable principles of trade,  
 perfects the mechanism of a free and  
 open market, and protects investors and  
 the public interest.

**B. Self-Regulatory Organization's  
 Statement on Burden on Competition**

The CBOE does not believe that the  
 proposed rule change will impose any  
 inappropriate burden on competition.

**C. Self-Regulatory Organization's  
 Statement on Comments on the  
 Proposed Rule Change Received From  
 Members, Participants or Others**

No written comments were solicited  
 or received with respect to the proposed  
 rule change.

<sup>1</sup> See Securities Exchange Act Release No. 29865  
 (October 28, 1991), 56 FR 68255.

<sup>2</sup> See Securities Exchange Act Release No. 31800  
 (February 1, 1993), 58 FR 7274.

### III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 35 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 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (a) By order approve 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. Copies of such filing will also be available for inspection and copying at the principal office of the above-mentioned self-regulatory organization. All submissions should refer to the file number in the caption above and should be submitted by April 14, 1993.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.<sup>3</sup>

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 93-6714 Filed 3-23-93; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 34-32004; File No. SR-DTC-92-10]

### Self-Regulatory Organizations; The Depository Trust Co.; Order Approving Proposed Rule Change Relating to DTC's Proposal To Add Valued Pledges and Releases to its Next-Day Funds Settlement System

March 16, 1993.

#### I. Introduction

On June 18, 1992, The Depository Trust Company ("DTC") 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"),<sup>1</sup> concerning the addition of valued pledges and releases to its Next-Day Funds Settlement ("NDFS") system. On September 22, 1992, notice of the proposed rule change was published in the Federal Register to solicit comments from interested persons.<sup>2</sup> No comments were received. For the reasons discussed below, the Commission is approving the proposed rule change.

#### II. Description of the Proposal

The proposed rule change would allow DTC participants to make valued pledges on DTC's NDFS system, eliminating the need for DTC participants to use facilities outside DTC to move funds. Currently, DTC allows its participants to effect valued and unvalued pledges on its Same-Day Funds Settlement ("SDFS") system. However, only unvalued pledges may be effected on DTC's NDFS system. Consequently, participants effecting pledges or releases in the NDFS system must make arrangements outside DTC to move funds related to the pledge.

DTC will institute the change by adding a new service called "NDFS Valued Pledge Services" to its Collateral Loan Services function. The new service will utilize a combination of the delivery versus payment function and the pledge function. The valued pledge will be entered by the pledgor with the securities being moved to a pledged position and a debit and credit applied to the pledgee's and pledgor's money settlement accounts. Upon the approval of the pledgee, securities will move from the pledgor's pledged account to its free account and DTC will debit its settlement account. The pledgee's associated participant settlement account will be credited for the pledged securities. Although DTC will not have a lien on the securities, should a

pledgee fail to settle its money obligations with DTC, DTC has the right to reverse the transaction pursuant to existing DTC rules and procedures.<sup>3</sup>

For pledges in the NDFS system, DTC will not effect a valued pledge until the pledgee has seen and agreed to its value. DTC also will not effect the valued release in the NDFS system (return of the pledged securities for value) unless the pledgor, by initiating the release, has seen and agreed to its value. These controls were built into the function so that the pledgee and pledgor, respectively, can exercise control over the buildup of cash debits in their accounts.<sup>4</sup> The controls are necessary because the NDFS system does not have the kinds of controls on cash debits to a receiver that are pervasive in the SDFS system.

#### III. Discussion

The Commission believes that DTC's proposed rule change is consistent with section 17A of the Act and, specifically, with sections 17A(b)(3) (A) and (F).<sup>5</sup> Those sections require a clearing agency to be organized and its rules be designed to promote the prompt and accurate clearance and settlement of securities transactions and to assure the safeguarding of securities and funds which are in its custody or control or for which it is responsible.

The Commission believes that the proposal provides a more efficient means of effecting pledges by eliminating the movement of funds for pledges or releases effected on DTC's NDFS system outside of DTC. Under the current system, DTC participants effect pledges without value in the NDFS system and then must transfer funds by some other means outside of DTC (e.g., check or Fedwire). Under the proposed rule, this process is greatly simplified and the risk substantially reduced, as the pledge or release and the movement of funds can be effected at DTC with a single instruction.<sup>6</sup>

<sup>3</sup> DTC Rule 9.

<sup>4</sup> DTC will not, however, place a cap on the value of participants' cash debits in their accounts.

<sup>5</sup> 15 U.S.C. 78q-1(b)(3) (A) and (F).

<sup>6</sup> The Commission previously urged DTC to reduce the risk associated with free pledges in the NDFS system by instituting a valued pledge program and eliminating free pledges. See Securities Exchange Act Release No. 28515 (October 11, 1990), 55 FR 41401 (File No. SR-DTC-90-08). Although DTC will continue to allow free pledges in the NDFS system, the Commission encourages DTC to explore the risk associated with and the need for free pledges. As part of DTC's review of the need for free pledges, DTC will report at the end of six months and one year of implementing this rule the usage volume of the new valued pledges and the free pledge services. See letter from Richard B. Nesson, General Counsel, DTC, to Francois

<sup>1</sup> 15 U.S.C. section 78s(b)(1).

<sup>2</sup> Securities Exchange Act Release No. 31177 (September 11, 1992), 57 FR 43758.

<sup>3</sup> 17 CFR 200.30-3(a)(12) (1992)

Continued

The Commission also believes that the controls proposed by DTC will afford effective protection to DTC members and to the NDFS system. DTC will not effect a valued pledge until the pledgee has seen and agreed to its value, nor will it effect a valued release unless the pledgor has seen and agreed to its value. Moreover, although DTC will not have a lien on the pledged securities, DTC's ability to reverse a transaction will protect the NDFS system should there be a failure to settle. This is possible because all aspects of the transaction remain within the NDFS system.

Consequently, the Commission believes the proposed rule enhances the prompt and accurate clearance and settlement of securities transactions by reducing the steps required in effecting valued pledges and releases in the NDFS system. Similarly, the proposed rule is consistent with DTC's duty to facilitate the safeguarding of securities and funds which are in DTC's custody or control or for which it is responsible under the Act.

#### IV. Conclusion

It is therefore ordered, Pursuant to section 19(b)(2) of the Act, that the proposed rule change (SR-DTC-92-10) be, and hereby is, approved.

For the Commission by the Division of Market Regulation, pursuant to delegated authority.<sup>7</sup>

Margaret H. McFarland,  
Deputy Secretary.

[FR Doc. 93-6712 Filed 3-23-93; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 34-32011; File No. SR-MSE-92-10]

### Self-Regulatory Organizations; Proposed Rule Change by Midwest Stock Exchange, Inc. Proposing To Establish Rules To Allow for and Govern the Trading of Standardized Baskets and To Trade a Specific Basket of Stocks, the Midwest Basket

March 17, 1993.

Pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"), 15 U.S.C. 78s(b)(1), notice is hereby given that on August 19, 1992, the Midwest Stock Exchange, Inc. ("MSE" or "Exchange") filed with the Securities and Exchange Commission ("Commission") the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the 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 MSE proposes to establish rules allowing for and governing the trading of standardized baskets on the Exchange floor. The Exchange also is seeking Commission approval to trade a specific basket product on the MSE.

The specific basket product which the Exchange proposes to trade, which will be known as the "MWB" basket, represents a new trading product for the securities industry. The MWB will offer a highly correlative hedge to the Chicago Board of Trade's ("CBOT") stock index futures contract traded under the ticker symbol "BC."<sup>1</sup> The MWB will be comprised of the 20 stocks included in the CBOT's BC futures contract in such quantity (the same number of whole shares of each stock) as to approximate one-fifth of the settlement value of the BC futures contract as calculated by the CBOT Clearing Corporation.

The text of the proposed rule change is available at the MSE and at the Commission.

#### 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. The self-regulatory organization has prepared summaries, set forth in Sections (A), (B), and (C) below, of the most significant aspects of such statements.

##### A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

The purpose of the proposed rule change is to establish rules allowing for and governing the trading of standardized baskets on the Exchange floor and to seek Commission approval to trade a specific basket of stocks on the MSE. The specific basket product

<sup>1</sup> The terms "BC" refers to the CBOT stock index futures contract which is based on the American Stock Exchange's Major Market Index ("MMI"). The MMI is traded on the Amex and is a broad-based, price-weighted index based on 20 stocks listed on the New York Stock Exchange, Inc.

which the Exchange proposes to trade will be known as the "MWB" Basket.

The MWB Basket represents a new trading product for the securities industry conceived by the MSE in consultation with the CBOT. The MWB is a basket of stocks that offers a highly correlative hedge to the CBOT's BC futures contract. The MWB will be comprised of the 20 stocks included in the BC futures contract which is based on an index comprised of 20 stocks from various industries, which stocks are listed and traded on the New York Stock Exchange ("NYSE") in such quantity (the same number of whole shares of each stock) as to approximate one-fifth of the settlement value of the BC futures contract as calculated by the CBOT Clearing Corporation.

The CBOT has for many years traded the BC futures contract as well as options on that futures contract. Since the beginning of trading in the BC futures contract there was expressed an interest and need for an efficient way to hedge the futures contract with the equity cash market. Based upon this need, the MSE in consultation with the CBOT developed the equity cash market trading facility in order to create an offsetting position with the BC futures contract.

The MWB essentially represents a trading facility. That is, the MWB is a product which will allow the buyer or seller of the basket to purchase or sell a defined group of stocks in a single transaction which will require the payment for, or delivery of, each of the securities underlying the basket.

The trading market for the MWB on the MSE floor will consist of a registered specialist, to be known as a Designated Primary Market Maker ("DPM") and Registered Market Makers ("RM"). DPMs will be required to continuously quote a two-sided market for five MWB baskets. RMs will be required to continuously quote a two-sided market for one MWB basket. The DPM will be required to maintain \$250,000 in excess net capital. All members of the MSE will have access to buy and sell the MWB.

The MWB will be traded at a specific, fixed location of the MSE trading floor. The floor will be configured to accommodate a sizeable "crowd" without disrupting others on the trading floor. Facilities will be visible to the crowd to display information from the futures and options markets. The displays also will show market information for the MWB.

The MWB will be traded in a price of whole dollars and fractions of one dollar with a minimum variation of 1/8th and in quantities of 100 shares where 100

Mazur, Staff Attorney, Division of Market Regulation, Commission, dated March 12, 1993.

<sup>7</sup> 17 CFR 200.30-3(a)(12) (1990).

shares equals 1 MWB basket.<sup>2</sup> One hundred shares shall be the minimum unit of trade for the MWB. In the price expression, one point will equal one dollar.

The MSE's automated order routing system ("MAX") may be used to enter orders and send reports as with any other issue; however, the MAX system will only be used for its order routing capability and not for automatic execution.

MWB Basket trades and quotes will be available on "Network B." As with any other MSE exclusive issue, the DPM will disseminate quotes through Autoquote. A goal of the MWB trading facility is to quote a tighter spread than the sum of the individual stock prices.

The MWB will be traded for next day settlement on the MSE (T+1 settlement). This means that a trade of MWB must be paid for or the underlying securities delivered on the next business day. The reason for this shortened settlement period is to keep the settlement activity approximately equal between the MWB and the BC futures contract and options on the BC futures contract. Settlement of an MWB trade will cause the delivery of the formula quantity (currently 32 shares of each of the underlying stocks) of the formula securities (currently 20 stocks) between the seller and the buyer.

At the end of the trading day, all MWB transactions within one account will be aggregated as will all sell transactions in the Midwest Clearing Corporation ("MCC"). These two aggregated transactions will be burst into the 20 component stocks in the formula quantities. Percent values will be assigned to each individual stock based upon each stock's relative percentage of the total closing value of the MWB Basket based on the NYSE closing price. This percent value will be used to assign values to each of the underlying stocks based upon the combined actual basket value for buy transactions and sell transactions.<sup>3</sup>

MWB trades will be netted by the MCC on trade date after bursting both

buy side and sell side aggregations. Because MWB basket trades will settle on T+1, each netted component stock will be reflected as transactions in the same component securities which settle on the following day. Once the basket trades have been burst into the component stocks and netted, these transactions will be entered into the MCC's Continuous Net Settlement system (i.e., the MCC's normal trade processing system) just as any other transactions are cleared and settled through MCC. However, because of the short settlement period, these transactions must be settled at MCC. Once these trades are settled, the positions may be moved to another registered depository.

It is the objective of the MSE to maintain a close value relationship between MWB and the CBOT's BC futures contract at the ratio of 500 shares of MWB (5 MWB Baskets) to approximate 1 BC futures contract. MSE will reserve the right to modify and change the formula for the MWB at its sole discretion. However, the MSE will strive to minimize the number of formula changes in order to maintain position continuity with the trading market.

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 and to protect investors and the public interest, and is not designed to permit unfair discrimination between customers, issuers, brokers or dealers.

#### *B. Self-Regulatory Organization's Statement on Burden on Competition*

The Exchange believes that no burden will be placed on competition as a result of the proposed rule change.

#### *C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others*

No comments were received.

#### **III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action**

Within 35 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 90 days of such date if it finds such longer period to be appropriate and publishes its reasons for so finding, or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve the proposed rule change, or

(B) Institute proceedings to determine whether the proposed rule change should be disapproved.

#### **IV. Solicitation of Comments**

Interested persons are invited to submit written data, views and arguments concerning the foregoing. Persons making written submissions should file six copies thereof with the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549. Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any persons, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for inspection and copying in the Commission's Public Reference Section, 450 Fifth Street, NW., Washington, DC 20549. Copies of such filing will also be available for inspection and copying at the principal office of the MSE. All submissions should refer to File No. SR-MSE-92-10 and should be submitted by April 14, 1993.

For the Commission, by the Division of Market Regulation, pursuant to delegated authority.

Margaret H. McFarland,  
Deputy Secretary.

[FR Doc. 93-6715 Filed 3-23-93; 8:45 am]

BILLING CODE 8010-01-M

[Release No. 34-32010; File No. SR-OCC-92-35]

#### **Self-Regulatory Organizations; The Options Clearing Corp.; Order Approving Proposed Rule Change Relating to Clarifying a Competency Requirement**

March 17, 1993.

On November 12, 1992, The Options Clearing Corporation ("OCC") filed with the Securities and Exchange Commission ("SEC") a proposed rule change (File No. SR-OCC-92-35) pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 (the "Act").<sup>1</sup> The proposed rule change would make a clarifying amendment to OCC's By-Laws<sup>2</sup> and Rules.<sup>3</sup> The Commission published notice of the proposed rule change in the *Federal*

<sup>2</sup> On June 25, 1992, 100 shares of MWB was equal to 640 individual equity shares (32 shares of each stock) and this was approximately equal to one-fifth of the CBOT's BC futures contract. Five hundred shares of MWB is approximately equal to one BC futures contract. The closing value of the MWB on June 25 would have been approximately 349. The closing value multiplied by 100 (the number of shares) equals \$34,900, which is approximately one-fifth of that day's closing value of the BC futures contract of \$174,510.

<sup>3</sup> For a more detailed description of the algorithm and clearing methods the MCC proposes to use in conjunction with MWB transactions, see Securities Exchange Act Release No. 31858 (February 16, 1993), 58 FR 9581 (February 22, 1993) (notice of filing of MCC proposed rule change to permit the processing of basket trades).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> Article V, Section 1, Interpretation and Policy .03 of OCC's By-laws.

<sup>3</sup> Chapter II, Rule 214(a) of OCC's Rules.

Register on December 18, 1992.<sup>4</sup> No comments were received. For the reasons discussed below, the Commission is approving the proposed rule change.

### I. Description

The proposed rule change would make a clarifying amendment to OCC's By-laws and Rules that require U.S. broker-dealer applicants for membership and existing domestic clearing members to employ one associated person who is registered with the National Association of Securities Dealers ("NASD") as a "Limited Principal—Financial and Operations" (a "FINOP").<sup>5</sup> Under the amendment, such requirement could be met by employing a person who has passed the appropriate NASD qualification examination even if such person is not registered with the NASD.

In January 1992, the Commission approved an OCC rule change (the "January 1992 Rule Change") which, among other things, requires that at least one associated person of a Clearing Member be registered with the NASD as a FINOP.<sup>6</sup> OCC was later advised by the NASD that it does not deem a person who has passed the NASD FINOP examination, but who is associated with a broker-dealer that is not a NASD member, to be registered as a FINOP. Instead, the NASD would consider such person to be qualified as a FINOP. Because the January 1992 Rule Change requires that an associated person be registered as a FINOP, this interpretation could affect Clearing Members and applicants who are not NASD members (i.e., firms doing a proprietary business), but who have or employ an associated person who has passed the FINOP qualification examination for registration as such. The amendment would require a Clearing Member to employ one associated person who is either registered with NASD as a FINOP or qualified to be a FINOP.

### II. Discussion

The Commission believes that OCC's proposed rule change is consistent with section 17A of the Act and, specifically, with sections 17A(b)(3) (A) and (F) thereunder.<sup>7</sup> Sections 17A(b)(3) (A) and

(F) of the Act require that a clearing agency be organized and its rules be designed to enable it to facilitate the prompt and accurate clearance and settlement of securities transactions and to assure the safeguarding of securities and funds which are in the custody or control of the clearing agency or for which it is responsible.

Prior to the January 1992 Rule Change, the competency of each applicant for clearing membership was determined on a subjective basis. The Commission, in approving the FINOP requirement, stated that "the FINOP examination is designed to provide an objective measure of competency in, among other things, clearing securities transactions."<sup>8</sup> In proposing the requirement, OCC stated that the requirement is "not unduly burdensome and is non-discriminatory because the FINOP examination is standard within the U.S. securities industry."<sup>9</sup> It is apparent from both releases that the focus of the new competency requirement was the FINOP examination. Instead, as a result of the NASD's interpretation, the January 1992 Rule Change has the unintended effect of requiring all Clearing Members to be NASD members. As clarified, OCC's competency requirement is satisfied if the Clearing Member is associated with a person who has passed the FINOP examination, as originally contemplated by the proposed rule change.

The Commission believes that this proposal is consistent with the provisions of section 17A(b)(3)(F) of the Act because it enables OCC to determine that its members have the competency needed to facilitate the prompt and accurate settlement of securities transactions.

### III. Conclusion

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the Act, and in particular with section 17A of the Act, and with the rules and regulations thereunder.

It is therefore ordered, Pursuant to section 19(b)(2) of the Act,<sup>10</sup> that the proposed rule change (File No. SR-OCC-92-35) 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. 93-6713 Filed 3-23-93; 8:45 am]  
BILLING CODE 8010-01-M

## SMALL BUSINESS ADMINISTRATION

### National Small Business Development Center Advisory Board; Public Meeting; Notice of Cancellation of Meeting

The National Small Business Development Center Advisory Board, public meeting scheduled for 9 a.m. on Monday, March 22, through noon Tuesday, March 23, 1993, at the Small Business Administration (SBA), 409 3d St., SW., Washington, DC, has been cancelled.

For further information, write or call Judith Dunn, SBA, 5th Flr., 409 3d Street, SW., Washington, DC 20416, telephone 202/205-7301.

Dated: March 19, 1993.

Dorothy A. Overall,  
Acting Assistant Administrator, Office of Advisory Councils.

[FR Doc. 93-6738 Filed 3-23-93; 8:45 am]  
BILLING CODE 8025-01-M

## DEPARTMENT OF STATE

[Public Notice 1779]

### Study Group 4 of the U.S. Organization for the International Radio Consultative Committee (CCIR); Notice of Meeting

The Department of State announces that Study Group 4 of the U.S. Organization for the International Radio Consultative Committee (CCIR) will hold an open meeting on April 14, 1993, at the Communications Satellite Corporation, 950 L'Enfant Plaza, SW., Washington, DC, from 9:30 a.m. to 12:30 p.m. in the 8th Floor Conference Room.

Study Group 4 deals with matters relating to the fixed satellite service. The purpose of the meeting is to (1) deal with administrative matters, (2) review the activities of the Working Parties and Task Groups, (3) identify and discuss priority issues such as (a) coexistence of networks in geostationary and non-geostationary orbits, and (b) the sharing aspect of inclined-orbit satellite operation in networks having geostationary-orbit assignments, and finally (4) discussion of issues related to the November Radiocommunication Assembly and World Radiocommunication Conference.

<sup>4</sup> Securities Exchange Act Release No. 31592 (December 11, 1992), 57 FR 60262.

<sup>5</sup> Under Schedule C, Part II, Section (2)(b) of NASD's By-laws, every NASD member must designate a FINOP to perform certain financial reporting functions. All persons designated as a FINOP must take a qualification examination administered by the NASD.

<sup>6</sup> Securities Exchange Act Release No. 30169 (January 8, 1992), 57 FR 1776.

<sup>7</sup> 15 U.S.C. 78q-1(b)(3) (A) and (F).

<sup>8</sup> Securities Exchange Act Release No. 30169 (January 8, 1992), 57 FR 1776.

<sup>9</sup> Securities Exchange Act Release No. 29162 (May 3, 1991), 56 FR 22031.

<sup>10</sup> 15 U.S.C. 78s(b)(2).

Members of the general public may attend the meeting and join in the discussions subject to instructions of the Chairman. Requests for further information should be directed to Mr. Hans Weiss, Communications Satellite Corporation, 22300 Comsat Drive, Clarksburg, MD 20871, phone (301) 428-4777 or to Mr. Robert Huang, Communications Satellite Corporation, 950 L'Enfant Plaza, SW., Washington, DC, phone (202) 863-6790.

Dated: March 10, 1993.

Warren G. Richards,

Chairman, U.S. CCIR National Committee.

[FR Doc. 93-6630 Filed 3-23-93; 8:45 am]

BILLING CODE 4710-45-M

## DEPARTMENT OF TRANSPORTATION

### Coast Guard

[CGD8-93-02]

#### Lower Mississippi River Waterway Safety Advisory Committee; Solicitation for Membership

AGENCY: Coast Guard, DOT.

ACTION: Notice.

**SUMMARY:** The U.S. Coast Guard is seeking applications for appointment to membership on the Lower Mississippi River Waterway Safety Advisory Committee. Present appointments will expire October 1, 1993.

**DATES:** Requests for applications should be received no later than March 31, 1993. Completed applications should be returned no later than April 30, 1993.

**ADDRESSES:** Persons interested in applying should write to Commander, Eighth Coast Guard District (oan), Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396.

**FOR FURTHER INFORMATION CONTACT:** Mr. Monty Ledet, USCG, Recording Secretary, Lower Mississippi River Waterway Safety Advisory Committee, c/o Commander Eighth Coast Guard (oan), room 1209, Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, telephone number (504) 589-4686.

**SUPPLEMENTARY INFORMATION:** The Committee shall consist of twenty-four members, who have particular expertise, knowledge, and experience regarding the transportation, equipment, and techniques that are used to ship cargo and to navigate vessels in the waters of the Lower Mississippi River:

(1) Five members representing River Port Authorities between Baton Rouge, Louisiana, and the head of passes of the Lower Mississippi River, of which one

member shall be from the Port of St. Bernard and one member from the Port of Plaquemines.

(2) Two members representing vessel owners or ship owners domiciled in the State of Louisiana.

(3) Two members representing organizations which operate harbor tugs or barge fleets in the geographical area covered by the Committee.

(4) Two members representing companies which transport cargo or passengers on the navigable waterways in the geographical area covered by the Committee.

(5) Three members representing State Commissioned Pilot organizations, with one member each representing the New Orleans/Baton Rouge Steamship Pilots Association, the Crescent River Port Pilots Association, and the Associated Branch Pilots Association.

(6) Two at-large members who utilize water transportation facilities located in the geographical area covered by the Committee.

(7) Three members representing consumers, shippers, or importers/exporters that utilize vessels which utilize the navigable waterways covered by the Committee.

(8) Two members representing those licensed merchant mariners, other than pilots, who perform shipboard duties on those vessels which utilize navigable waterways covered by the Committee.

(9) One member representing an organization that serves in a consulting or advisory capacity to the maritime industry.

(10) One member representing an environmental organization.

(11) One member representing the general public.

To achieve the balance of membership required by the Federal Advisory Committee Act, the Coast Guard is especially interested in receiving applications from minorities and women.

The purpose of the committee is to provide local expertise on such matters as communications, surveillance, traffic control, anchorages, aids to navigation, and other related topics dealing with navigation safety in the Lower Mississippi River area as required by the Coast Guard. The committee normally meets four times a year. Members serve voluntarily, without compensation from the Federal Government for salary, travel, or per diem. Term of membership will not exceed the expiration of the charter, October 1, 1995.

Dated: March 17, 1993.

T.D. Fisher,

Captain, U.S. Coast Guard, Acting Commander, 8th Coast Guard District.

[FR Doc. 93-6708 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

[CGD8-93-06]

#### Houston/Galveston Navigation Safety Advisory Committee; Offshore Waterway Management Subcommittee Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. app. II) notice is hereby given of a meeting of the Offshore Waterway Management Subcommittee of the Houston/Galveston Navigation Safety Advisory Committee. The meeting will be held on Thursday, April 29, 1993, at the Houston Yacht Club, 3620 Miramar, Shoreacres, Texas. The meeting is scheduled to begin at 9 a.m. and end at 10:30 a.m. The agenda for the meeting consists of the following items:

1. Call to Order.
2. Discussion of previous recommendations made by the full Advisory Committee and the Offshore Waterway Management Subcommittee.
3. Presentation of any additional new items for consideration by the Subcommittee.
4. Adjournment.

The meeting is open to the public. Members of the public may present written or oral statements at the meeting.

Additional information may be obtained from Mr. M.M. Ledet, USCG, Recording Secretary, Houston/Galveston Navigation Safety Advisory Committee, c/o Commander, Eighth Coast Guard District (oan), room 1209, Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, telephone number (504) 589-4686.

Dated: March 10, 1993.

T.D. Fisher,

Captain, U.S. Coast Guard, Acting Commander, 8th Coast Guard District.

[FR Doc. 93-6710 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

[CGD8-93-05]

#### Houston/Galveston Navigation Safety Advisory Committee; Inshore Waterway Management Subcommittee Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. app. II) notice is hereby given of a meeting of the Inshore

Waterway Management Subcommittee of the Houston/Galveston Navigation Safety Advisory Committee. The meeting will be held on Thursday, April 29, 1993, at the Houston Yacht Club, 3620 Miramar, Shoreacres, Texas. The meeting is scheduled to begin at 10:30 a.m. and end at 12 noon. The agenda for the meeting consists of the following items:

1. Call to Order.
2. Discussion of previous recommendations made by the full Advisory Committee and the Inshore Waterway Management Subcommittee.
3. Presentation of any additional new items for consideration of the Subcommittee.
4. Adjournment.

The meeting is open to the public. Members of the public may present written or oral statements at the meeting.

Additional information may be obtained from Mr. M. M. Ledet, USCG, Recording Secretary, Houston/Galveston Navigation Safety Advisory Committee, c/o Commander, Eighth Coast Guard District (oan), room 1209, Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, telephone number (504) 589-4686.

Dated: March 10, 1993.

T.D. Fisher,

*Captain, U.S. Coast Guard, Acting Commander, 8th Coast Guard District.*

[FR Doc. 93-6709 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

[CGD8-93-07]

**Houston/Galveston Navigation Safety Advisory Committee; Meeting**

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. app. II) notice is hereby given of the thirtieth meeting of the Houston/Galveston Navigation Safety Advisory Committee. The meeting will be held on Thursday, May 20, 1993, in the conference room of the Houston Pilots Office, 8150 South Loop East, Houston, Texas. The meeting is scheduled to begin at approximately 9 a.m. and end at approximately 1 p.m. The agenda for the meeting consists of the following items:

1. Call to Order.
2. Presentation of the minutes of the Inshore and Offshore Waterways Subcommittees and discussion of recommendations.
3. Discussion of previous recommendations made by the Committee.
4. Presentation of any additional new items for consideration of the Committee.

**5. Adjournment.**

The purpose of this Advisory Committee is to provide recommendations and guidance to the Commander, Eighth Coast Guard District on navigation safety matters affecting the Houston/Galveston area.

The meeting is open to the public. Members of the public may present written or oral statements at the meeting.

Additional information may be obtained from Mr. M.M. Ledet, USCG, Recording Secretary, Houston/Galveston Navigation Safety Advisory Committee, c/o Commander, Eighth Coast Guard District (oan), room 1209, Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, telephone number (504) 589-4686.

Dated: March 10, 1993.

T.D. Fisher,

*Captain, U.S. Coast Guard, Acting Commander, 8th Coast Guard District.*

[FR Doc. 93-6711 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

[CGD8-93-04]

**Lower Mississippi River Waterway Safety Advisory Committee; Meeting**

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. app. II) notice is hereby given of a meeting of the Lower Mississippi River Waterway Safety Advisory Committee. The meeting will be held on Tuesday, April 20, 1993, in the 29th floor Boardroom of the World Trade Center, 2 Canal Street, New Orleans, Louisiana at 9 a.m. The agenda for the meeting consists of the following items:

1. Call to order.
2. Minutes of the October 20, 1992 meeting.
3. Old Business.
4. New Business.
5. Report from the VTS Subcommittee.
6. Adjournment.

The purpose of this Advisory Committee is to provide recommendations and guidance to the Commander, Eighth Coast Guard District on navigation safety matters affecting this waterway.

All meetings are open to the public. Members of the public may present written or oral statements at the meetings.

Additional information may be obtained from Mr. M.M. Ledet, USCG, Recording Secretary, Lower Mississippi River Waterway Safety Advisory Committee, c/o Commander, Eighth Coast Guard District (oan), room 1209,

Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, telephone number (504) 589-4686.

Dated: March 10, 1993.

T.D. Fisher,

*Captain, U.S. Coast Guard, Acting Commander, 8th Coast Guard District.*

[FR Doc. 93-6707 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M

[CGD 92-018]

**National Offshore Safety Advisory Committee; Meeting**

AGENCY: Coast Guard, DOT.

ACTION: Notice of meeting.

**SUMMARY:** A meeting of the National Offshore Safety Advisory Committee (NOSAC) will be held on Friday, April 23, 1993, in room 2415, at U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC. The meeting is scheduled to run from 8:30 a.m. to 12 noon. Attendance is open to the public. The agenda will include discussion on the following topics:

- (a) Revisions to OCS Regulations (33 CFR subchapter N).
- (b) Clean Air Act Amendments.
- (c) Periodic Verification of Lightship.
- (d) Task on Additional Guidelines for Towing Jackup Rigs.
- (e) International Safety Management Code (ISM).

Attendance at the meeting is open to the public. With advance notice, and at the discretion of the Chairman, members of the public may present oral statements at the meeting. Persons wishing to present oral statements should notify the NOSAC Executive Director no later than the day before the meeting. Written statements or materials may be submitted for presentation to the Committee at any time; however, to ensure distribution to each Committee member, 20 copies of the written materials should be submitted to the Executive Director no later than April 9, 1993.

**FOR FURTHER INFORMATION CONTACT:** Commander Michael Ashdown, Executive Director, National Offshore Safety Advisory Committee (NOSAC), room 1405, U.S. Coast Guard Headquarters, 2100 Second Street, SW., Washington, DC 20593-0001, (202) 267-2307.

Dated: March 16, 1993.

Joseph J. Angelo,

*Acting Deputy Chief, Office of Marine Safety, Security and Environmental Protection.*

[FR Doc. 93-6705 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-14-M



**National Highway Traffic Safety Administration**

[Docket No. 92-20; Notice 2]

**Petition for Approval of Alternate Odometer Disclosure Requirements**

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), DOT.  
**ACTION:** Notice of final denial.

**SUMMARY:** The National Highway Traffic Safety Administration (NHTSA) denies the petition submitted by the State of Oregon for approval of alternate odometer disclosure requirements. The comments received in response to the agency's notice of preliminary denial do not provide sufficient justification for NHTSA to grant the petition. Consequently, Oregon must continue to conform its procedures to the odometer disclosure requirements of 49 CFR part 580.

**FOR FURTHER INFORMATION CONTACT:** John Donaldson, Office of the Chief Counsel, room 5219, NHTSA, 400 Seventh Street, SW., Washington, DC 20590, (202) 366-1834.

**SUPPLEMENTARY INFORMATION:****Background**

The Truth in Mileage Act of 1986 (Pub. L. 99-579), 15 U.S.C. 1981 *et seq.*, (TIMA) requires each person transferring ownership of a motor vehicle to disclose the vehicle's mileage on the title. The law permits the administrative approval by NHTSA of alternate methods of odometer disclosure, provided those methods are consistent with the purposes of the Act. NHTSA's implementing regulations (49 CFR part 580) set forth the procedures that must be followed to comply with odometer disclosure requirements and to seek approval of alternate disclosure requirements. Pursuant to § 580.11 of those regulations, Oregon submitted a petition for approval of alternate disclosure requirements.

**Basis for the Petition**

Oregon seeks to allow a titled motor vehicle owner to use a separate disclosure/reassignment document for the odometer disclosure statement in order to accommodate the interests of security holders. According to Oregon, a security interest in a vehicle is perfected in the State when the title is submitted to the Motor Vehicles Division (MVD), and perfection must occur within the ten-day period allowed by Federal bankruptcy law in order to ensure that security interests are properly protected. Oregon maintains that it is not always possible to obtain the odometer

disclosure on the title within the ten-day period and that Oregon law does not allow a title certificate to be returned to the submitter, once received by the MVD, when the transfer involves the holder of a security interest.

Accordingly, Oregon requests that buyers and sellers be permitted to use a separate secure odometer disclosure/reassignment form when the MVD has possession of the title certificate. The title certificate would be retained in division headquarters until receipt of the completed secure odometer disclosure/reassignment form. Upon receipt, the form would be processed with the title certificate and become part of the title history of the vehicle.

**Notice of Preliminary Determination**

On December 22, 1992, NHTSA published a notice in the *Federal Register* (57 FR 60834) preliminarily denying Oregon's petition. NHTSA determined that Oregon had provided insufficient justification for deviating from Congress' intent that odometer disclosures be made on the titles to vehicles and that separate disclosures be used as little as possible. NHTSA noted that Oregon had provided no reason why the required disclosure could not be made on the title, and concluded that the proposed approach would reward buyers and sellers for negligence—the seller for failing to make the disclosure and the buyer for accepting a title without the disclosure. NHTSA further noted that the seller's signature block on the title is normally used for both odometer disclosure and transfer of ownership. Consequently, a seller seeking to effect transfer by signing the title but not completing the odometer disclosure would be essentially signing a false odometer disclosure statement.

NHTSA also expressed concern about the integrity of the proposed system. NHTSA reasoned that a buyer who was unable to obtain a properly completed title from the seller at the time of transfer would be no more successful after the transfer, when the seller no longer had a stake in the transaction. NHTSA further reasoned that a system which did not discourage sellers from failing to provide the proper written mileage disclosure undermined Congressional intent that buyers receive written accurate mileage information useful in making purchasing decisions. Such a system could, moreover, allow a seller who had verbally misrepresented the mileage of a vehicle to avoid making any written statements on the title or even on the proposed post-transaction assignment form.

**Comments**

In response to the notice preliminarily denying Oregon's petition, NHTSA received comments from the following organizations: The Oregon Auto Dealers Association (OADA); the Oregon Independent Auto Dealers Association (OIADA); the Oregon Bankers Association (OBA); the Oregon Department of Transportation, Motor Vehicles Division (ODOT); the Oregon Credit Union League & Affiliates (OCUL); the California Business, Transportation and Housing Agency, Department of Motor Vehicles (CDMV); the Missouri Department of Revenue, Division of Motor Vehicle and Drivers Licensing (MDR); and the Wisconsin Department of Transportation (WDOT).

Various commenters recounted the process by which a security interest in a motor vehicle is perfected in Oregon. OADA explained that, in order to protect against fraudulent alterations, the MVD is prohibited by statute from returning an incomplete title. OBA and ODOT argued that, due to the ten-day time constraint, it is critical to the interest of the lender that titles be submitted in certain instances without completed odometer statements. OCUL echoed that concern, stating that incomplete titles are submitted in order to expedite the process. CDMV explained that the ten-day period begins when the contract of sale is signed or the buyer takes possession of the vehicle, not when the title is endorsed. OIADA expressed concern about the potential risk to a dealer's security interest if an odometer disclosure statement could not be obtained on the title in a timely manner. None of these commenters adequately explained why a seller is unable to complete the odometer disclosure statement on the title before conveying it or how completing that portion of the title along with other applicable portions would delay the process.

In support of Oregon's petition, some commenters stressed that titles often are not present when a vehicle is sold, that buyers and sellers may be in different locations, or that buyers sometimes travel great distances to purchase motor vehicles. OADA believes it would be unreasonable to require parties to again travel great distances in order to secure the benefits of a purchased vehicle when the required odometer information can be obtained by mail. However, the comments do not explain why the seller, in executing the transfer of ownership on the title document, is unable to complete the required odometer disclosure statement at the same time. Issues of distance or exact

location of the title are not responsive to this fundamental question. Two commenters appear to agree with this point. MDR concurs that allowing the use of a separate secure odometer disclosure/reassignment form simply because the seller fails to make the required disclosure is inappropriate. To do so, according to MDR, would be condoning the transfer of an "open" title, and would introduce the opportunity for fraud. CDMV acknowledges that both the transferor and the transferee have access to the title prior to its receipt by the MVD, and asks why the transferor is unable to make the proper disclosure or, indeed, why the lienholder does not demand that it be made. However, CDMV supports Oregon's petition for a secure disclosure document because "both the title and the vehicle have been seen by the transferee."

We note that NHTSA's regulation provides for the use of a secure power of attorney in cases where the title is held by a lienholder. Congress has expressly provided for such a procedure. In the other instances described by the commenters, requiring the odometer disclosure statement to appear on the title does not impose an undue burden. OADA's comment that the information can be obtained by mail, CDMV's comment that the title (without the odometer disclosure information) has been seen by the transferee, and similar comments that the process would not be compromised because the odometer readings would eventually appear on the title misconceive Congress' fundamental intent under the TIMA. The odometer disclosure statement and certification are intended to aid purchasers of motor vehicles in their purchasing decisions and protect them from fraudulent misrepresentations. In order to properly accomplish these objectives, the information must be available at the time a transfer agreement is consummated, not sometime thereafter.

Several commenters argued that Oregon's proposed alternate procedure would apply only in limited circumstances. There is no indication from the petition that the procedure would, in fact, apply infrequently or that it would necessarily be limited to transactions involving security interests. Rather, the procedure would seem to apply on any occasion when the MVD receives a title without a completed odometer disclosure statement. In effect, the seller (by failing to complete the statement), and not the MVD, would control the frequency with which the proposed alternate procedure would be invoked. Such a course of events is

squarely inconsistent with Congressional intent, and would render the TIMA essentially meaningless.

ODOT and OBA argued that denial of the petition might have an adverse impact on the financing industry, and prevent persons from obtaining financing for motor vehicles. They also claimed that consumers would be harmed if Oregon was required to withhold authority to operate motor vehicles because the title was temporarily unavailable for completing the odometer disclosure statement. NHTSA does not believe that financing institutions are likely to discontinue offering financing under the existing procedures. It is more likely that, in the exercise of prudent business judgment, financing is and will continue to be made conditional on the timely submission of a properly completed title that includes an odometer disclosure statement. Moreover, as previously discussed, we believe that the seller has access to the title and is able to complete the odometer disclosure statement without hardship or inconvenience. Consequently, we conclude that the existing procedures protect, rather than harm, the interests of consumers.

Various other arguments were advanced in support of the petition. ODOT argued that, given the realities of vehicle purchases and sales, one Federal law should not hamper the operation of another. NHTSA assumes that the Federal laws to which ODOT is referring are the TIMA and Federal Bankruptcy law. In our view, neither of these Federal laws hampers the operation of the other. Rather, the problem lies in the failure of the seller, without apparent reason, to complete the odometer disclosure statement on the title. To the extent that this problem requires attention in Oregon, NHTSA agrees with the solution proposed by MDR that Oregon law be amended to allow the return of incomplete titles after perfecting the security interest. The MVD could retain a copy of the title for comparison to the eventually returned original, thereby ensuring against fraudulent alterations.

WDOT strongly objected to returning title documents, once submitted, arguing that this would create a potential conflict with Wisconsin registration laws, and perhaps result in a loss of revenue to the State if the applicant failed to resubmit an application. WDOT's comment appears to be general in nature, and does not specifically address the situation involving a security interest perfected through the titling process. Under the TIMA, a State may not accept a

conforming title that does not contain the required odometer disclosure statement unless one of several narrow exceptions applies. Presumably, States would choose to return non-compliant documents to the submitter, along with an appropriate explanation. Moreover, NHTSA does not believe that the potential for lost revenue is a realistic concern, as it would pose a problem only if vehicle owners routinely chose to operate vehicles in violation of State titling or registration laws.

In response to concerns advanced by NHTSA in the preliminary determination, ODOT argued that it is the inconsistencies among states in dealing with odometer disclosure statements on titles, rather than its proposed alternate procedure, that threaten the integrity of the odometer disclosure requirements. The TIMA and implementing regulations, with limited exceptions, require a seller to complete an odometer disclosure statement on a conforming title incident to the transfer of a motor vehicle. This requirement is specific and unambiguous, and NHTSA believes that its proper implementation promotes uniformity among the States rather than inconsistency. It is the failure to follow the odometer disclosure requirements that results in inconsistencies which threaten the integrity of the system.

#### Final Determination

None of the commenters has provided specific information as to why the seller is unable to complete the odometer disclosure statement on the title in the course of the transfer. Though not articulated, it appears that the situation is one in which the seller simply forgets or chooses not to complete the odometer statement. Such a situation provides inadequate justification to support the proposed alternate procedure, in light of Congress' intent that buyers receive a statement of mileage directly on the title. Accordingly, NHTSA reaffirms its preliminary determination and denies Oregon's petition for approval of alternate odometer disclosure requirements.

Issued on: March 18, 1993.

John Womack,  
Acting Chief Counsel.

[FR Doc. 93-6661 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-60-M

**Research and Special Programs Administration**

[Notice No. 93-8]

**Safety Advisory; High Pressure Composite Hoop Wrapped Cylinders (4500 PSIG Marked Service Pressure; DOT-E 7235)**

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Safety advisory notice.

**SUMMARY:** This is to notify persons using cylinders authorized under DOT-E 7235 and not fitted with neckrings that serious personal injury, death, or property damage could result from rupture of these cylinders. Persons finding cylinders marked "DOT-E 7235 4500", without the required neckrings, are requested to take the precautionary measures outlined in this notice.

**FOR FURTHER INFORMATION CONTACT:** Charles H. Hochman, telephone (202) 366-4545, Office of Hazardous Materials Technology, Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590-0001. Office hours are: 8:30 a.m. to 5 p.m., Monday through Friday.

**SUPPLEMENTARY INFORMATION:** RSPA has been notified of the rupture of a cylinder authorized under DOT-E 7235 on March 13, 1993. The cylinder, with a marked service pressure of 4500 psig, ruptured while it was being charged, resulting in the death of a firefighter. While the cause of the cylinder rupture has not been determined, it appears that this cylinder was not fitted with a steel neckring as required by DOT-E 7235.

RSPA alerted users of cylinders authorized under DOT-E 7235, in a Federal Register notice published on August 15, 1985 (50 FR 32944) that RSPA had "amended DOT-E 7235 to require that any cylinder manufactured under exemption DOT-E 7235, which is not equipped with a neckring be removed from service, prior to October 1, 1985." This restriction was based on a series of hydro-pneumatic burst tests performed by the cylinder manufacturer. Those tests showed that all test cylinders with neckrings failed by leakage only, while a considerable number of test cylinders without neckrings failed by rupturing.

Users of DOT-E 7235 cylinders again are reminded that serious personal injury, death, or property damage could result from the rupture of a cylinder without a neckring. Accordingly, all persons owning, using, or having access to DOT-E 7235 4500 psig cylinders should examine those cylinders

immediately to ensure that the cylinders are fitted with the required neckring. Persons finding cylinders without the required neckring should immediately take the following precautions.

1. If a cylinder has been filled, its entire contents should be vented in order to relieve internal pressure.
2. The vented cylinders should be segregated from all other cylinders by being placed in a secured area and marked conspicuously with a tag bearing the notation "Do Not Use" or similar warning.
3. Under no circumstances should any of the cylinders in question be sold or otherwise transferred, filled, refilled or used for any purpose.

Once the above procedures have been taken, persons finding cylinders without neckrings should contact the company, or distributor from whom they were purchased, for their disposition.

Issued in Washington, DC, on March 19, 1993.

**Alan I. Roberts,**

Associate Administrator for Hazardous Materials Safety.

[FR Doc. 93-6720 Filed 3-23-93; 8:45 am]

BILLING CODE 4910-60-M

**DEPARTMENT OF THE TREASURY****Public Information Collection Requirements Submitted to OMB for Review**

March 18, 1993.

The Department of Treasury has made revisions and resubmitted 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 3171 Treasury Annex, 1500 Pennsylvania Avenue, NW., Washington, DC 20220.

**Internal Revenue Service**

OMB Number: 1545-0181

Form Number: IRS Form 4768

Type of Review: Resubmission

Title: Application for Extension of Time

To File A Return and/or Pay U.S. Estate (and Generation-Skipping Transfer) Taxes

Description: Form 4768 is used by estates to request an extension of time to file an estate (and GST) tax return and/or to pay the estate (and GST) taxes and to explain why the

extension should be granted. IRS uses the information to decide whether the extension should be granted.

Respondents: Individuals or households, businesses or other for-profit, small businesses or organizations

Estimated Number of Respondents/Recordkeepers: 18,500

Estimated Burden Hours Per

Respondent/Recordkeeper:

Recordkeeping—13 minutes  
Learning about the law or the form—16 minutes

Preparing the form—22 minutes

Copying, assembling, and sending the form to the IRS—20 minutes

Frequency of Response: On occasion

Estimated Total Reporting/

Recordkeeping Burden: 22,015 hours

OMB Number: 1545-1038

Form Number: IRS Form 8703

Type of Review: Resubmission

Title: Rental Residential Project Annual Certification by an Operator

Description: Operators of qualified residential projects will use this form to certify annually that their project meet the requirements of IRC section 142(d). Operators are required to file this certification under section 142(d)(7).

Respondents: Businesses or other for-profit

Estimated Number of Respondents/Recordkeepers: 6,000

Estimated Burden Hours Per

Respondent/Recordkeeper:

Recordkeeping—3 hours, 50 minutes  
Learning about the law or the form—35 minutes

Preparing and sending the form to the IRS—41 minutes

Frequency of Response: Annually

Estimated Total Reporting/

Recordkeeping Burden: 30,660 hours

Clearance Officer: Garrick Shear (202)

535-4297, Internal Revenue Service, room 5571, 1111 Constitution Avenue, NW., Washington, DC 20224.

OMB Reviewer: Milo Sunderhauf (202)

395-6880, Office of Management and Budget, room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland,

Departmental Reports Management Officer.

[FR Doc. 93-6735 Filed 3-23-93; 8:45 am]

BILLING CODE 4830-01-M

**Public Information Collection Requirements Submitted to OMB for Review**

March 18, 1993.

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 3171 Treasury Annex, 1500 Pennsylvania Avenue, NW., Washington, DC 20220.

#### Internal Revenue Service

OMB Number: 1545-1189

Form Number: IRS Form 8819

Type of Review: Extension

Title: Dollar Election Under Section 985

Description: Form 8819 is filed by U.S. and foreign businesses to elect the U.S. dollar as their functional currency or as the functional currency of their controlled entities. The IRS uses Form 8819 to determine if the election is properly made.

Respondents: Businesses or other for-profit

Estimated Number of Respondents/

Recordkeepers: 1,500

Estimated Burden Hours Per

Respondent/Recordkeeper:

Recordkeeping—2 hours, 52 minutes  
Learning about the law or the form—  
24 minutes

Preparing and sending the form to the  
IRS—28 minutes

Frequency of Response: On occasion  
Estimated Total Reporting/

Recordkeeping Burden: 5,595 hours

Clearance Officer: Garrick Shear (202) 622-3869, Internal Revenue Service, room 5571, 1111 Constitution Avenue, NW., Washington, DC 20224.  
OMB Reviewer: Milo Sunderhauf (202) 395-6880, Office of Management and Budget, room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland,

Departmental Reports Management Officer.

[FR Doc. 93-6736 Filed 3-23-93; 8:45 am]

BILLING CODE 4830-01-M

#### Customs Service

[T.D. 93-19]

#### Rescission of Trade Name: "Modular Computer Systems, Inc."

AGENCY: U.S. Customs Service, Department of the Treasury.

ACTION: Rescission of trade name "Modular Computer Systems, Inc."

SUMMARY: On November 27, 1992, a notice of recordation for the trade name

"Modular Computer Systems, Inc." was published in the *Federal Register* (57 FR 56402). The notice advised that the trade name was used by Modular Computer Systems, Inc., a/k/a Modcomp, in connection with computers, computer peripherals, computer programs and computer systems, all manufactured in the United States.

Following the publication of the notice of recordation, Customs was made aware that a prior recordation, effective December 18, 1991, had been made with the Customs Service for the trademark "Modular Computer Systems, Inc." (U.S. Trademark Registration No. 1,648,688).

The Customs Regulations at 19 CFR 133.11 provide that "[w]ords and designs used as trademarks, whether or not registered in the U.S. Patent and Trademark Office shall not be accepted for recordation as a trade name." Inasmuch as the trade name "Modular Computer Systems, Inc." is used (and registered) as a trademark, the recordation of "Modular Computer Systems, Inc." as a trade name was in error. Customs therefore rescinds the recordation of "Modular Computer Systems, Inc." as a trade name. The recordation of the trademark "Modular Computer Systems, Inc.", TMK 91-00664, remains in effect.

EFFECTIVE DATE: March 23, 1993.

FOR FURTHER INFORMATION CONTACT: Karl Wm. Means, Intellectual Property Rights Branch, 1301 Constitution Avenue, NW., Franklin Court, Washington, DC 20229, (202) 482-6960.

Dated: March 18, 1993.

John F. Atwood,

Chief, Intellectual Property Rights Branch.

[FR Doc. 93-6649 Filed 3-23-93; 8:45 am]

BILLING CODE 4820-02-M

[T.D. 93-20]

#### Recordation of Trade Name: "Wemco, Inc."

AGENCY: U.S. Customs Service, Department of the Treasury.

SUMMARY: On Friday, November 27, 1992, a notice of application for the recordation under section 42 of the Act of July 5, 1946, as amended (15 U.S.C. 1124), of the trade name "Wemco, Inc.," was published in the *Federal Register* (57 FR 56402). The notice advised that before final action was taken on the application, consideration would be given to any relevant data, views, or arguments submitted in writing by any person in opposition to the recordation and received no later than January 26,

1993. No responses were received in opposition to the notice.

Accordingly, as provided in § 133.14, Customs Regulations (19 CFR 133.14) the name "Wemco Inc.," is recorded as the trade name used by Wemco Inc., a corporation organized under the laws of the State of Louisiana, located at 966 South White Street, New Orleans, Louisiana 70125.

The trade name is used in connection with mens and boys neckties, ready ties, bow ties, ties and handkerchief sets and formal wear.

EFFECTIVE DATE: March 24, 1993.

FOR FURTHER INFORMATION CONTACT: Delois P. Cooper, Intellectual Property Rights Branch, 1301 Constitution Avenue NW., Washington, DC 20229 (Franklin Court) (202-482-6960).

Dated: March 18, 1993.

John F. Atwood,

Chief, Intellectual Property Rights Branch.

[FR Doc. 93-6648 Filed 3-23-93; 8:45 am]

BILLING CODE 4820-02-M

#### Fiscal Service

[Dept. Circ. 570, 1992—Rev., Supp. No. 15]

#### Surety Companies Acceptable on Federal Bonds; Termination of Authority: Covenant Mutual Insurance Company

Notice is hereby given that the Certificate of Authority issued by the Treasury to Covenant Mutual Insurance Company, of Hartford, CT, under the United States Code, title 31, Sections 9304-9308, to qualify as an acceptable surety on Federal bonds is terminated effective March 3, 1993.

The Company was last listed as an acceptable surety on Federal bonds at 57 FR 29368, July 1, 1992.

With respect to any bonds currently in force with Covenant Mutual Insurance Company, bond-approving officers should secure new bonds with acceptable sureties in those instances where a significant amount of liability remains outstanding. In addition, bonds that are continuous in nature should not be renewed.

Questions concerning this notice may be directed to the Department of the Treasury, Financial Management Service, Funds Management Division, Surety Bond Branch, Washington, D.C. 20227, telephone (202/FTS) 874-6507.

Dated: March 3, 1993.

Diane E. Clark,

Assistant Commissioner, Financial Information, Financial Management Service.

[FR Doc. 93-6639 Filed 3-23-93; 8:45 am]

BILLING CODE 4810-35-M

[Dept. Circ. 570, 1992 Rev., Supp. No. 16]

**Surety Companies Acceptable on Federal Bonds; Navigators Insurance Co.**

A Certificate of Authority as an acceptable surety on Federal Bonds is hereby issued to the following company under sections 9304 to 9308, title 31, of the United States Code. Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570, 1992 Revision, on page 29383 to reflect this addition:

*Navigators Insurance Company.*  
Business Address: 123 William St., New York, NY, 10038. Underwriting Limitation<sup>b</sup>: 7,004,000. Surety Licenses<sup>c</sup>: AK, AZ, DE, DC, GA, IN, IL, IA, KS, KY, MD, MA, MI, MS, MO, NE, NJ, ND, OH, OK, OR, PA, RI, SD, TN, TX, VA, WA, WI. Incorporated in: New York.

Certificates of Authority expire on June 30 each year, unless revoked prior to that date. The Certificates are subject to subsequent annual renewal as long as the companies remain qualified (31 CFR part 223). A list of qualified companies is published annually as of July 1 in Treasury Department Circular 570, with details as to underwriting limitations, areas in which licensed to transact surety business and other information.

Copies of the Circular may be obtained from the Surety Bond Branch, Financial Management Service, Department of the Treasury, Washington, DC 20227, telephone (202) 874-6507.

Dated: March 16, 1993.

**Charles F. Schwan III,**  
*Director, Funds Management Division.*  
[FR Doc. 93-6640 Filed 3-23-93; 8:45 am]  
BILLING CODE 4810-35-M

[Dept. Circ. 570, 1992 Rev., Supp. No. 17]

**Surety Companies Acceptable on Federal Bonds; Underwriters Reinsurance Co.**

A Certificate of Authority as an acceptable surety on Federal Bonds is hereby issued to the following company under sections 9304 to 9308, title 31, of the United States Code. Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570, 1992 Revision on page 29396 to reflect this addition:

*Underwriters Reinsurance Company.*  
Business Address: P.O. Box 4030, Woodland Hills, CA 91365.

Underwriting Limitation<sup>b</sup>: \$17,140,000. Surety Licenses<sup>c</sup>: AZ, CA, DC, FL, GA, ID, IL, IN, IA, KS, KY, LA,

MI, MS, MT, NE, NV, NJ, NM, NY, OH, PA, TX, UT. Incorporated: New Hampshire.

Certificates of Authority expire on June 30 each year, unless revoked prior to that date. The Certificates are subject to subsequent annual renewal as long as the companies remain qualified (31 CFR part 223). A list of qualified companies is published annually as of July 1 in Treasury Department Circular 570, with details as to underwriting limitations, areas in which licensed to transact surety business and other information.

Copies of the Circular may be obtained from the Department of the Treasury, Financial Management Service, Funds Management Division, Surety Bond Branch, Washington, DC 20227, telephone (202) 874-6765.

Dated: March 16, 1993.

**Charles F. Schwan III,**  
*Director, Funds Management Division,*  
*Financial Management Service.*  
[FR Doc. 93-6638 Filed 3-23-93; 8:45 am]  
BILLING CODE 4810-35-M

# Sunshine Act Meetings

Federal Register

Vol. 58, No. 55

Wednesday, March 24, 1993

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).

## FEDERAL ENERGY REGULATORY COMMISSION

The following notice of meeting is published pursuant to Section 3(a) of the Government in the Sunshine Act (Pub. L. No. 94-409), U.S.C. 552b:

**DATE AND TIME:** March 26, 1993, 10 a.m.

**PLACE:** 825 North Capitol Street, NE, Room 9306, Washington, DC 20426.

**STATUS:** Open.

**MATTERS TO BE CONSIDERED:** Agenda.

**Note**—Items listed on the agenda may be deleted without further notice.

**CONTACT PERSON FOR MORE INFORMATION:** Lois D. Cashell, Secretary, Telephone (202) 208-0400. For a recording listing items stricken from or added to the meeting, call (202) 208-1627.

This is a list of matters to be considered by the Commission. It does not include a listing of all papers relevant to the items on the agenda; however, all public documents may be examined in the Reference and Information Center.

**Consent Agenda—Hydro, 976th Meeting—March 26, 1993, Regular Meeting (10:00 a.m.)**

CAH-1.

Project No. 3451-024, Beaver Falls Municipal Authority

CAH-2.

Omitted

CAH-3.

Project No. 10813-002, Town of Summersville, West Virginia

CAH-4.

Project No. 10900-001, Thomas Hodgson & Sons, Inc.

CAH-5.

Project No. 10909-002, Kinderhook Hydro, Inc.

CAH-6.

Project No. 8142-022, Henwood Associates, Inc.

CAH-7.

Project No. 6287-002, Rainsong Company

CAH-8.

Project No. 2179-019, Merced Irrigation District

**Consent Agenda—Electric**

CAE-1.

Docket No. ER92-67-002, Western Massachusetts Electric Company

CAE-2.

Docket Nos. ER91-569-000, 001, 002, ER92-761-000 and ER93-250-000, Entergy Services, Inc.

CAE-3.

Docket No. EC90-10-007, Northeast Utilities Service Company  
Docket No. ER93-294-000, Northeast Utilities Service Company

CAE-4.

Docket Nos. ER93-59-001, ER93-65-001 and EL91-29-002, Southern Company Services, Inc.

CAE-5.

Docket No. PL93-2-002, Prior Notice and Filing Requirements Under Part II of the Federal Power Act

CAE-6.

Docket No. ER91-457-004, Central Maine Power Company  
Docket Nos. ER92-286-002, ER92-484-001, ER92-512-001, ER92-817-001, ER93-130-000 and 001, New England Power Company

CAE-7.

Docket No. EL92-15-002, Florida Power & Light Company

CAE-8.

Docket No. EG93-13-000, InterAmerican Energy Leasing Company

CAE-9.

Docket No. EG93-16-000, JMC Ocean State Corporation  
Docket No. EG93-17-000, TCPL Power Ltd.

CAE-10.

Docket No. EG93-18-000, LG&E Power 20 Incorporated

CAE-11.

Omitted

CAE-12.

Docket No. EG93-20-000, Southern Electric Wholesale Generators, Inc.  
Docket No. EG93-22-000, SEI Birchwood, Inc.

Docket No. EG93-23-000, Birchwood Development Corporation

Docket No. EG93-24-000, Birchwood Power Partners, L.P.

Docket No. EG93-25-000, SEI Hawaiian Cogenerators, Inc.

CAE-13.

Docket No. EG93-21-000, Vermont Yankee Nuclear Power Corporation  
Docket No. EL93-22-000, Maine Yankee Atomic Power Company

Docket Nos. ER93-85-000 and EL93-7-000, Connecticut Yankee Atomic Power Company

CAE-14.

Docket No. EL93-6-000, Municipal Resale Service Customers v. Ohio Power Company

CAE-15.

Docket No. ER92-67-003, Western Massachusetts Electric Company

CAE-16.

Docket No. ER92-516-002, Entergy Power, Inc.

CAE-17.

Docket No. ER93-251-001, Wisconsin Electric Power Company

**Consent Agenda—Oil and Gas**

CAG-1.

Docket No. RP93-87-000, Natural Gas Pipeline Company

CAG-2.

Docket Nos. RP93-90-000 and 001, CNG Transmission Corporation

CAG-3.

Docket Nos. RP93-56-000 and RP93-86-000, Transwestern Pipeline Company

CAG-4.

Docket No. TA93-1-7-000, Southern Natural Gas Company

CAG-5.

Docket No. RP93-88-000, Arkla Energy Resources

CAG-6.

Docket Nos. TA93-1-31-000 and 001, Arkla Energy Resources, a division of Arkla, Inc.

CAG-7.

Omitted

CAG-8.

Omitted

CAG-9.

Omitted

CAG-10.

Docket No. TM93-11-29-000, Transcontinental Gas Pipe Line Corporation

CAG-11.

Docket No. TM93-2-37-000, Northwest Pipeline Corporation

CAG-12.

Docket No. RP89-137-010, Northwest Pipeline Corporation

CAG-13.

Docket Nos. RP93-37-002 and TM93-2-9-001, Tennessee Gas Pipeline Company

CAG-14.

Docket Nos. RP93-41-001 and RP92-179-002, Florida Gas Transmission Company

CAG-15.

Omitted

CAG-16.

Docket No. RP92-229-000, Northwest Pipeline Corporation

CAG-17.

Docket No. RP91-54-009, Trunkline Gas Company

CAG-18.

Docket No. RP93-89-000, MIGC, Inc.

CAG-19.

Docket No. RP93-78-000, Texas Gas Transmission Corporation

CAG-20.

Docket No. RP93-4-000, Mississippi River Transmission Corporation

CAG-21.

Docket No. RP93-82-000, Northern Natural Gas Company

CAG-22.

Docket No. RP93-61-001, U-T Offshore System

CAG-23.

- Docket No. RP93-8-004, Paiute Pipeline Company  
CAG-24.  
Docket No. RP93-53-003, Carnegie Natural Gas Company  
CAG-25.  
Docket No. RP93-59-001, High Island Offshore System  
CAG-26.  
Docket No. IS92-25-002, Amoco Pipeline Company  
CAG-27.  
Docket Nos. TM92-2-21-001, RP91-41-009, 010, 014, TM92-3-21-001, TM92-11-21-001 and RP88-187-020, Columbia Gas Transmission Corporation  
CAG-28.  
Docket No. RP93-23-002, Transcontinental Gas Pipe Line Corporation  
CAG-29.  
Docket No. RP92-48-001, Viking Gas Transmission Company  
CAG-30.  
Docket Nos. RP88-259-062, RP88-262-063, 064, CP89-1227-016, CP89-1951-001, RP89-136-027 and RP90-124-012, Northern Natural Gas Company  
CAG-31.  
Docket Nos. RP89-137-008, RP89-219-006, TM90-1-37-004, RP90-50-006 and TM90-4-37-003, Northwest Pipeline Corporation  
CAG-32.  
Docket No. RP93-3-001, Arkla Energy Resources  
CAG-33.  
Docket Nos. CP89-195-014 and CP89-638-009, CNG Transmission Corporation  
CAG-34.  
Docket Nos. RP89-183-041 and TC89-8-005, Williams Natural Gas Company  
CAG-35.  
Docket Nos. RP89-183-043, TC89-8-007, RP91-43-007, TM91-3-43-007 and RP91-152-021, Williams Natural Gas Company  
CAG-36.  
Docket Nos. RP90-48-002, 003, RP88-191-019, 021, RP91-29-003, 005, 007, 009 and TA90-1-9-004, Tennessee Gas Pipeline Company  
CAG-37.  
Omitted  
CAG-38.  
Docket No. TM91-7-28-002, Panhandle Eastern Pipe Line Company  
CAG-39.  
Docket No. PR93-3-000, Montana Power Company  
CAG-40.  
Docket No. PR93-4-000, Transok, Inc.  
CAG-41.  
Docket No. PR93-5-000, Pontchartrain Natural Gas System  
CAG-42.  
Docket No. PR93-6-000, Dow Pipeline Company  
CAG-43.  
Omitted  
CAG-44.  
Docket Nos. RP91-161-011, *et al.*, RP92-3-000, *et al.*, RP90-108-016, RP91-82-008, and RS92-5-000, Columbia Gas Transmission Corporation  
Docket Nos. RP91-160-000, *et al.*, RP92-2-000, *et al.*, RP90-107-013 and RS92-6-000, Columbla Gulf Transmission Company  
CAG-45.  
Docket No. IS90-11-000, *et al.*, Amerada Hess Pipeline Corporation  
Docket No. IS90-12-000, *et al.*, ARCO Transportation Alaska, Inc.  
Docket No. IS90-13-000, *et al.*, BP Pipelines (Alaska) Inc.  
Docket No. IS90-14-000, *et al.*, Exxon Pipeline Company  
Docket No. IS90-15-000, *et al.*, Mobil Alaska Pipeline Company  
Docket No. IS90-16-000, *et al.*, Phillips Alaska Pipeline Corporation  
Docket No. IS90-17-000, *et al.*, Unocal Pipeline Company  
CAG-46.  
Docket No. IS92-39-001, IS93-21-001 and OR92-8-000, SFPP, L.P.  
CAG-47.  
Docket No. GP90-11-001, NICOR Exploration Company  
CAG-48.  
Docket Nos. RP93-80-000, RP93-81-000 and RS92-14-000, CNG Transmission Corporation  
CAG-49.  
Docket No. RS92-87-000 and 012, Transwestern Pipeline Company  
CAG-50.  
Docket Nos. RP93-6-001 and RS92-75-001, Paiute Pipeline Company  
CAG-51.  
Docket Nos. RP92-237-003, 001 and RS92-27-001, Alabama-Tennessee Natural Gas Company  
CAG-52.  
Docket Nos. RP92-226-000 and RS92-65-000, Kern River Pipeline Company  
CAG-53.  
Docket No. CP91-2704-004, Blue Lake Gas Storage Company  
CAG-54.  
Docket No. RS92-1-004, ANR Pipeline Company  
CAG-55.  
Docket No. RS92-8-001, Northern Natural Gas Company  
CAG-56.  
Docket No. CP80-34-010, Panhandle Eastern Pipe Line Company  
Docket No. CP80-35-010, Colorado Interstate Gas Company  
CAG-57.  
Docket No. CP93-75-001, Sunrise Energy Company v. Transwestern Pipeline Company  
CAG-58.  
Omitted  
CAG-59.  
Docket No. CP92-448-001, ANR Pipeline Company  
CAG-60.  
Docket Nos. CP91-595-007, TQ91-4-28-004, CP92-677-003, GT93-3-001 and CP92-576-003, Panhandle Eastern Pipe Line Company  
CAG-61.  
Docket No. CP92-190-001, Panhandle Eastern Pipe Line Company  
Docket No. CP92-203-001, KN Wattenberg Transmission Limited Liability Company  
Docket No. CP92-208-001, KN Front Range Gathering Company  
CAG-62.  
Docket No. CP92-570-000, Arkansas Western Pipeline Company  
CAG-63.  
Docket No. CP93-11-000, Michigan Gas Storage Company  
CAG-64.  
Docket No. CP93-35-000, CNG Transmission Corporation  
CAG-65.  
Docket No. CP92-502-000, Florida Gas Transmission Company  
CAG-66.  
Docket Nos. CP93-121-000, 001 and CP93-123-000, Williston Basin Interstate Pipeline Company  
Docket No. CP93-125-000, KN Energy, Inc.  
Docket No. CP93-126-000, Northern Gas Company  
Docket No. CP93-130-000, Wind River Gathering Company  
CAG-67.  
Docket Nos. RP85-39-011 and RS92-90-001, Wyoming Interstate Company, Ltd.  
CAG-68.  
Docket Nos. RP90-109-010, RP87-62-017 and RP86-148-012, Pacific Gas Transmission Company  
CAG-69.  
Docket No. RP93-85-000, Southern Natural Gas Company and South Georgia Natural Gas Company  
CAG-70.  
Docket Nos. CP93-180-001, RP92-214-006 and RS92-60-010, El Paso Natural Gas Company
- Hydro Agenda**  
H-1.  
Reserved
- Electric Agenda**  
E-1.  
Docket No. RM93-10-000, New Reporting Requirement Implementing Section 213(b) of the Federal Power Act and Supporting Expanded Regulatory Responsibilities Under the Energy Policy Act of 1992, and Conforming and Other Changes to Form No. FERC-714. Proposed rule specifying requirements for information gathering regarding transmission.  
E-2.  
Docket No. RM92-1-000, Revisions to Uniform Systems of Accounts to Account for Allowances Under the Clean Air Act Amendments of 1990 and Regulatory-Created Assets and Liabilities and to Form Nos. 1, 1-F, 2 and 2-A. Final rule specifying requirements for Clean Air Act Amendments accounting standards.
- Oil and Gas Agenda**  
*I. Pipeline Rate Matters*  
PR-1.  
Docket No. RM91-8-002, Bureau of Land Management, Department of Interior and Railroad Commission of Texas. Order on request for extension of time for filings by jurisdictional agencies.  
*II. Restructuring Matters*  
RS-1.  
Docket Nos. RS92-60-002, 003, 004 and 008, El Paso Natural Gas Company.

Order on compliance filing and rehearing.

RS-2. Docket No. RS92-70-000, OkTex Pipeline Company. Order on compliance filing and rehearing.

RS-3. Omitted.

RS-4. Docket Nos. RS92-15-000, RP93-62-000 and 001, Equitrans, Inc. Order on compliance filing.

RS-5. Docket No. RS92-42-000, MJGC, Inc. Order on compliance filing.

RS-6. Docket No. RS92-78-000, Sabine Pipe Line Company. Order on compliance filing.

RS-7. Docket No. RS92-20-000, Mid Louisiana Gas Company. Order on compliance filing.

RS-8. Omitted

RS-9. Omitted

RS-10. Omitted

RS-11. Docket Nos. RS92-22-003 and 004, Panhandle Eastern Pipe Line Company. Order on compliance filing and requests for rehearing of December 22, 1992 order in Docket No. RP92-22-002.

RS-12. Docket No. RS92-5-002, Columbia Gas Transmission Corporation  
Docket No. RS92-8-002, Columbia Gulf Transmission Company. Order on request for rehearing of February 10, 1993.

**III. Pipeline Certificate Matters**

PC-1. Docket No. CP91-1910-000, Southwestern Public Service Company v. Red River Pipeline. Order on complaint alleging undue discrimination by Red River Pipeline in refusing to provide transportation.

PC-2. Docket No. CP91-1925-002, Southwestern Glass Company, Inc. v. Arkla Energy Resources, a division of Arkla, Inc. Order on request for rehearing of February 1, 1993 order.

Dated: March 19, 1993.

Linwood A. Watson, Jr.,  
Acting Secretary.

[FR Doc. 93-6864 Filed 3-22-93; 1:03 pm]  
BILLING CODE 6717-01-M

**FEDERAL HOUSING FINANCE BOARD**

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 58 FR 14625, March 18, 1993.

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 8:30 a.m. Wednesday, March 24, 1993.

CHANGES IN THE MEETING: The following topic was deleted from the agenda during the open portion of the meeting.

**3. Examination and Regulatory Oversight Division**

**A. Advances Regulations**

1. Approval of Final Rule
2. Approval of Interim Final Rule on Advances to Non-Member Mortgagees
3. Notification to Finance Board that a Proposed Rule on Advances to Capital Deficient and Tangibly Insolvent Members will be Presented in April

**CONTACT PERSON FOR MORE INFORMATION:**

Elaine L. Baker, Executive Secretary to the Board, (202) 408-2837.

Philip L. Conover,  
Managing Director.

[FR Doc. 93-6804 Filed 3-22-93; 9:09 am]  
BILLING CODE 6725-01-M

**FEDERAL TRADE COMMISSION**

TIME AND DATE: 2:00 p.m., Thursday, April 22, 1993.

PLACE: Federal Trade Commission Building, Room 532, 6th Street and Pennsylvania Avenue, N.W., Washington, D.C. 20580.

STATUS: Parts of this meeting will be open to the public. The rest of the meeting will be closed to the public.

MATTERS TO BE CONSIDERED: Portions Open to Public:

- (1) Oral Argument in Adventist Health System/West, Docket 9234.

**Portions Closed to the Public:**

- (2) Executive Session to follow Oral Argument in Adventist Health System/West, Docket 9234.

CONTACT PERSON FOR MORE INFORMATION: Bonnie Jansen, Office of Public Affairs:

(202) 326-2180; Recorded Message: (202) 326-2711.

Donald S. Clark,

Secretary.

[FR Doc. 93-6799 Filed 3-22-93; 9:11 am]  
BILLING CODE 6750-01-M

**NATIONAL CREDIT UNION ADMINISTRATION**

**Notice of Change in Subject of Meeting**

The National Credit Union Administration Board determined that its business requires that the previously announced closed meeting (Federal Register, Vol. 58, No. 50, Wednesday, March 17, 1993, page 14473) scheduled for 9:30 a.m., Tuesday, March 23, 1993, will include the following additional item, which is closed to public observation:

6. Personnel Actions. Closed pursuant to exemptions (2) and (6).

The Board voted unanimously to add this item to the closed agenda. Earlier announcement of this change was not possible.

The previously announced items are:

1. Approval of Minutes of Previous Closed Meeting.
2. Administrative Action under Section 208 of the Federal Credit Union Act. Closed pursuant to exemptions (8), (9)(A)(ii), and (9)(B).
3. Request from State for Exemption from Section 701.21(h), NCUA's Rules and Regulations. Closed pursuant to exemptions (9)(A)(ii) and (9)(B).
4. Requests from Credit Unions for Waivers from Part 704, NCUA's Rules and Regulations. Closed pursuant to exemption (8).
5. Administrative Actions under Section 208 of the Federal Credit Union Act. Closed pursuant to exemptions (8), (9)(A)(ii), and (9)(B).

FOR MORE INFORMATION CONTACT: Becky Baker, Secretary of the Board, Telephone (202) 682-9600.

Becky Baker,

Secretary of the Board.

[FR Doc. 93-6865 Filed 3-22-93; 1:04 pm]  
BILLING CODE 7536-01-M



# Corrections

Federal Register

Vol. 58, No. 55

Wednesday, March 24, 1993

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

## DEPARTMENT OF AGRICULTURE

### Animal and Plant Health Inspection Service

#### 9 CFR Part 94

[Docket No. 92-126-1]

#### Change in Disease Status of France Because of Rinderpest and Foot-and-Mouth Disease

##### Correction

In proposed rule document 93-5986 beginning on page 14174 in the issue of Tuesday, March 16, 1993, make the following correction:

On the same page, in the third column, in the DATES: paragraph, "April 15, 1993." should read "May 17, 1993."

BILLING CODE 1505-01-D

## DEPARTMENT OF AGRICULTURE

### Commodity Credit Corporation

#### 7 CFR Part 1493

#### Commodity Credit Corporation Emerging Democracies Facilities Guarantees

##### Correction

In rule document 93-4501 beginning on page 11786 in the issue of Monday,

March 1, 1993, make the following correction:

#### § 1493.220 [Corrected]

On page 11789, in the third column, in the section heading "§ 1493.200" should read "§ 1493.220".

BILLING CODE 1505-01-D

## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

#### Endangered and Threatened Wildlife and Plants; Notice of 90-Day Finding on Petition To List the Virgin Spinedace as Endangered

##### Correction

FR Doc. 93-5964 was published beginning on page 14169 in the issue of Tuesday, March 16, 1993. This document was a notice of petition finding and initiation of status review. It was published in the Rules section of the Federal Register. It should have appeared in the Proposed Rules section.

BILLING CODE 1505-01-D

## DEPARTMENT OF TRANSPORTATION

### Coast Guard

#### 33 CFR Part 1

#### 46 CFR Parts 10 and 12

[CGD 91-002]

#### User Fees for Marine Licensing, Certification of Registry and Merchant Mariner Documentation

##### Correction

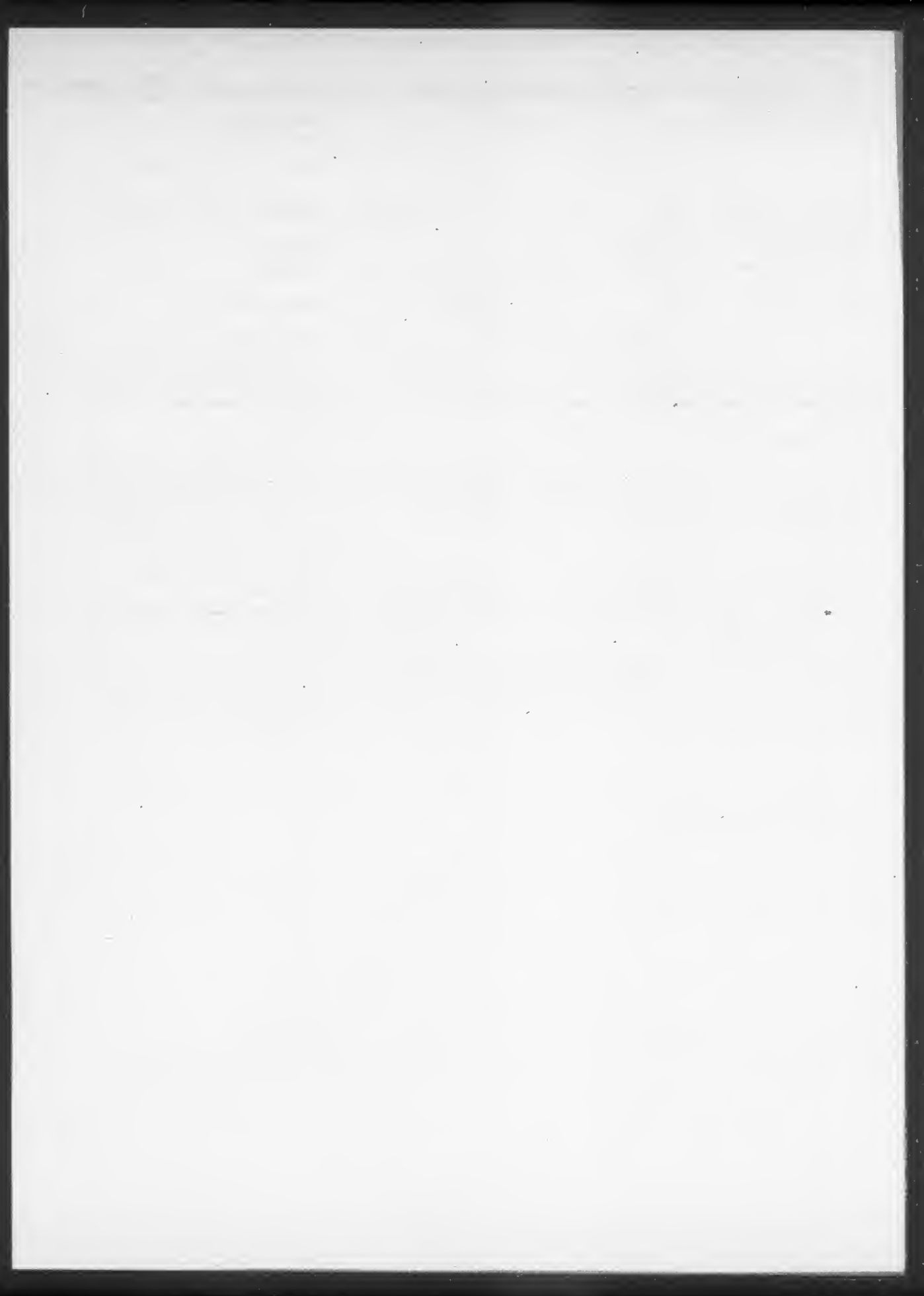
In rule document 93-6364 beginning on page 15228, in the issue of Friday, March 19, 1993, make the following corrections:

1. On page 15231, in the table:
  - a. In the first column, under "License", in the fourth entry, "Endorsement" should read "Endorsements".
  - b. In the third column, in the first entry, footnote 3 should read footnote 1.

#### § 10.109 [Corrected]

2. On page 15237, in the second column, the second § 10.109(c)(3) should read § 10.109(c)(4).

BILLING CODE 1505-01-D



# Federal Register

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Wednesday  
March 24, 1993

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Part II

## Environmental Protection Agency

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40 CFR Parts 80 and 86

Control of Air Pollution From New Motor  
Vehicles and New Motor Vehicle Engines;  
Evaporative Emission Regulations; Final  
Rule

**ENVIRONMENTAL PROTECTION AGENCY**

40 CFR Parts 80 and 86

[FRL-4556-9]

RIN 2060-AC64

**Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines: Evaporative Emission Regulations for Gasoline- and Methanol-Fueled Light-Duty Vehicles, Light-Duty Trucks and Heavy-Duty Vehicles**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

**SUMMARY:** This action promulgates requirements for revised test procedures intended to reduce evaporative emissions from motor vehicles as authorized by the 1990 amendments to the Clean Air Act and the Act's general standard-setting provisions. Proposals for revised test procedures were published on August 19, 1987 and on January 19, 1990. Since then EPA has held two public workshops, announced December 3, 1990 and December 17, 1991, for further discussion of available test procedure options. The revised test procedures are scheduled for implementation beginning with the 1996 model year, with phase-in completed in the 1999 model year. This action will result in significant reductions of volatile organic compound emissions. Such emissions are a major contributor to the nation's ground-level ozone problem, which is responsible for harm to human health and public welfare.

This action also limits fuel pump dispensing rates. Effective January 1, 1996 for most facilities, dispensing rates for gasoline and methanol pumps may not exceed 10 gallons (37.9 liters) per minute. For facilities with low sales volumes, implementation is delayed for two years. This action will ensure that vehicles designed to prevent spitback during refueling will not experience in-use fueling rates beyond the design basis rate.

**DATES:** This regulation is effective April 23, 1993. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 23, 1993.

The information collection requirements contained in §§ 86.096-7, 86.096-8, 86.096-9, 86.096-10, 86.096-14, 86.096-21, 86.096-23, 86.096-26, 86.096-30, 86.096-35, 86.097-9, 86.098-23, 86.099-8, 86.099-9, and

86.099-10 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them. A technical amendment will be published in the *Federal Register* when OMB has approved the information collection requirements.

**ADDRESSES:** Materials related to this rulemaking have been placed in Docket A-89-18 by EPA. The docket is located at: Air Docket Section (LE-130), U.S. Environmental Protection Agency, 1st Floor, Waterside Mall, room M-1500, 401 M Street, SW., Washington, DC 20460 (Telephone 202-260-7548), and is available for inspection between 8:30 a.m. and noon and between 1:30 p.m. and 3:30 p.m., Monday through Friday. EPA may charge a reasonable fee for copying docket materials.

**FOR FURTHER INFORMATION CONTACT:** Mr. Alan Stout, Engine and Vehicle Regulations Branch 313-741-7805 or Mr. Tom Ball, Compliance Programs Branch 313-668-4280.

**SUPPLEMENTARY INFORMATION:****Table of Contents**

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  - C. Liability Periods
  - D. Spitback
  - E. Lead Time
  - F. In-use Performance
  - G. Certification Testing
  - H. In-use and Assembly Line Testing
- III. Public Participation
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  - A. Environmental Impact
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  - C. Regulatory Flexibility Act
- VIII. Judicial Review

**I. Introduction**

EPA's concern regarding the control of volatile organic compound (VOC) emissions has grown over the years as exceedances of the health-based ozone standard have continued to be a problem in many areas. On hot, sunny days VOC emissions react in the air to form ground-level ozone, which causes respiratory problems and is associated with urban smog. Based on the most recently available information for 1989 to 1991, there are 97 areas that fail to meet the National Ambient Air Quality Standard for ozone (0.12 parts per

million).<sup>1</sup> According to ozone monitoring data, based on 1991 only, 70 million people continue to live in U.S. counties exceeding the ozone standard. Evaporative emissions from motor vehicles are a significant source of VOCs and, as a result, EPA has initiated action aimed at reducing these emissions.

In addition, the Clean Air Act, as amended in 1990, states in section 202(k) that: The Administrator shall promulgate (and from time to time revise) regulations applicable to evaporative emissions of hydrocarbons from all gasoline-fueled motor vehicles—(1) during operation; and (2) over 2 or more days of nonuse; under ozone-prone summertime conditions (as determined by regulations of the Administrator). The regulations shall take effect as expeditiously as possible and shall require the greatest degree of emission reduction achievable by means reasonably expected to be available for production during any model year to which the regulations apply, giving appropriate consideration to fuel volatility and to cost, energy and safety factors associated with the application of the appropriate technology. (42 U.S.C. 7521)

In 1971 EPA began testing motor vehicles for evaporative emissions by subjecting test vehicles to typical drive and park conditions. The test procedure, which has changed little since then, measures emissions from fuel evaporation during a simulated parking experience (diurnal emissions) and immediately following a drive (hot soak emissions).

This final rule establishes changes to the test procedure that effectively require vehicles to meet current standards under a more challenging set of conditions in order to prompt more effective evaporative emission control technology. The revised test procedures include a sequence of three basic elements: an initial loading of the evaporative canister with fuel vapor, a period of driving to provide an opportunity to purge the canister, and a simulation of repeated hot days of parking. By following this sequence and sampling for emissions during the parking simulation, the test ensures that the vehicle can quickly regain canister storage capacity during driving, and that the canister's total capacity is sufficient. An additional test element that measures evaporative emissions during vehicle operation (running losses), provides further assurance that vehicles can control the fuel vapors generated in use.

<sup>1</sup> "National Air Quality and Emissions Trends Report, 1991" EPA, October, 1992.

The changes to the regulations contained in this final rule reflect the public comments received throughout this rulemaking process. EPA published Notices of Proposed Rulemakings (NPRMs) to revise the evaporative test procedure on August 19, 1987 (52 FR 31274), and on January 19, 1990 (55 FR 1914). Since then EPA has held two public workshops, announced December 3, 1990 (55 FR 49914) and December 17, 1991 (56 FR 65461), for further discussion of available options in finalizing a test procedure. The series of public meetings involved very detailed discussions of the proposed test requirements. Each subsequent time period for written comments was extended to allow additional opportunity for participants to prepare their input.

EPA has particularly benefitted from extensive participation by the automotive industry and the California Air Resources Board (CARB). During the development of this final rule, EPA has incorporated many of the substantive revisions to the proposed test suggested by commenters, and, in fact, the final test procedure is based largely on a procedure suggested by General Motors (GM).<sup>2</sup> Most of the revisions, however, have been made to improve the simulation and repeatability of testing; the basic hardware and vehicle configuration requirements have changed little since the January 1990 NPRM. The resulting test procedure is expected to ensure that properly functioning vehicles will effectively control evaporative emissions for most in-use events.

This action applies to both gasoline- and methanol-fueled vehicles (proposed in the January 1990 NPRM and at the January 1992 public workshop). Although section 202(k) of the Clean Air Act applies specifically to gasoline-fueled vehicles, EPA is promulgating these regulations for methanol-fueled vehicles as well, pursuant to section 202(a) of the Act. EPA has established the practice of applying evaporative emission standards consistently to both gasoline- and methanol-fueled vehicles, including flexible-fueled vehicles (54 FR 14426, April 11, 1989). Also, methanol-fueled vehicles can have significant evaporative emissions.<sup>3</sup>

The regulations also apply to both light- and heavy-duty vehicles, and to heavy-duty engines. The revised test for heavy-duty vehicles is the same as that

for light-duty vehicles, except that different driving schedules are specified because of the variation in driving patterns for the different classes of vehicles (proposed in the January 1990 NPRM, and at the December 1990 and January 1992 public workshops). Also, the heavy-duty engine test now requires attachment of a loaded evaporative canister before testing for exhaust emissions (proposed in the August 1987 NPRM and at the January 1992 public workshop).

This final rule also deals with fuel spitback during refueling, pursuant to Clean Air Act sections 202(a) and 211(c). Fuel spitback can be a problem when the design of fuel fill necks is inadequate to accommodate in-use fuel fill rates. The result can be fuel spillage, which is both an environmental and a safety hazard. This action institutes a vehicle test to ensure that no spillage occurs when a vehicle is refueled at a rate of up to 10 gallons (37.9 liters) per minute (as proposed at the January 1992 public workshop).<sup>4</sup> Also, to ensure that the resulting vehicle designs will be effective under in-use conditions, EPA is limiting fuel pump dispensing rates for gasoline and methanol to a maximum rate of 10 gallons (37.9 liters) per minute, pursuant to sections 202(a)(1) and 211(c) of the Act (as proposed in the August 1987 and January 1990 NPRMs, and at the January 1992 public workshop).

The remainder of this document is divided into several sections. Section II provides a detailed description of the test procedures and other provisions contained in this final rule. Section III includes a summary and analysis of public comments on the main issues involved in the rulemaking. Sections IV through VIII describe some remaining concerns and summarize an analysis of the estimated impacts of this action.

This document provides a brief discussion of key issues and other information relevant to EPA's final decisions. Detailed discussions of the basis for this rule and of the many considerations that went into past proposals are contained in the previously mentioned NPRMs and workshop notices. Detailed analyses of the impacts of this rule and issues raised during the rulemaking process are included in the Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Evaporative Hydrocarbon Emissions from New Motor Vehicles ("Final RIA"). This document is available in Docket A-89-18 as item V-B-1; a limited number

of individual copies are also available through Mr. Alan Stout (see "For Further Information Contact" above).

## II. Description of This Action

### A. Evaporative Emission Test Procedures

This action will improve the evaporative emission test for gasoline- and methanol-fueled vehicles, and, taken as a whole, satisfies the statutory requirement of ensuring "the greatest degree of emission reduction achievable by means reasonably expected to be available." The test sequence, shown in Figure 1, consists of vehicle preconditioning, exhaust emission testing, a running loss test, a hot soak test, and three diurnal heat builds (this test sequence is referred to in this notice as the three-diurnal test).

Each of these test elements corresponds to an aspect of in-use vehicle operation in ozone-prone summertime conditions. The exhaust emission testing following vehicle preconditioning corresponds to vehicle operation while the vapors from a loaded evaporative canister are being purged into the engine, as might occur during driving after a long parking period. The running loss test element corresponds to sustained vehicle operation on a hot day, the hot soak element corresponds to the emission-prone period immediately following engine shut-off, and the diurnal heat builds correspond to successive days of parking in hot weather. Diurnal testing also serves to control fuel system permeation emissions, called resting losses.

A supplemental procedure with two diurnal heat builds after the exhaust emission test verifies sufficient purging of the evaporative canister during the exhaust emission test (this supplemental test sequence is sometimes referred to in this notice as the two-diurnal test). The reasons for selecting this approach to testing are discussed in detail in section III. The following paragraphs describe the specifications for the new test requirements; more extensive discussion of the test specifications is included in the Final RIA.

The three-diurnal test begins with a draining and refilling of the fuel tank. The vehicle is filled to 40 percent of capacity with a test fuel having a volatility of 9 psi (62 kPa) Reid vapor pressure (RVP). For high-altitude testing, the specified fuel volatility is 7.8 psi (53.8 kPa) RVP. The refueling is followed by a soak (park) period to stabilize the vehicle, and then by vehicle operation over an Urban

<sup>2</sup> Letter from Lisa Fior, GM, to Tad Wysor, EPA, March 26, 1990 (Docket A-89-18, item IV-D-19).

<sup>3</sup> "An Overview of the Technical Implications of Methanol and Ethanol as Highway Motor Vehicle Fuels," Frank Black, SAE 912413.

<sup>4</sup> Rounded metric equivalents to U.S. units are provided in parentheses throughout this notice.

Dynamometer Driving Schedule (UDDS). The UDDS is the conventional simulation of urban driving for the Federal Test Procedure. After the drive, the vehicle's tank is drained and refueled. The vehicle then soaks again for a minimum of 12 hours, during which the evaporative canister is purged and loaded with a butane-nitrogen mix. The canister loading is terminated when the mass of butane supplied to the canister reaches 1½ times the canister's working capacity.<sup>5</sup> The exhaust emission test, unchanged from the current procedure (40 CFR 86.135 to 86.137), follows the soak period. (Various aspects of this preconditioning sequence were proposed in the January 1990 NPRM, and at the December 1990 and January 1992 public workshops.)

After the exhaust emission test, the vehicle is stabilized at 95 °F (35 °C) and driven through the running loss test. The running loss test consists of vehicle operation at 95 °F (35 °C) over a UDDS cycle, two consecutive New York City Cycles (NYCC), and one more UDDS. The NYCC simulates urban driving with substantial low-speed and idle operation. Fuel temperatures are controlled during the running loss test according to a profile determined during a drive at representative summer conditions, as described below. Fuel tank pressure during the running loss test may not exceed 10 inches of water (2.5 kPa), unless manufacturers show that fuel vapors, other than refueling emissions, are vented to the evaporative canister when the fuel cap is removed. Running loss tests may be conducted by either the point-source or the enclosure method. Hot soak emissions are measured at an ambient temperature of 95 °F (35 °C) for one hour after the running loss test. (The running loss test and the high-temperature hot soak test were proposed at the December 1990 and January 1992 public workshops.)

The vehicle is then stabilized at 72 °F (22.2 °C) and begins the series of three 24-hour ambient temperature cycles, from 72° to 96 °F (22.2° to 35.6 °C), which comprise the diurnal emission test. Sampling for emissions over 24-hour periods ensures that resting losses will be measured and controlled. EPA may adjust the fan configuration to ensure sufficient air circulation around the fuel tank. Furthermore, EPA may compare a vehicle's fuel temperatures under outdoor, summertime conditions with test fuel temperatures, and may

<sup>5</sup> For the purposes of the test procedure, the working capacity is the amount of vapor that a canister, starting from a purged condition, would retain in loading to the two-gram breakthrough point (that is, 2 grams of vapor emitted from the canister).

adjust ambient temperatures or air circulation as necessary during testing to correct any demonstrated discrepancy. (The various aspects of diurnal emission testing were proposed in the January 1990 NPRM, and at the December 1990 and January 1992 public workshops.)

Auto manufacturers must separately develop a fuel temperature profile for the running loss test (proposed at the December 1990 and January 1992 public workshops). The fuel temperature profile is used as a target during the heating of the vehicle's fuel tank during onroad driving in representative summer conditions. Each fuel temperature profile is generated by obtaining a fuel temperature vs. time trace as the vehicle is driven over the prescribed running loss driving cycle on the road. Manufacturers must develop a fuel temperature profile for the vehicle model in each evaporative emission family expected to have the greatest temperature increase during driving. They must also select vehicles equipped with any optional features that limit underbody airflow. Manufacturers may generate additional profiles for individual engine families, or for individual models. Multiple runs on any vehicle model must be averaged to yield a composite profile and all valid profile data must be submitted to EPA. EPA may conduct its own testing to establish a vehicle's fuel temperature profile.

In the supplemental two-diurnal procedure, the evaporative canister is loaded with a mixture of butane and nitrogen until the two-gram breakthrough point is reached. The canister may also be loaded to this point by conducting repeated diurnal heat builds. No additional canister purging is performed after the preconditioning drive. Following canister loading, the vehicle is driven through the exhaust emission test, followed by a moderate-temperature hot soak test and two 24-hour ambient temperature cycles from 72° to 96 °F (22.2° to 35.6 °C) for the diurnal emission test. EPA's handling of fuel temperatures for the diurnal emission test, described above, also applies to the supplemental procedure. (The two-diurnal procedure is nearly identical to that proposed by EPA in the January 1990 NPRM.)

As discussed in Section III, adoption of the procedure described above results from a desire expressed by all participants in this rulemaking to have consistent federal and California test procedures, as well as to achieve the statutory goals. EPA has worked with the CARB staff to design a procedure

based on the test that CARB adopted in August 1990, which was based in large part on a procedure recommended by GM.<sup>6,7</sup> (CARB's test procedure, which has not yet been implemented, is referred to in this document as CARB's adopted test procedure.) EPA is adding the supplemental test sequence that CARB proposed in March 1992.<sup>8</sup> This action does not incorporate the CARB test procedure specifications in every detail, though it does so wherever there is no compelling reason to do otherwise. For example, CARB's adopted procedure involves different fuel volatility and ambient temperatures than those required in this action. These and other differences between CARB's adopted test and the procedure in this final rule are described in the Final RIA.

It should be noted that the Clean Air Act requires CARB to obtain a waiver of federal preemption from EPA to implement its test. EPA has received a waiver request from CARB regarding its August 1990 test procedure. This waiver request is under evaluation by EPA according to the criteria set forth in section 209 of the Clean Air Act.

Two evaporative emission standards must be met for a vehicle to pass the three-diurnal evaporative emission test. First, a vehicle must emit no more than a total of 2 grams of hydrocarbon (or, in the case of methanol-fueled vehicles, hydrocarbon and methanol), measured during the 24-hour cycle with the highest emissions from the diurnal emission test, plus that measured during the one-hour hot soak test. Second, the vehicle must meet a running loss test standard of 0.05 g/mi (0.03 g/km) (these standards were proposed in the January 1990 NPRM and at the January 1992 public workshop). These standards apply to light-duty vehicles. Light-duty trucks must meet the same standards, except that light-duty trucks of gross vehicle weight rating (GVWR) between 6,000 and 8,500 pounds (2,700 to 3,900 kg) which have nominal fuel tank sizes of 30 gallons (110 liters) or more are subject to a relaxed diurnal/hot soak standard of 2.5 grams. This relaxed standard results from EPA's analysis of comments on the proposals and is considered to be a reasonable extension of EPA's approach to applying slightly higher evaporative emission standards to larger vehicles, as discussed in the Final RIA. Heavy-duty vehicle standards are discussed in the subsection below.

<sup>6</sup> Letter from Lisa Fior, GM, to Tad Wysor, EPA, March 26, 1990 (Docket A-89-18, item IV-D-19).

<sup>7</sup> CARB Mail-Out #92-10, March 3, 1992 (Docket A-89-18, item IV-D-83).

<sup>8</sup> CARB Mail-Out #92-13, March 6, 1992 (Docket A-89-18, item IV-D-84).

The light-duty standard for the supplemental two-diurnal procedure is 2.5 grams for emissions measured during the 24-hour diurnal cycle with the highest emissions, plus emissions measured during the moderate-temperature, one-hour hot soak. Again, a 0.5 relaxation of the standard, to 3.0 grams, applies to light-duty trucks of GVWR between 6,000 and 8,500 pounds (2,700 to 3,900 kg) which have nominal fuel tank sizes of 30 gallons (110 liters) or more. As discussed in the Final RIA, manufacturers requested these relaxed supplemental test standards (compared to the corresponding standards for the three-diurnal test) to help ensure that the supplemental test does not introduce a net increase in stringency. EPA does not believe that these relaxed standards will compromise in-use control because manufacturers must also design vehicles to meet the lower standards for the full three-diurnal test, and because EPA testing can be done using either procedure.

All evaporative standards apply equally for all altitudes. EPA removed separate standards for high-altitude testing, starting with 1995 model year vehicles, as part of the action to implement Tier 1 exhaust emission standards (56 FR 25724, June 5, 1991). This action does not, however, affect EPA's current policy of allowing an engineering evaluation, in lieu of test data, to demonstrate compliance with high-altitude requirements.

Evaporative emission measurements, and the associated standards, include both fuel and nonfuel emissions, consistent with established Agency policy (41 FR 35626, August 23, 1976). Because the levels of the standard already account for the possibility of nonfuel background emissions, any attempt to separate fuel and nonfuel emissions would be inappropriate. These standards apply equally to vehicle certification and recall testing. The Final RIA includes a detailed discussion of this issue. The measurement of exhaust emissions occurs during the running of the test procedure being promulgated in this final rule and, of course, applicable exhaust emission standards must be met.

In addition to the above test requirements, EPA is requiring that all fuel vapor generated during in-use operation be routed exclusively to the evaporative canister or the engine to prevent vapor venting under any foreseeable in-use conditions (proposed in the January 1990 NPRM and at the January 1992 public workshop). The requirement does allow for exceptions

in emergency situations and does not include vehicle refueling.

#### *B. Heavy-Duty Vehicles and Engines*

In this action, EPA is also promulgating revised regulations for testing heavy-duty vehicles and heavy-duty engines. The revised test for heavy-duty vehicles is the same as that for light-duty vehicles, except that the driving sequence for the running loss test consists of three consecutive heavy-duty UDDS cycles, in order to reflect the different driving patterns of heavy-duty vehicles. The heavy-duty UDDS cycle includes adequate low-speed driving so that a separate cycle like the NYCC is not needed for heavy-duty testing.

The testing of heavy-duty engines, which occurs without a vehicle chassis or body, obviously cannot make full use of the vehicle test procedure. However, the heavy-duty engine test for exhaust emissions now requires that the test engine be equipped with a loaded evaporative canister, ensuring that exhaust emissions will not increase due to canister purge. Engine manufacturers must test with one or more canisters representing the largest capacity expected for the range of applications for each engine. Heavy heavy-duty vehicles not subject to vehicle testing for evaporative emissions will be expected to demonstrate a sufficient level of purge during engine testing.

The standard for the three-diurnal evaporative emission test for heavy-duty vehicles has the same form as the standard for light-duty vehicles, but has a numerical value of 3 grams for vehicles with GVWR up to 14,000 pounds (6,400 kg), and 4 grams for heavier vehicles, consistent with the regulations being replaced by this action. For the two-diurnal procedure, the standards are set at 3.5 and 4.5 grams, respectively, consistent with the approach taken for light-duty vehicle testing, discussed above. The running loss standard of 0.05 g/mi (0.03 g/km) applies to all heavy-duty vehicles.

#### *C. Liability Periods*

In this action, EPA is promulgating revisions to the useful life and recall and warranty periods for evaporative emission controls, to incorporate liability periods specified by the amended Clean Air Act. EPA indicated at the time of the January 1992 workshop that it would conform its rules to the statute and received no comments. The following changes to liability periods apply to any vehicles subject to the new evaporative test requirements.

For new light-duty vehicles, evaporative emission controls must

have useful lives of 10 years or 100,000 miles (160,000 km) (or the equivalent), with recall testing allowed up to 7 years or 75,000 miles (120,000 km) (or the equivalent), whichever occurs first (Clean Air Act section 202(d)(1); 42 U.S.C. 7521(d)(1)). Pursuant to section 207(i), existing designs for evaporative emission controls are not "specified major emission control components," because they cost less than \$200. Therefore, unless more expensive components are utilized, manufacturers need only warrant them for 2 years or 24,000 miles (39,000 km) (or the equivalent), whichever occurs first. If, at some time in the future, the Administrator should determine that the evaporative emission controls are "specified major emission control components," manufacturers must warrant them for 8 years or 80,000 miles (130,000 km) (or the equivalent), whichever occurs first (Clean Air Act section 207(i)(2); 42 U.S.C. 7541(i)(2)).

For light light-duty trucks with loaded vehicle weight up to 3,750 pounds (1,700 kg), the defined useful life is decreased from 11 years or 120,000 miles (190,000 km) to 10 years, or 100,000 miles (160,000 km) (or the equivalent), whichever occurs first (Clean Air Act section 202(d)(1); 42 U.S.C. 7521(d)(1)). All other light-duty trucks retain a useful life requirement of 11 years or 120,000 miles (190,000 km) (or the equivalent), whichever occurs first. This change is consistent with the Agency's action to implement Tier 1 exhaust emission standards (56 FR 25724, June 5, 1991).

The only change in liability periods for manufacturers of heavy-duty gasoline-fueled vehicles is an increase in the useful life from 8 to 10 years (or the existing requirement of 110,000 miles (180,000 km), or the equivalent) for those vehicles (Clean Air Act section 202(d)(2); 42 U.S.C. 7521(d)(2)).

#### *D. Spitback*

This action institutes a vehicle test to ensure that no spitback occurs when a gasoline- or methanol-fueled vehicle is fueled at a rate of up to 10 gallons (37.9 liters) per minute. The spitback test consists of draining the vehicle's fuel tank, filling the tank to 10 percent of its nominal capacity, operating the vehicle over one UDDS, and promptly refueling the vehicle to at least 95 percent of capacity at 10 gallons (37.9 liters) per minute. Spitback emissions are measured by determining the mass of liquid fuel trapped in a plastic bag placed around the dispensing nozzle during the refueling event. A vehicle may not release more than one gram of liquid emissions. One gram of measured

emissions is considered to be a clear indicator that appreciable spitback is occurring. The small air quality benefit potentially derived from adopting a tighter standard would not justify the extra precautions and complexity needed to conduct a more precise measurement.

Heavy-duty vehicles over 14,000 pounds (6,400 kg) GVWR are typically designed with filler necks so short that fuel can be dispensed directly into the fuel tank. These vehicles would therefore not be expected to experience spitback and are exempt from spitback test requirements.

Also, to ensure that the resulting vehicle designs will be effective under in-use conditions, EPA is limiting in-use dispensing rates to a maximum rate of 10 gallons (37.9 liters) per minute. This action ensures that emissions from spitback will not occur in use, and thus will not contribute to air pollution capable of endangering public health or welfare within the meaning of Clean Air Act section 211(c). The limit applies to all retailers' and wholesale purchaser-consumers' fuel pumps for gasoline or methanol, except those dedicated to servicing heavy-duty vehicles.

In addition to achieving an environmental benefit, the control of spitback emissions through the combination of in-use dispensing rate limits and vehicle testing will have a number of secondary societal impacts, both negative and positive. On the negative side, some refuelings currently performed at higher dispensing rates will take slightly longer. A vehicle owner who currently fills a 16-gallon (61-liter) tank from empty at the maximum rate of 13 gallons (49 liters) per minute, once a week, would spend an additional 22 seconds a week refueling at the lower rate. However, most refuelings are carried out at less than 10 gallons (37.9 liters) per minute and, of those that are not, it is expected that only a small portion occur at rates as high as 13 gallons (49 liters) per minute.

Spitback control should shorten refueling times in three ways, however. These reductions will offset the increase in refueling time described above. First of all, Exxon found that 20 percent of the customers at high volume locations refuel at less-than-full flow rates because of concern over spitback.<sup>9</sup> This dispensing is likely performed manually and cautiously. It is reasonable to expect that essentially all of these customers will switch to full flow rate refueling

when the spitback concern has been eliminated. Secondly, testing done by EPA on a representative sample of vehicles found that most vehicles exhibit spitback at fuel dispensing rates over 10 gallons (37.9 liters) per minute.<sup>10</sup> Thus, the majority of service station owners who depend on return customers have an incentive to keep flow rates below this level to minimize customer complaints. Vehicles designed to preclude spitback at 10 gallons (37.9 liters) per minute will eliminate uncertainty for these service station owners and prompt an increase in dispensing rates to the full 10 gallons (37.9 liters) per minute. Finally, the spitback test procedure will likely result in vehicle designs that are not prone to premature pump shutoff, due to the potential for spitback from premature shutoffs during the test. By eliminating the time wasted by premature shutoffs, this change will also tend toward faster refuelings overall.

Additional benefits are expected from a reduction in the safety hazard caused by fires involving spilled gasoline, and from a reduction in the health hazard caused by breathing gasoline vapors. Furthermore, the inconvenience and cleaning costs resulting from fuel spilling on clothing will be largely eliminated.

EPA does not believe that requiring vehicle spitback controls without concurrently adopting a dispensing rate limit is a viable option because it would not achieve the desired environmental benefit. In the absence of dispensing rate regulation, dispensing rates appear to depend on a station operator's interest in serving customers quickly, but without excessive complaints due to spitback. Vehicle designs which eliminate spitback at dispensing rates of up to 10 gallon (37.9 liters) per minute would be likely to inadvertently encourage higher dispensing rates, because station operators would be likely to set flow rates that result in the same complaint frequency they previously found acceptable. Thus spitback emissions would continue at about the same levels. Even if one were to conclude that this produces a net benefit to society from faster refuelings, EPA could not justify such action without an environmental benefit.

#### E. Lead Time

Section 202(k) of the amended Clean Air Act, in directing EPA to promulgate new regulations to control evaporative

emissions from all gasoline-fueled motor vehicles, provides that "the regulations shall take effect as expeditiously as possible." The new evaporative test procedure is also being adopted for methanol-fueled vehicles, including flexible-fueled vehicles, pursuant to section 202(a) of the Act, which requires EPA to provide lead time as "necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." Moreover, for heavy-duty methanol-fueled vehicles, section 202(a)(3)(C) also applies; this paragraph provides for a minimum of four years lead time for the implementation of new heavy-duty vehicle and engine standards being promulgated pursuant to section 202(a).

Based on EPA's assessment of lead time requirements under these statutory provisions, discussed in detail in the Final RIA for this rule, the test procedures in this action will be phased in for gasoline-fueled light-duty vehicles, light-duty trucks, and heavy-duty vehicles and engines according to the schedule in Table 1. This implementation schedule will also apply to methanol-fueled light-duty vehicles and light-duty trucks. Testing with the new procedures will apply to a manufacturer's production of methanol-fueled heavy-duty vehicles and engines starting in model year 1998. These vehicles may be averaged in with other vehicles produced by the manufacturer to demonstrate compliance with the 90 percent requirement for the 1998 model year.

TABLE 1.—IMPLEMENTATION SCHEDULE

Model year	Percent of production
1996 .....	20
1997 .....	40
1998 .....	90
1999 .....	100

EPA's approach to administering the phase-in will be consistent with that of the Tier 1 exhaust emission standards (56 FR 25724, June 5, 1991). Percentage requirements are applied to a manufacturer's actual sales, or to production figures if manufacturers demonstrate that sales and production figures are equivalent.

Manufacturers may combine light-duty vehicle, light-duty truck, and heavy-duty vehicle and engine families to demonstrate compliance with the phase-in requirements. Providing this flexibility will not significantly affect emission reductions because light-duty

<sup>9</sup> Letter from Harry T. Gibson, Exxon Company, to EPA Air Docket, June 4, 1990 (Docket A-89-18, Item IV-D-28).

<sup>10</sup> "Application of Onboard Refueling Emission Control System to a 1988 Ford Taurus Vehicle," EPA technical report, EPA-AA-SDSB-91-06, Tables 6 and 7, (Docket A-87-11, item IV-A-6).



vehicles and light-duty trucks have fairly similar operating and evaporative control system design characteristics, and gasoline-fueled heavy-duty vehicles comprise only a small portion of affected manufacturers' production volume. In addition, manufacturers may combine methanol-fueled vehicle and engine families with gasoline-fueled vehicle and engine families to demonstrate compliance. Small-volume manufacturers (10,000 annual units or less) may delay certification under the revised test until the 1999 model year for all of their vehicles.

The limitation on dispensing rates to 10 gallons (37.9 liters) per minute becomes effective January 1, 1996 for retailers or wholesale purchaser-consumers that handle over 10,000 gallons (38,000 liters) per month. For those with a lower volume, the dispensing limitation becomes effective January 1, 1998. For those nozzles that will need modification, the high turnover rate of nozzles and the minimal cost of the change ensure a negligible economic impact on the industry.

#### F. In-use Performance

The control of evaporative emissions is highly dependent on vehicle operating and environmental factors such as vehicle speed and ambient temperature. EPA recognizes, therefore, that simply passing a test procedure cannot always ensure vehicle designs that achieve good control under the in-use conditions being targeted by the Clean Air Act. Put another way, although EPA believes that the test adopted in this final rule reasonably fulfills the statutory goals, the test alone cannot be expected to yield invariable effectiveness in use.

EPA is not expecting that manufacturers will intentionally design vehicles that pass the test, but fail to perform well in use. However, in order to best meet the statutory requirement for control under ozone-prone summertime conditions, the Agency will, if necessary, make full use of existing regulations against defeat devices. Thus, EPA may deny certification upon determination that a particular evaporative control system design constitutes a defeat device (40 CFR 86.094-16).<sup>11</sup> EPA could also invoke the defeat device regulations in selective enforcement audit (SEA) and recall testing.

A defeat device is defined in 40 CFR 86.094-2 as:

An auxiliary emission control device (AECED) that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless (1) such conditions are substantially included in the Federal emission test procedure; (2) the need for the AECED is justified in terms of protecting the vehicle against damage or accident; or (3) the AECED does not go beyond the requirements of engine starting.

An AECED is defined as:

Any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.

An element of design is defined as:

Any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.

The following discussion provides examples of potential defeat devices related to compliance with evaporative emission standards.

EPA's main concern is that some purge strategies used to pass emission tests may be ineffective over a wide range of in-use driving patterns. To help preclude this, the Agency plans to evaluate purge strategies in the certification process to identify vehicle designs that, though capable of passing emission tests, may not function effectively in use. This would include designs that substantially delay purging after the start of closed-loop vehicle operation (or designs with purge increases after initiation so slow as to virtually prolong the delay). Such vehicles, when operated in short trip driving patterns frequently experienced in use, would probably not achieve good control. Likewise, EPA would examine designs which delay closed-loop operation beyond a reasonable initial warm-up period of two minutes or so. Designs that purge intermittently without justification would also be considered potential defeat devices.

EPA also will consider to be defeat devices those designs that purge at substantially higher rates during high-speed operation than during low-speed operation, such that they primarily depend on the high-speed purge to pass emission tests. Even if such designs do pass the test, they would produce potentially high evaporative emissions if designed to purge substantially less during typical nonfreeway urban driving than during the evaporative

emission test on average. Also, designs that shut purge off at any time for other than safety reasons would be closely examined by EPA for possible classification as defeat devices.

Finally, since the generation of vapors from the fuel tank increases at higher temperatures, no vehicle should experience less aggressive purging of the evaporative canister with increasing ambient temperatures. Similarly, any technique used to limit fuel tank temperatures during driving should not be less effective with higher temperatures. For example, if a vehicle's recirculating fuel can be cooled by the vehicle's air conditioner components, it should not be designed to bypass the air conditioner beyond some maximum temperature.

#### G. Certification Testing

This action does not change the overall certification process. Manufacturers must demonstrate compliance with emission standards before EPA issues certificates. Manufacturers test light-duty emission-data vehicles (EDVs) at their facilities, and submit test data to EPA for possible certification confirmatory testing. Of course, the type of data and test procedures used to generate test data will change with this action. The following paragraphs summarize the Agency's certification and fuel economy data requirements.

For light-duty EDVs used in evaporative testing (evaporative EDVs), this action requires manufacturers to submit data to EPA according to the prescribed phase-in schedule for the full test procedure (three-diurnal sequence), the supplemental procedure (two-diurnal sequence), and the spitback test. For evaporative EDVs, exhaust emission data also must be submitted for each evaporative test sequence to demonstrate compliance with exhaust emission standards. If a vehicle model is subject to the new evaporative testing requirements, any EDVs used in exhaust testing (exhaust EDVs) representing that model must also be tested using canisters preconditioned according to one of the methods described above. EPA may perform certification confirmatory testing for exhaust emissions on those vehicles using any of the canister preconditioning methods described above, or, to reduce test burden, EPA may use the preconditioning specified in the current test. Since the current test, with less initial loading of the evaporative canister, has more lenient requirements than the new procedure, continued use of the current test for this purpose does

<sup>11</sup> "Prohibition of Use of Emission Control Defeat Devices," MSPC Advisory Circular No. 24, December 11, 1972.

not affect manufacturers' design requirements.

This action does not change manufacturers' data submission requirements for heavy-duty engines or heavy-duty vehicles. It will, however, require manufacturers to perform exhaust emission tests using a loaded canister for these vehicles and engines. This will require close cooperation between vehicle manufacturers and engine manufacturers, since vehicle manufacturers are responsible for meeting the phase-in schedule discussed above for both exhaust and evaporative testing. Engine manufacturers should contact the EPA Compliance Programs Branch if they are unable to determine when the new test requirements apply to their engine models (see "FOR FURTHER INFORMATION CONTACT" above).

This action does not directly impact fuel economy labeling, Corporate Average Fuel Economy (CAFE), or gas guzzler data submission requirements. Because the changes to the test procedure promulgated in this action may affect fuel economy measurements, EPA will not require use of the new procedure for fuel economy testing. Manufacturers may use either the previously established Federal Test Procedure or the test procedure established with this action to measure city fuel economy. EPA's certification confirmatory testing on each fuel economy data vehicle will use the same procedure that manufacturers use.

Current regulations require that fuel economy data vehicles comply with applicable exhaust emission standards (40 CFR 600.007-80(b)(4)). Compliance with exhaust emission standards for fuel economy data vehicles may be demonstrated with either the current test, or with the test procedures promulgated in this final rule. In a future action, the Agency may require that fuel economy and all emission testing be done with the test procedure promulgated in this final rule.

EPA reserves the right to conduct certification confirmatory testing on any vehicle using any test procedure or test condition allowable under the regulations. Further, EPA may truncate a test procedure after any emission measurement, such as the measurement of exhaust, running loss, or hot soak emissions. (Implicit in truncating testing in this way is the recognition that portions of testing can yield valid data, even if the test sequence is not run to the end, and similarly, that if a vehicle fails a part of EPA's test, the test need not be run to completion for that result to be valid.) Also, if EPA conducts the three-diurnal test sequence, emissions

from the running loss test need not be measured to continue with hot soak and diurnal emission tests, provided that EPA meets all of the specifications of the running loss test unrelated to emission measurement. Durability demonstrations should be completed using the appropriate new test procedures (i.e., evaporative vehicles run using both the two-diurnal and three-diurnal test sequences and exhaust durability vehicles run with one consistent canister preconditioning method for all tests on a vehicle). For vehicles that have established durability data with the current test procedure (with less canister preconditioning), EPA will evaluate requests for carryover of exhaust deterioration factors on a case-by-case basis, consistent with established policy.

#### *H. In-use and Assembly Line Testing*

This action also does not contain any major changes to the Agency's practices for in-use or assembly line testing. EPA tests newly assembled vehicles and heavy-duty engines at manufacturing facilities in a selective enforcement audit. EPA tests vehicles and heavy-duty engines from the in-use fleet for the recall program.

In the SEA program, EPA will evaluate exhaust emissions, using either the current test procedure or the test procedures in this final rule, for light-duty vehicles, light-duty trucks, and heavy-duty engines. SEA testing involves no measurement of evaporative emissions, consistent with current policy, due to the concern that nonfuel background emissions from new vehicles will interfere with the evaporative emission measurement. EPA may specify the test procedure and corresponding canister preconditioning method to be used when testing exhaust emissions from SEA vehicles or engines. EPA may require SEA testing of heavy-duty engines with a loaded canister of any size that may be reasonably expected to be installed in in-use applications. Additionally, EPA may require that spitback testing be performed on SEA vehicles which are subject to the spitback requirements.

In the recall testing program, all test requirements for certification will apply. Specifically, EPA may test light-duty vehicles, light-duty trucks, or heavy-duty vehicles for evaporative emissions with the full three-diurnal test sequence or the supplemental two-diurnal test sequence. The Agency expects, however, to depend primarily on the two-diurnal sequence to test in-use vehicles for evaporative emissions, because it provides an adequate evaluation of system performance with

a much smaller burden on Agency resources. Vehicles must meet exhaust emission standards when tested with either test sequence for evaporative emissions. As in certification, EPA may truncate a test procedure after any emission measurement, such as the measurement of exhaust, running loss, or hot soak emissions. As noted above, there is no valid technical reason not to use data from completed portions of the test, provided the test is conducted properly up to that point. Also, if EPA conducts the three-diurnal test sequence, EPA reserves the right to measure evaporative emissions only from the hot soak and diurnal emission tests, and not from the running loss test, provided that EPA meets all the specifications of the running loss test unrelated to emission measurement. Invalidation of an evaporative emission measurement will not necessarily result in invalidation of exhaust emission measurement, and vice versa (provided all specifications related to the valid measurement are met). EPA may also conduct recall testing for vehicle spitback.

Recall testing for exhaust emissions will also be consistent with certification requirements. EPA may test any light-duty vehicles, light-duty trucks, or heavy-duty engines for exhaust emissions, using any of the preconditioning procedures described above. EPA may also test vehicles for exhaust emissions using the current procedure, which utilizes a one-hour heat build to load the evaporative canister before the exhaust emission test; this represents a more lenient test requirement, as described above, and provides more flexibility for Agency testing without compromising the test's value. Finally, EPA expects to test gasoline- or methanol-fueled heavy-duty engines with evaporative canisters that have been loaded with butane or fuel vapors.

EPA expects to use the vehicle or engine data submitted by manufacturers (during certification) throughout the vehicle's useful life, i.e., in all testing for certification, SEA, and recall. Thus, EPA expects to use fuel temperature profiles submitted by manufacturers at certification for the whole life of the vehicle, unless EPA develops its own profile for a test vehicle. Similarly, EPA expects to use the canister working capacities submitted by manufacturers (during certification) to determine the appropriate canister loading for certification, SEA, and recall testing, unless EPA separately determines a canister's working capacity.

The Agency may measure running losses with the point-source or the

enclosure method, but expects to depend primarily on the enclosure method when using the three-diurnal test for recall programs. As explained in the Final RIA, this method is better able to measure any emissions from unexpected sources in the vehicle.

EPA will in all cases discontinue the current practice of performing additional vehicle preconditioning before conducting an initial test for recall. Manufacturers requested the additional preconditioning to correct for excessively loaded in-use canisters, caused by unusual vehicle usage, or by in-use fuels with much higher volatility than that of test fuels. This rule specifies that the evaporative canister start the test in a fully loaded condition. Also, EPA's action to control in-use fuel volatility should minimize the possibility that in-use fuels would cause any unrepresentative loading of the evaporative canister (55 FR 23658, June 11, 1990).

Manufacturers have expressed concerns that use of oxygenated fuels prior to testing may increase the permeability of some fuel system components, or otherwise increase evaporative emissions. However, gasoline containing oxygenated compounds is commercially available for in-use vehicles, several blends either having been found "substantially similar" or having been granted waivers under section 211 of the Clean Air Act. Operation of in-use vehicles with these legal fuels cannot be considered improper maintenance or use. While EPA will continue to use the specified test fuel during compliance testing (including certification, SEA, and recall), manufacturers should take into account any effect on evaporative emissions resulting from the use of legally available fuels through appropriate material selection and component or vehicle design, so that properly used and maintained in-use vehicles will meet emission standards. Moreover, past use of illegal fuels would not, in itself, be adequate cause to invalidate a test. Manufacturers must demonstrate that illegal fuels had a lasting effect on a test vehicle's emission performance. For example, if a vehicle were fueled with gasoline exceeding volatility standards prior to procurement for testing, that vehicle would not be exempt from testing.

### III. Public Participation

EPA has benefitted from extensive public participation throughout this rulemaking. Comments from participants have led to major revisions in EPA's proposed test procedures. EPA has fully considered all of the comments

and has modified the proposed procedures to reflect many of the suggestions received. The following discussion focuses on the key issues: The method of conducting diurnal heat builds and the sequencing of test segments. For a thorough treatment of other issues raised by commenters, the reader is referred to past notices published in the *Federal Register*, referenced in section I, and to the Final RIA available in Docket A-89-18.

#### A. Diurnal Emission Test

The generation of vapors from diurnal heating is a straightforward phenomenon that can be simulated for laboratory testing. When a vehicle is not driven but is exposed to outdoor conditions, its fuel temperature follows daily ambient temperatures. The increase in fuel temperature causes evaporation of liquid fuel, driving fuel vapors from the tank. The current test method, a rapid, direct heating of the fuel from an initial to a final temperature, is a simple procedure that simulates the actual diurnal heat build. Over the course of the rulemaking the Agency has considered various changes that would not only make the test more representative of actual conditions, but also increase the sophistication of the simulation.

#### EPA Proposal

In the January 1990 NPRM, EPA proposed to conduct heat builds with the conventional method of directly heating the fuel tank. The test procedure that EPA proposed at the time of the January 1992 workshop included the new diurnal test method advocated by GM and adopted by CARB, in which the whole test vehicle would be exposed to ambient temperatures cycled in three 24-hour periods ("real time").

#### Summary of Comments

GM promoted its method of slowly heating the whole vehicle primarily as a better way of duplicating a vehicle's outdoor experience, thereby improving the accuracy and repeatability of test results. Other automakers largely agreed with GM. Achieving harmony with CARB, which adopted the real time method, was also cited by these commenters as a reason for using real time testing.

#### Analysis of Comments

The Agency is adopting the approach recommended by industry, although EPA believes that full 24-hour temperature cycling may not be necessary for an effective diurnal emission test. Conducting the diurnal emission test either by directly heating

the fuel tank in one or two hours, or by exposing the vehicle to an accelerated temperature-cycling process, would be adequate to prompt the changes in vehicle designs necessary to improve in-use performance. In contrast, real time testing for diurnal emissions is more complex and facility-intensive, and would likely yield no substantial additional improvement in vehicle design above that achieved by directly heating the fuel tank. On the other hand, the real time test is fully capable of prompting the improved control of evaporative emissions desired by the Agency and required by section 202(k) of the Clean Air Act. Also, any possible emission sources that may not currently be identified would more likely be measured and controlled with the real time test. EPA therefore has no technical objection to real time testing for diurnal emissions. Based on the broad support for this method and EPA's desire to achieve consistency with CARB's test procedure (where that procedure satisfies the section 202(k) requirement), EPA considers real time testing to be an acceptable method for diurnal emission measurement.

#### B. Sequence of Test Segments

##### EPA Proposal

The test sequence described in the December 1990 *Federal Register* notice established the driving time between the canister loading and the diurnal emission test at about 30 minutes, the amount driven during the exhaust emission test (Figure 2). This test sequence involved canister loading just before the exhaust emission test, which was in turn followed by the diurnal emission test. A new running loss test was added at the end of the test sequence, not affecting the driving time before the diurnal emission test.

EPA's proposed test sequence was different than that finalized by CARB. CARB's adopted procedure included a 70-minute running loss test between the exhaust and diurnal emission tests, allowing a total of approximately 100 minutes of driving for vehicles to purge their canisters.

#### Summary of Comments

Manufacturers objected to EPA's proposal, arguing primarily that the proposed test sequence, compared to in-use driving patterns, represented a rare and rather extreme scenario of vehicle operation. Manufacturers claimed that because the specific drive-park sequence represented in the test would so rarely happen in real driving, EPA's approach was invalid. They reinforced their position with the observation that

EPA's MOBILE model estimates that vehicles from the in-use fleet average approximately 30 miles (48 km) of driving per day, much more than the 11 miles (18 km) of driving for the exhaust emission test.<sup>12</sup> Most auto manufacturers recommended that EPA adopt CARB's test procedure.

After considering EPA's technical objections to its procedures, however, CARB acknowledged that its procedure could lead to inadequate purge during short trips. In a March 1992 letter, CARB thus stated,

As written, the [CARB] procedure may not necessarily ensure adequate purge during short trips, and canister saturation is a possibility. This could occur even on a vehicle which would pass the ARB procedure. ARB and Environmental Protection Agency (EPA) analyses have confirmed significant in-use emissions benefits from requiring adequate purge during the exhaust testing portion of the current test.<sup>13</sup>

To address these concerns, CARB suggested in the same letter adding one of two alternative methods to verify purge during the exhaust emission test. In the first method, purge airflow would be measured and compared with a similar measurement during the running loss test to verify a consistent purge rate. In addition, the change in canister mass during the exhaust emission test would be measured to ensure that approximately 70 percent of the canister's working capacity before breakthrough had been made available. In the second method, CARB would conduct a special test with two diurnal heat builds directly following the exhaust emission test. CARB proposed that these additional test requirements would apply to certification and, potentially, in-use testing. In addition, CARB identified the possibility of adopting EPA's proposed test sequence if its other proposed changes were found not to be viable.

Auto manufacturers had varying responses to CARB's proposed approaches. Some argued that current language in EPA rules that prohibits defeat devices would be effective in ensuring sufficient purge under CARB's adopted test. These manufacturers suggested a requirement to state at certification that they had employed no defeat devices in designing their purge strategy.

Manufacturers opposed CARB's suggestion of weighing canisters during

a test run. They commented that such an operation could jeopardize the repeatability, reliability, and validity of test results because of the need to remove and handle components of a vehicle's emission control system.

Commenters who did not object outright to the idea of a purge-verification strategy generally supported the concept of measuring purge airflow. These commenters noted that measuring purge airflow would be the least burdensome strategy, and would give a direct measure of purge behavior. Various formulas for specifying a purge requirement were discussed.

Ford and Chrysler came forward with nearly identical approaches for a potential compromise, consistent with CARB's proposed option for a special two-diurnal test to ensure sufficient purge in short-trip driving patterns.<sup>14,15</sup> Ford and Chrysler recommended that EPA finalize CARB's adopted procedure, with minor modifications, for certification testing. For recall testing, they suggested an abbreviated test, consisting of the preconditioning and exhaust emission test, followed by a moderate-temperature hot soak test, and two diurnal heat builds. Since Ford and Chrysler offered no explanation of the differences for recall and certification testing, EPA understands that they were merely responding to EPA's desire to adopt an enforceable in-use test that would ensure adequate purge rates. The standard for recall testing would be 2.5 grams for vehicles with fuel tank capacity less than 30 gallons (110 liters), and would allow for exclusion of nonfuel emissions. Vehicles with larger fuel tanks would be subject to a 3-gram standard. No explanation of the basis for these relaxed standards was stated.

GM opposed the use of any alternate emission measurement to verify purge.<sup>16</sup> GM claimed that the alternate procedures under consideration would overburden the industry and increase the severity of the full evaporative test procedure. GM claimed, though without explanation, that an alternate emission measurement, with the existing 2-gram standard, would increase the overall purge requirement by 25 percent—with no air quality benefit.

Several commenters recommended a streamlined version of CARB's adopted

procedure to facilitate EPA's in-use testing (e.g., see GM's March 23, 1992 letter, page 11). Commenters suggested driving through the running loss test without measuring evaporative emissions to avoid installation of thermocouples and to prevent the need for running loss measurement facilities. Significant fuel heating (and thus vapor generation) would be prevented by holding ambient temperatures at 80 °F (26.7 °C) and circulating air around the fuel tank.

#### Analysis of Comments

After considering all of the comments, EPA still believes that CARB's adopted test procedure, by allowing 100 minutes of driving time to purge the evaporative canister, does not ensure effective emission control. Most importantly, the majority of the driving time, and therefore purging time, in CARB's test occurs when there is no measurement of exhaust emissions. Vapors purged from the canister during the running loss test could simply pass unburned out the vehicle's tailpipe as exhaust emissions, without detection. CARB's test sequence thus gives manufacturers an important incentive to minimize the amount of purge during the early part of the test's driving time, when exhaust emissions are measured. An inadequate purge requirement would result in reduced evaporative control effectiveness for vehicles experiencing mostly short trips, and could also cause increased exhaust emissions in use, compared to current vehicles.

In addition, CARB's adopted procedure would be very difficult to use as the exclusive test for in-use enforcement for three reasons. First, CARB's adopted procedure would require that a full running loss test be conducted before every diurnal emission test. EPA believes that the diurnal emission test is of primary importance in verifying the key parameters of canister purge and storage capacity. EPA expects that the resource-intensive running loss test can be reserved for vehicle designs with higher vapor loads to the engine, such as those with high fuel temperatures during driving. CARB's adopted test would remove this flexibility, and would require a greater investment in running loss facilities, significantly increasing the cost and effort of testing. Second, some of CARB's running loss test specifications are very difficult to maintain, increasing the likelihood of invalid tests. This would also apply to certification confirmatory testing. Third, in-use vehicles would likely need to have fuel tanks removed for installation of thermocouples for the running loss

<sup>12</sup> Letter from Gordon E. Allardyce, Chrysler Corporation, to Docket A-89-18, March 23, 1992 (item IV-D-76).

<sup>13</sup> Letter from Donald R. Buist, Ford Motor Company, to Richard D. Wilson, EPA, March 27, 1992 (Docket A-89-18, item IV-D-77).

<sup>14</sup> Letter from Samuel A. Leonard, General Motors, to Richard D. Wilson, EPA, March 23, 1992 (Docket A-89-18, item IV-D-78).

<sup>12</sup> The series of MOBILE models is used to characterize the emission behavior of the in-use fleet and to estimate the effectiveness of various control programs.

<sup>13</sup> CARB Mail-Out #92-13, March 6, 1992 (Docket A-89-18, item IV-D-64).

test. Thermocouple installation is a time-consuming procedure, and may call into question the validity of test results if installation affects the integrity of the vehicle's emission control system.

EPA believes that its proposed test, with three diurnal heat builds following the exhaust emission test, is a feasible requirement that would achieve good in-use control. EPA has evaluated the emission benefits of its proposed test sequence relative to CARB's (described further in Section V below). This evaluation is described in a draft technical report and was the subject of the January 1992 public workshop.<sup>17</sup> The draft report concluded (as noted above) that CARB's test had so much driving time before the diurnal emission test that manufacturers could substantially delay purging.

Refinements made to the analysis, documented in the Final RIA for this rule, only reinforce that concern. If vehicles designed for CARB's adopted test delay purging, in-use emissions may actually increase from current levels, contrary to the requirements of Clean Air Act section 202(k) (or section 202(a) for methanol-fueled vehicles). The analysis shows that these vehicles would perform poorly in use, because many in-use driving patterns involve short trips with less driving time than is present in CARB's adopted test procedure. In comparison, the analysis shows that vehicles designed to pass EPA's proposed test sequence with three diurnal heat builds would almost completely control emissions for a wide range of in-use driving patterns.

EPA has, however, made a concerted effort to achieve common test requirements for federal and California-only vehicles, within the constraints of its legal obligation under section 202(k) of the Act. EPA has considered possible modifications to the CARB procedure to ensure effective in-use emission control, while addressing manufacturers' expressed concerns about the relative stringency and associated costs of test options, and the desirability of avoiding the expense and administrative complication of maintaining different federal and California-only tests. The following discussion evaluates the various proposed or suggested modifications to CARB's test.

Merely relying on existing requirements aimed at preventing defeat devices, as suggested by some commenters, is insufficient to ensure adequate emission control. Most

participants, including CARB (particularly in its March 6, 1992 letter), have acknowledged that CARB's adopted test sequence allows manufacturers flexibility that could result in poor in-use performance. Defeat device regulations rely on a subjective evaluation of designs to identify possible defeat devices. As much as possible, the test itself should ensure effective in-use performance and so avoid the need for such subjective inquiries. Moreover, this is the Agency's legal mandate under section 202(k).

The various suggested improvements to CARB's adopted test sequence are also not satisfactory. Measuring a change in canister mass during the exhaust emission test is an inappropriate way to verify purge during short trips. Any requirement for a change in canister mass would effectively be a design standard, because it would dictate requirements for certain vehicle components rather than demonstrating the vehicle's performance to an emission standard. EPA strongly prefers performance standards over design standards because design standards can unnecessarily constrain manufacturers' design options, and may not be effective in improving in-use performance in that they may not address possible unforeseen mechanisms by which emissions occur. Also, the removal of a canister to determine its mass change would involve an unnecessary intrusion into the control system, both before and after the exhaust emission test.

Measurement of purge airflow is also an inappropriate way to verify purge. Requiring some specified distribution of purge in different driving conditions would effectively be a design standard, and therefore not a preferred alternative for the reasons just noted. Also, there is an enormous degree of latitude in defining the criterion for acceptable purge distribution, so that setting such a criterion would require a subjective evaluation of what constitutes an optimum strategy, to the exclusion of other reasonable strategies. The nature of design standards virtually ensures that any such criterion would either be ineffective in ensuring in-use emission control, or would unnecessarily restrict manufacturers' flexibility in vehicle design, or both. EPA believes the goals of establishing an effective, yet nonrestrictive purge flow criterion are irreconcilable, as evidenced by the fact that CARB has been unable to reach an agreement with manufacturers. Measurement of purge airflow may also require temporary, intrusive vehicle modifications that could impact vehicle

evaporative emissions and call into question the test results.

Manufacturers' suggestions to perform the running loss segment of the test without measuring emissions, in order to increase testing capacity, does not address EPA's primary concern: that manufacturers would minimize purge rates during the exhaust emission test. In fact, removing the vapor generation component from the running loss test by holding the vehicle and its fuel at low nominal temperatures would only increase the incentive for manufacturers to delay substantial purge until the running loss test.

A special test measuring vehicle emissions from two diurnal heat builds immediately after the exhaust emission test is the only suggested modification to CARB's test procedure that addresses EPA's need for assurance of adequate purge. This assurance comes from the fact that such a test measures emissions following a relatively short amount of driving, as is common in use. Measuring emissions is necessary to establish a performance standard, and to prevent the need for any intrusive measurement of secondary variables such as canister mass or purge airflow. A supplemental procedure could verify sufficient purge for short trips without being more stringent overall than the full three-diurnal test. Such a procedure would only change the overall test requirements for vehicles that are indeed insufficiently purging early in the test.

In addition to verifying adequate purge, a supplemental test procedure is also the best way of dealing with EPA's other concerns regarding CARB's test. The simpler supplemental procedure measures the performance of vehicles' evaporative emission controls with much lower resource requirements than the full sequence. Also, the supplemental procedure can prevent the possibility of a significant increase in exhaust emissions by ensuring that exhaust emissions are measured while the canister is being purged.

EPA thus considers the fundamental elements of the alternate procedure suggested by CARB, and developed further in the Ford and Chrysler comments, to be effective and reasonable. The approach taken in defining this procedure helps to ensure that it does not introduce challenges to vehicle designers beyond those already imposed by the three-diurnal test, except for ensuring that vehicles can purge effectively to control evaporative emissions. For example, eliminating a diurnal heat build, initially loading the evaporative canister only to breakthrough, measuring a moderate-

<sup>17</sup> "Emission Evaluation of the GM Real Time Evaporative Test Procedure," draft EPA report by Julie Hayden, September 25, 1991 (Docket A-89-18, item III-B-2).

temperature hot soak, and increasing the standard from 2 to 2.5 grams all contribute significantly to making the supplemental procedure effective in its limited objective of ensuring proper purge without requiring additional design modifications (such as increased canister size). Also, EPA believes that the vehicle hardware that would be needed to meet the test requirements proposed in EPA's January 1990 NPRM (e.g., canisters, purge valves) will be sufficient to meet the requirements of the supplemental test.

The supplemental test procedure would not in itself provide assurance that a vehicle could meet all requirements of the longer three-diurnal test. For example, there is no measurement of running losses and the final diurnal heat build is omitted in the supplemental test. Thus, the supplemental procedure is not a replacement for the three-diurnal test. However, the opportunity for EPA to run the longer test, in both confirmatory certification and in-use testing, provides the necessary assurance that vehicle designs will achieve optimum control.

Because neither test sequence is sufficient in itself to demonstrate adequate control of evaporative emissions, manufacturers would have to perform certification testing using both sequences. Reserving the supplemental test only for EPA's testing of in-use vehicles, as suggested by Ford and Chrysler, would therefore be inappropriate. EPA recognizes that this adds some testing burden to the certification process. However, the record established in the docket for this rulemaking makes it amply clear that the industry views consistency with CARB's requirements (with potential implications for vehicle designs and costs) to be of more critical importance than minimizing test burden for federal testing. A test based on the CARB procedure, with the addition of the supplemental test, deals with manufacturers' concerns and, because it allows EPA to meet statutory requirements, is acceptable to EPA.

In conclusion, CARB's test sequence, with the essential addition of the supplemental test to verify adequate purge, is an acceptable procedure for controlling evaporative emissions. There is also substantial consensus to use this approach in achieving the statutory objectives, rather than using EPA's proposal. Thus, unlike the previous EPA proposals, the basic elements of the test procedure finalized in this action are supported by a segment of the industry. CARB also views this approach favorably. The CARB staff has expressed its willingness

to recommend the adoption of this approach to the Air Resources Board following action by EPA.<sup>18</sup> This should achieve the consistency of regulations sought by all parties involved in this rulemaking, and still achieve optimized control of evaporative emissions as required by sections 202(k) and 202(a) of the Act.

#### IV. Remaining In-use Concerns and Options for Further Action

EPA is concerned about manufacturers' potential reliance on pressurized fuel tanks to control evaporative emissions. In the January 1990 NPRM, EPA proposed to remove fuel caps during the hot soak test to discourage the use of high pressures in fuel tanks (55 FR 1914). Industry strongly opposed the provision to remove the fuel cap. EPA has not yet determined the best way to resolve this issue. Rather than delay current action, EPA is separating the issue of pressurized fuel tanks for future study and possible action.

More stringent exhaust and evaporative test requirements may increase the incentive for manufacturers to use pressurized tanks to contain fuel vapors. The pressure limit described in section II above prevents fuel emissions when a vehicle's fuel cap is removed, but does not disallow high pressures. Moreover, vehicles using pressurized systems may be more likely to fail with age. Failure to hold pressure may be caused by a loss of integrity of fuel caps, vapor lines, or several other fuel system components. High fuel tank pressures could also be a safety hazard.

Because failures result in such high emission rates, these vehicles could dominate the fleet's contribution to the evaporative VOC emission inventory—even as a minority of the in-use fleet. Test results from the inspection and maintenance lane in Hammond, Indiana, obtained by Automotive Testing Labs (ATL), show that about 15 percent of in-use vehicles do not hold pressure.<sup>19,20</sup> Summer diurnal emissions for these vehicles would be in the range of 20 to 30 grams per day (approximately 1 g/mi (0.6 g/km) equivalent on average); running losses could reach as high as 10 g/mi (6 g/km) (according to testing at ATL). In

contrast, properly operating vehicles should be emitting less than 0.25 g/mi (0.16 g/km) of exhaust emissions, and 0.05 g/mi (0.03 g/km) of running losses.

To avoid these high emission rates, vehicles would need either to prevent failures or to rely on low-pressure systems. Manufacturers could take steps to increase the durability of in-use systems. Alternatively, manufacturers could avoid a buildup of pressure in the fuel tank. An unpressurized system could avoid high emission rates even if there were some loss of system integrity, because the fuel vapors would have a very low-resistance path from the fuel tank to the evaporative canister. Recall testing, inspection and maintenance programs, and onboard diagnostics can also be expected to impact this problem, but they deal primarily with finding and correcting such vehicles after the problems occur.

EPA intends to continue work on issues arising from this rulemaking by holding a public workshop, to be announced in a future Federal Register publication. The Agency intends to present specific proposals to deal with the problems associated with pressurized fuel tanks. EPA may at that time also deal with any other in-use concerns that have arisen since the initial proposal.

#### V. Environmental and Economic Impacts

EPA has done extensive modeling to evaluate the expected reductions in VOC emissions associated with this rule. EPA has also quantified the costs and calculated the cost-effectiveness involved in achieving the estimated benefits. These analyses, described in detail in the Final RIA, are summarized below.

Throughout the development of this final rule, EPA's intent regarding emission control performance and air quality improvements has been consistent. There is no substantial change in EPA's estimates of the environmental or economic impacts of this rule. The costs and benefits described below, while responsive to comments received, do not represent any fundamental change from previous estimates shared with the public.

##### A. Environmental Impact

Baseline emission levels are estimated on a per-vehicle basis using recently developed projections from MOBILE5. Projections are made for the year 2020 in order to provide benefit predictions for a fully turned-over fleet and to factor in other known trends, such as the effects of other new Clean Air Act programs. These new programs include

<sup>18</sup> Letter from Thomas Cackette, CARB, to Charles L. Gray, EPA, September 15, 1992 (Docket A-89-18, item IV-D-88).

<sup>19</sup> "I/M Costs, Benefits, and Impacts," EPA, November 1992, Appendix A, pg 31 (Docket A-91-75, item V-B).

<sup>20</sup> Supplement A to AP-42 Volume II: Compilation of Mobile Source Emission Factors," January 1991, NTIS Accession No. PB 91 167692, page H-10.

high-technology inspection and maintenance and reformulated gasoline. Reformulated gasoline achieving a 25 percent overall VOC emission reduction standard is assumed to be used in 40 percent of the nation. This coverage level corresponds to the nine cities specified in the Clean Air Act, all of California, several areas that are likely to opt in to the Clean Air Act program,

and some additional areas that will be included due to the spillover of fuel distribution systems.

As indicated in Table 2, the baseline evaporative emission level projected in MOBILE5 for light-duty vehicles (LDVs) is 0.63 g/mi (0.39 g/km). The corresponding projection for vehicles designed to meet the new evaporative control requirements is 0.23 g/mi (0.14

g/km), a reduction of 0.40 g/mi (0.25 g/km). Emission estimates for light-duty trucks (LDTs) and heavy-duty vehicles (HDVs) are also summarized in Table 2. Overall, MOBILE5 estimates that average motor vehicle VOC emissions will be reduced from 1.67 g/mi (1.04 g/km) to 1.32 g/mi (0.82 g/km) as a result of the new evaporative test procedure.

TABLE 2.—EVAPORATIVE EMISSION REDUCTIONS IN G/MI (G/KM)

	LDV	LDT	HDV
Baseline .....	0.63 (0.39)	0.45 (0.28)	2.98 (1.85)
Post-control .....	0.23 (0.14)	0.20 (0.12)	1.94 (1.21)
Net reduction .....	0.40 (0.25)	0.25 (0.16)	1.04 (0.65)

In terms of total VOC reductions, EPA estimates that implementation of the new evaporative emission test procedure will result in emission reductions from light-duty vehicles, light-duty trucks, and heavy-duty vehicles of 710,000, 240,000, and 170,000 metric tons of VOC, respectively, in calendar year 2020. This is a total of 1,120,000 metric tons, representing a 20 percent reduction in the annual motor vehicle VOC emission inventory.

In addition to the modeling performed with MOBILE5, EPA has done extensive modeling of in-use evaporative emissions. The model, documented in the Final RIA to this rule, uses a database of in-use driving patterns to estimate evaporative emissions over a wide range of drive and park combinations. This supplemental modeling recognizes that fleet-averaged driving patterns, such as those inherent in the MOBILE5 methodology, may not provide a clear picture of the emission contribution of the vehicles that experience atypical driving patterns, such as those that make only short trips or that park for long periods.

The results of this modeling support EPA's position that vehicles designed to CARB's adopted test could have very high in-use emissions if manufacturers substantially delayed canister purging at the beginning of a trip. The current results reinforce the findings of the modeling presented at the January 1992 workshop. The modeling indicates that the addition of the supplemental test sequence, as described above, provides assurance that vehicles will be designed to perform well under in-use driving conditions. In fact, the results show that the test procedure finalized in this action, by protecting against excessive purge delays, will provide air quality

benefits very near those projected for the last EPA proposal.

#### B. Economic Impact

Cost estimates from the January 1990 NPRM have been updated to reflect modifications to test requirements, further technological developments, and inflation. These changes are described in detail in the Final RIA for this rule and are summarized below.

Vehicles will require new or upgraded components to comply with the new test requirements. Larger evaporative canisters are estimated to add about \$3 to a light-duty vehicle's sale price, in 1992 dollars. Purge valves will be larger and more complex (\$1). Materials for nonmetallic components of the fuel system will need improved resistance to fuel permeation (\$1). Some vehicle designs may need some modification to reduce fuel temperatures during driving to reduce running losses. Auto manufacturers will incur additional costs for research, testing, and capital investment in test facilities. Total light-duty vehicle costs, in retail price equivalent, are estimated to average \$10 per vehicle. EPA expects similar changes for light-duty trucks and heavy-duty vehicles, resulting in total per vehicle costs of \$13, and \$11, respectively. The Agency views these costs as reasonable and further believes that these costs will not impede the reasonable availability of evaporative emission control technology, within the meaning of section 202(k) of the Clean Air Act. The Agency also views these costs to be reasonable for methanol-fueled vehicles for purposes of section 202(a) of the Act.

Manufacturers have estimated the cost of compliance with the CARB procedure, upon which the procedure in this final rule is based, to be approximately \$100 per vehicle. Only

GM gave any justification for its estimate, claiming the need for "a larger canister, running loss control by thermal management techniques, and a 'smart purge' system."<sup>21</sup> No other detail was provided to justify this figure. GM said it would need more hardware to meet the more stringent requirements of EPA's proposed procedure, for a total cost of \$200. This latter estimate is no longer relevant because this action does not adopt EPA's proposed procedure. EPA believes the lower estimate of \$100 greatly overestimates costs. As described in the Final RIA and summarized above, a limited number of components need fairly inexpensive modification. Although manufacturers provided cost estimates differing markedly from EPA's estimates (with little or no substantiation), EPA has received little comment on its detailed analysis of the extent and cost of the necessary vehicle modifications.

The increased cost to the consumer is offset by an increase in fuel economy. Containing the evaporated fuel allows it to be burned in the engine to power the vehicle. Total savings over the life of a vehicle, discounted to the year of sale and expressed in 1992 dollars, are estimated to be \$9, \$5, and \$24 for light-duty vehicles, light-duty trucks, and heavy-duty vehicles, respectively. This results in net costs to consumers of near zero over a vehicle's lifetime, as summarized in Table 3.

TABLE 3.—COST SUMMARY  
(Net present value in year of sale, in 1992 dollars)

	LDV	LDT	HDV
Cost to manufacturer ...	\$8	\$11	\$9
Cost to consumer .....	10	13	11

<sup>21</sup> Letter from Samuel A. Leonard, General Motors, to Richard D. Wilson, EPA, March 23, 1992 (Docket A-89-18, Item IV-D-78).

TABLE 3.—COST SUMMARY—Continued

(Net present value in year of sale, in 1992 dollars)

	LDV	LDT	HDV
Net Fuel savings .....	9	5	24
Net cost to consumer ..	1	8	-13

Assuming that 10 to 15 million vehicles requiring improved evaporative controls are sold per year, and conservatively using the light-duty truck costs of \$13 per vehicle, EPA estimates an annual total program cost of \$130 to 200 million. This estimate does not include the offsetting fuel savings.

### C. Cost-effectiveness

Comparing benefits and costs yields an estimated overall cost-effectiveness of this action. Future emission reductions are discounted at a ten percent annual rate to calculate a vehicle's cumulative emission reductions in present terms.

The discounted lifetime total emission reductions are 26, 16, and 68 kg of VOC for light-duty vehicles, light-duty trucks, and heavy-duty vehicles, respectively. Dividing the consumer costs in Table 3 by benefits gives cost-effectiveness figures of \$380, \$810, and \$160 per metric ton for light-duty vehicles, light-duty trucks, and heavy-duty vehicles, respectively, and an overall weighted average cost-effectiveness (based on projected vehicle registrations) of \$500 per metric ton.

These figures are conservative in that they do not factor in the cost savings over the lifetime of the vehicle caused by improved fuel economy. Applying these fuel consumption credits (Table 3) results in an overall cost-effectiveness of \$170 per metric ton.

Even considering GM's cost estimate of \$100 per vehicle, which was insufficiently substantiated, the cost-effectiveness would be \$3,800 per metric ton for light-duty vehicles.

### VI. Energy and Safety Issues

The Clean Air Act also requires EPA to consider energy and safety factors associated with the vehicle technology resulting from the enhanced test procedure for evaporative emissions (Clean Air Act section 202(k) (42 U.S.C. 7521)).

All the control measures described above promote conservation of energy, since they reduce fuel loss from evaporation. By containing fuel vapors inside the fuel system and burning them as fuel in the engine, vehicles will be more fuel efficient. This conservation of fuel for the motor vehicle fleet

represents a net benefit to society and reinforces the justification for the changes promulgated in this action.

With respect to safety, the changes to test procedures promulgated by this action do not require any fundamental change in vehicle design. EPA expects vehicle manufacturers to upgrade their systems by increasing the size of their evaporative canisters, by adjusting the strategy for purging vapors from the canister, and by decreasing in-tank fuel temperatures. No data or comments have been submitted to the public docket for this rulemaking (A-89-18) suggesting negative impacts on safety as a result of the proposed action.

As part of the rulemaking activity for onboard refueling vapor recovery (EPA Docket A-87-11), various groups raised the concern that evaporative emission controls on current vehicles carry some safety risk. However, when questioned, auto representatives stated that removing current evaporative control technologies would create more safety problems than currently existed.<sup>22</sup>

Furthermore, this rule adds tangible safety benefits, by preventing spitback during refueling and reducing fuel tank temperatures during driving.

## VII. Administrative Requirements

### A. Administrative Designation and Regulatory Analysis

The Administrator has determined that this action is a major regulation, under the provisions of Executive Order 12291. Accordingly, EPA has completed a Regulatory Impact Analysis of issues pertinent to this action. The analysis is titled Final Regulatory Impact Analysis and Summary and Analysis of Comments: Control of Vehicular Evaporative Emissions. The analysis is available in Docket A-89-18 as item V-B-1; a limited number of individual copies are also available through Mr. Alan Stout (see FOR FURTHER INFORMATION CONTACT above).

This regulation was submitted to the Office of Management and Budget (OMB) for review, as required by Executive Order 12291. Any written comments from OMB and any EPA response to those comments are in the public docket for this rulemaking.

### B. Paperwork Reduction Act

The information collection requirements in this rule (ICR number 783.24) have been submitted for approval to the Office of Management and Budget under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

<sup>22</sup> Transcript of public hearing held on September 26 and 27, 1991, volume I, page 230 (Docket A-87-11, item IV-F-19).

These requirements are not effective until OMB approves them and a technical amendment to that effect is published in the Federal Register.

The increased public reporting burden for this collection of information is estimated to average 1,900 additional hours per manufacturer, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch; EPA, 401 M St., S.W. (PM-223-Y); Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

### C. Regulatory Flexibility Act

The Regulatory Flexibility Act requires federal agencies to identify potentially adverse impacts of federal regulations upon small entities. In instances where significant impacts are possible on a substantial number of these entities, agencies are required to perform a Regulatory Flexibility Analysis.

EPA has determined that the test requirements for motor vehicles in this final rule will not have a significant impact on a substantial number of small entities. Small manufacturers have been granted a delayed phase-in of test requirements.

Many small entities must comply with the limitations on the in-use fuel dispensing rate. The long lead time, especially for small-volume facilities, is adequate to comply with the new requirement with the normal turnover of dispensing nozzles. Compliance with this regulation will have a negligible effect on most entities.

Therefore, to meet the requirements of section 605 of the Regulatory Flexibility Act 5 U.S.C. 601 *et seq.*, I certify that this regulation does not have a significant adverse impact on a substantial number of small entities.

### VIII. Judicial Review

Under section 307(b) of the Clean Air Act, EPA hereby finds that these regulations are of national applicability. Accordingly, judicial review of this action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit within 60 days of publication. Under section 307(b)(2) of the Act, the requirements that are the



subject of this notice may not be challenged later in judicial proceedings brought by EPA to enforce these requirements.

**List of Subjects**

**40 CFR Part 80**

Administrative practice and procedures, Air pollution control, Gasoline, Motor vehicle pollution.

**40 CFR Part 86**

Administrative practice and procedures, Air pollution control, Gasoline, Incorporation by reference, Labeling, Motor vehicle pollution, Motor vehicles, Reporting and recordkeeping requirements.

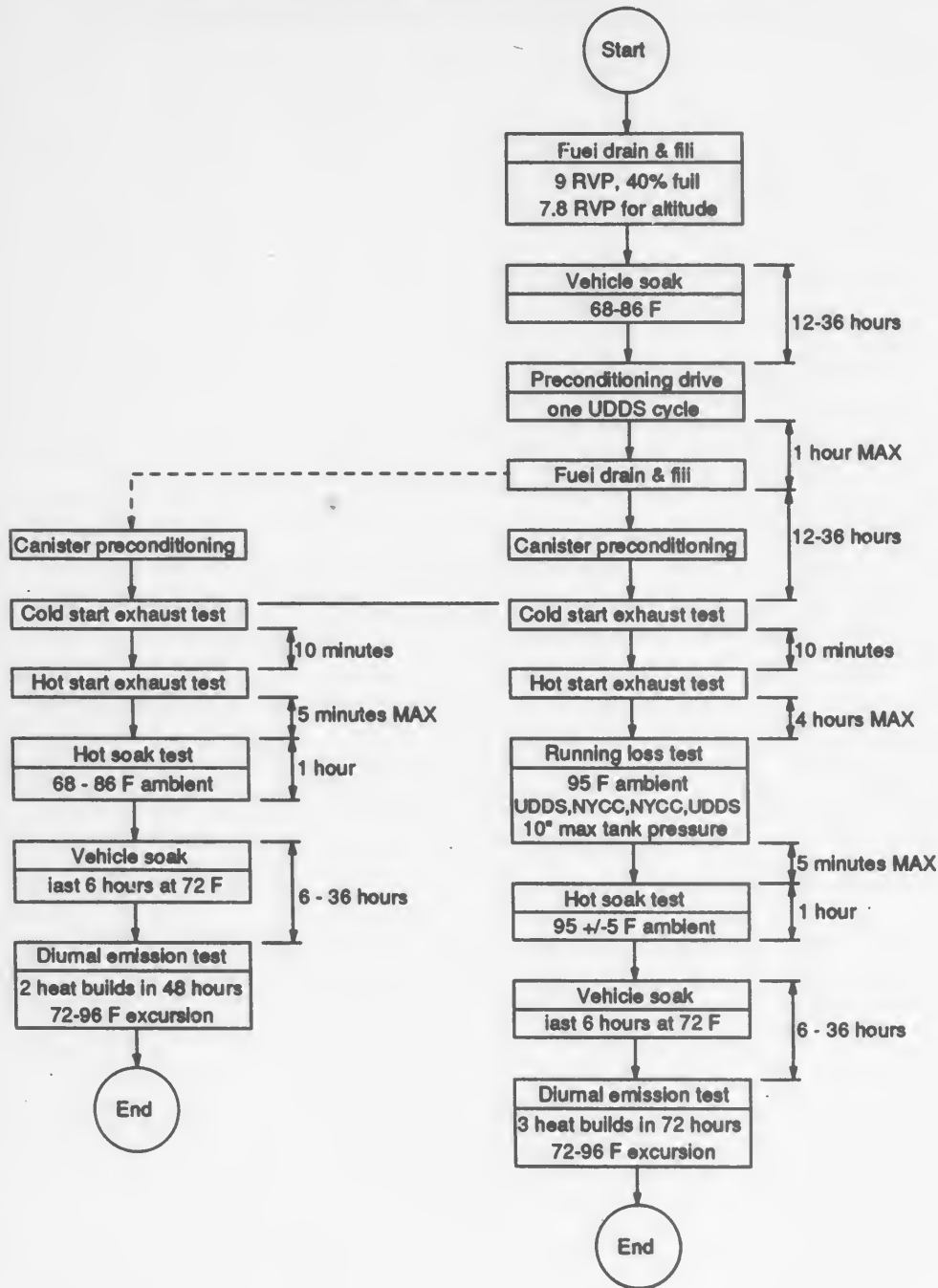
Dated: January 20, 1993.

William K. Reilly,  
Administrator.

Figures to Preamble

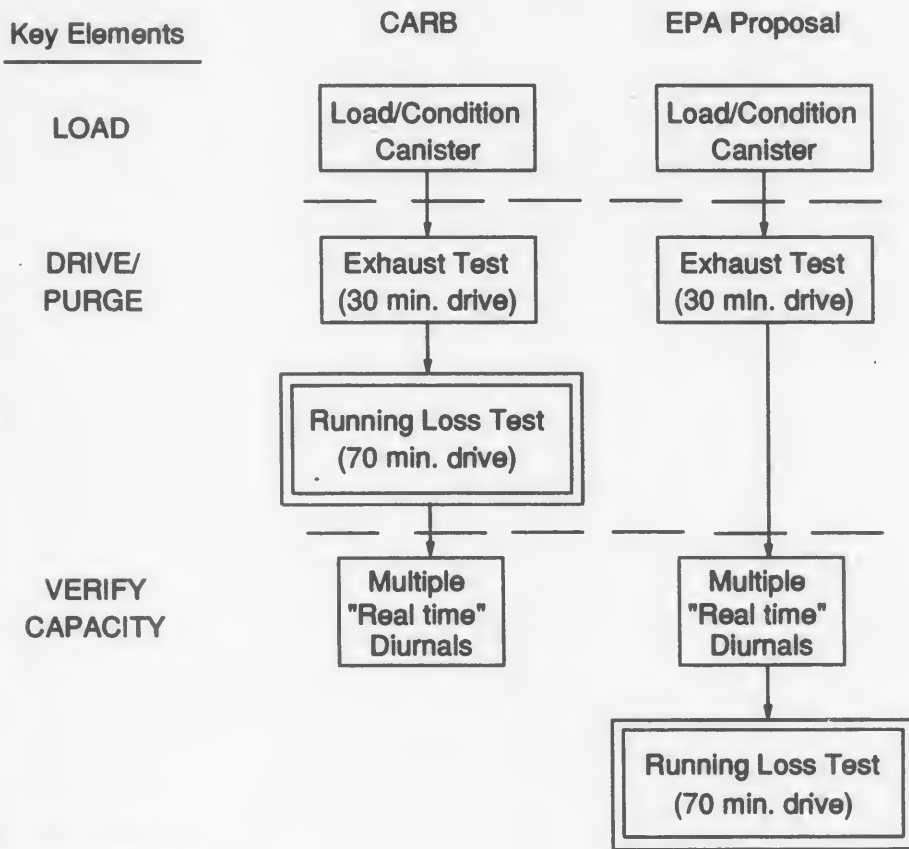
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# Figure 1 Evaporative Emissions Test



## Figure 2

### Basic Elements of CARB and EPA Proposed Sequences



## APPENDIX TO THE PREAMBLE—TABLE OF CHANGES TO VARIOUS SUBPARTS

Section	Change	Reason
1. Authority, part 80	Updated	Clean Air Act Amendments of 1990.
2. § 80.22	Limit in-use gasoline dispensing rates to ten gal/min	Prevents spitback for in-use refueling.
3. Authority, part 86	Updated	Clean Air Act Amendments of 1990.
3a. Part 86	Remove old sections	Obsolete.
4. § 86.1	Create new section to index documents incorporated by reference in part 86	Simplification of CFR format.
5. § 86.091-29	Revise to allow EPA to truncate testing	Clean Air Act Amendments of 1990.
6. § 86.095-35	Add requirement to identify evap family on label	Do.
7. § 86.096-2	Add definitions	Do.
8. § 86.096-7	Revised to reflect test changes	Do.
9. § 86.096-8	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Change "fuel evaporative emissions" in (b) to "evaporative emissions." Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
10. § 86.096-9	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Change "fuel evaporative emissions" in (b) to "evaporative emissions." Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
11. § 86.096-10	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
12. § 86.096-14	Require submission of additional vehicle parameters	Do.
13. § 86.096-21	Require submission of additional vehicle parameters	Do.
14. § 86.096-23	Revised to reflect test changes	Do.
15. § 86.096-26	Revised to reflect the use of evaporative canisters for heavy-duty engine testing	Do.
16. § 86.096-30	Revised to reflect test changes	Do.
17. § 86.096-35	Revised to require vehicle label to identify the applicable evaporative test during the phase-in of new test requirements.	Do.
17a. § 86.097-9	Revised to reflect test changes	Do.
18. § 86.098-23	Revised to reflect test changes	Do.
19. § 86.099-8	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Change "fuel evaporative emissions" in (b) to "evaporative emissions." Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
20. § 86.099-9	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Change "fuel evaporative emissions" in (b) to "evaporative emissions." Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
21. § 86.099-10	Prohibit direct release of fuel vapor into the atmosphere during in-use operations. Add standard for running loss and spitback tests. Add standard for supplemental evaporative test.	Do.
22. § 86.105	Revised to reflect test changes	Do.
23. § 86.106-96	Delete restriction from conducting exhaust-only emission tests. Allow evaporative testing without exhaust measurement. Add text for canister-loading equipment.	Do.
24. § 86.107-96	Add specifications for variable-temperature diurnal enclosures and running loss test facilities	Do.
25. § 86.113-94	Change fuel RVP specification for evaporative emission testing at high-altitude	Do.
26. § 86.115-78	Specify the speed tolerances for the spitback test and the procedure for generating fuel temperature profile. Revise speed tolerances to allow more flexibility for outdoor driving.	Do.
27. § 86.117-96	Add calibration of variable-temperature diurnal enclosure and running loss facilities	Do.
28. § 86.127-96	Update description of evaporative emission test	Do.
29. § 86.128-79	Allow transmission to be in "neutral" during extended idles	Do.
30. § 86.129-94	Add procedure to determine fuel temperature profile for the running loss test	Do.
31. § 86.130-96	Revise flowchart of test sequence	Do.
32. § 86.131-96	Add requirement to repair leaks in the exhaust system for running loss testing. Add step to prepare for canister preconditioning.	Do.
33. § 86.132-96	Add canister preconditioning after initial drive	Do.
34. § 86.133-96	Delete heat build immediately before exhaust emission test. Revise diurnal emission test to include three consecutive, high-temperature diurnal heat builds, with 24-hour ambient temperature cycling, following running loss test.	Do.
35. § 86.134-96	Add running loss test after exhaust emission test, using either SHED or point-source measurement.	Do.
36. § 86.136-90	Revise treatment of restarting	Do.
37. § 86.137-96	Revised to reflect test changes	Do.
38. § 86.138-90	Adjust time between exhaust emission test and start of hot soak test	Do.
39. § 86.138-96	Move hot soak test after new running loss test. Change ambient temperature to 95 °F	Do.
40. § 86.143-96	Add calculations for running loss test. Revise calculations for variable-temperature enclosures	Do.
41. § 86.146-96	Add vehicle test for spitback	Do.
42. § 86.608-90	Revised to reflect test changes	Do.
43. § 86.609-84	Revised to reflect test changes	Do.
44. § 86.610-84	Revised to reflect test changes	Do.

APPENDIX TO THE PREAMBLE—TABLE OF CHANGES TO VARIOUS SUBPARTS—Continued

Section	Change	Reason
45. Table of contents, subpart K.	Revise title to add heavy-duty vehicles (for SEA spitback testing)	Do.
46. § 86.1008-90	Revise to reflect test changes	Do.
47. § 86.1009-84	Revise to reflect test changes	Do.
48. § 86.1010-84	Revise to reflect test changes	Do.
49. § 86.1205-90	Revise to reflect test changes	Do.
50. § 86.1206-96	Revise to reflect test changes	Do.
51. § 86.1207-96	Add specifications for variable-temperature diurnal enclosures and running loss test facilities	Do.
52. § 86.1215-85	Revise speed tolerances to allow more flexibility for outdoor driving	Do.
53. § 86.1217-96	Add calibration of variable-temperature diurnal enclosure and running loss facilities	Do.
54. § 86.1227-96	Update description of evaporative emission test	Do.
55. § 86.1229-85	Add procedure to determine fuel temperature profile for the running loss test	Do.
56. § 86.1230-96	Revise flowchart of test sequence	Do.
57. § 86.1231-96	Add requirement to repair leaks in the exhaust system for running loss testing. Add step to prepare for canister preconditioning.	Do.
58. § 86.1232-96	Add canister preconditioning after initial drive	Do.
59. § 86.1233-86	Delete heat build immediately before exhaust emission test. Revise diurnal emission test to include three consecutive, high-temperature diurnal heat builds, with 24-hour ambient temperature cycling, following running loss test.	Do.
60. § 86.1234-96	Add running loss test after exhaust emission test, using either SHED or point-source measurement.	Do.
61. § 86.1235-96	Revise text to reflect test changes	Do.
62. § 86.1236-85	Revise treatment of restarting	Do.
63. § 86.1237-96	Revise text to reflect test changes	Do.
64. § 86.1238-90	Adjust time between exhaust emission test and start of hot soak test	Do.
65. § 86.1238-96	Move hot soak test after new running loss test. Change ambient temperature to 95 °F	Do.
66. § 86.1243-96	Add calculations for running loss test. Revise calculations for variable-temperature enclosures	Do.
67. § 86.1246-96	Add spitback test	Do.
68. § 86.1306-96	Revise to reflect test changes	Do.
69. § 86.1327-96	Revise to reflect test changes	Do.
70. § 86.1336-84	Revise to reflect test changes	Do.
71. § 86.1337-96	Add step to attach loaded evaporative canister to engine	Do.
72. Appendix I to part 86	Add EPA New York City Cycle	Do.
73. Appendix II to part 86.	Add temperature profile for diurnal emission test	Do.

For the reasons set out in the preamble, title 40, chapter I, parts 80 and 86 of the Code of Federal Regulations, are amended as set forth below.

**PART 80—[AMENDED]**

1. The authority citation for part 80 is revised to read as follows:

Authority: Secs. 144, 211, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7414, 7545, and 7601(a)).

**Subpart B—[Amended]**

2. Section 80.22 of subpart B is amended by adding a new paragraph (j) to read as follows:

**§ 80.22 Controls applicable to gasoline retailers and wholesale purchaser-consumers.**

\* \* \* \* \*

(j) After January 1, 1996 every retailer and wholesale purchaser-consumer handling over 10,000 gallons of fuel per month shall equip each pump from which gasoline or methanol is introduced into motor vehicles with a nozzle that dispenses fuel at a flow rate not to exceed 10 gallons per minute.

After January 1, 1998 this requirement applies to every retailer and wholesale purchaser-consumer. Any dispensing pump shown to be dedicated to heavy-duty vehicles is exempt from this requirement.

**PART 86—[AMENDED]**

3. The authority citation for part 86 is revised to read as follows:

Authority: Secs. 202, 203, 205, 206, 207, 208, 215, 216, 217, and 301(a), Clean Air Act, as amended (42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, 7549, 7550, 7552, and 7601(a)).

3a. Part 86 is amended by removing the following sections:

Sec.	86.107-78	86.1233-85
	86.113-82	86.1234-85
	86.113-87	86.1238-85
	86.113-90	86.1242-85
	86.117-78	86.1243-85
	86.127-82	86.1301-84
	86.131-78	86.1301-88
	86.132-82	86.1304-84
	86.133-78	86.1305-84
	86.135-82	86.1306-84
	86.136-82	86.1306-88
	86.137-82	86.1313-84
	86.138-78	86.1313-87

**Sec.—Continued**

86.143-78	86.1313-90
86.1201-85	86.1316-84
86.1205-85	86.1320-88
86.1206-85	86.1321-84
86.1207-85	86.1326-84
86.1213-85	86.1327-84
86.1213-87	86.1327-88
86.1216-85	86.1332-84
86.1217-85	86.1333-84
86.1221-85	86.1337-84
86.1227-85	86.1337-88
86.1231-85	86.1339-88
86.1232-85	86.1340-84

4. A new § 86.1 is added immediately preceding subpart A to read as follows:

**§ 86.1 Reference materials.**

(a) The documents in paragraph (b) of this section have been incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at U.S. EPA, OAR, 401 M Street, SW., Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(b) The following paragraphs and tables set forth the material that has been incorporated by reference in this part.

(1) *ASTM material.* The following table sets forth material from the American Society for Testing and Materials that has been incorporated by reference. The first column lists the number and name of the material. The second column lists the section(s) of this part, other than § 86.1, in which the matter is referenced. The second column is presented for information only and may not be all inclusive. Copies of these materials may be obtained from American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.

Document No. and name	40 CFR part 86 reference
ASTM E29-67 (Reapproved 1980), Standard Recommended Practice for Indicating Which Places of Figures Are To Be Considered Significant in Specified Limiting Values.	86.094-26; 86.094-28; 86.1105-87.
ASTM E29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications.	86.609-84; 86.1009-84.

(2) *SAE material.* The following table sets forth material from the Society of Automotive Engineers that has been incorporated by reference. The first column lists the number and name of the material. The second column lists the section(s) of this part, other than § 86.1, in which the matter is referenced. The second column is presented for information only and may not be all inclusive. Copies of these materials may be obtained from Society of Automotive Engineers International, 400 Commonwealth Dr., Warrendale, PA, 15096-0001.

Document No. and name	40 CFR part 86 reference
SAE J1349 June 1990, Engine Power Test Code—Spark Ignition and Compression Ignition.	86.094-8; 86.096-8.

**Subpart A—[Amended]**

5. Section 86.091-29 of subpart A is amended by revising paragraphs (a)(3)(i) and (c)(3)(i) to read as follows:

**§ 86.091-29 Testing by the Administrator.**

(a) \* \* \*  
(3)(i) Whenever the Administrator conducts a test segment on a test vehicle, the results of that test segment,

unless subsequently invalidated by the Administrator, shall comprise the official data for that test segment for the vehicle at the prescribed test point and the manufacturer's data for that test segment for that prescribed test point shall not be used in determining compliance with emission standards (or family emission limits, as appropriate). The Administrator may stop a test after any evaporative test segment and use as official data any valid results obtained up to that point in the test, as described in subpart B of this part.

\* \* \* \* \*

(c) \* \* \*  
(3)(i) Whenever the Administrator conducts a test segment on an evaporative emission family-system combination, the results of that test segment, unless subsequently invalidated by the Administrator, shall comprise the official data for that test segment for the evaporative emission family-system combination, and the manufacturer's data, analyses, etc., for that test segment shall not be used in determining compliance with emission standards. The Administrator may stop a test after any evaporative test segment and use as official data any valid results obtained up to that point in the test, as described in subpart B of this part.

\* \* \* \* \*  
6. Section 86.095-35 of subpart A is amended by revising paragraph (a)(2)(iii)(C) to read as follows:

**§ 86.095-35 Labeling.**

\* \* \* \* \*  
(a) \* \* \*  
(2) \* \* \*  
(iii) \* \* \*  
(C) Engine displacement (in cubic inches or liters), engine family identification, and evaporative family identification;

\* \* \* \* \*  
7. A new § 86.096-2 is added to subpart A to read as follows:

**§ 86.096-2 Definitions.**

The definitions listed in this section apply beginning with the 1996 model year. The definitions of § 86.094-2 continue to apply to 1996 and later model year vehicles.

- Diurnal breathing losses* means diurnal emissions.
- Diurnal emissions* means evaporative emissions resulting from the daily cycling of ambient temperatures.
- Hot soak emissions* means evaporative emissions after termination of engine operation.
- Hot-soak losses* means hot soak emissions.
- Resting losses* means evaporative emissions that may occur

continuously, that are not diurnal emissions, hot soak emissions, running losses, or spitback emissions.

*Running losses* means evaporative emissions that occur during vehicle operation.

*Spitback emissions* means evaporative emissions resulting from the loss of liquid fuel that is emitted from a vehicle during a fueling operation.

*Useful life* means:

(1) For light-duty vehicles, and for light light-duty trucks not subject to the Tier 0 standards of § 86.094-9(a), intermediate useful life and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 10 years or 100,000 miles, whichever occurs first, except as otherwise noted in § 86.094-9. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of § 86.130-96 is defined as a period of use of 10 years or 100,000 miles, whichever occurs first.

(2) For light light-duty trucks subject to the Tier 0 standards of § 86.094-9(a), and for heavy light-duty truck engine families, intermediate and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 11 years or 120,000 miles, whichever occurs first. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of § 86.130-96 is also defined as a period of 11 years or 120,000 miles, whichever occurs first.

(3) For an Otto-cycle heavy-duty engine family, a period of use of 8 years or 110,000 miles, whichever occurs first, except for the portion of evaporative emission control systems subject to the evaporative emission test requirements of § 86.1230-96, for which the applicable period of use is 10 years or 110,000 miles, whichever occurs first.

(4) For a diesel heavy-duty engine family:

- (i) For light heavy-duty diesel engines, period of use of 8 years or 110,000 miles, whichever occurs first.
- (ii) For medium heavy-duty diesel engines, a period of use of 8 years or 185,000 miles, whichever occurs first.
- (iii) For heavy heavy-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever occurs first, except as provided in paragraph (4)(iv) of this definition.
- (iv) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of

10 years or 290,000 miles, whichever occurs first.

(5) As an option for both light-duty trucks under certain conditions and heavy-duty engine families, an alternative useful life period assigned by the Administrator under the provisions of § 86.094-21(f).

(6) The useful-life period for purposes of the emissions defect warranty and emissions performance warranty shall be a period of 5 years/50,000 miles, whichever occurs first, for light-duty trucks, Otto-cycle heavy-duty engines and light heavy-duty diesel engines. For all other heavy-duty diesel engines the aforementioned period is 5 years/100,000 miles, whichever occurs first. However, in no case may this period be less than the manufacturer's basic mechanical warranty period for the engine family.

8. A new § 86.096-7 is added to subpart A to read as follows:

**§ 86.096-7 Maintenance of records; submittal of information; right of entry.**

Section 86.096-7 includes text that specifies requirements that differ from those specified in §§ 86.091-7 and 86.094-7. Where a paragraph in § 86.091-7 or § 86.094-7 is identical and applicable to § 86.096-7, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.091-7," or "[Reserved]. For guidance see § 86.094-7."

(a) Introductory text through (a)(2) [Reserved]. For guidance see § 86.091-7.

(a)(3) Through (h)(5) [Reserved]. For guidance see § 86.094-7.

(h)(6) *Voiding a certificate.* (i) EPA may void ab initio a certificate for a vehicle certified to Tier 0 certification standards or to the respective evaporative test procedure and accompanying evaporative standards as set forth or otherwise referenced in §§ 86.090-8, 86.090-9, or § 86.091-10 for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

(ii) EPA may void ab initio a certificate for a 1994 or 1995 model year light-duty vehicle or light-duty truck that is not certified in compliance with the cold temperature CO standard for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

(iii) Any voiding ab initio of a certificate under § 86.091-7(c)(6) and paragraph (h)(6) of this section will be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in

accordance with § 86.614 for light-duty vehicles or under § 86.1014 for light-duty trucks and heavy-duty engines.

(7) The manufacturer (or contractor for the manufacturer, if applicable) of any new model 1996 through 1998 light-duty vehicle, light-duty truck or heavy-duty vehicle that is certified shall establish, maintain and retain the following adequately organized and indexed records for each such vehicle:

- (i) EPA engine family;
- (ii) Vehicle identification number;
- (iii) Model year and production date;
- (iv) Shipment date;
- (v) Purchaser;
- (vi) Purchase contract; and
- (vii) EPA evaporative family.

9. Section 86.096-8 of subpart A is amended by revising paragraph (b) to read as follows:

**§ 86.096-8 Emission standards for 1996 and later model year light-duty vehicles.**

\* \* \* \* \*

(b) Evaporative emissions from light-duty vehicles shall not exceed the following standards. The standards apply equally to certification and in-use vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for gasoline-fueled vehicles).* (i)(A) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams per test.

(B) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(ii) *Running loss test:* 0.05 grams per mile.

(iii) *Fuel dispensing spitback test:* 1.0 gram per test.

(2) *Organic Material Hydrocarbon Equivalent (for methanol-fueled vehicles).* (i)(A) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams carbon per test.

(B) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(ii) *Running loss test:* 0.05 grams carbon per mile.

(iii) *Fuel dispensing spitback test:* 1.0 gram carbon per test.

(3) The standards set forth in paragraphs (b) (1) and (2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart B of this part.

(4) All fuel vapor generated in a gasoline- or methanol-fueled light-duty vehicle during in-use operations shall

be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(5)(i) A minimum of the percentage shown in Table A96-15 of a manufacturer's sales of the applicable model year's gasoline- and methanol-fueled light-duty vehicles shall be tested with the procedures in subpart B indicated for 1996 model year, and shall not exceed the standards described in paragraph (b) of this section. The remaining vehicles shall be tested with the procedures in subpart B of this part for 1995 model year light-duty vehicles and be subject to the standards described in § 86.090-8(b).

TABLE A96-15.—IMPLEMENTATION SCHEDULE FOR LIGHT-DUTY VEHICLES FOR EVAPORATIVE EMISSION TESTING

Model year	Sales percentage
1996 .....	20
1997 .....	40
1998 .....	90
1999 and following .....	100

(ii) Optionally, a minimum of the percentage shown in Table A96-15 of a manufacturer's combined sales of the applicable model year's gasoline- and methanol-fueled light-duty vehicles, light-duty trucks, and heavy-duty vehicles shall not exceed the applicable standards.

(iii) Small volume manufacturers, as defined in § 86.092-14(b)(1) and (2), are exempt from the implementation schedule of Table A96-15 of this section for model years 1996, 1997, and 1998. For small volume manufacturers, the standards of § 86.090-8(b), and the associated test procedures, continue to apply until model year 1999, when 100 percent compliance with the standards of this section is required. This exemption does not apply to small volume engine families as defined in § 86.092-14(b)(5).

\* \* \* \* \*

10. A new § 86.096-9 is added to subpart A to read as follows:

**§ 86.096-9 Emission standards for 1996 and later model year light-duty trucks.**

Section 86.096-9 includes text that specifies requirements that differ from § 86.094-9. Where a paragraph in § 86.094-9 is identical and applicable to § 86.096-9, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-9."

(a) [Reserved]. For guidance see § 86.094-9.

(b) Evaporative emissions from light-duty trucks shall not exceed the following standards. The standards apply equally to certification and in-use vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for gasoline-fueled vehicles)*. (i)(A) For heavy light-duty trucks with nominal fuel tank capacity of at least 30 gallons:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 3.0 grams per test.

(B) For all other light-duty trucks:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(ii) *Running loss test*: 0.05 grams per mile.

(iii) *Fuel dispensing spitback test*: 1.0 gram per test.

(2) *Organic Material Hydrocarbon Equivalent (for methanol-fueled vehicles)*. (i)(A) For heavy light-duty trucks with nominal fuel tank capacity of at least 30 gallons:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 3.0 grams carbon per test.

(B) For all other light-duty trucks:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(ii) *Running loss test*: 0.05 grams carbon per mile.

(iii) *Fuel dispensing spitback test*: 1.0 gram carbon per test.

(3) The standards set forth in paragraphs (b) (1) and (2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart B of this part.

(4) All fuel vapor generated in a gasoline- or methanol-fueled light-duty truck during in-use operations shall be

routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(5) (i) A minimum of the percentage shown in Table A96-16 of a manufacturer's sales of the applicable model year's gasoline- and methanol-fueled light-duty trucks shall be tested with the procedures in subpart B of this part indicated for the 1996 model year, and shall not exceed the standards described in paragraph (b) of this section. The remaining vehicles shall be tested with the procedures in subpart B of this part for 1995 model year light-duty trucks and be subject to the standards described in § 86.090-9(b).

TABLE A96-16.—IMPLEMENTATION SCHEDULE FOR LIGHT-DUTY TRUCKS FOR EVAPORATIVE EMISSION TESTING

Model year	Sales percentage
1996 .....	20
1997 .....	40
1998 .....	90
1999 and following .....	100

(ii) Optionally, a minimum of the percentage shown in Table A96-16 of a manufacturer's combined sales of the applicable model year's gasoline- and methanol-fueled light-duty vehicles, light-duty trucks, and heavy-duty vehicles shall not exceed the applicable standards.

(iii) Small volume manufacturers, as defined in § 86.092-14(b)(1) and (2), are exempt from the implementation schedule of Table A96-16 of this section for model years 1996, 1997, and 1998. For small volume manufacturers, the standards of § 86.090-9(b), and the associated test procedures, continue to apply until model year 1999, when 100 percent compliance with the standards of this section is required. This exemption does not apply to small volume engine families as defined in § 86.092-14(b)(5).

(c) through (k) [Reserved]. For guidance see § 86.094-9.

11. A new § 86.096-10 is added to subpart A to read as follows:

**§ 86.096-10 Emission standards for 1996 and later model year Otto-cycle heavy-duty engines and vehicles.**

Section 86.096-10 includes text that specifies requirements that differ from § 86.091-10. Where a paragraph in § 86.091-10 is identical and applicable to § 86.096-10, this may be indicated by specifying the corresponding paragraph

and the statement "[Reserved]. For guidance see § 86.091-10."

(a) [Reserved]. For guidance see § 86.091-10.

(b) Evaporative emissions from heavy-duty vehicles shall not exceed the following standards. The standards apply equally to certification and in-use vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for vehicles equipped with gasoline-fueled engines)*.

(i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs:

(A) (1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.5 grams per test.

(B) *Running loss test*: 0.05 grams per mile.

(C) *Fuel dispensing spitback test*: 1.0 gram per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs:

(A) (1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.5 grams per test.

(B) *Running loss test*: 0.05 grams per mile.

(2) *Organic Material Hydrocarbon Equivalent (for vehicles equipped with methanol-fueled engines)*. (i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs:

(A) (1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.5 grams carbon per test.

(B) *Running loss test*: 0.05 grams carbon per mile.

(C) *Fuel dispensing spitback test*: 1.0 gram carbon per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs:

(A) (1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.5 grams carbon per test.

(B) *Running loss test*: 0.05 grams carbon per mile.

(3) (i) For vehicles with a Gross Vehicle Weight Rating of up to 26,000



lbs, the standards set forth in paragraphs (b)(1) and (b)(2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart M of this part.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs., the standards set forth in paragraphs (b)(1)(ii) and (b)(2)(ii) of this section refer to the manufacturer's engineering design evaluation using good engineering practice (a statement of which is required in § 86.091-23(b)(4)(ii)).

(4) All fuel vapor generated in a gasoline- or methanol-fueled heavy-duty vehicle during in-use operations shall be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(5)(i) A minimum of the percentage shown in Table A96-17 of a manufacturer's sales of the applicable model year's gasoline- and methanol-fueled heavy-duty vehicles shall not exceed the standards described in paragraph (b) of this section, except that methanol-fueled heavy-duty vehicles are exempt for the 1996 and 1997 model years. The remaining vehicles shall be subject to the standards described in § 86.091-10(b).

TABLE A96-17.—IMPLEMENTATION SCHEDULE FOR HEAVY-DUTY VEHICLES FOR EVAPORATIVE EMISSION TESTING

Model year	Sales percentage
1996 .....	20
1997 .....	40
1998 .....	90
1999 and following .....	100

(ii) Optionally, a minimum of the percentage shown in Table A96-17 of a manufacturer's combined sales of the applicable model year's gasoline- and methanol-fueled light-duty vehicles, light-duty trucks, and heavy-duty vehicles shall not exceed the applicable standards.

(iii) Small volume manufacturers, as defined in § 86.092-14(b)(1) and (2), are exempt from the implementation schedule of Table A96-17 of this section for model years 1996, 1997, and 1998. For small volume manufacturers, the standards of § 86.091-10(b), and the associated test procedures, continue to apply until model year 1999, when 100 percent compliance with the standards of this section is required. This exemption does not apply to small

volume engine families as defined in § 86.092-14(b)(5).

(c) and (d) [Reserved]. For guidance see § 86.091-10.

12. A new § 86.096-14 is added to subpart A to read as follows:

**§ 86.096-14 Small-volume manufacturer certification procedures.**

Section 86.096-14 includes text that specifies requirements that differ from those specified in §§ 86.094-14 and 86.095-14. Where a paragraph in § 86.094-14 or § 86.095-14 is identical and applicable to § 86.096-14, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-14" or "[Reserved]. For guidance see § 86.095-14." Where a corresponding paragraph of § 86.094-14 or § 86.095-14 is not applicable, this is indicated by the statement "[Reserved]."

(a) through (c)(11)(ii)(B)(15) [Reserved]. For guidance see § 86.094-14.

(c)(11)(ii)(B)(16) through (c)(11)(ii)(B)(18) [Reserved]. For guidance see § 86.095-14.

(c)(11)(ii)(B)(19) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family, a description of any unique procedures required to perform evaporative emission tests (including canister working capacity, canister bed volume, and fuel temperature profile for the running loss test) for all vehicles in that evaporative emission family, and a description of the method used to develop those unique procedures.

(20) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family:

(i) Canister working capacity, according to the procedures specified in § 86.132-96(h)(1)(iv);

(ii) Canister bed volume; and

(iii) Fuel temperature profile for the running loss test, according to the procedures specified in § 86.129-94(d).

(c)(11)(ii)(C) through (c)(11)(ii)(D)(5) [Reserved]. For guidance see § 86.095-14.

(c)(11)(ii)(D)(6) [Reserved]  
(c)(11)(ii)(D)(7) through (c)(11) [Reserved]. For guidance see § 86.094-14.

13. A new § 86.096-21 is added to subpart A to read as follows:

**§ 86.096-21 Application for certification.**

Section 86.096-21 includes text that specifies requirements that differ from § 86.094-21. Where a paragraph in § 86.094-21 is identical and applicable to § 86.096-21, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-21."

(a) through (b)(8) [Reserved]. For guidance see § 86.094-21.

(b) (9) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family, a description of any unique procedures required to perform evaporative emission tests (including canister working capacity, canister bed volume, and fuel temperature profile for the running loss test) for all vehicles in that evaporative emission family, and a description of the method used to develop those unique procedures.

(10) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family:

(i) Canister working capacity, according to the procedures specified in § 86.132-96(h)(1)(iv);

(ii) Canister bed volume; and

(iii) Fuel temperature profile for the running loss test, according to the procedures specified in § 86.129-94(d).

(c) through (g) [Reserved]. For guidance see § 86.094-21.

14. A new § 86.096-23 is added to subpart A to read as follows:

**§ 86.096-23 Required data.**

Section 86.096-23 includes text that specifies requirements that differ from those specified in § 86.094-23. Where a paragraph in § 86.094-23 is identical and applicable to § 86.096-23, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-23."

(a) through (l) [Reserved]. For guidance see § 86.094-23.

(m) Additionally, except for small-volume manufacturers, manufacturers certifying vehicles shall submit for each model year 1996 through 1998 light-duty vehicle, light-duty truck, and gasoline-fueled heavy-duty vehicle evaporative family:

(1) In the application for certification the projected sales volume of evaporative families certifying to the respective evaporative test procedure and accompanying standards as set forth or otherwise referenced in §§ 86.090-8, 86.090-9, and 86.091-10 or those set forth or otherwise referenced in §§ 86.096-8, 86.096-9, and 86.096-10. Volume projected to be produced for U.S. sale may be used in lieu of projected U.S. sales.

(2) End-of-year reports for each evaporative family.

(i) These end-of-year reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (6405), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

(ii) These reports shall indicate the model year, evaporative family and the actual U.S. sales volume. The manufacturer may petition the Administrator to allow volume produced for U.S. sale to be used in lieu of U.S. sales. Such petition shall be submitted within 30 days of the end of the model year to the Manufacturers Operations Division. For the petition to be granted, the manufacturer must establish to the satisfaction of the Administrator that production volume is functionally equivalent to sales volume.

(iii) The U.S. sales volume for end-of-year reports shall be based on the location of the point of sale to a dealer, distributor, fleet operator, broker, or any other entity that comprises the point of first sale.

(iv) Failure by a manufacturer to submit the end-of-year report within the specified time may result in certificate(s) for the evaporative family(ies) certified to the certification standards set forth in §§ 86.090-8, 86.090-9, and 86.091-10 being voided ab initio plus any applicable civil penalties for failure to submit the required information to the Agency.

(v) The information shall be organized in such a way as to allow the Administrator to determine compliance with the Evaporative Emission Testing implementation schedules of §§ 86.096-8, 86.096-9, and 86.096-10.

15. A new § 86.096-26 is added to subpart A to read as follows:

**§ 86.096-26 Mileage and service accumulation; emission measurements.**

Section 86.096-26 includes text that specifies requirements that differ from those specified in §§ 86.094-26 and 86.095-26. Where a paragraph in § 86.094-26 or § 86.095-26 is identical and applicable to § 86.096-26, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-26." or "[Reserved]. For guidance see § 86.095-26."

(a) through (b)(4)(i)(C) [Reserved]. For guidance see § 86.094-26.

(b)(4)(i)(D) through (b)(4)(ii)(D) [Reserved]. For guidance see § 86.095-26.

(b)(4)(iii) through (c)(3) [Reserved]. For guidance see § 86.094-26.

(c)(4) The manufacturer shall determine, for each engine family, the number of hours at which the engine system combination is stabilized for emission-data testing. The manufacturer shall maintain, and provide to the Administrator if requested, a record of the rationale used in making this determination. The manufacturer may

elect to accumulate 125 hours on each test engine within an engine family without making a determination. Any engine used to represent emission-data engine selections under § 86.094-24(b)(2) shall be equipped with an engine system combination that has accumulated at least the number of hours determined under this paragraph. Complete exhaust emission tests shall be conducted for each emission-data engine selection under § 86.094-24(b)(2). Evaporative emission controls must be connected, as described in § 86.1337-96(a)(1). The Administrator may determine under § 86.094-24(f) that no testing is required.

(d) [Reserved]. For guidance see § 86.094-26.

16. A new § 86.096-30 is added to subpart A to read as follows:

**§ 86.096-30 Certification.**

Section 86.096-30 includes text that specifies requirements that differ from those specified in §§ 86.094-30 and 86.095-30. Where a paragraph in § 86.094-30 or § 86.095-30 is identical and applicable to § 86.096-30, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-30." or "[Reserved]. For guidance see § 86.095-30."

(a)(1)(i) through (a)(2) [Reserved]. For guidance see § 86.094-30.

(a)(3)(i) through (a)(4)(ii) introductory text [Reserved]. For guidance see § 86.095-30.

(a)(4)(iii)(A) through (a)(4)(iii)(C) [Reserved]. For guidance see § 86.094-30.

(a)(4)(iv) introductory text [Reserved]. For guidance see § 86.095-30.

(a)(4)(iv)(A) through (a)(12) [Reserved]. For guidance see § 86.094-30.

(a)(13) [Reserved]. For guidance see § 86.095-30.

(a)(14) [Reserved]. For guidance see § 86.094-30.

(a)(15) For all light-duty vehicles certified to evaporative test procedures and accompanying standards specified under § 86.096-8:

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of § 86.096-8 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in § 86.096-8 will be considered to be a failure to satisfy the conditions upon which the certificate was issued and the vehicles sold in violation of the implementation schedule shall not be covered by the certificate.

(iii) The manufacturer shall bear the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificate was issued were satisfied.

(16) For all light-duty trucks certified to evaporative test procedures and accompanying standards specified under § 86.096-9:

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of § 86.096-9 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in § 86.096-9 will be considered to be a failure to satisfy the conditions upon which the certificate was issued and the vehicles sold in violation of the implementation schedule shall not be covered by the certificate.

(iii) The manufacturer shall bear the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificate was issued were satisfied.

(17) For all heavy-duty vehicles certified to evaporative test procedures and accompanying standards specified under § 86.096-10:

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of § 86.096-10 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in § 86.096-10 will be considered to be a failure to satisfy the conditions upon which the certificate was issued and the vehicles sold in violation of the implementation schedule shall not be covered by the certificate.

(iii) The manufacturer shall bear the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificate was issued were satisfied.

(b) through (e) [Reserved]. For guidance see § 86.094-30.

17. A new § 86.096-35 is added to subpart A to read as follows:

**§ 86.096-35 Labeling.**

Section 86.096-35 includes text that specifies requirements that differ from § 86.095-35. Where a paragraph in § 86.095-35 is identical and applicable to § 86.096-35, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.095-35."

(a) introductory text through (a)(1)(iii)(L) [Reserved]. For guidance see § 86.095-35.

(a)(1)(iii)(M) For model years 1996 through 1998 light-duty vehicles, a clear

indication of which test procedure was used to certify the evaporative family, e.g., "Evaporative Family xx (§ 86.130-96 procedures)" or "Evaporative Family xx (§ 86.130-78 procedures)."

(a)(2) Heading through (a)(2)(iii)(N) [Reserved]. For guidance see § 86.095-35.

(a)(2)(iii)(O) For model years 1996 through 1998 light-duty trucks, a clear indication of which test procedure was used to certify the evaporative family, e.g., "Evaporative Family xx (§ 86.130-96 procedures)" or "Evaporative Family xx (§ 86.130-78 procedures)."

(a)(3) through (a)(4)(iii)(F) [Reserved]. For guidance see § 86.095-35.

(a)(4)(iii)(G) For model years 1996 through 1998 gasoline-fueled and methanol-fueled heavy-duty vehicles, a clear indication of which test procedure was used to certify the evaporative family, e.g., "Evaporative Family xx (§ 86.1230-96 procedures)" or "Evaporative Family xx (§ 86.1230-85 procedures)."

(b) through (h) [Reserved]. For guidance see § 86.095-35.

17a. Section 86.097-9 of subpart A is amended by revising paragraph (b) to read as follows:

**§ 86.097-9 Emission standards for 1997 and later model year light-duty trucks.**

\* \* \* \* \*

(b) [Reserved]. For guidance see § 86.096-9.

\* \* \* \* \*

18. A new § 86.098-23 is added to subpart A to read as follows:

**§ 86.098-23 Required data.**

Section 86.098-23 includes text that specifies requirements that differ from those specified in § 86.094-23. Where a paragraph in § 86.094-23 is identical and applicable to § 86.098-23, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-23."

(a) through (l) [Reserved]. For guidance see § 86.094-23.

(m) Additionally, except for small-volume manufacturers, manufacturers certifying vehicles shall submit for each model year 1998 light-duty vehicle, light-duty truck, and gasoline- and methanol-fueled heavy-duty vehicle evaporative family:

(1) In the application for certification the projected sales volume of evaporative families certifying to the respective evaporative test procedure and accompanying standards as set forth or otherwise referenced in §§ 86.090-8, 86.090-9, and 86.091-10 or those set forth or otherwise referenced in §§ 86.096-8, 86.096-9, and 86.096-10.

Volume projected to be produced for U.S. sale may be used in lieu of projected U.S. sales.

(2) End-of-year reports for each evaporative family.

(i) These end-of-year reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (6405J), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC, 20460.

(ii) These reports shall indicate the model year, evaporative family and the actual U.S. sales volume. The manufacturer may petition the Administrator to allow volume produced for U.S. sale to be used in lieu of U.S. sales. Such petition shall be submitted within 30 days of the end of the model year to the Manufacturers Operations Division. For the petition to be granted, the manufacturer must establish to the satisfaction of the Administrator that production volume is functionally equivalent to sales volume.

(iii) The U.S. sales volume for end-of-year reports shall be based on the location of the point of sale to a dealer, distributor, fleet operator, broker, or any other entity that comprises the point of first sale.

(iv) Failure by a manufacturer to submit the end-of-year report within the specified time may result in certificate(s) for the evaporative family(ies) certified to the certification standards set forth in §§ 86.090-8, 86.090-9, and 86.091-10 being voided ab initio plus any applicable civil penalties for failure to submit the required information to the Agency.

(v) The information shall be organized in such a way as to allow the Administrator to determine compliance with the Evaporative Emission Testing implementation schedules of §§ 86.096-8, 86.096-9, and 86.096-10.

19. A new § 86.099-8 is added to subpart A to read as follows:

**§ 86.099-8 Emission standards for 1999 and later model year light-duty vehicles.**

Section 86.099-8 includes text that specifies requirements that differ from § 86.096-8. Where a paragraph in § 86.096-8 is identical and applicable to § 86.099-8, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.096-8."

(a) [Reserved]. For guidance see § 86.096-8.

(b) Evaporative emissions from light-duty vehicles shall not exceed the following standards. The standards apply equally to certification and in-use

vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for gasoline-fueled vehicles)*. (i)(A) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams per test.

(B) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(ii) Running loss test: 0.05 grams per mile.

(iii) Fuel dispensing spitback test: 1.0 gram per test.

(2) *Organic Material Hydrocarbon Equivalent (for methanol-fueled vehicles)*. (i)(A) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams carbon per test.

(B) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(ii) Running loss test: 0.05 grams carbon per mile.

(iii) Fuel dispensing spitback test: 1.0 gram carbon per test.

(3) The standards set forth in paragraphs (b) (1) and (2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart B of this part.

(4) All fuel vapor generated in a gasoline- or methanol-fueled light-duty vehicle during in-use operations shall be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(c) through (k) [Reserved]. For guidance see § 86.096-8.

20. A new § 86.099-9 is added to subpart A to read as follows:

**§ 86.099-9 Emission standards for 1999 and later model year light-duty trucks.**

Section 86.099-9 includes text that specifies requirements that differ from § 86.097-9. Where a paragraph in § 86.097-9 is identical and applicable to § 86.099-9, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.097-9." Where a corresponding paragraph of § 86.097-9 is not applicable, this is indicated by the statement "[Reserved]."

(a) [Reserved]. For guidance see § 86.097-9.

(b) Evaporative emissions from light-duty trucks shall not exceed the following standards. The standards apply equally to certification and in-use

vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for gasoline-fueled vehicles)*. (i)(A) For heavy light-duty trucks with nominal fuel tank capacity of at least 30 gallons:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 3.0 grams per test.

(B) For all other light-duty trucks:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams per test.

(i) Running loss test: 0.05 grams per mile.

(iii) Fuel dispensing spitback test: 1.0 gram per test.

(2) *Organic Material Hydrocarbon Equivalent (for methanol-fueled vehicles)*. (i)(A) For heavy light-duty trucks with nominal fuel tank capacity of at least 30 gallons:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 3.0 grams carbon per test.

(B) For all other light-duty trucks:

(1) For the full three-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.

(i) Running loss test: 0.05 grams carbon per mile.

(iii) Fuel dispensing spitback test: 1.0 gram carbon per test.

(3) The standards set forth in paragraphs (b) (1) and (2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart B of this part.

(4) All fuel vapor generated in a gasoline- or methanol-fueled light-duty truck during in-use operations shall be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(c) [Reserved]. For guidance see § 86.097-9.

(d) through (f) [Reserved].

(g) through (k) [Reserved]. For guidance see § 86.097-9.

21. A new § 86.099-10 is added to subpart A to read as follows:

**§ 86.099-10 Emission standards for 1999 and later model year Otto-cycle heavy-duty engines and vehicles.**

Section 86.099-10 includes text that specifies requirements that differ from § 86.098-10. Where a paragraph in § 86.98-10 is identical and applicable to § 86.099-10, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.098-10."

(a) [Reserved]. For guidance see § 86.098-10.

(b) Evaporative emissions from heavy-duty vehicles shall not exceed the following standards. The standards apply equally to certification and in-use vehicles. The spitback standard also applies to newly assembled vehicles.

(1) *Hydrocarbons (for vehicles equipped with gasoline-fueled engines)*.

(i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs:

(A)(1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.5 grams per test.

(B) Running loss test: 0.05 grams per mile.

(C) Fuel dispensing spitback test: 1.0 gram per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs:

(A)(1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.0 grams per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.5 grams per test.

(B) Running loss test: 0.05 grams per mile.

(2) *Organic Material Hydrocarbon Equivalent (for vehicles equipped with methanol-fueled engines)*. (i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs:

(A)(1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 3.5 grams carbon per test.

(B) Running loss test: 0.05 grams carbon per mile.

(C) Fuel dispensing spitback test: 1.0 gram carbon per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs:

(A)(1) For the full three-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.0 grams carbon per test.

(2) For the supplemental two-diurnal test sequence described in § 86.1230-96, diurnal plus hot soak measurements: 4.5 grams carbon per test.

(B) Running loss test: 0.05 grams carbon per mile.

(3)(i) For vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs, the standards set forth in paragraphs (b)(1) and (b)(2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart M of this part.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs., the standards set forth in paragraphs (b)(1)(ii) and (b)(2)(ii) of this section refer to the manufacturer's engineering design evaluation using good engineering practice (a statement of which is required in § 86.091-23(b)(4)(ii)).

(4) All fuel vapor generated in a gasoline- or methanol-fueled heavy-duty vehicle during in-use operations shall be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.

(c) and (d) [Reserved]. For guidance see § 86.098-10.

**Subpart B—[Amended]**

22. Section 86.105 of subpart B is amended by revising paragraph (b) to read as follows:

**§ 86.105 Introduction; structure of subpart.**

\* \* \* \* \*

(b) Three topics are addressed in this subpart. Sections 86.106 through 86.115 set forth specifications and equipment requirements; §§ 86.116 through 86.126 discuss calibration methods and frequency; test procedures and data requirements are listed in §§ 86.127 through 86.146.

23. A new § 86.106-96 is added to subpart B to read as follows:

**§ 86.106-96 Equipment required; overview.**

(a) This subpart contains procedures for exhaust emission tests on petroleum-fueled and methanol-fueled light-duty vehicles and light-duty trucks, and for evaporative emission tests on gasoline-fueled and methanol-fueled light-duty vehicles and light-duty trucks. Certain items of equipment are not necessary for

a particular test, e.g., evaporative enclosure when testing diesel-cycle vehicles. Alternate sampling systems and calculation methods may be used if shown to yield equivalent or superior results, and if approved in advance by the Administrator. Equipment required and specifications are as follows:

(1) *Evaporative emission tests, gasoline-fueled and methanol-fueled vehicles.* The evaporative emission test is closely related to and connected with the exhaust emission test. All vehicles tested for evaporative emissions must undergo testing according to the test sequences described in § 86.130-96; however, the Administrator may omit measurement of exhaust emissions to test for evaporative emissions. The Administrator may truncate a test after any valid emission measurement without affecting the validity of the test. Further, unless the evaporative emission test is waived by the Administrator under § 86.090-26, all gasoline-fueled and methanol-fueled vehicles must undergo both exhaust and evaporative emission tests. (Diesel vehicles are excluded from the evaporative emission standard.) Section 86.107 specifies the necessary equipment.

(2) *Exhaust emission tests.* All vehicles subject to this subpart are subject to testing for both gaseous and particulate exhaust emissions using the CVS concept (see § 86.109), except where exemptions or waivers are expressly provided in subpart A of this part. Vehicles subject to the "Tier 0" (i.e., phase-out) standards described under subpart A of this part are exempted from testing for methane emissions. Otto-cycle vehicles subject to the "Tier 0" standards are waived from testing for particulates. For vehicles waived from the requirement for measuring particulate emissions, use of a dilution tunnel is not required (see § 86.109). The CVS must be connected to the dilution tunnel if particulate emission sampling is required (see § 86.110). Petroleum- and methanol-fueled diesel-cycle vehicle testing requires that a PDP-CVS or CFV-CVS with heat exchanger be used. (This equipment may be used with methanol-fueled Otto-cycle vehicles; however, particulates need not be measured for vehicles that are waived from the requirement). All gasoline-fueled and methanol-fueled vehicles equipped with evaporative canisters are preconditioned by loading the canisters with hydrocarbon vapors. Petroleum-fueled diesel-cycle vehicles are excluded from this requirement. Equipment necessary and specifications appear in §§ 86.108 through 86.114.

(3) *Fuel, analytical gas, and driving schedule specifications.* Fuel specifications for exhaust and evaporative emissions testing and for mileage accumulation for petroleum-fueled and methanol-fueled vehicles are specified in § 86.113. Analytical gases are specified in § 86.114. The EPA Urban Dynamometer Driving Schedule (UDDS), for use in exhaust emission tests, and the New York City Cycle (NYCC), for use with the UDDS in running loss tests, are specified in § 86.115 and appendix I of this part.

(b) [Reserved]

24. A new § 86.107-96 is added to subpart B to read as follows:

**§ 86.107-96 Sampling and analytical systems; evaporative emissions.**

(a) *Testing enclosures—(1) Diurnal emission test.* The enclosure shall be readily sealable, rectangular in shape, with space for personnel access to all sides of the vehicle. When sealed, the enclosure shall be gas tight in accordance with § 86.117-96. Interior surfaces must be impermeable and nonreactive to hydrocarbons (and to methanol, if the enclosure is used for methanol-fueled vehicles). The temperature conditioning system shall be capable of controlling the internal enclosure air temperature to follow the prescribed temperature versus time cycle as specified in § 86.133-96 and appendix II of this part, within an instantaneous tolerance of  $\pm 3.0$  °F of the nominal temperature versus time profile throughout the test, and an average tolerance of  $\pm 2.0$  °F over the duration of the test. The control system shall be tuned to provide a smooth temperature pattern that has a minimum of overshoot, hunting, and instability about the desired long-term ambient temperature profile. Interior surface temperatures shall not be less than 40 °F, nor more than 130 °F at any time during the diurnal emission test. To accommodate the volume changes due to enclosure temperature changes, either a variable-volume or fixed-volume enclosure may be used for diurnal emission testing:

(i) *Variable-volume enclosure.* The variable-volume enclosure expands and contracts in response to the temperature change of the air mass in the enclosure. Two potential means of accommodating the internal volume changes are movable panel(s), or a bellows design, in which impermeable bag(s) inside the enclosure expand and contract in response to internal pressure changes by exchanging air from outside the enclosure. Any design for volume accommodation must maintain the integrity of the enclosure as specified in

§ 86.117-96 over the specified temperature range. Any method of volume accommodation shall limit the differential between the enclosure internal pressure and the barometric pressure to a maximum value of  $\pm 2.0$  inches of water. The enclosure shall be capable of latching to a fixed volume. A variable-volume enclosure must be capable of accommodating a  $\pm 7$  percent change from its "nominal volume" (see § 86.117-96(b)), accounting for temperature and barometric pressure variation during testing.

(ii) *Fixed-volume enclosure.* The fixed-volume enclosure shall be constructed with rigid panels that maintain a fixed enclosure volume, and meet the following requirements.

(A) The enclosure shall be equipped with an outlet flow stream that withdraws air at a low, constant rate from the enclosure throughout the test. An inlet flow stream may provide make-up air to balance the outgoing flow with incoming ambient air. Inlet air must be filtered with activated carbon to provide a relatively constant hydrocarbon level. Any method of volume accommodation shall maintain the differential between the enclosure internal pressure and the barometric pressure between 0 and -2 inches of water.

(B) The equipment shall be capable of measuring the mass of hydrocarbon and methanol (if the enclosure is used for methanol-fueled vehicles) in the inlet and outlet flow streams with a resolution of 0.01 gram. A bag sampling system may be used to collect a proportional sample of the air withdrawn from and admitted to the enclosure. Alternatively, the inlet and outlet flow streams may be continuously analyzed using an on-line FID analyzer and integrated with the flow measurements to provide a continuous record of the mass hydrocarbon and methanol removal.

(2) *Running loss test.* The enclosure shall be readily sealable, rectangular in shape, with space for personnel access to all sides of the vehicle. When sealed, the enclosure shall be gas tight in accordance with § 86.117-96. The enclosure may be equipped with a personnel door, provided that the enclosure can still meet the requirements of § 86.117-96 with the door installed. Interior surfaces must be impermeable and nonreactive to hydrocarbons and to methanol (if the enclosure is used for methanol-fueled vehicles). Interior surface temperatures shall not be less than 40 °F. If a running loss enclosure meets all the requirements of paragraph (a)(1) of this section, it may be used as a diurnal evaporative emission enclosure. The

enclosure must contain a dynamometer that meets the requirements of § 86.108. Provisions shall be made to remove exhaust gases from the enclosure. The running loss enclosure shall be equipped to supply air to the vehicle, at a temperature of  $95 \pm 5$  °F, from sources outside of the running loss enclosure directly into the operating engine's air intake system. Supplemental air requirements (e.g., for an air pump) shall be supplied by drawing air from the engine intake source. During the running loss test, ambient temperatures must be maintained at  $95 \pm 5$  °F ( $95 \pm 2$  °F on average). An air or oxygen cylinder with an attached self-contained breathing apparatus may be provided for the vehicle operator.

(3) *Hot soak test.* The hot soak test may be conducted by holding the vehicle in an enclosure that meets the requirements for either diurnal emission or running loss tests. The enclosure shall be configured to provide an internal enclosure ambient temperature of  $95 \pm 10$  °F for the first 5 minutes, and  $95 \pm 5$  °F ( $95 \pm 2$  °F on average) for the remainder of the hot soak test.

(i) If the hot soak test is conducted in the same enclosure as the immediately preceding running loss test, interior surface temperatures shall not be below 70 °F, nor above 125 °F for the last 55 minutes of the hot soak test.

(ii) If the hot soak test is not conducted in the same enclosure as the immediately preceding running loss test, interior surface temperatures shall not be below 70 °F, nor above 125 °F for the duration of the hot soak test.

(b) *Evaporative emission hydrocarbon and methanol analyzers.* (1) For gasoline- and methanol-fueled vehicles a hydrocarbon analyzer utilizing the hydrogen flame ionization principle (FID) shall be used to monitor the atmosphere within the enclosure (a heated FID (HFID) ( $235 \pm 15$  °F ( $113 \pm 8$  °C))) is required for methanol-fueled vehicles). Provided evaporative emission results are not affected, a probe may be used to detect or verify hydrocarbon sources during a running loss test. Instrument bypass flow may be returned to the enclosure. The FID shall have a response time to 90 percent of final reading of less than 1.5 seconds.

(2) For methanol-fueled vehicles, a methanol sampling and analyzing system is required in addition to the FID analyzer. The methanol sampling equipment shall consist of impingers for collecting the methanol sample and appropriate equipment for drawing the sample through the impingers. The analytical equipment shall consist of a gas chromatograph equipped with a flame ionization detector.

(c) *Evaporative emission hydrocarbon and methanol data recording system.* (1) The electrical output of the FID used for measuring hydrocarbons (or hydrocarbons plus methanol, as appropriate) shall be recorded at least at the initiation and termination of each running loss and hot soak test, and at the initiation and termination of the enclosure sampling period(s) for the diurnal emission test, as described in § 86.133. The recording may be taken by means of a strip chart potentiometric recorder, by use of an on-line computer system or other suitable means. In any case, the recording system must have operational characteristics (signal to noise ratio, speed of response, etc.) equivalent to or better than those of the signal source being recorded, and must provide a permanent record of results. The record shall show a positive indication of the initiation and completion of each hot soak, running loss, or diurnal emission test (including initiation and completion of sampling period(s)), along with the time elapsed during each soak.

(2) For the methanol sample, permanent records shall be made of the following: the volumes of deionized water introduced into each impinger, the rate and time of sample collection, the volumes of each sample introduced into the gas chromatograph, the flow rate of carrier gas through the column, the column temperature, and the chromatogram of the analyzed sample.

(d) *Fuel temperature control system.* Fuel temperatures of the test vehicle shall be controlled, as specified in § 86.134(g)(1)(xv), with the following combination of fans. The control system shall be tuned and operated to provide a smooth and continuous fuel tank temperature profile that is representative of the on-road temperature profile.

(1) A vehicle underbody fan shall discharge air from the front of the vehicle, as necessary to control fuel temperatures. The fan shall be a roadspeed modulated fan that is controlled to a discharge velocity that follows the dynamometer roll speed, at least up to speeds of 30 mph, throughout the driving cycle. Discharge velocities may temporarily depart from dynamometer roll speed if necessary to control fuel temperatures. The system shall provide a total discharge airflow not to exceed 8,000 cfm.

(2) Additional fans may be used to route heating or cooling air directly at the bottom of the vehicle's fuel tank. The air supplied to the tank shall be between 70° and 160 °F, with a total discharge airflow not to exceed 1,000 cfm.

(e) *Temperature recording system.* A strip chart potentiometric recorder, an on-line computer system, or other suitable means shall be used to record enclosure ambient temperature during all evaporative emission test segments, as well as vehicle fuel tank temperature during the running loss test. The recording system shall record each temperature at least once every minute. The recording system shall be capable of resolving time to  $\pm 15$ s and capable of resolving temperature to  $\pm 0.75$  °F ( $\pm 0.42$  °C). The temperature recording system (recorder and sensor) shall have an accuracy of  $\pm 3$  °F ( $\pm 1.7$  °C). The recorder (data processor) shall have a time accuracy of  $\pm 15$ s and a precision of  $\pm 15$ s. Two ambient temperature sensors, connected to provide one average output, shall be located 3 feet above the floor at the approximate mid-length of each side wall of the enclosure and within 3 to 12 inches of each side wall. Manufacturers shall arrange that vehicles furnished for testing at Federal certification facilities be equipped with iron-constantan Type J thermocouples for measurement of fuel tank temperature. Vehicles shall be equipped with 2 temperature sensors installed to provide an average liquid fuel temperature. The temperature sensors shall be placed to measure the temperature at the mid-volume of the liquid fuel at a fill level of 40 percent of nominal tank capacity. In-tank temperature sensors are not required for the supplemental two-diurnal test sequence specified in § 86.130-96.

(f) *Pressure recording system.* A strip chart potentiometric recorder, an on-line computer system, or other suitable means, shall be used to record the enclosure gauge pressure for any testing in an enclosure, as well as the vehicle's fuel tank pressure during the running loss test. The Administrator may omit measurement of fuel tank pressure. The recording system shall record each pressure at least once every minute. The recording system shall be capable of resolving time to  $\pm 15$ s and capable of resolving pressure to  $\pm 0.1$  inches of water. The pressure recording system (recorder and sensor) shall have an accuracy of  $\pm 1.0$  inches of water. The recorder (data processor) shall have a time accuracy of  $\pm 15$ s and a precision of  $\pm 15$ s. The pressure transducer shall be installed to measure the pressure in the vapor space of the fuel tank.

(g) *Purge blower.* One or more portable or fixed blowers shall be used to purge the enclosure. The blowers shall have sufficient flow capacity to reduce the enclosure hydrocarbon and/or methanol concentration from the test level to the ambient level between tests.

Actual flow capacity will depend upon the time available between tests.

(h) *Mixing blower.* Blowers or fans shall be used to mix the enclosure contents during evaporative emission testing. The inlets and outlets of the air circulation blower(s) shall be configured to provide a well dispersed air circulation pattern that produces effective internal mixing and avoids significant temperature or hydrocarbon stratification. Maintenance of uniform concentrations throughout the enclosure is important to the accuracy of testing.

(1) *Diurnal emission test.* Blowers or fans shall have a capacity of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume for mixing in the enclosure. Additional fans may be used to maintain a minimum wind speed of 5 mph (8 km/h) under the fuel tank of the test vehicle.

(2) *Running loss test.* Blowers or fans shall have a total capacity of at least 1.0 cfm per cubic foot of the nominal enclosure volume.

(3) *Hot soak test.* Blowers or fans must have a capacity of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume. Circulated air shall not be aimed directly at the vehicle.

(i) *Point-source running loss measurement facility.* Some system requirements pertain specifically to running loss testing by the point-source method, in which emissions from potential sources are collected and routed to a sampling system. Emissions are sampled with the same equipment and techniques as for exhaust emission measurement. The test environment must contain a dynamometer that meets the requirements of § 86.108. During the running loss test, ambient temperatures must be maintained at  $95 \pm 5$  °F ( $95 \pm 2$  °F on average). An air or oxygen cylinder with an attached self-contained breathing apparatus may be provided for the vehicle operator.

(1) The running loss vapor vent collection system shall be configured to collect all running loss emissions from each of the discrete point sources that function as vehicle fuel system vapor vents, and transport the collected vapor emissions to a CFV- or PDP-based dilution and measurement system. The collection system shall consist of a collector at each vehicle vapor vent, lengths of heated sample line connecting each collector to the inlet of the heated sample pump, and lengths of heated sample line connecting the outlet of the heated sample pump to the inlet of the running loss fuel vapor sampling system. Up to 3 feet of unheated line connecting each of the vapor collectors to the heated sample lines shall be allowed. Each heated sample pump and

its associated sample lines shall be maintained at a temperature between 175 °F and 200 °F to prevent condensation of fuel vapor in the sample lines. The heated sample pump(s) and its associated flow controls shall be configured and operated to draw a flow of ambient air into each collector at a flow rate of at least 0.67 cfm. The flow controls on each heated sampling system shall include an indicating flow meter that provides an alarm output to the data recording system if the flow rate drops below 0.67 cfm by more than 5 percent. The collector inlet for each discrete vapor vent shall be placed in proximity to the vent as necessary to capture any fuel vapor emissions without significantly affecting flow or pressure of the normal action of the vent. The collector inlets shall be designed to interface with the configuration and orientation of each specific vapor vent. For vapor vents that terminate in a tube or hose barb, a short length of tubing of an inside diameter larger throughout its length than the inside diameter of the vent outlet may be used to extend the vent into the mouth of the collector. For those vapor vent designs that are not compatible with such collector configurations, the vehicle manufacturer shall supply a collector that is configured to interface with the vapor vent design and that terminates in a fitting that is capable of capturing all vapor emitted from the vent. The Administrator may test for running losses by the point-source method without heating sample lines or pumps.

(2) The running loss fuel vapor sampling system shall be a CFV- or PDP-based dilution and measurement system that further dilutes the running loss fuel vapors collected by the vapor vent collection system(s) with ambient air, collects continuously proportional samples of the diluted running loss vapors and dilution air in sample bags, and measures the total dilute flow through the sampling system over each test interval. In practice, the system shall be configured and operated in a manner that is directly analogous to an exhaust emissions constant volume sampling system, except that the input flow to the system is the flow from the running loss vapor vent collection system(s) instead of vehicle exhaust flow. The system shall be configured and operated to meet the following requirements:

(i) The running loss fuel vapor sampling system shall be designed to measure the true mass of fuel vapor emissions collected by the running loss vapor vent collection system from the specified fuel vapor vents. The total

volume of the mixture of running loss emissions and dilution air shall be measured and a continuously proportioned sample of volume shall be collected for analysis. Mass emissions shall be determined from the sample concentration and total flow over the test period.

(ii) The PDP-CVS shall consist of a dilution air filter and mixing assembly, heat exchanger, positive-displacement pump, sampling system, and associated valves, pressure and temperature sensors. The PDP-CVS shall conform to the following requirements:

(A) The gas mixture temperature, measured at a point immediately ahead of the positive-displacement pump, shall be within  $\pm 10$  °F of the designed operating temperature at the start of the test. The gas mixture temperature variation from its value at the start of the test shall be limited to  $\pm 10$  °F during the entire test. The temperature measuring system shall have an accuracy and precision of  $\pm 2$  °F.

(B) The pressure gauges shall have an accuracy and precision of  $\pm 1.6$  inches of water ( $\pm 0.4$  kPa).

(C) The flow capacity of the CVS shall not exceed 350 cfm.

(D) Sample collection bags for dilution air and running loss fuel vapor samples shall be sufficient size so as not to impede sample flow.

(iii) The CFV sample system shall consist of a dilution air filter and mixing assembly, a sampling venturi, a critical flow venturi, a sampling system and assorted valves, and pressure and temperature sensors. The CFV sample system shall conform to the following requirements:

(A) The temperature measuring system shall have an accuracy and precision of  $\pm 2$  °F and a response time of 0.100 seconds of 62.5 percent of a temperature change (as measured in hot silicone oil).

(B) The pressure measuring system shall have an accuracy and precision of  $\pm 1.6$  inches of water (0.4 kPa).

(C) The flow capacity of the CVS shall not exceed 350 cfm.

(D) Sample collection bags for dilution air and running loss fuel vapor samples shall be of sufficient size so as not to impede sample flow.

(3) An on-line computer system or strip-chart recorder shall be used to record the following additional parameters during the running loss test sequence:

(i) CFV (if used) inlet temperature and pressure.

(ii) PDP (if used) inlet temperature, pressure, and differential pressure.

25. Section 86.113-94 is amended by revising footnote 4 in the table of paragraph (a)(1) to read as follows:

**§ 86.113-94 Fuel specifications.**

(a) \* \* \* (1) \* \* \*

\* \* \* \* \*  
 \* For testing at altitude above 1,219 m (4,000 ft.) the specified range is 7.6-8.0 psi (52-55 kPa).  
 \* \* \* \* \*

26. Section 86.115-78 of subpart B is amended by revising paragraphs (a) and (b) to read as follows:

**§ 86.115-78 EPA urban dynamometer driving schedules.**

(a) The EPA Urban Dynamometer Driving Schedule and the EPA New York City Cycle are listed in appendix I of this part. The driving schedules are defined by a smooth trace drawn through the specified speed vs. time relationships. They each consist of a distinct nonrepetitive series of idle, acceleration, cruise, and deceleration modes of various time sequences and rates.

(b) The driver should attempt to follow the target schedule as closely as possible. The speed tolerance at any given time for these schedules, or for a driver's aid chart approved by the Administrator, are as follows:

(1) The upper limit is 2 mph (3.2 km/h) higher than the highest point on the trace within 1 second of the given time.

(2) The lower limit is 2 mph (3.2 km/h) lower than the lowest point on the trace within 1 second of the given time.

(3)(i) Speed variations greater than the tolerances (such as may occur during gear changes or braking spikes) are acceptable, provided they occur for less than 2 seconds on any occasion and are clearly documented as to the time and speed at that point of the driving schedule.

(ii) When conducted to meet the requirements of § 86.129, up to three additional occurrences of speed variations greater than the tolerance are acceptable, provided they occur for less than 15 seconds on any occasion, and are clearly documented as to the time and speed at that point of the driving schedule.

(4) Speeds lower than those prescribed are acceptable, provided the vehicle is operated at maximum available power during such occurrences.

(5) When conducted to meet the requirements of §§ 86.129, 86.132, or § 86.146, the speed tolerance shall be as specified above, except that the upper and lower limits shall be 4 mph (6.4 km/h).

\* \* \* \* \*

27. A new § 86.117-96 is added to subpart B to read as follows:

**§ 86.117-96 Evaporative emission enclosure calibrations.**

The calibration of evaporative emission enclosures consists of three parts: initial and periodic determination of enclosure background emissions (hydrocarbons and methanol); initial determination of enclosure internal volume; and periodic hydrocarbon and methanol retention check and calibration. Methanol measurements may be omitted when methanol-fueled vehicles will not be tested in the evaporative enclosure.

(a) *Initial and periodic determination of enclosure background emissions.* Prior to its introduction into service, annually thereafter, and after any repair that can affect the enclosure background emissions, the enclosure shall be checked to determine that it does not contain materials that will themselves emit hydrocarbons or methanol. When methanol as well as hydrocarbons are present in the evaporative enclosure, the HFID hydrocarbon concentration measurement includes the partial response of the HFID to methanol plus the hydrocarbons. Determination of the HFID response to methanol, § 86.121, prior to its being placed in service is required for the determination of hydrocarbons. Proceed as follows:

(1) Prepare the enclosure. (i) Variable-volume enclosures may be operated in either latched or unlatched volume configuration, as described in paragraph (b)(1) of this section. Ambient temperatures shall be maintained at 96±3 °F throughout the 4-hour period.

(ii) Fixed-volume enclosures shall be operated with inlet and outlet flow streams closed. Ambient temperatures shall be maintained at 96±3 °F throughout the 4-hour period.

(iii) For running loss enclosures ambient temperatures shall be maintained at 95±3 °F throughout the 4-hour period.

(2) The enclosure may be sealed and the mixing fan operated for a period of up to 12 hours before the 4-hour background sampling period begins.

(3) Zero and span (calibrate if required) the hydrocarbon analyzer.

(4) Prior to the background determination, purge the enclosure until a stable background hydrocarbon reading is obtained.

(5) Turn on the mixing blower (if not already on).

(6) Seal enclosure and measure background hydrocarbon concentration, background methanol, temperature, and barometric pressure.

These are the initial readings  $C_{HCl}$ ,  $C_{CH_3OH}$ , and  $P_{BI}$ ,  $T_1$  for the enclosure background determination.

(7) Allow the enclosure to stand undisturbed without sampling for four hours.

(8) Measure the hydrocarbon concentration on the same FID and the methanol level. These are the final concentrations,  $C_{HCl}$  and  $C_{CH_3OH}$ . Also measure final temperature and barometric pressure.

(9) Calculate the mass change of methanol, hydrocarbons, and hydrocarbons plus methanol in the enclosure according to the equations in paragraph (d) of this section.

(i) *Diurnal enclosures.* The enclosure background emissions (hydrocarbons plus methanol) shall not be greater than 0.05g for the 4 hours.

(ii) *Running loss enclosures.* The enclosure background emissions (hydrocarbons plus methanol) shall not be greater than 0.2 grams for the 4 hours.

(b) *Initial determination of enclosure internal volume.* Initial determination of enclosure internal volume. Prior to its introduction into service the enclosure internal volume shall be determined by the following procedure:

(1) Carefully measure the internal length, width and height of the enclosure, accounting for irregularities (such as braces) and calculate the internal volume. For variable-volume enclosures, latch the enclosure to a fixed volume when the enclosure is held at an ambient temperature of 84 °F; this nominal volume shall be repeatable within ±0.5 percent of the reported value.

(2) Perform an enclosure calibration check according to paragraph (c) of this section.

(3) If the calculated mass does not agree within 2 percent of the injected propane mass, then corrective action is required.

(c) *Hydrocarbon and methanol retention check and calibration.* The hydrocarbon and methanol (if the enclosure is used for methanol-fueled vehicles) retention check provides a check upon the calculated volume and also measures the leak rate. The enclosure leak rate shall be determined prior to its introduction into service, following any modifications or repairs to the enclosure that may affect the integrity of the enclosure, and at least monthly thereafter. If six consecutive monthly retention checks are successfully completed without corrective action, the enclosure leak rate may be determined quarterly thereafter as long as no corrective action is required.



(1) An enclosure to be used for the diurnal emission test (see § 86.133-96) shall be calibrated according to the following procedure.

- (i) Zero and span (calibrate if required) the hydrocarbon analyzer.
- (ii) Purge the enclosure until a stable background hydrocarbon reading is obtained.
- (iii) Turn on the mixing blowers (if not already on).
- (iv) On variable-volume enclosures, latch the enclosure to the nominal volume position. On fixed-volume enclosures close the outlet and inlet flow streams.
- (v) Turn on the ambient temperature control system (if not already on) and adjust it for an initial temperature of 96 °F (36 °C).
- (vi) When the enclosure stabilizes at 96±3 °F (36±2 °C), seal the enclosure and measure background hydrocarbon concentration, background methanol, temperature, and barometric pressure. These are the initial readings  $C_{HCl}$ ,  $C_{CH_3OH,i}$ ,  $T_i$ , and  $P_{Bi}$  for the enclosure calibration.
- (vii) Inject into the enclosure 2 to 6 grams of pure propane and 2 to 6 grams of pure methanol in gaseous form; i.e., at a temperature of at least 150 °F (65 °C). The propane and methanol may be measured by volume flow or by mass measurement. The method used to

measure the propane and methanol shall have an accuracy and precision of ±0.2 percent of the measured value.

(viii) After a minimum of 5 minutes of mixing, analyze the enclosure atmosphere for hydrocarbon and methanol content, also record temperature and pressure. These measurements are the final readings for the enclosure calibration as well as the initial readings for the retention check.

(ix) To verify the enclosure calibration, calculate the mass of propane and the mass of methanol using the measurements taken in paragraphs (c)(1)(vi) and (viii) of this section. See paragraph (d) of this section. This quantity must be within ±2 percent of that measured in paragraph (c)(1)(vii) of this section.

(x) For variable-volume enclosures, unlatch the enclosure from the nominal volume configuration. For fixed-volume enclosures, open the outlet and inlet flow streams.

(xi) Start cycling the ambient temperature from 96 °F to 72 °F and back to 96 °F over a 24-hour period, according to the profile specified in § 86.133-96 and appendix II of this part, within 15 minutes of sealing the enclosure.

(xii) At the completion of the 24-hour cycling period, analyze the enclosure atmosphere for hydrocarbon and

methanol content; determine the net withdrawn methanol (in the case of diurnal emission testing with fixed volume enclosures); record temperature and barometric pressure. These are the final readings for the hydrocarbon and methanol retention check. The final hydrocarbon and methanol mass, calculated in paragraph (d) of this section, shall be within 3 percent of that determined in paragraph (c)(1)(viii) of this section.

(2) An enclosure to be used for the running loss test (see § 86.134-96) shall meet the calibration and retention requirements of § 86.117-90(c).

(3) Enclosures calibrated according to the procedures specified in either paragraph (c)(1) or (c)(2) of this section may be used for hot soak testing (see § 86.138).

(d) *Calculations.* (1) The calculation of net methanol and hydrocarbon mass change is used to determine enclosure background and leak rate. It is also used to check the enclosure volume measurements. The methanol mass change is calculated from the initial and final methanol samples, the net withdrawn methanol (in the case of diurnal emission testing with fixed-volume enclosures), and initial and final temperature and pressure according to the following equation:

$$M_{CH_3OH} = \left( \frac{V_n \times C_{MR}}{A_{MR}} \right) \times \left( \frac{T_{E_f}}{V_{E_f} \times T_{SHED_f}} \times [(A_{MS1f} \times AV_{1f}) + (A_{MS2f} \times AV_{2f})] - \frac{T_{E_i}}{V_{E_i} \times T_{SHED_i}} \times [(A_{MS1i} \times AV_{1i}) + (A_{MS2i} \times AV_{2i})] \right) + (M_{CH_3OH,out} - M_{CH_3OH,in})$$

Where,

- (i)  $M_{CH_3OH}$  = mass change, µg.
- (ii)  $V$  = Enclosure volume, ft<sup>3</sup>, as measured in paragraph (b)(1) of this section.
- (iii)  $C_{MR}$  = Concentration of methanol in standard sample for calibration of gas chromatograph (GC), µg/ml.
- (iv)  $A_{MR}$  = GC peak area of standard sample.
- (v)  $T_E$  = Temperature of sample withdrawn, R.
- (vi)  $T_{SHED}$  = Temperature of enclosure, R.
- (vii)  $V_E$  = Volume of sample withdrawn, ft<sup>3</sup>.
- (viii)  $P_B$  = Barometric pressure at time of sampling, in. Hg.
- (ix)  $A_{MS}$  = GC peak area of test sample.
- (x)  $AV$  = Volume of absorbing reagent in impinger (ml).
- (xi)  $i$  = Initial sample.
- (xii)  $f$  = Final sample.
- (xiii)  $1$  = First impinger
- (xiv)  $2$  = Second impinger.
- (xv)  $M_{CH_3OH,out}$  = mass of methanol exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, µg.
- (xvi)  $M_{CH_3OH,in}$  = mass of methanol entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, µg.

(2) The hydrocarbon mass change is calculated from the initial and final FID readings of hydrocarbon concentration, methanol concentration with FID response to methanol, the net withdrawn hydrocarbon and methanol (in the case of diurnal emission testing with fixed-volume enclosures), and initial and final temperature and pressure according to the following equation:

$$M_{HC} = (kV_n \times 10^{-4}) \times \left( \frac{(C_{HCf} - rC_{CH_3OHf})P_{Bf}}{T_f} - \frac{(C_{HCi} - rC_{CH_3OHi})P_{Bi}}{T_i} \right) + M_{HC,out} - M_{HC,in}$$

Where,

- (i)  $M_{HC}$ =Hydrocarbon mass change, g.  
 (ii)  $C_{HC}$ =FID hydrocarbon concentration as ppm carbon, that is, ppm propane  $\times 3$ , including FID response to methanol in the sample.  
 (iii)  $C_{CH_3OH}$ =Methanol concentration as ppm carbon.

$$C_{CH_3OH} = \left( \frac{1.501 \times 10^{-3} C_{MR} \times T}{A_{MR} \times P_B \times V_n} \right) \times [(A_{S1} \times AV_1) + (A_{S2} \times AV_2)]$$

- (iv)  $V$ =Enclosure volume  $\text{ft}^3$  ( $\text{m}^3$ ), as measured in paragraph (b)(1) of this section.  
 (v)  $r$ =FID response factor to methanol.  
 (vi)  $P_B$ =Barometric pressure, in. Hg. (kPa).  
 (vii)  $T$ =Enclosure ambient temperature, R(K).  
 (viii)  $i$ =Indicates initial reading.  
 (ix)  $f$ =Indicates final reading.  
 (x)(A)  $k=3.05$ .  
 (B) For SI units,  $k=17.60$ .  
 (xi)  $M_{HC,out}$ =mass of hydrocarbon exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.  
 (xii)  $M_{HC,in}$ =mass of hydrocarbon entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(e) *Calibration of equipment for point-source testing of running losses.* For the point-source method, the running loss fuel vapor sampling system shall be calibrated as a CVS system, as specified in § 86.119, with the additional specification that the vapor sampling system verification be conducted as follows:

(1) The following "gravimetric" technique can be used to verify that the vapor sampling system and analytical instruments can accurately measure a mass of gas that has been injected into the system. If the vapor sampling system will be used only in the testing of petroleum-fueled engines, the system verification may be performed using propane. If the vapor sampling system will be used with methanol-fueled vehicles as well as petroleum-fueled vehicles, the system verification performance check must include a methanol check in addition to the propane check. (Verification can also be accomplished by constant flow metering using critical flow orifice devices.)

(i) Obtain a small cylinder that has been charged with pure propane gas. Obtain another small cylinder that has been charged with pure methanol if the system will be used for methanol-fueled vehicle testing. Since this cylinder will be heated to 150–155 °F, care must be taken to ensure that the liquid volume of methanol placed in the cylinder does not exceed approximately one-half of the total volume of the cylinder.

(ii) Determine a reference cylinder weight to the nearest 0.01 grams.

(iii) Operate the vapor sampling system in the normal manner and release a known quantity of pure propane into the most frequently used fuel vapor vent collector during the sampling period (approximately 5 minutes).

(iv) Continue to operate the vapor sampling system in the normal manner and release a known quantity of pure methanol into the system during the sampling period (approximately 5 minutes).

(v) The calculations of § 86.144 are performed in the normal way, except in the case of propane. The density of propane (17.30 g/ft<sup>3</sup>/carbon atom (0.6109 kg/m<sup>3</sup>/carbon atom)) is used in place of the density of exhaust hydrocarbons. In the case of methanol, the density of 37.71 g/ft<sup>3</sup> (1.332 kg/m<sup>3</sup>) is used.

(vi) The gravimetric mass is subtracted from the vapor sampling system measured mass and then divided by the gravimetric mass to determine the percent accuracy of the system.

(vii) The cause for any discrepancy greater than  $\pm 2$  percent must be found and corrected.

(2) This procedure shall be conducted in the point-source running loss test environment with the collector installed in a vehicle in the normal test configuration. The fuel of the test vehicle shall either be diesel, or it shall be kept under 100 °F (38 °C). Two to six grams of pure propane and two to six grams of pure methanol shall be injected into the collector while the vehicle is operated over one Urban Dynamometer

Driving Schedule (UDDS), as described in § 86.115 and Appendix I of this part. The propane and methanol injections shall be conducted at the ambient temperature of 95 $\pm$ 5 °F (35 $\pm$ 3 °C).

28. A new § 86.127–96 is added to subpart B to read as follows:

#### § 86.127–96 Test procedures; overview.

The procedures described in this and subsequent sections are used to determine the conformity of vehicles with the standards set forth in subpart A of this part for light-duty vehicles and light-duty trucks.

(a) The overall test consists of prescribed sequences of fueling, parking, and operating conditions. Vehicles are tested for any or all of the following emissions:

(1) Gaseous exhaust THC, CO, NO<sub>x</sub>, CO<sub>2</sub> (for petroleum-fueled vehicles), plus CH<sub>3</sub>OH and HCHO for methanol-fueled vehicles, plus CH<sub>4</sub> (for vehicles subject to the NMHC and OMNMHCE standards).

(2) Particulates.

(3) Evaporative HC (for gasoline-fueled and methanol-fueled vehicles) and CH<sub>3</sub>OH (for methanol-fueled vehicles). The evaporative testing portion of the procedure occurs after the exhaust emission test; however, exhaust emissions need not be sampled to complete a test for evaporative emissions.

(4) Fuel spitback.

(b) The Otto-cycle exhaust emission test is designed to determine gaseous THC, CO, CO<sub>2</sub>, CH<sub>4</sub>, NO<sub>x</sub>, and particulate mass emissions from

gasoline-fueled and methanol-fueled Otto-cycle vehicles as well as methanol and formaldehyde from methanol-fueled Otto-cycle vehicles, while simulating an average trip in an urban area of 11 miles (18 kilometers). The test consists of engine start-ups and vehicle operation on a chassis dynamometer through a specified driving schedule. A proportional part of the diluted exhaust is collected continuously for subsequent analysis, using a constant volume (variable dilution) sampler or critical flow venturi sampler.

(c) The diesel-cycle exhaust emission test is designed to determine particulate and gaseous mass emissions during a test similar to the test in § 86.127(b). For petroleum-fueled diesel-cycle vehicles, diluted exhaust is continuously analyzed for THC using a heated sample line and analyzer; the other gaseous emissions (CH<sub>4</sub>, CO, CO<sub>2</sub>, and NO<sub>x</sub>) are collected continuously for analysis as in § 86.127(b). For methanol-fueled vehicles, THC, methanol, formaldehyde, CO, CO<sub>2</sub>, CH<sub>4</sub>, and NO<sub>x</sub> are collected continuously for analysis as in § 86.127(b). THC, methanol, and formaldehyde are collected using heated sample lines, and a heated FID is used for THC analyses. Simultaneous with the gaseous exhaust collection and analysis, particulates from a proportional part of the diluted exhaust are collected continuously on a filter. The mass of particulate is determined by the procedure described in § 86.139. This testing requires a dilution tunnel as well as the constant volume sampler.

(d) The evaporative emission test (gasoline-fueled vehicles and methanol-fueled vehicles) is designed to determine hydrocarbon and methanol evaporative emissions as a consequence of diurnal temperature fluctuation, urban driving, and hot soaks following drives. It is associated with a series of events that a vehicle may experience and that may result in hydrocarbon and/or methanol vapor losses. The test procedure is designed to measure:

(1) Diurnal emissions resulting from daily temperature changes (as well as relatively constant resting losses), measured by the enclosure technique (see § 86.133);

(2) Running losses resulting from a simulated trip performed on a chassis dynamometer, measured by the enclosure or point-source technique (see § 86.134); and

(3) Hot soak emissions, which result when the vehicle is parked and the hot engine is turned off, measured by the enclosure technique (see § 86.138).

(e) Fuel spitback emissions occur when a vehicle's fuel fill neck cannot accommodate dispensing rates. The

vehicle test for spitback consists of a short drive followed immediately by a complete refueling event.

(f) Except in cases of component malfunction or failure, all emission control systems installed on or incorporated in a new motor vehicle shall be functioning during all procedures in this subpart. Maintenance to correct component malfunction or failure shall be authorized in accordance with § 86.090-25.

29. Section 86.128-79 of subpart B is amended by revising paragraph (c) to read as follows:

**§ 86.128-79 Transmissions.**

(c) Idle modes less than one minute in length shall be run with automatic transmissions in "Drive" and the wheels braked; manual transmissions shall be in gear with the clutch disengaged, except for the first idle mode (see §§ 86.134, 86.136, and 86.137). The first idle mode and idle modes longer than one minute in length may be run with automatic transmissions in "Neutral;" manual transmissions may be in "Neutral" with the clutch engaged (clutch may be disengaged for engine start-up). If an automatic transmission is in "Neutral" during an idle mode, it shall be placed in "Drive" with the wheels braked at least 5 seconds before the end of the idle mode. If a manual transmission is in "Neutral" during an idle mode, it shall be placed in gear with the clutch disengaged at least 5 seconds before the end of the idle mode.

30. Section 86.129-94 of subpart B is amended by revising the section heading and adding paragraph (d) to read as follows:

**§ 86.129-94 Road load power, test weight, inertia weight class determination, and fuel temperature profile.**

(d) *Fuel temperature profile*—(1) *General requirements.* To be tested for running losses, as specified in § 86.134, a vehicle must have a fuel temperature profile. The following procedure is used to generate the fuel temperature profile, which serves as a target for controlling fuel temperatures during the running loss test. This profile represents the fuel temperature change that occurs during on-road driving. If a vehicle has more than one fuel tank, a profile shall be established for each tank. If manufacturers use a vehicle model to develop a profile to represent multiple models, the vehicle model selected must have the greatest expected fuel temperature increase during driving of all those models it represents. Also,

manufacturers must select test vehicles with any available vehicle options that increase fuel temperatures during driving (for example, any feature that limits underbody airflow). The Administrator may conduct testing to establish any vehicle's fuel temperature profile.

(2) *Vehicle instrumentation.* (i) The vehicle must be equipped with temperature sensors and pressure transducers, as described in § 86.107-96 (e) and (f), and a driver's aid, which shall be configured to provide the test driver with the desired vehicle speed vs. time trace and the actual vehicle speed.

(ii) A computer, data logger, or strip chart data recorder shall record the following parameters at a minimum during the test run:

- (A) Desired speed;
- (B) Actual speed;
- (C) Instantaneous average liquid fuel temperature ( $T_{fu}$ ); and
- (D) Vapor space pressure (the Administrator may omit measurement of fuel tank pressure).

(iii) The data recording system described in paragraph (d)(2)(ii) of this section shall be capable of resolving time to  $\pm 1$  s, capable of resolving temperature to  $\pm 2$  °F, capable of resolving pressure to  $\pm 1.0$  inch of water, and capable of resolving speed to  $\pm 0.1$  mph. The temperature and pressure signals shall be recorded at intervals of up to 1 minute; speed signals shall be recorded at intervals of up to 1 second.

(3) *Ambient conditions.* The procedure shall be run under the following ambient conditions. Conditions should be representative of sunny summer days.

(i) Starting ambient temperature ( $T_{amb,o}$ ) shall be at least 95 °F, steady or increasing (no more than 2 °F drop) during the procedure. Ambient temperature shall be measured and recorded in regular intervals of at least once every 5 minutes. Measure ambient temperature with the following requirements (based on *Federal Standard for Siting Meteorological Sensors at Airports*, FCM-S4-1987). The sensors shall be mounted 5±1 feet (1.5±0.3 meters) above ground level. The sensors shall be protected from radiation from the sun, sky, earth, and any other surrounding objects, but at the same time be adequately ventilated. The sensors shall be installed in such a position as to ensure that measurements are representative of the free air circulation in the locality and not influenced by artificial conditions such as large buildings, cooling towers, and expanses of concrete and tarmac. Keep any grass and vegetation within 100 feet (30 meters) of the sensor clipped to a

height of about 10 inches (25 centimeters) or less.

(ii) Wind conditions shall be calm to light with maximum wind speed of 15 mph. Wind speed shall be measured and recorded in regular intervals of at least once per minute. Measure wind speed with the following requirements (based on *Federal Standard for Siting Meteorological Sensors at Airports*, FCM-S4-1987). The site should be relatively level, but small gradual slopes are acceptable. The sensor shall be mounted 30 to 33 feet (9 to 10 meters) above the average ground height within a radius of 500 feet (150 meters). The sensor height shall not exceed 33 feet, except as necessary to be at least 15 feet (5 meters) above the height of any obstruction (e.g. vegetation, buildings, etc.) within a 500 foot (150 meter) radius. An object is considered to be an obstruction if the included lateral angle from the sensor to the ends of the object is 10 degrees or more.

(iii) Road surface temperature shall be at least 30 °F above ambient temperature throughout the driving period.

Pavement temperature shall be measured and recorded in regular intervals of at least once per minute. The track temperature may be measured with an embedded sensor, a portable temperature probe, or an infrared pyrometer that can provide an accuracy of  $\pm 2$  °F. Temperatures must be measured on a surface representative of the surface where the vehicle is driven.

(iv) Conditions shall be sunny or mostly sunny with a maximum cloud cover of 25 percent.

(v) Reported cloud cover, wind speed, and ambient temperature should be consistent with that reported by the nearest weather station; the Administrator may request justification of any discrepancy.

(4) *Profile determination procedure.*

(i) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2.

(ii) The vehicle shall be moved to the location where the data is to be collected. It may be driven a maximum distance of 5 miles and may be transported by other means. The vehicle shall be parked for a minimum of 12 hours in an open area on a surface that is representative of the test road. The orientation of the front of the vehicle during parking (e.g., N, SW, etc.) shall be documented.

(iii) Once the 12 hour minimum parking time has been achieved and the ambient temperature, weather conditions, and track surface temperature are within the allowable ranges, the vehicle engine shall be

started. The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed. Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(iv) The vehicle may be operated at minimum throttle for a period up to 60 seconds prior to the start of the driving schedule, as necessary to move from the parking location onto the road surface. The driver's aid shall be started and the vehicle operated over the driving cycle specified in § 86.134-96(b) with the transmission operated in the same manner as specified in § 86.128-79. The data recording system shall provide a record of the required parameters over the entire period of driving.

(5) *Records required.* In addition to the vehicle data recording, the following parameters shall be documented for the determination of the fuel temperature profile:

- (i) Date and time of vehicle fueling;
- (ii) Odometer reading at vehicle fueling;
- (iii) Date and time vehicle was parked, parking location and orientation;
- (iv) Odometer reading at parking;
- (v) Date and time engine was started;
- (vi) Time of initiation of first UDDS;
- (vii) Time of completion of the driving cycle;
- (viii) Ambient temperatures throughout the period of driving ( $T_{amb}$ );
- (ix) Wind speed throughout the period of driving;
- (x) Track surface temperatures throughout the period of driving cycle ( $T_{sur}$ );
- (xi) Percent cloud cover during the period of driving; and
- (xii) Ambient temperature, wind speed, and percent cloud cover reported by the nearest weather station for the time corresponding most closely to the period of driving.

(6) *Fuel tank pressure.* Tank pressure shall not exceed 10 inches of water at any time during the temperature profile determination unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(7) *Calculation of temperature profiles.* (i) The traces from the driving schedule shall be verified to meet the speed tolerance requirements of § 86.115. The following conditions shall be verified:

$$(A) T_{amb,i} \geq T_{amb,o} - 2 \text{ } ^\circ\text{F.}$$

Where,

- (1)  $i$ =instantaneous measurement throughout the drive; and
- (2)  $o$ =initial measurement at the start of the specified driving schedule.
- (B)  $T_{amb,o} \geq 95 \text{ } ^\circ\text{F.}$
- (C)  $T_{sur,i} - T_{amb,i} \geq 30 \text{ } ^\circ\text{F.}$
- (D)  $W_{max} \leq 15 \text{ mph.}$

(ii) Failure to comply with any of these requirements shall result in invalidation of the data and require that the procedure be repeated, beginning with the fuel drain at paragraph (d)(4)(i) of this section.

(iii) If all these requirements are met, the following calculations shall be performed:

$$T_{i,profile} = T_i - T_o.$$

Where,

(A)  $T_{i,profile}$ =the series of temperatures that comprise the relative fuel temperature profile.

(B)  $T_i$ =the series of observed liquid fuel temperatures during the drive.

(C)  $T_o$ =the liquid fuel temperature observed at the start of the specified driving schedule.

(iv) The relative fuel temperature profile consists of the set of temperatures at each 1-minute interval. If multiple valid test runs are conducted for any model, then all the collected data shall be used to calculate a composite profile, based on the average temperatures at each point. The absolute fuel temperature profile is determined by adding 95 °F (35 °C) to each point of the relative profile.

31. A new § 86.130-96 is added to subpart B to read as follows:

**§ 86.130-96 Test sequence; general requirements.**

(a) The test sequence shown in figure B96-10 shows the steps encountered as the test vehicle undergoes the procedures subsequently described to determine conformity with the standards set forth. The full three-diurnal sequence depicted in figure B96-10 tests vehicles for all sources of evaporative emissions. The supplemental two-diurnal test sequence is designed to verify that vehicles sufficiently purge their evaporative canisters during the exhaust emission test. Sections 86.132-96, 86.133-96, and 86.138-96 describe the separate specifications of the supplemental two-diurnal test sequence.

(b) The vehicle test for fuel spitback during fuel dispensing is conducted as a stand-alone test (see § 86.146).

(c) Ambient temperature levels encountered by the test vehicle shall be not less than 68 °F nor more than 86 °F, unless otherwise specified. If a different

ambient temperature is specified for soaking the vehicle, the soak period may be interrupted once for up to 10 minutes to transport the vehicle from one soak area to another, provided the ambient temperature experienced by the vehicle is never below 68 °F. The temperatures

monitored during testing must be representative of those experienced by the test vehicle.

(d) The vehicle shall be approximately level during all phases of

the test sequence to prevent abnormal fuel distribution.

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# Federal Test Procedure

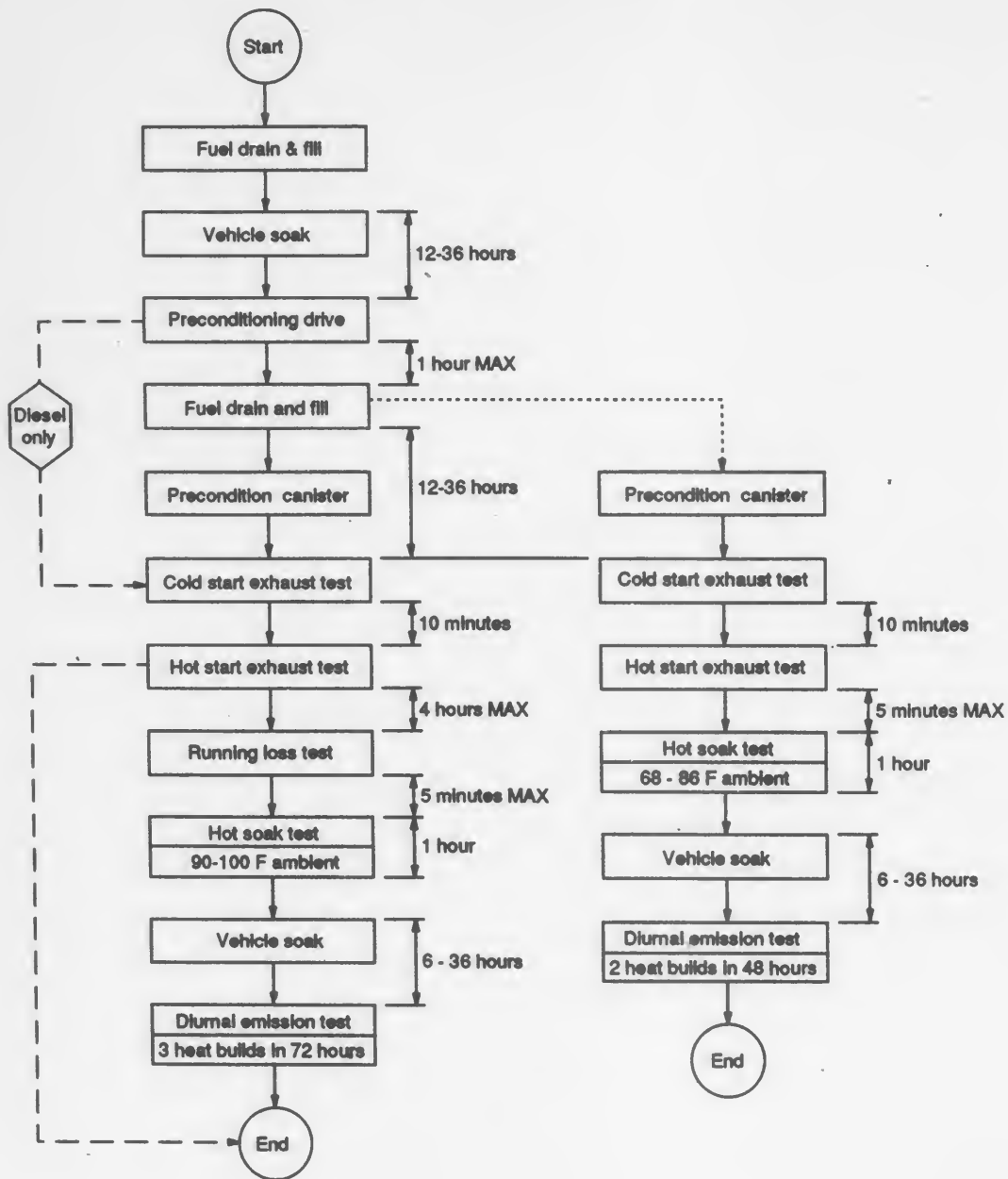


Figure B96-10 Test sequence

32. A new § 86.131-96 is added to subpart B to read as follows:

**§ 86.131-96 Vehicle preparation.**

(a) For gasoline- and methanol-fueled vehicles prepare the fuel tank(s) for recording the temperature of the prescribed test fuel, as described in § 86.107-96(e).

(b) Provide additional fittings and adapters, as required, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle.

(c) For preconditioning that involves loading the evaporative emission canister(s) with butane, provide valving or other means as necessary to allow purging and loading of the canister(s).

(d) For vehicles to be tested for running loss emissions, prepare the fuel tank(s) for measuring and recording the temperature and pressure of the fuel tank as specified in § 86.107-96 (e) and (f). The Administrator may omit measurement of fuel tank pressure.

(e) For vehicles to be tested for running loss emissions, prepare the exhaust system by sealing or plugging all detectable sources of exhaust gas leaks. The exhaust system shall be tested or inspected to ensure that detectable exhaust hydrocarbons are not emitted into the running loss enclosure during the running loss test.

33. A new § 86.132-96 is added to subpart B to read as follows:

**§ 86.132-96 Vehicle preconditioning.**

(a) Fuel tank cap(s) of gasoline- and methanol-fueled vehicles shall be removed during any period that the vehicle is parked outdoors awaiting testing, to prevent unusual loading of the canisters. During this time care must be taken to prevent entry of water or other contaminants into the fuel tank. During storage in the test area while awaiting testing, the fuel tank cap(s) may be in place. The vehicle shall be moved into the test area and the following operations performed.

(b) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2. The fuel cap(s) shall be installed within 1 minute after refueling.

(c) Between 12 and 36 hours (or, at the Administrator's option, between 6 and 36 hours) after being refueled, the vehicle shall be placed, either by being driven or pushed, on a dynamometer and operated through one Urban Dynamometer Driving Schedule (UDDS), specified in § 86.115 and appendix I of this part. The test vehicle may not be used to set dynamometer horsepower.

(d) For unusual circumstances where the need for additional preconditioning

is demonstrated by the manufacturer, such preconditioning may be allowed with the advance approval of the Administrator.

(e) The Administrator may also choose to conduct or require to be conducted additional preconditioning to ensure that the evaporative emission control system is stabilized in the case of gasoline-fueled and methanol-fueled vehicles, or to ensure that the exhaust system is stabilized in the case of petroleum- and methanol-fueled diesel vehicles. The preconditioning shall consist of one of the following:

(1) For gasoline- and methanol-fueled vehicles. (i) Additional preconditioning shall consist of no more than 50 miles of mileage accumulation under typical driving conditions, either on the road or on a dynamometer.

(ii) In the case of repeat testing on a flexible-fueled vehicle, in which the test fuel is changed, the following preconditioning procedure shall be used. This additional preconditioning allows the vehicle to adapt to the new fuel before the next test run.

(A) Purge the vehicle's evaporative canister for 60 minutes at 0.8 cfm.

(B) Drain the fuel tank(s) and fill with 3 gallons of the test fuel.

(C) Start the vehicle and allow it to idle for 1 minute.

(D) Drain the fuel tank(s) and fill with the new test fuel to the "tank fuel volume" defined in § 86.082-2. The average temperature of the dispensed fuel shall be less than 60 °F.

(E) Conduct a heat build according to the procedure specified in § 86.133-90.

(F) The vehicle shall be placed, either by being driven or pushed, on a dynamometer and operated through one UDDS, specified in § 86.115 and appendix I of this part.

(G) Following the dynamometer drive, the vehicle shall be turned off for 5 minutes, then restarted and allowed to idle for 1 minute. The vehicle shall then be turned off for 1 minute, and allowed to idle again for 1 minute.

(H) After the vehicle is turned off the last time, it may be tested for evaporative and exhaust emissions, starting with paragraph (a) of this section.

(2) For petroleum-fueled diesel vehicles. The preconditioning shall consist of either of the following:

(i) An initial one hour minimum soak and, one, two, or three driving cycles of the UDDS, as described in paragraph (c) of this section, each followed by a soak of at least one hour with engine off, engine compartment cover closed and cooling fan off. The vehicle may be driven off the dynamometer following each UDDS for the soak period; or

(ii) For abnormally treated vehicles, as defined in § 86.085-2, two Highway Fuel Economy Driving Schedules, found in Appendix I of part 600, run in immediate succession, with the road load power set at twice the value obtained from § 86.129.

(f) Within five minutes of completion of the preconditioning drive, the vehicle shall be driven off the dynamometer and parked. For gasoline- and methanol-fueled vehicles, drain the fuel tank(s) and fill with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2. The vehicle shall be refueled within 1 hour of completion of the preconditioning drive. The fuel cap(s) shall be installed within 1 minute after refueling.

(g) The vehicle shall be soaked for not less than 12 hours nor more than 36 hours between the end of the refueling event and the beginning of the cold start exhaust emission test.

(h) During the soak period for the three-diurnal test sequence described in § 86.130-96, evaporative canisters, if the vehicle is so equipped, shall be preconditioned according to the following procedure. For vehicles with multiple canisters, each canister shall be preconditioned separately.

(1) (i) Prepare the evaporative emission canister for the canister purging and loading operation. The canister shall not be removed from the vehicle, unless access to the canister in its normal location is so restricted that purging and loading can only reasonably be accomplished by removing the canister from the vehicle. Special care shall be taken during this step to avoid damage to the components and the integrity of the fuel system.

(ii) The canister purge shall be performed with ambient air of humidity controlled to 50±25 grains per pound of dry air. This may be accomplished by purging the canister in a room that is conditioned to this level of absolute humidity. The flow rate of the purge air shall be maintained at a nominal flow rate of 0.8 cfm and the duration shall be determined to provide a total purge volume flow through the canister equivalent to 300 canister bed volume exchanges. The bed volume is based on the volume of adsorbing material in the canister.

(iii) The evaporative emission canister shall then be loaded by sending to the canister an amount of commercial grade butane vapors equivalent to 1.5 times its nominal working capacity. The canister shall be loaded with a mixture composed of 50 percent butane and 50 percent nitrogen by volume at a rate of 15±2 grams butane per hour. If the canister loading at that rate takes longer

than 12 hours, a manufacturer may determine a new rate, based on completing the canister loading in no less than 12 hours. The new rate may be used for all subsequent canister loading according to paragraph (h) of this section. The time of initiation and completion of the canister loading shall be recorded.

(iv) The determination of a canister's nominal working capacity shall be based on the average capacity of no less than five canisters that are in a stabilized condition.

(A) For stabilization, each canister must be loaded no less than 10 times and no more than 100 times to 2-gram breakthrough with a 50/50 mixture by volume of butane and nitrogen, at a rate of 15 grams butane per hour. Each canister loading step must be preceded by canister purging with 300 canister bed volume exchanges at 0.8 cfm.

(B) For determining working capacity, each canister must first be purged with 300 canister bed volume exchanges at 0.8 cfm. The working capacity of each canister shall be established by determining the mass of butane required to load the canister from the purged state so that it emits 2 grams of hydrocarbon vapor; the canister must be loaded with a 50/50 mixture by volume of butane and nitrogen, at a rate of 15 grams butane per hour.

(2) For vehicles designed to use only fuel consisting of at least 80 percent methanol by volume, canister preconditioning shall be performed with a fuel vapor composition representative of the composition of the vapor space in the vehicle's fuel tank under in-use conditions. Manufacturers shall develop a procedure to precondition the evaporative canister, if the vehicle is so equipped, for the different fuel. The procedure shall represent a canister loading equivalent to that specified in paragraph (h)(1) of this section and shall be approved in advance by the Administrator.

(i) [Reserved]

(j) For the supplemental two-diurnal test sequence described in § 86.130-96, one of the following methods shall be used to precondition evaporative canisters during the soak period specified in paragraph (g) of this section. For vehicles with multiple canisters, each canister shall be preconditioned separately. Canister emissions are measured to determine breakthrough. Breakthrough is here defined as the point at which the cumulative quantity of hydrocarbons emitted is equal to 2 grams.

(1) *Butane loading to breakthrough.* The following procedure provides for emission measurement in an enclosure.

Breakthrough may also be determined by measuring the weight gain of an auxiliary evaporative canister connected downstream of the vehicle's canister, in which case, the following references to the enclosure can be ignored. The auxiliary canister shall be well purged with dry air prior to loading.

(i) Prepare the evaporative emission canister for the canister loading operation. The canister shall not be removed from the vehicle, unless access to the canister in its normal location is so restricted that loading can only reasonably be accomplished by removing the canister from the vehicle. Special care shall be taken during this step to avoid damage to the components and the integrity of the fuel system.

(ii) The evaporative emission enclosure shall be purged for several minutes. Warning: If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(iii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the canister loading procedure.

(iv) If not already on, the evaporative enclosure mixing fan shall be turned on at this time.

(v) Place the vehicle in a sealed enclosure and measure emissions with a FID.

(vi) Load the canister with a mixture composed of 50 percent butane and 50 percent nitrogen by volume at a rate of 40 grams butane per hour (0.010 cfm butane at lab temperatures).

(vii) As soon as the canister reaches breakthrough, the vapor source shall be shut off.

(viii) Reconnect the evaporative emission canister and restore the vehicle to its normal operating condition.

(2) *Load with repeated diurnal heat builds to breakthrough.* The following procedure provides for emission measurement in an enclosure. Breakthrough may also be determined by measuring the weight gain of an auxiliary evaporative canister connected downstream of the vehicle's canister, in which case, the following references to the enclosure can be ignored. The auxiliary canister shall be well purged with dry air prior to loading.

(i) The evaporative emission enclosure shall be purged for several minutes. Warning: If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the

enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the diurnal heat builds.

(iii) If not already on, the evaporative enclosure mixing fan shall be turned on at this time.

(iv) The fuel tank(s) of the prepared vehicle shall be drained and filled with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2. The average temperature of the dispensed fuel shall be  $60 \pm 12$  °F ( $16 \pm 7$  °C). The fuel tank cap(s) shall be installed within 1 minute after refueling.

(v) Within one hour of being refueled, the vehicle shall be placed, with the engine shut off, in the evaporative emission enclosure. The fuel tank temperature sensor shall be connected to the temperature recording system. A heat source, specified in § 86.107-90(a)(4), shall be properly positioned with respect to the fuel tank(s) and connected to the temperature controller.

(vi) The temperature recording system shall be started.

(vii) The fuel may be artificially heated to the starting diurnal temperature.

(viii) When the fuel temperature reaches at least 69 °F (21 °C), immediately: turn off purge blower (if not already off); close and seal enclosure doors; and initiate measurement of the hydrocarbon level in the enclosure.

(ix) When the fuel temperature reaches  $72 \pm 2$  °F ( $22 \pm 1$  °C), start the diurnal heat build.

(x) The fuel shall be heated in such a way that its temperature change conforms to the following function to within  $\pm 4$  °F ( $\pm 3$  °C):

$$F = T_0 + 0.4t; \text{ or} \\ \text{for SI units,} \\ C = T_0 + (2/9)t.$$

Where,

F=fuel temperature, °F;

C=fuel temperature, °C;

t=time since beginning of test, minutes; and

T<sub>0</sub>=initial temperature in °F (°C for SI units).

(xi) As soon as breakthrough occurs or when the fuel temperature reaches 96 °F (36 °C), whichever occurs first, the heat source shall be turned off, the enclosure doors shall be unsealed and opened, and the vehicle fuel tank cap(s) shall be removed. If breakthrough has not occurred by the time the fuel temperature reaches 96 °F (36 °C), the



heat source shall be removed from the vehicle, the vehicle shall be removed (with engine still off) from the evaporative emission enclosure and the entire procedure outlined in paragraph (j)(2) of this section shall be repeated until breakthrough occurs.

(xii) After breakthrough occurs, the fuel tank(s) of the prepared vehicle shall be drained and filled with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2. The fuel shall be stabilized to a temperature within 3 °F of the lab ambient before beginning the driving cycle for the exhaust emission test.

(k) The Administrator may conduct the vehicle preparation and preconditioning for measurement of fuel economy or exhaust emissions according to the procedures specified in §§ 86.132-90 and 86.133-90, in lieu of the procedures specified in this section.

(l) Vehicles to be tested for exhaust emissions only shall be processed according to §§ 86.135 through 86.137. Vehicles to be tested for evaporative emissions shall be processed in accordance with the procedures in §§ 86.133 through 86.138, starting with § 86.135.

(m) Vehicles to be tested for evaporative emissions with the supplemental two-diurnal test sequence described in § 86.130-96, shall proceed according to §§ 86.135 through 86.137, followed by the supplemental hot soak test (see § 86.138-96(k)) and the supplemental diurnal emission test (see § 86.133-96(p)).

34. A new § 86.133-96 is added to subpart B to read as follows:

**§ 86.133-96 Diurnal emission test.**

(a) (1) The diurnal emission test for gasoline- and methanol-fueled vehicles consists of three 24-hour test cycles following the hot soak test. Emissions are measured for each 24-hour cycle, with the highest emission level used to determine compliance with the standards specified in subpart A of this part. The Administrator may truncate a test after any 24-hour cycle without affecting the validity of the collected data. Sampling of emissions from the running loss and hot soak tests is not required as preparation for the diurnal emission test. The diurnal emission test may be conducted as part of either the three-diurnal test sequence or the supplemental two-diurnal test sequence, as described in § 86.130-96.

(2) For the full three-diurnal test sequence, the diurnal emission test outlined in paragraphs (b) through (o) of this section follows the high-temperature hot soak test concluded in § 86.138-96(j).

(3) For the supplemental two-diurnal test sequence, the diurnal emission test outlined in paragraph (p) of this section follows the alternate hot soak test specified in § 86.138-96(k).

(b) The test vehicle shall be soaked for not less than 6 hours nor more than 36 hours between the end of the hot soak test and the start of the diurnal emission test. For at least the last 6 hours of this period, the vehicle shall be soaked at 72±3 °F. The temperature tolerance may be waived for up to 10 minutes to allow purging of the enclosure or transporting the vehicle into the enclosure at the beginning of the diurnal emission test.

(c) The test vehicle shall be exposed to ambient temperatures cycled according to the profile specified in § 86.133 and appendix II of this part with a maximum deviation of 3 °F at any time. The average temperature deviation from the profile, calculated using the absolute value of each measured deviation, shall not exceed 2 °F. Ambient temperatures shall be measured at least every minute. Temperature cycling shall begin when time=0 minutes, as specified in paragraph (i)(5) of this section.

(d) The diurnal enclosure shall be purged for several minutes prior to the test. **Warning:** If at any time the concentration of hydrocarbons, of methanol or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(e) The test vehicle, with the engine shut off and the test vehicle windows and luggage compartment(s) opened, shall be moved into the diurnal enclosure.

(f) [Reserved]

(g) [Reserved]

(h) Prior to sampling for emissions and throughout the period of cycled ambient temperatures, the mixing fan(s) shall circulate the air at a rate of 0.8±0.2 cfm per cubic foot of ambient volume. The fans shall also maintain a minimum air circulation of 5 mph (8 km/hr) under the fuel tank of the test vehicle. The Administrator may adjust fan speed and location to ensure sufficient air circulation around the fuel tank.

(i) Emission sampling may begin as follows:

(1) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the sampling.

(2) Impingers charged with known volumes of pure deionized water shall be placed in the methanol sampling system (methanol-fueled vehicles only).

(3) Turn off purge blowers (if not already off).

(4) Close and seal enclosure doors (if not already closed and sealed).

(5) Within 10 minutes of closing and sealing the doors, analyze enclosure atmosphere for hydrocarbons and record. This is the initial (time=0 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.143.

(6) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for 4.0±0.5 minutes. This is the initial methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses. If the test is conducted in a fixed-volume enclosure that allows airflow into and out of the enclosure, the effect of makeup air dilution must be factored into the analysis.

(j) If testing indicates that a vehicle design may result in fuel temperature responses during enclosure testing that are not representative of in-use summertime conditions, the Administrator may adjust air circulation and temperature during the test as needed to ensure that the test sufficiently duplicates the vehicle's in-use experience.

(k) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of each emission sampling period.

(l) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of each emission measurement, if applicable.

(m) The end of the first, second, and third emission sampling period shall occur 1440±6, 2880±6, 4320±6 minutes, respectively, after the beginning of the initial sampling, as specified in paragraph (i)(5) of this section.

(1) At the end of each emission sampling period, analyze the enclosure atmosphere for hydrocarbons and record. This is the final hydrocarbon concentration,  $C_{HC}$ , required in § 86.143. The emission measurement at the end of each period becomes the initial hydrocarbon concentration,  $C_{HC}$ , of the next emission sampling period.

(2) Analyze the enclosure atmosphere for methanol, if applicable, and record.

The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the final (time=1440 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses. If the test is conducted in a fixed-volume enclosure that allows airflow into and out of the enclosure, the effect of makeup air dilution must be factored into the analysis.

(n) At the end of the temperature cycling period the enclosure doors shall be unsealed and opened, the test vehicle windows and luggage compartments may be closed and the test vehicle, with the engine shut off, shall be removed from the enclosure.

(o) This completes the full three-diurnal evaporative emission test sequence described in § 86.130-96.

(p) For the supplemental two-diurnal test sequence described in § 86.130-96, the following steps shall be performed in lieu of the steps described in paragraphs (b) through (n) of this section.

(1) For the supplemental two-diurnal test sequence, the test vehicle shall be soaked for not less than 6 hours nor more than 36 hours between the end of the hot soak test described in § 86.138-96(k), and the start of the two-diurnal emission test. For at least the last 6 hours of this period, the vehicle shall be soaked at  $72 \pm 3$  °F.

(2) The vehicle shall be tested for diurnal emissions according to the procedures specified in paragraphs (c) through (n) of this section, except that the test includes only two 24-hour periods. Therefore the end of the first and second emission sampling periods shall occur  $1440 \pm 6$  and  $2880 \pm 6$  minutes, respectively, after the initial sampling.

(3) This completes the supplemental two-diurnal test sequence for evaporative emission measurement.

35. A new § 86.134-96 is added to subpart B to read as follows:

**§ 86.134-96 Running loss test.**

(a) *Overview.* Gasoline- and methanol-fueled vehicles are to be tested for running loss emissions during simulated high-temperature urban driving. During operation, tank

temperatures are controlled according to a prescribed profile to simulate in-use conditions. If the vehicle is determined to have exceeded the standard before the end of the running loss test, the test may be terminated without invalidating the data. The test can be run either in a sealed enclosure or with the point-source method, as specified in paragraph (g) of this section.

(b) *Driving schedule.* Conduct the running loss test by operating the test vehicle through one Urban Dynamometer Driving Schedule (UDDS), a 2-minute idle, two New York City Cycles, another 2-minute idle, another UDDS, then another 2-minute idle (see § 86.115 and appendix I of this part). Fifteen seconds after the engine starts, place the transmission in gear. Twenty seconds after the engine starts, begin the initial vehicle acceleration of the driving schedule. The transmission shall be operated according to the specifications of § 86.128 during the driving cycles.

(c) *Dynamometer Operation.* (1) The exhaust from the vehicle must be routed outside the test cell or enclosure. Exhaust gases may, but need not, be collected and sampled.

(2) Provisions of § 86.135-90(c) shall apply.

(3) Practice runs over the prescribed driving schedule may not be performed at test point.

(4) Provisions of § 86.135-90 (e) and (f) shall apply.

(5) If the dynamometer horsepower must be adjusted manually, it shall be set within 1 hour prior to the running loss test phase. The test vehicle shall not be used to make this adjustment. Dynamometers using automatic control of preselectable power settings may be set any time prior to the beginning of the emissions test.

(6) Dynamometer roll or shaft revolutions shall be used to determine the actual driving distance for the running loss test,  $D_{RL}$ , required in § 86.143. The revolutions shall be measured on the same roll or shaft used for measuring the vehicle's speed.

(7) Provisions of § 86.135-90(i) shall apply.

(8) The test run may be stopped if a warning light or gauge indicates that the vehicle's engine coolant has overheated.

(d) *Engine Starting and Restarting.* (1) Provisions of § 86.136-90(a) shall apply.

(2) If the vehicle does not start after the manufacturer's recommended cranking time (or 10 continuous seconds in the absence of a manufacturer's recommendation), cranking shall cease for the period recommended by the manufacturer (or 10 seconds in the absence of a manufacturer's

recommendation). This may be repeated for up to three start attempts. If the vehicle does not start after three attempts, the reason for failure to start shall be determined. If failure to start is an operational error, the vehicle shall be rescheduled for testing, starting with the soak period immediately preceding the running loss test.

(3) If failure to start is caused by a vehicle malfunction, corrective action of less than 30 minutes duration may be taken (according to § 86.090-25), and the test continued, provided that the ambient conditions to which the vehicle is exposed are maintained at  $95 \pm 5$  °F ( $35 \pm 3$  °C). When the engine starts, the timing sequence of the driving schedule shall begin. If failure to start is caused by vehicle malfunction and the vehicle cannot be started, the test shall be voided, the vehicle removed from the dynamometer, and corrective action may be taken according to § 86.090-25. The reason for the malfunction (if determined) and the corrective action taken shall be reported to the Administrator.

(4) Provisions of § 86.136-90(e) shall apply.

(e) *Pressure checks.* No pressure checks of the evaporative system shall be allowed. Under no circumstances will any changes/repairs to the evaporative emissions control system be allowed.

(f) *Temperature stabilization.* Immediately after the hot transient exhaust emission test, the vehicle shall be soaked in a temperature controlled area for a maximum of 4 hours until the fuel temperature is stabilized at  $95 \pm 3$  °F. Cooling or heating of the fuel tank may be induced to bring the fuel tank to  $95 \pm 3$  °F.

(g) *Running loss test.* The running loss test may be conducted either by the enclosure method, or by the point-source method.

(1) *Enclosure method.* (i) The running loss enclosure shall be purged for several minutes immediately prior to the test. **Warning:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the test.

(iii) If not already on, the running loss enclosure mixing fan(s) shall be turned on at this time. Throughout the test, the mixing fan(s) shall circulate the air at a rate of at least 1.0 cfm per cubic foot of ambient volume.

(iv) The test vehicle, with the engine off, shall be moved onto the dynamometer in the running loss enclosure. The vehicle engine compartment cover shall be unlatched, but closed as much as possible, allowing for the air intake equipment specified in paragraph (g)(1)(vii) of this section. The vehicle engine compartment cover may be closed if alternate routing is found for the air intake equipment. Any windows, doors, and luggage compartments shall be closed. A window may be opened to direct cooling air into the passenger compartment of the vehicle, if the vehicle is not equipped with its own air conditioning.

(v) Fans shall be positioned as described in §§ 86.135-90(b), 86.107-96(d), and 86.107-96(h).

(vi) The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed. Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(vii) Connect the air intake equipment to the vehicle. This connection shall be made to minimize leakage.

(viii) The temperature and pressure recording systems shall be started. The Administrator may omit measurement of fuel tank pressure.

(ix) Turn off purge blowers (if not already off).

(x) The temperature of the liquid fuel shall be monitored and recorded at least every 15 seconds with the temperature recording system specified in § 86.107-96(e).

(xi) Close and seal the enclosure doors.

(xii) When the ambient temperature is  $95 \pm 5$  °F ( $35 \pm 3$  °C) and the fuel tank temperature is  $95 \pm 3$  °F ( $35 \pm 2$  °C) the running loss test may begin. Measure the initial ambient temperature and pressure.

(A) Analyze enclosure atmosphere for hydrocarbons and record. This is the initial (time=0 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.143.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the initial (time=0 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a

sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(xiii) Start the engine and begin operation of the vehicle over the drive cycle specified in paragraph (b) of this section.

(xiv) The ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 3$  °F on average) during the running loss test; it shall be recorded at least every 60 seconds.

(xv) The fuel temperature during the dynamometer drive shall be controlled to match the fuel tank temperature profile determined in § 86.129.

Measured fuel temperatures must be within  $\pm 3$  °F of the profile temperatures during the first 4306 seconds of the running loss test, and within  $\pm 2$  °F for the remaining 120 seconds of the test run. If the test vehicle has more than one fuel tank, the fuel temperatures for both fuel tanks shall follow the temperature profiles determined in § 86.129. The control system shall be tuned and operated to provide a smooth and continuous fuel tank temperature profile that is representative of the on-road profile.

(xvi) Tank pressure shall not exceed 10 inches of water at any time during the running loss test unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(xvii) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of the test.

(xviii) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of the test, if applicable.

(xix) The running loss test ends with the completion of the third 2-minute idle period.

(xx) At the end of the running loss test:

(A) Analyze the enclosure atmosphere for hydrocarbons and record. This is the final hydrocarbon concentration,  $C_{HC}$ , required in § 86.143.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start prior to the end of the test and continue for  $4.0 \pm 0.5$  minutes. The methanol sampling must be completed within 2 minutes after the end of the running loss test. This is the final methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed

during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(xxi) Turn off any CVS apparatus (if not already turned off).

(2) *Point-source method.* (i) The test vehicle, with the engine off, shall be moved onto the dynamometer. The vehicle engine compartment cover and any windows, doors, and luggage compartments shall be closed.

(ii) Fans shall be positioned as described in §§ 86.135-90(b) and 86.107-96(d).

(iii) The running loss vapor vent collection system shall be properly positioned at the potential fuel vapor vents or leaks of the vehicle's fuel system. Typical vapor vents for current fuel systems are the ports of the evaporative emission canister and the pressure relief vent of the fuel tank (typically integrated into the fuel tank cap).

(iv) The running loss vapor vent collection system may be connected to a PDP-CVS or CFV-CVS bag collection system. Otherwise, running loss vapors shall be sampled continuously with analyzers meeting the requirements of § 86.107-96(b).

(v) Measured emissions must be compared with background hydrocarbon levels to determine the reported running loss emissions.

(vi) The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed.

Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(vii) The temperature and pressure recording systems shall be started. The Administrator may omit measurement of fuel tank pressure.

(viii) The temperature of the liquid fuel shall be monitored and recorded at least every 15 seconds with the temperature recording system specified in § 86.107-96(e).

(ix) When the ambient temperature is  $95 \pm 5$  °F ( $35 \pm 3$  °C) and the fuel tank temperature is  $95 \pm 3$  °F the running loss test may begin.

(x) The ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 3$  °F on average) during the running loss test; it

shall be recorded at least every 60 seconds.

(xi) Fuel temperatures shall be controlled according to the specifications of paragraph (g)(1)(xv) of this section.

(xii) Tank pressure shall not exceed 10 inches of water at any time during the running loss test unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(xiii) The running loss test ends with completion of the third 2-minute idle period.

(xiv) If emissions are collected in bags, the sample bags must be analyzed within 20 minutes of their respective sample collection phases, as described in § 86.137-94(b)(15). The results of the analysis are used in § 86.143 to calculate the mass of hydrocarbons emitted.

(h) Following the completion of the running loss drive, the vehicle may be tested for hot soak emissions as specified in § 86.138-96.

36. Section 86.136-90 of subpart B is amended by revising paragraph (c) to read as follows:

**§ 86.136-90 Engine starting and restarting.**

(c) If the vehicle does not start after the manufacturer's recommended cranking time (or 10 continuous seconds in the absence of a manufacturer's recommendation), cranking shall cease for the period recommended by the manufacturer (or 10 seconds in the absence of a manufacturer's recommendation). This may be repeated for up to three start attempts. If the vehicle does not start after three attempts, the reason for failure to start shall be determined. The gas flow measuring device on the constant volume sampler (usually a revolution counter) or CFV (and the hydrocarbon integrator and particulate sampling system when testing petroleum-fueled diesel vehicles and the particulate sampling system when testing methanol-fueled diesel vehicles, see § 86.137) shall be turned off and the sampler selector valves, including the methanol sampler, placed in the "standby" position during this diagnostic period. In addition, either the CVS should be turned off, or the exhaust tube disconnected from the tailpipe during the diagnostic period. If failure to start is an operational error, the vehicle shall be rescheduled for testing from a cold start.

37. A new § 86.137-96 is added to subpart B to read as follows:

**§ 86.137-96 Dynamometer test run, gaseous and particulate emissions.**

Section 86.137-96 includes text that specifies requirements that differ from those specified in §§ 86.137-90 and 86.137-94. Where a paragraph in § 86.137-90 or § 86.137-94 is identical and applicable to § 86.137-96, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.137-90." or "[Reserved]. For guidance see § 86.137-94."

(a) through (b)(15) [Reserved]. For guidance see § 86.137-94.

(b)(16) through (b)(23) [Reserved]. For guidance see § 86.137-90.

(b)(24) Vehicles to be tested for evaporative emissions will proceed according to § 86.134; vehicles to be tested with the supplemental two-diurnal test sequence for evaporative emissions will proceed according to § 86.138-96(k). For all others this completes the test sequence.

38. Section 86.138-90 of subpart B is amended by revising paragraph (i) to read as follows:

**§ 86.138-90 Hot-soak test.**

(i) The enclosure doors shall be closed and sealed within two minutes of engine shutdown and within five minutes after the end of the exhaust emission test.

39. A new § 86.138-96 is added to subpart B to read as follows:

**§ 86.138-96 Hot soak test.**

(a) For gasoline- and methanol-fueled vehicles, the hot soak test shall be conducted immediately following the running loss test. However, sampling of emissions from the running loss test is not required as preparation for the hot soak test.

(b) The hot soak test may be conducted in the running loss enclosure as a continuation of that test or in a separate enclosure.

(1) If the hot soak test is conducted in the running loss enclosure, the driver may exit the enclosure after the running loss test. If exiting, the driver should use the personnel door described in § 86.107-96(a)(2), exiting as quickly as possible with a minimum disturbance to the system. The final hydrocarbon and methanol concentration for the running loss test, measured in § 86.134-96(g)(1)(xx), shall be the initial hydrocarbon and methanol concentration (time=0 minutes)  $C_{HC}$  and  $C_{CH_3OH}$ , for the hot soak test.

(2) If the vehicle must be moved to a different enclosure, the following steps must be taken:

(i) The enclosure for the hot soak test shall be purged for several minutes prior to completion of the running loss test.

**WARNING:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the test.

(iii) Fresh impingers shall be installed in the methanol sample collection system immediately prior to the start of the test, if applicable.

(iv) If not already on, the mixing fan(s) shall be turned on at this time. Throughout the hot soak test, the mixing fan(s) shall circulate the air at a rate of 0.8±0.2 cfm per cubic foot of the nominal enclosure volume.

(v) Begin sampling as follows:  
(A) Analyze the enclosure atmosphere for hydrocarbons and record. This is the initial (time = 0 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.143.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for 4.0±0.5 minutes. This is the initial (time=0 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(vi) The vehicle engine compartment cover shall be closed (if not already closed), the cooling fan shall be moved, the vehicle shall be disconnected from the dynamometer and any sampling system, and then driven at minimum throttle to the enclosure for the hot soak test. These steps should be done as quickly as possible to minimize the time needed to start the hot soak test.

(vii) The vehicle's engine must be stopped before any part of the vehicle enters the enclosure.

(viii) The vehicle shall enter the enclosure; the enclosure doors shall be closed and sealed within 2 minutes of engine shutdown and within five minutes after the end of the running loss test.

(ix) The test vehicle windows and any luggage compartments shall be opened (if not already open). The vehicle engine compartment cover shall be closed (if not already closed).

(c) [Reserved]

(d) The temperature recording system shall be started and the time of engine shutoff shall be noted on the evaporative emission hydrocarbon data recording system.

(e) For the first 5 minutes of the hot soak test, the ambient temperature shall be maintained at  $95 \pm 10$  °F. For the remainder of the hot soak test, the ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 2$  °F on average).

(f) The  $60 \pm 0.5$  minute hot soak begins when the enclosure doors are sealed (or when the running loss test ends, if the hot soak test is conducted in the running loss enclosure).

(g) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of the test.

(h) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of the test, if applicable.

(i) [Reserved]

(j) At the end of the  $60 \pm 0.5$  minute test period:

(1) Analyze the enclosure atmosphere for hydrocarbons and record. This is the final (time=60 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.143.

(2) Analyze the enclosure atmosphere for methanol and record, if applicable. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the final (time=60 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.143. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(k) For the supplemental two-diurnal test sequence (see § 86.130-96), the hot soak test described in § 86.138-90 shall be conducted immediately following the hot transient exhaust emission test. This

test requires ambient temperatures between 68° and 86 °F at all times. The equipment and calibration specifications of §§ 86.107-90 and 86.117-90 may apply for this testing. Enclosures meeting the requirements of §§ 86.107-96 and 86.117-96 may also be used. This hot soak test is followed by two consecutive diurnal heat builds, described in § 86.133-96(p).

(l) If the vehicle is to be tested for diurnal emissions, follow the procedure outlined in § 86.133-96.

40. A new § 86.143-96 is added to subpart B to read as follows:

**§ 86.143-96 Calculations; evaporative emissions.**

(a) The following equations are used to calculate the evaporative emissions from gasoline- and methanol-fueled vehicles.

(b) Use the measurements of initial and final concentrations to determine the mass of hydrocarbons and methanol emitted. For testing with pure gasoline, methanol emissions are assumed to be zero.

(1) For enclosure testing of diurnal, hot soak, and running loss emissions:

(i) Methanol emissions:

$$M_{CH_3OH} = \left( \frac{V_n \times C_{MR}}{A_{MR}} \right) \times \left( \frac{T_{E_f}}{V_{E_f} \times T_{SHED_f}} \times [(A_{MS1f} \times AV_{1f}) + (A_{MS2f} \times AV_{2f})] - \frac{T_{E_i}}{V_{E_i} \times T_{SHED_i}} \times [(A_{MS1i} \times AV_{1i}) + (A_{MS2i} \times AV_{2i})] \right) + (M_{CH_3OH,out} - M_{CH_3OH,in})$$

Where,

(A)  $M_{CH_3OH}$ =Methanol mass change,  $\mu$ g.

(B)  $V_n$ =Net enclosure volume,  $ft^3$ , as determined by subtracting 50  $ft^3$  (1.42  $m^3$ ) (volume of vehicle with trunk and windows open) from the enclosure volume. A manufacturer may use the measured volume of the vehicle (instead of the nominal 50  $ft^3$ ) with advance approval by the Administrator, provided the measured volume is determined and used for all vehicles tested by that manufacturer.

(C)  $C_{MR}$ =Concentration of methanol in standard sample for calibration of GC,  $\mu$ g/ml.

(D)  $A_{MR}$ =GC peak area of standard sample.

(E)  $T_E$ =Temperature of sample withdrawn, °R.

(F)  $V_E$ =Volume of sample withdrawn,  $ft^3$ .

(G)  $T_{SHED}$ =Temperature of enclosure, °R.

(H)  $A_{MS}$ =GC peak area of sample.

(I)  $AV$ =Volume of absorbing reagent in impinger.

(J)  $P_B$ =Barometric pressure at time of sampling, in. Hg.

(K)  $i$ =Initial sample.

(L)  $f$ =Final sample.

(M) 1=First impinger.

(N) 2=Second impinger.

(O)  $M_{CH_3OH,out}$ =mass of methanol exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing,  $\mu$ g.

(P)  $M_{CH_3OH,in}$ =mass of methanol entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing,  $\mu$ g.

(ii) Hydrocarbon emissions:

$$M_{HC} = (kV_n \times 10^{-4}) \times \left( \frac{(C_{HC_f} - rC_{CH_3OH_f})P_{B_f}}{T_f} - \frac{(C_{HC_i} - rC_{CH_3OH_i})P_{B_i}}{T_i} \right) + M_{HC,out} - M_{HC,in}$$

Where,

- (A)  $M_{HC}$ =Hydrocarbon mass change, g.  
 (B)  $C_{HC}$ =FID hydrocarbon concentration as ppm carbon including FID response to methanol in the sample.  
 (C)  $C_{CH_3OH}$ =Methanol concentration as ppm carbon.

$$C_{CH_3OH} = \left( \frac{1.501 \times 10^{-3} C_{MR} \times T}{A_{MR} \times P_B \times V_n} \right) \times [(A_{S1} \times AV_1) + (A_{S2} \times AV_2)]$$

(D)  $V_n$ =Net enclosure volume  $ft^3$  ( $m^3$ ) as determined by subtracting 50  $ft^3$  ( $1.42 m^3$ ) (volume of vehicle with trunk and windows open) from the enclosure volume. A manufacturer may use the measured volume of the vehicle (instead of the nominal 50  $ft^3$ ) with advance approval by the Administrator, provided the measured volume is determined and used for all vehicles tested by that manufacturer.

- (E)  $r$ =FID response factor to methanol.  
 (F)  $P_B$ =Barometric pressure, in Hg (Kpa).  
 (G)  $T$ =Enclosure temperature, °R(°K).  
 (H)  $i$ =initial reading.  
 (I)  $f$ =final reading.  
 (J) 1=First impinger.  
 (K) 2=Second impinger.  
 (L) Assuming a hydrogen to carbon ratio of 2.3:  
 (1)  $k=2.97$ ; and  
 (2) For SI units,  $k=17.16$ .

(M)  $M_{HC,out}$ =mass of hydrocarbons exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(N)  $M_{HC,in}$ =mass of hydrocarbons entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(2) For running loss testing by the point-source method, the mass emissions of each test phase are calculated below, then summed for a total mass emission for the running loss test. If emissions are continuously sampled, the following equations can be used in integral form.

(i) Methanol emissions:

$$M_{CH_3OH} = \rho_{CH_3OH} V_{mix} \times (C_{CH_3OH,r} - C_{CH_3OH,d})$$

Where,

(A)  $M_{CH_3OH}$ =methanol mass change,  $\mu g$ .

(B)  $\rho_{CH_3OH}$ =36.85 g/ $ft^3$ , density of pure vapor at 74 °F.

(C)  $V_{mix}$ =total dilute sample volume, in  $ft^3$ , calculated as appropriate for the collection technique used.

(D)  $C_{CH_3OH,r}$ =methanol concentration of diluted running loss sample, in ppm carbon equivalent.

(E)  $C_{CH_3OH,d}$ =methanol concentration of dilution air, in ppm carbon equivalent.

(ii) Hydrocarbon emissions:

$$M_{HC} = \rho_{HC} V_{mix} 10^{-6} \times (C_{HC,r} - C_{HC,d})$$

Where,

(A)  $M_{HC}$ =hydrocarbon mass change, g.  
 (B)  $\rho_{HC}$ =16.46 g/ $ft^3$ , density of pure vapor at 74 °F (for hydrogen to carbon ratio of 2.3).

(C)  $V_{mix}$ =total dilute sample volume, in  $ft^3$ , calculated as appropriate for the collection technique used.

(D)  $C_{HC,r}$ =hydrocarbon concentration of diluted running loss sample, in ppm carbon equivalent.

(E)  $C_{HC,d}$ =hydrocarbon concentration of dilution air, in ppm carbon equivalent.

(c) Calculate the adjusted total mass emissions for each test segment.

$$(1) M_{DI} = \left( M_{HC} + \frac{14.3594}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{DI}$$

where  $M_{DI}$ =mass emissions from the diurnal emission test (see § 86.133), g.

$$(2) M_{HS} = \left( M_{HC} + \frac{14.2284}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{HS}$$

where  $M_{HS}$ =mass emissions from the hot soak test (see § 86.138), g.

$$(3) M_{RL} = \left( M_{HC} + \frac{14.2284}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{RL}$$

where  $M_{RL}$ =mass emissions from the running loss test (see § 86.134), g.

(d) (1) For the full three-diurnal test sequence, there are two final results to report:

(i) The sum of the adjusted total mass emissions for the diurnal and hot soak tests ( $M_{DI}+M_{HS}$ ); and

(ii) The adjusted total mass emissions for the running loss test, on a grams per mile basis= $M_{RL}/D_{RL}$ , where  $D_{RL}$ =miles driven for the running loss test (see § 86.134-96(c)(6)).

(2) For the supplemental two-diurnal test sequence, there is one final result to report: the sum of the adjusted total mass emissions for the diurnal and hot soak tests ( $M_{DI}+M_{HS}$ ), described in §§ 86.133-96(p) and 86.138-96(k), respectively.

41. A new § 86.146-96 is added to subpart B to read as follows:

**§ 86.146-96 Fuel dispensing spitback procedure.**

(a) The vehicle is fueled at a rate of 10 gal/min to test for fuel spitback emissions. All liquid fuel spitback emissions that occur during the test are collected in a bag made of a material impermeable to hydrocarbons or methanol. The bag shall be designed and used so that liquid fuel does not spit back onto the vehicle body, adjacent floor, etc., and it must not impede the free flow of displaced gasoline vapor from the orifice of the filler pipe. The bag must be designed to permit passage of the dispensing nozzle through the bag. If the bag has been used for previous testing, sufficient time shall be allowed for the bag to dry out. The dispensing nozzle shall be a commercial model, not equipped with vapor recovery hardware.

(b) Ambient temperature levels encountered by the test vehicle shall be not less than 68 °F nor more than 86 °F. The temperatures monitored during testing must be representative of those experienced by the test vehicle. The vehicle shall be approximately level during all phases of the test sequence to prevent abnormal fuel distribution.

(c) Measure and record the mass of the bag to be used for collecting spitback emissions to the nearest 0.01 gram.

(d) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.113, to 10 percent of the reported nominal fuel tank capacity. The fuel cap(s) shall be installed immediately after refueling.

(e) The vehicle shall be soaked at 80±6 °F (27±3 °C) for a minimum of six hours, then placed, either by being driven or pushed, on a dynamometer and operated through one Urban Dynamometer Driving Schedule (specified in § 86.115 and appendix I of this part). The test vehicle may not be used to set dynamometer horsepower.

(f) Following the preconditioning drive, the vehicle shall be driven at minimum throttle to the refueling area.

(g) All areas in proximity to the vehicle fuel fill orifice and the dispenser nozzle itself shall be completely dry of liquid fuel.

(h) The fuel filler neck shall be snugly fitted with the vented bag to capture any fuel emissions. The fuel nozzle shall be inserted through the bag into the filler neck of the test vehicle to its maximum penetration. The plane of the nozzle's handle shall be perpendicular to the floor of the laboratory.

(i) The fueling procedure consists of dispensing fuel through a nozzle, interrupted by a series of automatic shutoffs. A minimum of 3 seconds shall elapse between any automatic shutoff and subsequent resumption of dispensing. Dispensing may not be manually terminated, unless the test vehicle has already clearly failed the test. The vehicle shall be fueled according to the following procedure:

(1) The fueling operation shall be started within 4 minutes after the vehicle is turned off. The average temperature of the dispensed fuel shall be 65±5 °F (18±3 °C).

(2) The fuel shall be dispensed at a rate of 10.0±0.1 gallons/minute (37.9±0.4 ℓ/min) until the automatic shutoff is activated.

(3) If the automatic shutoff is activated before the nozzle has dispensed an amount of fuel equal to 70 percent of the tank's nominal capacity, the dispensing may be resumed at a reduced rate. Repeat as necessary until the nozzle has dispensed an amount of fuel equal to at least 70 percent of the tank's nominal capacity.

(4) Once the automatic shutoff is activated after the nozzle has dispensed an amount of fuel equal to 70 percent of the tank's nominal capacity, the fuel shall be dispensed at a rate of 5±1 gallons/minute (19±4 ℓ/min) for all subsequent dispensing. Dispensing shall be restarted two additional times.

(5) If the nozzle has dispensed an amount of fuel less than 85 percent of the tank's nominal capacity after the two additional dispensing restarts, dispensing shall be resumed, and shall continue through as many automatic shutoffs as necessary to achieve this level. This completes the fueling procedure.

(j) Withdraw the nozzle from the vehicle and the bag, holding the tip of the nozzle upward to avoid any dripping into the bag.

(k) Within 1 minute after completion of the fueling event, the bag shall be folded to minimize the vapor volume inside the bag. The bag shall be folded

as quickly as possible to prevent evaporation of collected emissions.

(l) Within 5 minutes after completion of the fueling event, the mass of the bag and its contents shall be measured and recorded (consistent with paragraph (c) of this section). The bag shall be weighed as quickly as possible to prevent evaporation of collected emissions.

**Subpart G—[Amended]**

42. Section 86.608-90 of subpart G is amended by revising paragraphs (a)(2) (ii), (iv), and (vi) to read as follows:

**§ 86.608-90 Test procedures.**

(a) \* \* \*

(2) \* \* \*

(ii) The manufacturer may measure the temperature of the test fuel at other than the approximate mid-volume of the fuel tank, as specified in § 86.131-96(a) with only a single temperature sensor, and may drain the test fuel from other than the lowest point of the tank, as specified in § 86.131-96(b), provided an equivalent method is used. Equivalency documentation shall be maintained by the manufacturers and shall be made available to the Administrator upon request.

\* \* \* \* \*

(iv) If the Administrator elects to use the evaporative canister preconditioning procedure described in § 86.132-96(k), the manufacturer shall perform the heat build procedure 11 to 34 hours following vehicle preconditioning rather than according to the time period specified in § 86.133-90(a). All references in § 86.133-90 to an evaporative emission enclosure (SHED) and analyzing for HC during the heat build can be ignored.

\* \* \* \* \*

(vi) If the Administrator elects to use the evaporative canister preconditioning procedure described in § 86.132-96(k), the cold start exhaust emission test described in § 86.137 shall follow the heat build procedure described in § 86.133-90 by not more than one hour.

\* \* \* \* \*

43. Section 86.609-84 of subpart G is amended by revising paragraphs (a), (b), and (c) to read as follows:

**§ 86.609-84 Calculation and reporting of test results.**

(a) Initial test results are calculated following the Federal Test Procedure specified in § 86.608(a). Round the initial test results to the number of decimal places contained in the applicable emission standard, expressed to one additional significant figure. Rounding shall be done in accordance

with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(b) Final test results for each test vehicle shall be calculated by summing the initial test results derived in paragraph (a) of this section for each test vehicle, dividing by the number of tests conducted on the vehicle, and rounding to the same number of decimal places contained in the applicable emission standard expressed to one additional significant figure. Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(c)(1) The final deteriorated test results for each test vehicle shall be calculated by multiplying the final test results by the appropriate deterioration factor derived for the certification process for the engine family and model year to which the selected configuration belongs, and rounded to two significant figures. Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1). For the purposes of this paragraph, if a deterioration factor as computed during the certification process is less than one, that deterioration factor shall be one.

(2) There are no deterioration factors for light-duty vehicles tested in accordance with § 86.146-96 of subpart B of this part. Accordingly, for the fuel dispensing spitback test the term "final deteriorated test results" shall mean the final test results derived in paragraph (b) of this section for each test vehicle, rounded to the same number of significant figures contained in the applicable standard in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

44. Section 86.610-84 of subpart G is amended by revising paragraph (b) to read as follows:

**§ 86.610-84 Compliance with acceptable quality level and passing and failing criteria for Selective Enforcement Audits.**

(b) A failed vehicle is one whose final deteriorated test results pursuant to § 86.609-84(c), for one or more of the applicable pollutants, including fuel

spitback, exceed the applicable emission standard.

**Subpart K—Selective Enforcement Auditing of New Heavy-Duty Engines, Heavy-Duty Vehicles, and Light-Duty Trucks**

45. The title of subpart K is revised to read as set forth above.

46. Section 86.1008-90 of subpart K is amended by revising paragraphs (a)(1) and (a)(3) (ii), (iv), and (vi) to read as follows:

**§ 86.1008-90 Test procedures.**

(a)(1) (i) For heavy-duty engines, the prescribed test procedure is the Federal Test Procedure, as described in subparts N, I, and P of this part.

(ii) For heavy-duty vehicles with a GVW of less than 14,000 pounds (6,400 kilograms), the prescribed test procedure is the Fuel Dispensing Spitback Test as described in 86.1246-96 of this part. The test for fuel spitback is conducted as a stand-alone test, thus all references to the test sequence described in figure M96-1 of subpart M of this part can be ignored.

(3) \*\*\*

(ii) The manufacturer may measure the temperature of the test fuel at other than the approximate mid-volume of the fuel tank, as specified in § 86.131-96(a) with only a single temperature sensor, and may drain the test fuel from other than the lowest point of the tank, as specified in § 86.131-96(b), provided an equivalent method is used. Equivalency documentation shall be maintained by the manufacturers and shall be made available to the Administrator upon request.

(iv) If the Administrator elects to use the evaporative canister preconditioning procedure described in § 86.132-96(k), the manufacturer shall perform the heat build procedure 11 to 34 hours following vehicle preconditioning rather than according to the time period specified in § 86.133-90(a). All references in § 86.133-90 to an evaporative emission enclosure (SHED) and analyzing for HC during the heat build can be ignored.

(vi) If the Administrator elects to use the evaporative canister preconditioning procedure described in § 86.132-96(k), the cold start exhaust test described in § 86.137 shall follow the heat build procedure described in § 86.133-90 by not more than one hour.

47. Section 86.1009-84 of subpart K is amended by revising paragraphs (a), (b), and (c)(3), and adding paragraph (c)(4) to read as follows:

**§ 86.1009-84 Calculation and reporting of test results.**

(a) Initial test results are calculated following the Federal Test Procedure specified in § 86.1008-94(a). Round the initial test results to the number of decimal places contained in the applicable emission standard, expressed to one additional significant figure. Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(b) Final test results for each test vehicle shall be calculated by summing the initial test results derived in paragraph (a) of this section for each test engine or vehicle, dividing by the number of tests conducted on the engine or vehicle, and rounding to the same number of decimal places contained in the applicable emission standard, expressed to one additional significant figure. Rounding shall be done in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(3) There are no deterioration factors for light-duty trucks tested in accordance with § 86.146-96 of subpart B of this part or for heavy-duty vehicles tested in accordance with § 86.1246-96 of subpart M of this part. Accordingly, for the Fuel Dispensing Spitback Test the term "final deteriorated test results" shall mean the final test results derived in paragraph (b) of this section for each test vehicle, rounded to the same number of significant figures contained in the applicable standard in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

(4) The final deteriorated test results are rounded to the same number of significant figures contained in the applicable standard in accordance with ASTM E 29-90, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. This procedure has been incorporated by reference (see § 86.1).

48. Section 86.1010-84 of subpart K is amended by revising paragraphs (b) and (c) to read as follows:



**§ 86.1010-84 Compliance with acceptable quality level and passing and failing criteria for selective enforcement audits.**

\* \* \* \* \*

(b) A failed engine or vehicle is one whose final deteriorated test results pursuant to § 86.1009(c), for one or more of the applicable pollutants, including fuel spitback, exceed the applicable emission standard.

(c) The manufacturer shall test heavy-duty engines, heavy-duty vehicles, or light-duty trucks comprising the test sample until a pass decision is reached for all pollutants, or a fail decision is reached for one pollutant. A pass decision is reached when the cumulative number of failed engines or vehicles, as described in paragraph (b) of this section, for each pollutant is less than or equal to the pass decision number appropriate to the cumulative number of engines or vehicles tested. A fail decision is reached when the cumulative number of failed engines or vehicles for one or more pollutants is greater than or equal to the fail decision number appropriate to the cumulative number of engines or vehicles tested. The pass and fail decision numbers associated with the cumulative number of engines or vehicles tested are determined by using the tables in appendix X of this part appropriate to the projected sales as made by the heavy-duty engine or heavy-duty vehicle manufacturer in its Application for Certification, or as made by the light-duty truck manufacturer in its report submitted under 40 CFR 600.207-80(a)(2). In the tables in appendix X to this part, sampling plan "stage" refers to the cumulative number of engines or vehicles tested. Once a pass or fail decision has been made for a particular pollutant, the number of engines or vehicles whose final deteriorated test results exceed the emission standard or compliance level, if applicable, for that pollutant shall not be considered any further for the purposes of the audit.

\* \* \* \* \*

**Subpart M—[Amended]**

49. Section 86.1205-90 of subpart M is amended by revising paragraph (b) to read as follows:

**§ 86.1205-90 Introduction; structure of subpart.**

\* \* \* \* \*

(b) Three topics are addressed in this subpart. Sections 86.1206 through 86.1215 set forth specifications and equipment requirements; §§ 86.1216 through 86.1226 discuss calibration methods and frequency; test procedures

and data requirements are listed in §§ 86.1227 through 86.1246.

50. A new § 86.1206-96 is added to subpart M to read as follows:

**§ 86.1206-96 Equipment required; overview.**

This subpart specifies procedures for testing gasoline- and methanol-fueled heavy-duty vehicles. Equipment required and specifications are as follows:

(a) *Evaporative emission tests.* Section 86.1207 specifies the necessary equipment.

(b) *Fuel, analytical gas, and driving schedule specifications.* Fuel specifications for emission testing and for service accumulation are specified in § 86.1213. Analytical gases are specified in § 86.1214. Evaporative testing requires vehicle operation on a chassis dynamometer. The driving cycle (EPA Heavy-Duty Vehicle Urban Dynamometer Driving Schedule) is specified in § 86.1215.

51. A new § 86.1207-96 is added to subpart M to read as follows:

**§ 86.1207-96 Sampling and analytical systems; evaporative emissions.**

(a) *Testing enclosures—(1) Diurnal emission test.* The enclosure shall be readily sealable, rectangular in shape, with space for personnel access to all sides of the vehicle. When sealed, the enclosure shall be gas tight in accordance with § 86.1217-96. Interior surfaces must be impermeable and nonreactive to hydrocarbons (and to methanol, if the enclosure is used for methanol-fueled vehicles). The temperature conditioning system shall be capable of controlling the internal enclosure air temperature to follow the prescribed temperature versus time cycle as specified in § 86.1233-96 and appendix II of this part, within an instantaneous tolerance of  $\pm 3.0$  °F of the nominal temperature versus time profile throughout the test, and an average tolerance of  $\pm 2.0$  °F over the duration of the test. The control system shall be tuned to provide a smooth temperature pattern that has a minimum of overshoot, hunting, and instability about the desired long-term ambient temperature profile. Interior surface temperatures shall not be less than 40 °F, nor more than 130 °F at any time during the diurnal emission test. To accommodate the volume changes due to enclosure temperature changes, either a variable-volume or fixed-volume enclosure may be used for diurnal emission testing:

(i) *Variable-volume enclosure.* The variable-volume enclosure expands and contracts in response to the temperature

change of the air mass in the enclosure. Two potential means of accommodating the internal volume changes are moveable panel(s), or a bellows design, in which impermeable bag(s) inside the enclosure expand and contract in response to internal pressure changes by exchanging air from outside the enclosure. Any design for volume accommodation must maintain the integrity of the enclosure as specified in § 86.1217-96 over the specified temperature range. Any method of volume accommodation shall limit the differential between the enclosure internal pressure and the barometric pressure to a maximum value of  $\pm 2.0$  inches of water. The enclosure shall be capable of latching to a fixed volume. A variable-volume enclosure must be capable of accommodating a  $\pm 7$  percent change from its "nominal volume" (see § 86.1217-96(b)), accounting for temperature and barometric pressure variation during testing.

(ii) *Fixed-volume enclosure.* The fixed-volume enclosure shall be constructed with rigid panels that maintain a fixed enclosure volume, and meet the following requirements.

(A) The enclosure shall be equipped with an outlet flow stream that withdraws air at a low, constant rate from the enclosure throughout the test. An inlet flow stream may provide make-up air to balance the outgoing flow with incoming ambient air. Inlet air must be filtered with activated carbon to provide a relatively constant hydrocarbon level. Any method of volume accommodation shall maintain the differential between the enclosure internal pressure and the barometric pressure between 0 and -2 inches of water.

(B) The equipment shall be capable of measuring the mass of hydrocarbon and methanol (if the enclosure is used for methanol-fueled vehicles) in the inlet and outlet flow streams with a resolution of 0.01 gram. A bag sampling system may be used to collect a proportional sample of the air withdrawn from and admitted to the enclosure. Alternatively, the inlet and outlet flow streams may be continuously analyzed using an on-line FID analyzer and integrated with the flow measurements to provide a continuous record of the mass hydrocarbon and methanol removal.

(2) *Running loss test.* The enclosure shall be readily sealable, rectangular in shape, with space for personnel access to all sides of the vehicle. When sealed, the enclosure shall be gas tight in accordance with § 86.1217-96. The enclosure may be equipped with a personnel door, provided that the enclosure can still meet the

requirements of § 86.1217-96 with the door installed. Interior surfaces must be impermeable and nonreactive to hydrocarbons and to methanol (if the enclosure is used for methanol-fueled vehicles). Interior surface temperatures shall not be less than 40 °F. If a running loss enclosure meets all the requirements of paragraph (a)(1) of this section, it may be used as a diurnal evaporative emission enclosure. The enclosure must contain a dynamometer that meets the requirements of § 86.108. Provisions shall be made to remove exhaust gases from the enclosure. The running loss enclosure shall be equipped to supply air to the vehicle, at a temperature of 95±5 °F, from sources outside of the running loss enclosure directly into the operating engine's air intake system. Supplemental air requirements (e.g., for an air pump) shall be supplied by drawing air from the engine intake source. During the running loss test, ambient temperatures must be maintained at 95±5 °F (95±2 °F on average). An air or oxygen cylinder with an attached self-contained breathing apparatus may be provided for the vehicle operator.

(3) *Hot soak test.* The hot soak test may be conducted by holding the vehicle in an enclosure that meets the requirements for either diurnal emission or running loss tests. The enclosure shall be configured to provide an internal enclosure ambient temperature of 95±10 °F for the first 5 minutes, and 95±5 °F (95±2 °F on average) for the remainder of the hot soak test.

(i) If the hot soak test is conducted in the same enclosure as the immediately preceding running loss test, interior surface temperatures shall not be below 70 °F, nor above 125 °F for the last 55 minutes of the hot soak test.

(ii) If the hot soak test is not conducted in the same enclosure as the immediately preceding running loss test, interior surface temperatures shall not be below 70 °F, nor above 125 °F for the duration of the hot soak test.

(b) *Evaporative emission hydrocarbon and methanol analyzers.* (1) For gasoline- and methanol-fueled vehicles a hydrocarbon analyzer utilizing the hydrogen flame ionization principle (FID) shall be used to monitor the atmosphere within the enclosure (a heated FID (HFID) (235±15 °F (113±8 °C))) is required for methanol-fueled vehicles). Provided evaporative emission results are not affected, a probe may be used to detect or verify hydrocarbon sources during a running loss test. Instrument bypass flow may be returned to the enclosure. The FID shall have a response time to 90 percent of final reading of less than 1.5 seconds.

(2) For methanol-fueled vehicles, a methanol sampling and analyzing system is required in addition to the FID analyzer. The methanol sampling equipment shall consist of impingers for collecting the methanol sample and appropriate equipment for drawing the sample through the impingers. The analytical equipment shall consist of a gas chromatograph equipped with a flame ionization detector.

(c) *Evaporative emission hydrocarbon and methanol data recording system.* (1) The electrical output of the FID used for measuring hydrocarbons (or hydrocarbons plus methanol, as appropriate) shall be recorded at least at the initiation and termination of each running loss and hot soak test, and at the initiation and termination of the enclosure sampling period(s) for the diurnal emission test, as described in § 86.1233. The recording may be taken by means of a strip chart potentiometric recorder, by use of an on-line computer system or other suitable means. In any case, the recording system must have operational characteristics (signal to noise ratio, speed of response, etc.) equivalent to or better than those of the signal source being recorded, and must provide a permanent record of results. The record shall show a positive indication of the initiation and completion of each hot soak, running loss, or diurnal emission test (including initiation and completion of sampling period(s)), along with the time elapsed during each soak.

(2) For the methanol sample, permanent records shall be made of the following: the volumes of deionized water introduced into each impinger, the rate and time of sample collection, the volumes of each sample introduced into the gas chromatograph, the flow rate of carrier gas through the column, the column temperature, and the chromatogram of the analyzed sample.

(d) *Fuel temperature control system.* Fuel temperatures of the test vehicle shall be controlled, as specified in § 86.1234(g)(1)(xv), with the following combination of fans. The control system shall be tuned and operated to provide a smooth and continuous fuel tank temperature profile that is representative of the on-road temperature profile.

(1) A vehicle underbody fan shall discharge air from the front of the vehicle, as necessary to control fuel temperatures. The fan shall be a roadspeed modulated fan that is controlled to a discharge velocity that follows the dynamometer roll speed, at least up to speeds of 30 mph, throughout the driving cycle. Discharge velocities may temporarily depart from

dynamometer roll speed if necessary to control fuel temperatures. The system shall provide a total discharge airflow not to exceed 8,000 cfm.

(2) Additional fans may be used to route heating or cooling air directly at the bottom of the vehicle's fuel tank. The air supplied to the tank shall be between 70° and 160 °F, with a total discharge airflow not to exceed 1,000 cfm.

(e) *Temperature recording system.* A strip chart potentiometric recorder, an on-line computer system, or other suitable means shall be used to record enclosure ambient temperature during all evaporative emission test segments, as well as vehicle fuel tank temperature during the running loss test. The recording system shall record each temperature at least once every minute. The recording system shall be capable of resolving time to ±15s and capable of resolving temperature to ±0.75 °F (±0.42 °C). The temperature recording system (recorder and sensor) shall have an accuracy of ±3 °F (±1.7 °C). The recorder (data processor) shall have a time accuracy of ±15s and a precision of ±15s. Two ambient temperature sensors, connected to provide one average output, shall be located 3 feet above the floor at the approximate mid-length of each side wall of the enclosure and within 3 to 12 inches of each side wall. Manufacturers shall arrange that vehicles furnished for testing at Federal certification facilities be equipped with iron-constantan Type J thermocouples for measurement of fuel tank temperature. Vehicles shall be equipped with 2 temperature sensors installed to provide an average liquid fuel temperature. The temperature sensors shall be placed to measure the temperature at the mid-volume of the liquid fuel at a fill level of 40 percent of nominal tank capacity. In-tank temperature sensors are not required for the supplemental two-diurnal test sequence specified in § 86.1230-96.

(f) *Pressure recording system.* A strip chart potentiometric recorder, an on-line computer system, or other suitable means, shall be used to record the enclosure gage pressure for any testing in an enclosure, as well as the vehicle's fuel tank pressure during the running loss test. The Administrator may omit measurement of fuel tank pressure. The recording system shall record each pressure at least once every minute. The recording system shall be capable of resolving time to ±15s and capable of resolving pressure to ±0.1 inches of water. The pressure recording system (recorder and sensor) shall have an accuracy of ±1.0 inches of water. The recorder (data processor) shall have a

time accuracy of  $\pm 15s$  and a precision of  $\pm 15s$ . The pressure transducer shall be installed to measure the pressure in the vapor space of the fuel tank.

(g) *Purge blower.* One or more portable or fixed blowers shall be used to purge the enclosure. The blowers shall have sufficient flow capacity to reduce the enclosure hydrocarbon and/or methanol concentration from the test level to the ambient level between tests. Actual flow capacity will depend upon the time available between tests.

(h) *Mixing blower.* Blowers or fans shall be used to mix the enclosure contents during evaporative emission testing. The inlets and outlets of the air circulation blower(s) shall be configured to provide a well dispersed air circulation pattern that produces effective internal mixing and avoids significant temperature or hydrocarbon stratification. Maintenance of uniform concentrations throughout the enclosure is important to the accuracy of testing.

(1) *Diurnal emission test.* Blowers or fans shall have a capacity of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume for mixing in the enclosure. Additional fans may be used to maintain a minimum wind speed of 5 mph (8 km/h) under the fuel tank of the test vehicle.

(2) *Running loss test.* Blowers or fans shall have a total capacity of at least 1.0 cfm per cubic foot of the nominal enclosure volume.

(3) *Hot soak test.* Blowers or fans must have a capacity of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume. Circulated air shall not be aimed directly at the vehicle.

(i) *Point-source running loss measurement facility.* Some system requirements pertain specifically to running loss testing by the point-source method, in which emissions from potential sources are collected and routed to a sampling system. Emissions are sampled with the same equipment and techniques as for exhaust emission measurement. The test environment must contain a dynamometer that meets the requirements of § 86.108. During the running loss test, ambient temperatures must be maintained at  $95 \pm 5$  °F ( $95 \pm 2$  °F on average). An air or oxygen cylinder with an attached self-contained breathing apparatus may be provided for the vehicle operator.

(1) The running loss vapor vent collection system shall be configured to collect all running loss emissions from each of the discrete point sources that function as vehicle fuel system vapor vents, and transport the collected vapor emissions to a CFV- or PDP-based dilution and measurement system. The collection system shall consist of a

collector at each vehicle vapor vent, lengths of heated sample line connecting each collector to the inlet of the heated sample pump, and lengths of heated sample line connecting the outlet of the heated sample pump to the inlet of the running loss fuel vapor sampling system. Up to 3 feet of unheated line connecting each of the vapor collectors to the heated sample lines shall be allowed. Each heated sample pump and its associated sample lines shall be maintained at a temperature between 175 °F and 200 °F to prevent condensation of fuel vapor in the sample lines. The heated sample pump(s) and its associated flow controls shall be configured and operated to draw a flow of ambient air into each collector at a flow rate of at least 0.67 cfm. The flow controls on each heated sampling system shall include an indicating flow meter that provides an alarm output to the data recording system if the flow rate drops below 0.67 cfm by more than 5 percent. The collector inlet for each discrete vapor vent shall be placed in proximity to the vent as necessary to capture any fuel vapor emissions without significantly affecting flow or pressure of the normal action of the vent. The collector inlets shall be designed to interface with the configuration and orientation of each specific vapor vent. For vapor vents that terminate in a tube or hose barb, a short length of tubing of an inside diameter larger throughout its length than the inside diameter of the vent outlet may be used to extend the vent into the mouth of the collector. For those vapor vent designs that are not compatible with such collector configurations, the vehicle manufacturer shall supply a collector that is configured to interface with the vapor vent design and that terminates in a fitting that is capable of capturing all vapor emitted from the vent. The Administrator may test for running losses by the point-source method without heating sample lines or pumps.

(2) The running loss fuel vapor sampling system shall be a CFV- or PDP-based dilution and measurement system that further dilutes the running loss fuel vapors collected by the vapor vent collection system(s) with ambient air, collects continuously proportional samples of the diluted running loss vapors and dilution air in sample bags, and measures the total dilute flow through the sampling system over each test interval. In practice, the system shall be configured and operated in a manner that is directly analogous to an exhaust emissions constant volume sampling system, except that the input

flow to the system is the flow from the running loss vapor vent collection system(s) instead of vehicle exhaust flow. The system shall be configured and operated to meet the following requirements:

(i) The running loss fuel vapor sampling system shall be designed to measure the true mass of fuel vapor emissions collected by the running loss vapor vent collection system from the specified fuel vapor vents. The total volume of the mixture of running loss emissions and dilution air shall be measured and a continuously proportioned sample of volume shall be collected for analysis. Mass emissions shall be determined from the sample concentration and total flow over the test period.

(ii) The PDP-CVS shall consist of a dilution air filter and mixing assembly, heat exchanger, positive-displacement pump, sampling system, and associated valves, pressure and temperature sensors. The PDP-CVS shall conform to the following requirements:

(A) The gas mixture temperature, measured at a point immediately ahead of the positive-displacement pump, shall be within  $\pm 10$  °F of the designed operating temperature at the start of the test. The gas mixture temperature variation from its value at the start of the test shall be limited to  $\pm 10$  °F during the entire test. The temperature measuring system shall have an accuracy and precision of  $\pm 2$  °F.

(B) The pressure gauges shall have an accuracy and precision of  $\pm 1.6$  inches of water ( $\pm 0.4$  kPa).

(C) The flow capacity of the CVS shall not exceed 350 cfm.

(D) Sample collection bags for dilution air and running loss fuel vapor samples shall be sufficient size so as not to impede sample flow.

(iii) The CFV sample system shall consist of a dilution air filter and mixing assembly, a sampling venturi, a critical flow venturi, a sampling system and assorted valves, and pressure and temperature sensors. The CFV sample system shall conform to the following requirements:

(A) The temperature measuring system shall have an accuracy and precision of  $\pm 2$  °F and a response time of 0.100 seconds of 62.5 percent of a temperature change (as measured in hot silicone oil).

(B) The pressure measuring system shall have an accuracy and precision of  $\pm 1.6$  inches of water (0.4 kPa).

(C) The flow capacity of the CVS shall not exceed 350 cfm.

(D) Sample collection bags for dilution air and running loss fuel vapor

samples shall be of sufficient size so as not to impede sample flow.

(3) An on-line computer system or strip-chart recorder shall be used to record the following additional parameters during the running loss test sequence:

(i) CFV (if used) inlet temperature and pressure.

(ii) PDP (if used) inlet temperature, pressure, and differential pressure.

52. Section 86.1215-85 of subpart M is amended by adding a sentence to the end of paragraph (a), revising paragraph (b), and removing paragraph (c) to read as follows:

**§ 86.1215-85 EPA heavy-duty vehicle (HDV) urban dynamometer driving schedule.**

(a) \* \* \* The Administrator will use this driving schedule when conducting evaporative emission tests, as described in § 86.1230-96.

(b) The driver should attempt to follow the target schedule as closely as possible. The speed tolerance at any given time for these schedules, or for a driver's aid chart approved by the Administrator, are as follows:

(1) The upper limit is 4 mph (6.4 km/h) higher than the highest point on the trace within 1 second of the given time.

(2) The lower limit is 4 mph (6.4 km/h) lower than the lowest point on the trace within 1 second of the given time.

(3) (i) Speed variations greater than the tolerances (such as may occur during gear changes or braking spikes) are acceptable, provided they occur for less than 2 seconds on any occasion and are clearly documented as to the time and speed at that point of the driving schedule.

(ii) When conducted to meet the requirements of § 86.1229, up to three additional occurrences of speed variations greater than the tolerance are acceptable, provided they occur for less than 15 seconds on any occasion, and are clearly documented as to the time and speed at that point of the driving schedule.

(4) Speeds lower than those prescribed are acceptable, provided the vehicle is operated at maximum available power during such occurrences.

53. A new § 86.1217-96 is added to subpart M to read as follows:

**§ 86.1217-96 Evaporative emission enclosure calibrations.**

The calibration of evaporative emission enclosures consists of three parts: initial and periodic determination of enclosure background emissions (hydrocarbons and methanol); initial determination of enclosure internal

volume; and periodic hydrocarbon and methanol retention check and calibration. Methanol measurements may be omitted when methanol-fueled vehicles will not be tested in the evaporative enclosure.

(a) *Initial and periodic determination of enclosure background emissions.* Prior to its introduction into service, annually thereafter, and after any repair that can affect the enclosure background emissions, the enclosure shall be checked to determine that it does not contain materials that will themselves emit hydrocarbons or methanol. When methanol as well as hydrocarbons are present in the evaporative enclosure, the HFID hydrocarbon concentration measurement includes the partial response of the HFID to methanol plus the hydrocarbons. Determination of the HFID response to methanol, § 86.1221, prior to its being placed in service is required for the determination of hydrocarbons. Proceed as follows:

(1) Prepare the enclosure. (i) Variable-volume enclosures may be operated in either latched or unlatched volume configuration, as described in paragraph (b)(1) of this section. Ambient temperatures shall be maintained at  $96 \pm 3$  °F throughout the 4-hour period.

(ii) Fixed-volume enclosures shall be operated with inlet and outlet flow streams closed. Ambient temperatures shall be maintained at  $96 \pm 3$  °F throughout the 4-hour period.

(iii) For running loss enclosures ambient temperatures shall be maintained at  $95 \pm 3$  °F throughout the 4-hour period.

(2) The enclosure may be sealed and the mixing fan operated for a period of up to 12 hours before the 4-hour background sampling period begins.

(3) Zero and span (calibrate if required) the hydrocarbon analyzer.

(4) Prior to the background determination, purge the enclosure until a stable background hydrocarbon reading is obtained.

(5) Turn on the mixing blower (if not already on).

(6) Seal enclosure and measure background hydrocarbon concentration, background methanol, temperature, and barometric pressure. These are the initial readings  $C_{HC}$ ,  $C_{CH_3OH}$ , and  $P_{BI}$ .  $T_i$  for the enclosure background determination.

(7) Allow the enclosure to stand undisturbed without sampling for four hours.

(8) Measure the hydrocarbon concentration on the same FID and the methanol level. These are the final concentrations,  $C_{HC}$  and  $C_{CH_3OH}$ . Also

measure final temperature and barometric pressure.

(9) Calculate the mass change of methanol, hydrocarbons, and hydrocarbons plus methanol in the enclosure according to the equations in paragraph (d) of this section.

(i) *Diurnal enclosures.* The enclosure background emissions (hydrocarbons plus methanol) shall not be greater than 0.05g for the 4 hours.

(ii) *Running loss enclosures.* The enclosure background emissions (hydrocarbons plus methanol) shall not be greater than 0.2 grams for the 4 hours.

(b) *Initial determination of enclosure internal volume.* Initial determination of enclosure internal volume. Prior to its introduction into service the enclosure internal volume shall be determined by the following procedure:

(1) Carefully measure the internal length, width and height of the enclosure, accounting for irregularities (such as braces) and calculate the internal volume. For variable-volume enclosures, latch the enclosure to a fixed volume when the enclosure is held at an ambient temperature of 84 °F; this nominal volume shall be repeatable within  $\pm 0.5$  percent of the reported value.

(2) Perform an enclosure calibration check according to paragraph (c) of this section.

(3) If the calculated mass does not agree within 2 percent of the injected propane mass, then corrective action is required.

(c) *Hydrocarbon and methanol retention check and calibration.* The hydrocarbon and methanol (if the enclosure is used for methanol-fueled vehicles) retention check provides a check upon the calculated volume and also measures the leak rate. The enclosure leak rate shall be determined prior to its introduction into service, following any modifications or repairs to the enclosure that may affect the integrity of the enclosure, and at least monthly thereafter. If six consecutive monthly retention checks are successfully completed without corrective action, the enclosure leak rate may be determined quarterly thereafter as long as no corrective action is required.

(1) An enclosure to be used for the diurnal emission test (see § 86.1233-96) shall be calibrated according to the following procedure.

(i) Zero and span (calibrate if required) the hydrocarbon analyzer.

(ii) Purge the enclosure until a stable background hydrocarbon reading is obtained.

(iii) Turn on the mixing blowers (if not already on).

(iv) On variable-volume enclosures, latch the enclosure to the nominal volume position. On fixed-volume enclosures close the outlet and inlet flow streams.

(v) Turn on the ambient temperature control system (if not already on) and adjust it for an initial temperature of 96 °F (36 °C).

(vi) When the enclosure stabilizes at 96±3 °F (36±2 °C), seal the enclosure and measure background hydrocarbon concentration, background methanol, temperature, and barometric pressure. These are the initial readings  $C_{HCl}$ ,  $C_{CH_3OH}$ ,  $T_i$ , and  $P_{Bi}$  for the enclosure calibration.

(vii) Inject into the enclosure 2 to 6 grams of pure propane and 2 to 6 grams of pure methanol in gaseous form; i.e., at a temperature of at least 150 °F (65 °C). The propane and methanol may be measured by volume flow or by mass measurement. The method used to measure the propane and methanol shall have an accuracy and precision of ±0.2 percent of the measured value.

(viii) After a minimum of 5 minutes of mixing, analyze the enclosure atmosphere for hydrocarbon and

methanol content, also record temperature and pressure. These measurements are the final readings for the enclosure calibration as well as the initial readings for the retention check.

(ix) To verify the enclosure calibration, calculate the mass of propane and the mass of methanol using the measurements taken in paragraphs (c)(1)(vi) and (viii) of this section. See paragraph (d) of this section. This quantity must be within ±2 percent of that measured in paragraph (c)(1)(vii) of this section.

(x) For variable-volume enclosures, unlatch the enclosure from the nominal volume configuration. For fixed-volume enclosures, open the outlet and inlet flow streams.

(xi) Start cycling the ambient temperature from 96 °F to 72 °F and back to 96 °F over a 24-hour period, according to the profile specified in § 86.1233-96 and appendix II of this part, within 15 minutes of sealing the enclosure.

(xii) At the completion of the 24-hour cycling period, analyze the enclosure atmosphere for hydrocarbon and methanol content; determine the net withdrawn methanol (in the case of diurnal emission testing with fixed-

volume enclosures); record temperature and barometric pressure. These are the final readings for the hydrocarbon and methanol retention check. The final hydrocarbon and methanol mass, calculated in paragraph (d) of this section, shall be within 3 percent of that determined in paragraph (c)(1)(viii) of this section.

(2) An enclosure to be used for the running loss test (see § 86.1234-96) shall meet the calibration and retention requirements of § 86.1217-90(c).

(3) Enclosures calibrated according to the procedures specified in either paragraph (c)(1) or (c)(2) of this section may be used for hot soak testing (see § 86.1238).

(d) *Calculations.* (1) The calculation of net methanol and hydrocarbon mass change is used to determine enclosure background and leak rate. It is also used to check the enclosure volume measurements. The methanol mass change is calculated from the initial and final methanol samples, the net withdrawn methanol (in the case of diurnal emission testing with fixed-volume enclosures), and initial and final temperature and pressure according to the following equation:

$$M_{CH_3OH} = \left( \frac{V_n \times C_{MR}}{A_{MR}} \right) \times \left( \frac{T_{E_f}}{V_{E_f} \times T_{SHED_f}} \times [(A_{MS1f} \times AV_{1f}) + (A_{MS2f} \times AV_{2f})] - \frac{T_{E_i}}{V_{E_i} \times T_{SHED_i}} \times [(A_{MS1i} \times AV_{1i}) + (A_{MS2i} \times AV_{2i})] \right) + (M_{CH_3OH,out} - M_{CH_3OH,in})$$

Where,

- (i)  $M_{CH_3OH}$ =mass change, µg.
- (ii)  $V$ =Enclosure volume, ft<sup>3</sup>, as measured in paragraph (b)(1) of this section.
- (iii)  $C_{MR}$ =Concentration of methanol in standard sample for calibration of gas chromatograph (GC), µg/ml.
- (iv)  $A_{MR}$ =GC peak area of standard sample.
- (v)  $T_E$ =Temperature of sample withdrawn, R.
- (vi)  $T_{SHED}$ =Temperature of enclosure, R.
- (vii)  $V_E$ =Volume of sample withdrawn, ft<sup>3</sup>.
- (viii)  $P_B$ =Barometric pressure at time of sampling, in. Hg.
- (ix)  $A_{MS}$ =GC peak area of test sample.
- (x)  $AV$ =Volume of absorbing reagent in impinger (ml).
- (xi)  $i$ =Initial sample.
- (xii)  $f$ =Final sample.
- (xiii)  $1$ =First impinger
- (xiv)  $2$ =Second impinger.
- (xv)  $M_{CH_3OH,out}$ =mass of methanol exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, µg.
- (xvi)  $M_{CH_3OH,in}$ =mass of methanol entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, µg.

(2) The hydrocarbon mass change is calculated from the initial and final FID readings of hydrocarbon concentration, methanol concentration with FID response to methanol, the net withdrawn hydrocarbon and methanol (in the case of diurnal emission testing with fixed-volume enclosures), and initial and final temperature and pressure according to the following equation:

$$M_{HC} = (kV_n \times 10^{-4}) \times \left( \frac{(C_{HC_f} - rC_{CH_3OH_f})P_{B_f}}{T_f} - \frac{(C_{HC_i} - rC_{CH_3OH_i})P_{B_i}}{T_i} \right) + M_{HC,out} - M_{HC,in}$$

Where,

- (i)  $M_{HC}$ =Hydrocarbon mass change, g.  
 (ii)  $C_{HC}$ =FID hydrocarbon concentration as ppm carbon, that is, ppm propane  $\times$  3, including FID response to methanol in the sample.  
 (iii)  $C_{CH_3OH}$ =Methanol concentration as ppm carbon.

$$C_{CH_3OH} = \left( \frac{1.501 \times 10^{-3} C_{MR} \times T}{A_{MR} \times P_B \times V_n} \right) \times [(A_{S1} \times AV_1) + (A_{S2} \times AV_2)]$$

- (iv)  $V$ =Enclosure volume  $ft^3$  ( $m^3$ ), as measured in paragraph (b)(1) of this section.  
 (v)  $r$ =FID response factor to methanol.  
 (vi)  $P_B$ =Barometric pressure, in. Hg. (kPa).  
 (vii)  $T$ =Enclosure ambient temperature, R(K).  
 (viii)  $i$ =Indicates initial reading.  
 (ix)  $f$ =Indicates final reading.  
 (x)(A)  $k=3.05$ .  
 (B) For SI units,  $k=17.60$ .  
 (xi)  $M_{HC,out}$ =mass of hydrocarbon exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.  
 (xii)  $M_{HC,in}$ =mass of hydrocarbon entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(e) *Calibration of equipment for point-source testing of running losses.* For the point-source method, the running loss fuel vapor sampling system shall be calibrated as a CVS system, as specified in § 86.119, with the additional specification that the vapor sampling system verification be conducted as follows:

(1) The following "gravimetric" technique can be used to verify that the vapor sampling system and analytical instruments can accurately measure a mass of gas that has been injected into the system. If the vapor sampling system will be used only in the testing of petroleum-fueled engines, system verification may be performed using propane. If the vapor sampling system will be used with methanol-fueled vehicles as well as petroleum-fueled vehicles, the system verification performance check must include a methanol check in addition to the propane check. (Verification can also be accomplished by constant flow metering using critical flow orifice devices.)

(i) Obtain a small cylinder that has been charged with pure propane gas. Obtain another small cylinder that has been charged with pure methanol if the system will be used for methanol-fueled vehicle testing. Since this cylinder will be heated to 150–155 °F, care must be taken to ensure that the liquid volume of methanol placed in the cylinder does not exceed approximately one-half of the total volume of the cylinder.

(ii) Determine a reference cylinder weight to the nearest 0.01 grams.

(iii) Operate the vapor sampling system in the normal manner and release a known quantity of pure propane into the most frequently used fuel vapor vent collector during the sampling period (approximately 5 minutes).

(iv) Continue to operate the vapor sampling system in the normal manner and release a known quantity of pure methanol into the system during the sampling period (approximately 5 minutes).

(v) The calculations of § 86.1244 are performed in the normal way, except in the case of propane. The density of propane (17.30 g/ft<sup>3</sup>/carbon atom (0.6109 kg/m<sup>3</sup>/carbon atom)) is used in place of the density of exhaust hydrocarbons. In the case of methanol, the density of 37.71 g/ft<sup>3</sup> (1.332 kg/m<sup>3</sup>) is used.

(vi) The gravimetric mass is subtracted from the vapor sampling system measured mass and then divided by the gravimetric mass to determine the percent accuracy of the system.

(vii) The cause for any discrepancy greater than  $\pm 2$  percent must be found and corrected.

(2) This procedure shall be conducted in the point-source running loss test environment with the collector installed in a vehicle in the normal test configuration. The fuel of the test vehicle shall either be diesel, or it shall be kept under 100 °F (38 °C). Two to six grams of pure propane and two to six grams of pure methanol shall be injected into the collector while the vehicle is operated over one Heavy-Duty Vehicle

Urban Dynamometer Driving Schedule, as described in § 86.1215 and Appendix I of this part. The propane and methanol injections shall be conducted at the ambient temperature of 95 $\pm$ 5 °F (35 $\pm$ 3 °C).

54. A new § 86.1227–96 is added to subpart M to read as follows:

**§ 86.1227–96 Test procedures overview.**

(a) The overall test consists of prescribed sequences of fueling, parking, and operating conditions. Vehicles are tested only for evaporative emissions.

(b) The evaporative emission test (gasoline-fueled vehicles and methanol-fueled vehicles) is designed to determine hydrocarbon and methanol evaporative emissions as a consequence of diurnal temperature fluctuation, urban driving, and hot soaks following drives. It is associated with a series of events that may be experienced by in-use vehicles that results in hydrocarbon and/or methanol vapor losses. The test procedure is designed to measure:

(1) Diurnal emissions resulting from daily temperature changes (as well as relatively constant resting losses), measured by the enclosure technique (see § 86.1233);

(2) Running losses resulting from a simulated trip on a chassis dynamometer, measured by the enclosure or point-source technique (see § 86.1234); and

(3) Hot soak losses, which result when the vehicle is parked and the hot engine is turned off, measured by the enclosure technique (see § 86.1238).

55. Section 86.1229-85 of subpart M is amended by revising the section heading, adding and reserving paragraph (c), and adding paragraph (d) to read as follows:

**§ 86.1229-85 Dynamometer load determination and fuel temperature profile.**

\* \* \* \* \*

(c) [Reserved]

(d) *Fuel temperature profile*—(1) *General requirements.* To be tested for running losses, as specified in § 86.1234, a vehicle must have a fuel temperature profile. The following procedure is used to generate the fuel temperature profile, which serves as a target for controlling fuel temperatures during the running loss test. This profile represents the fuel temperature change that occurs during on-road driving. If a vehicle has more than one fuel tank, a profile shall be established for each tank. If manufacturers use a vehicle model to develop a profile to represent multiple models, the vehicle model selected must have the greatest expected fuel temperature increase during driving of all those models it represents. Also, manufacturers must select test vehicles with any available vehicle options that increase fuel temperatures during driving (for example, any feature that limits underbody airflow). The Administrator may conduct testing to establish any vehicle's fuel temperature profile.

(2) *Vehicle instrumentation.* (i) The vehicle must be equipped with temperature sensors and pressure transducers, as described in § 86.1207-96(e) and (f), and a driver's aid, which shall be configured to provide the test driver with the desired vehicle speed vs. time trace and the actual vehicle speed.

(ii) A computer, data logger, or strip chart data recorder shall record the following parameters at a minimum during the test run:

- (A) Desired speed;
- (B) Actual speed;
- (C) Instantaneous average liquid fuel temperature ( $T_{liq}$ ); and
- (D) Vapor space pressure (the Administrator may omit measurement of fuel tank pressure).

(iii) The data recording system described in paragraph (d)(2)(ii) of this section shall be capable of resolving time to  $\pm 1$  s, capable of resolving temperature to  $\pm 2$  °F, capable of resolving pressure to  $\pm 1.0$  inch of water, and capable of resolving speed to  $\pm 0.1$  mph. The temperature and pressure signals shall be recorded at intervals of up to 1 minute; speed signals shall be recorded at intervals of up to 1 second.

(3) *Ambient conditions.* The procedure shall be run under the

following ambient conditions. Conditions should be representative of sunny summer days.

(i) Starting ambient temperature ( $T_{amb,o}$ ) shall be at least 95 °F, steady or increasing (no more than 2 °F drop) during the procedure. Ambient temperature shall be measured and recorded in regular intervals of at least once every 5 minutes. Measure ambient temperature with the following requirements (based on Federal Standard for Siting Meteorological Sensors at Airports, FCM-S4-1987). The sensors shall be mounted  $5 \pm 1$  feet ( $1.5 \pm 0.3$  meters) above ground level. The sensors shall be protected from radiation from the sun, sky, earth, and any other surrounding objects, but at the same time be adequately ventilated. The sensors shall be installed in such a position as to ensure that measurements are representative of the free air circulation in the locality and not influenced by artificial conditions such as large buildings, cooling towers, and expanses of concrete and tarmac. Keep any grass and vegetation within 100 feet (30 meters) of the sensor clipped to a height of about 10 inches (25 centimeters) or less.

(ii) Wind conditions shall be calm to light with maximum wind speed of 15 mph. Wind speed shall be measured and recorded in regular intervals of at least once per minute. Measure wind speed with the following requirements (based on Federal Standard for Siting Meteorological Sensors at Airports, FCM-S4-1987). The site should be relatively level, but small gradual slopes are acceptable. The sensor shall be mounted 30 to 33 feet (9 to 10 meters) above the average ground height within a radius of 500 feet (150 meters). The sensor height shall not exceed 33 feet, except as necessary to be at least 15 feet (5 meters) above the height of any obstruction (e.g. vegetation, buildings, etc.) within a 500 foot (150 meter) radius. An object is considered to be an obstruction if the included lateral angle from the sensor to the ends of the object is 10 degrees or more.

(iii) Road surface temperature shall be at least 30 °F above ambient temperature throughout the driving period. Pavement temperature shall be measured and recorded in regular intervals of at least once per minute. The track temperature may be measured with an embedded sensor, a portable temperature probe, or an infrared pyrometer that can provide an accuracy of  $\pm 2$  °F. Temperatures must be measured on a surface representative of the surface where the vehicle is driven.

(iv) Conditions shall be sunny or mostly sunny with a maximum cloud cover of 25 percent.

(v) Reported cloud cover, wind speed, and ambient temperature should be consistent with that reported by the nearest weather station; the Administrator may request justification of any discrepancy.

(4) *Profile determination procedure.*

(i) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.1213, to the "tank fuel volume" defined in § 86.082-2.

(ii) The vehicle shall be moved to the location where the data is to be collected. It may be driven a maximum distance of 5 miles and may be transported by other means. The vehicle shall be parked for a minimum of 12 hours in an open area on a surface that is representative of the test road. The orientation of the front of the vehicle during parking (e.g., N, SW, etc.) shall be documented.

(iii) Once the 12 hour minimum parking time has been achieved and the ambient temperature, weather conditions, and track surface temperature are within the allowable ranges, the vehicle engine shall be started. The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed. Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(iv) The vehicle may be operated at minimum throttle for a period up to 60 seconds prior to the start of the driving schedule, as necessary to move from the parking location onto the road surface. The driver's aid shall be started and the vehicle operated over the driving cycle specified in § 86.1234-96(b) with the transmission operated in the same manner as specified in § 86.128-79. The data recording system shall provide a record of the required parameters over the entire period of driving.

(5) *Records required.* In addition to the vehicle data recording, the following parameters shall be documented for the determination of the fuel temperature profile:

- (i) Date and time of vehicle fueling;
- (ii) Odometer reading at vehicle fueling;
- (iii) Date and time vehicle was parked, parking location and orientation;
- (iv) Odometer reading at parking;
- (v) Date and time engine was started;
- (vi) Time of initiation of first Heavy-Duty Vehicle UDDS;

- (vii) Time of completion of the driving cycle;
- (viii) Ambient temperatures throughout the period of driving ( $T_{amb}$ );
- (ix) Wind speed throughout the period of driving;
- (x) Track surface temperatures throughout the period of driving cycle ( $T_{sur}$ );
- (xi) Percent cloud cover during the period of driving; and
- (xii) Ambient temperature, wind speed, and percent cloud cover reported by the nearest weather station for the time corresponding most closely to the period of driving.

(6) *Fuel tank pressure.* Tank pressure shall not exceed 10 inches of water at any time during the temperature profile determination unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(7) *Calculation of temperature profiles.* (i) The traces from the driving schedule shall be verified to meet the speed tolerance requirements of § 86.1215. The following conditions shall be verified:

$$(A) T_{amb,i} \geq T_{amb,o} - 2 \text{ } ^\circ\text{F.}$$

Where,

- (1) i=instantaneous measurement throughout the drive; and
  - (2) o=initial measurement at the start of the specified driving schedule.
- (B)  $T_{amb,o} \geq 95 \text{ } ^\circ\text{F.}$
  - (C)  $T_{sur,i} - T_{amb,i} \geq 30 \text{ } ^\circ\text{F.}$

(D)  $W_{max} \leq 15 \text{ mph.}$

(ii) Failure to comply with any of these requirements shall result in invalidation of the data and require that the procedure be repeated, beginning with the fuel drain at paragraph (d)(4)(i) of this section.

(iii) If all these requirements are met, the following calculations shall be performed:

$$T_{i,profile} = T_i - T_o.$$

Where,

(A)  $T_{i,profile}$ =the series of temperatures that comprise the relative fuel temperature profile.

(B)  $T_i$ =the series of observed liquid fuel temperatures during the drive.

(C)  $T_o$ =the liquid fuel temperature observed at the start of the specified driving schedule.

(iv) The relative fuel temperature profile consists of the set of temperatures at each 1-minute interval. If multiple valid test runs are conducted for any model, then all the collected data shall be used to calculate a composite profile, based on the average temperatures at each point. The absolute fuel temperature profile is determined by adding 95 °F (35 °C) to each point of the relative profile.

56. A new § 86.1230-96 is added to subpart M to read as follows:

**§ 86.1230-96 Test sequence; general requirements.**

(a) The test sequence shown in figure M96-1 of this section shows the steps

encountered as the test vehicle undergoes the procedures subsequently described to determine conformity with the standards set forth. The full three-diurnal sequence depicted in figure M96-1 tests vehicles for all sources of evaporative emissions. The supplemental two-diurnal test sequence is designed to verify that vehicles sufficiently purge their evaporative canisters during the dynamometer run. Sections 86.1232-96, 86.1233-96, and 86.1238-96 describe the separate specifications of the supplemental two-diurnal test sequence.

(b) The vehicle test for fuel spitback during fuel dispensing is conducted as a stand-alone test (see § 86.1246).

(c) Ambient temperature levels encountered by the test vehicle shall be not less than 68 °F nor more than 86 °F, unless otherwise specified. If a different ambient temperature is specified for soaking the vehicle, the soak period may be interrupted once for up to 10 minutes to transport the vehicle from one soak area to another, provided the ambient temperature experienced by the vehicle is never below 68 °F. The temperatures monitored during testing must be representative of those experienced by the test vehicle.

(d) The vehicle shall be approximately level during all phases of the test sequence to prevent abnormal fuel distribution.

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# Federal Test Procedure

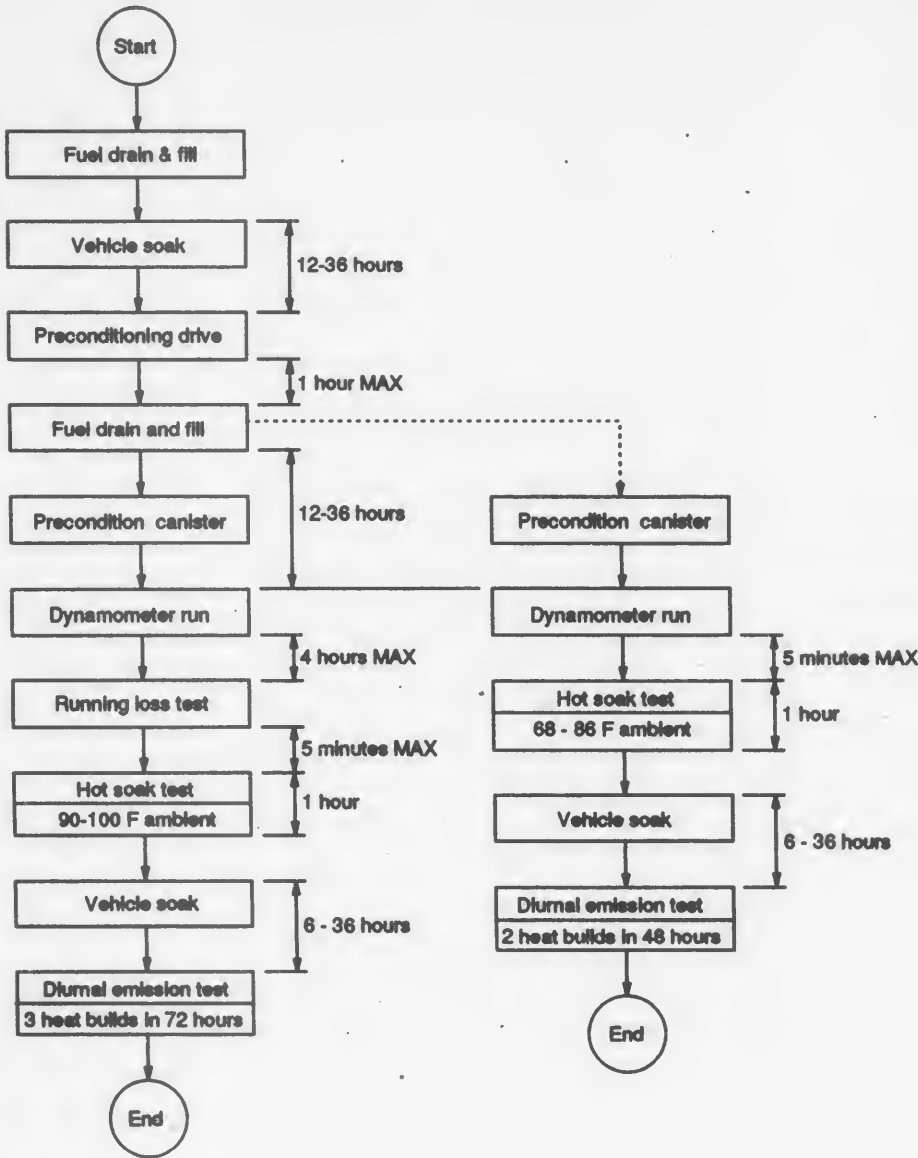


Figure M96-1 Test sequence

57. A new § 86.1231-96 is added to subpart M to read as follows:

**§ 86.1231-96 Vehicle preparation.**

(a) For gasoline- and methanol-fueled vehicles prepare the fuel tank(s) for recording the temperature of the prescribed test fuel, as described in § 86.1207-96(e).

(b) Provide additional fittings and adapters, as required, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle.

(c) For preconditioning that involves loading the evaporative emission canister(s) with butane, provide valving or other means as necessary to allow purging and loading of the canister(s).

(d) For vehicles to be tested for running loss emissions, prepare the fuel tank(s) for measuring and recording the temperature and pressure of the fuel tank as specified in § 86.1207-96 (e) and (f). The Administrator may omit measurement of fuel tank pressure.

(e) For vehicles to be tested for running loss emissions, prepare the exhaust system by sealing or plugging all detectable sources of exhaust gas leaks. The exhaust system shall be tested or inspected to ensure that detectable exhaust hydrocarbons are not emitted into the running loss enclosure during the running loss test.

58. A new § 86.1232-96 is added to subpart M to read as follows:

**§ 86.1232-96 Vehicle preconditioning.**

(a) Fuel tank cap(s) of gasoline- and methanol-fueled vehicles shall be removed during any period that the vehicle is parked outdoors awaiting testing, to prevent unusual loading of the canisters. During this time care must be taken to prevent entry of water or other contaminants into the fuel tank. During storage in the test area while awaiting testing, the fuel tank cap(s) may be in place. The vehicle shall be moved into the test area and the following operations performed.

(b) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.1213, to the "tank fuel volume" defined in § 86.082-2. The fuel cap(s) shall be installed within 1 minute after refueling.

(c) Between 12 and 36 hours (or, at the Administrator's option, between 6 and 36 hours) after being refueled, the vehicle shall be placed, either by being driven or pushed, on a dynamometer and operated through one Heavy-Duty Vehicle Urban Dynamometer Driving Schedule, specified in § 86.1215 and appendix I of this part. The test vehicle may not be used to set dynamometer horsepower.

(d) [Reserved]

(e) The Administrator may choose to conduct additional preconditioning to

ensure that the evaporative emissions control system is stabilized. The additional preconditioning shall consist of an initial one hour minimum soak and one, two or three driving cycles of the dynamometer driving schedule, as described in paragraph (c) of this section, each followed by a soak of at least one hour with engine off, engine compartment cover closed and cooling fan off. The vehicle may be driven off the dynamometer for the soak period that follows each driving cycle.

(f) Within five minutes of completion of the preconditioning drive, the vehicle shall be driven off the dynamometer and parked. For gasoline- and methanol-fueled vehicles, drain the fuel tank(s) and fill with test fuel, as specified in § 86.1213, to the "tank fuel volume" defined in § 86.082-2. The vehicle shall be refueled within 1 hour of completion of the preconditioning drive. The fuel cap(s) shall be installed within 1 minute after refueling.

(g) The vehicle shall be soaked for not less than 12 hours nor more than 36 hours between the end of the refueling event and the beginning of the cold start exhaust emission test.

(h) During the soak period for the three-diurnal test sequence described in § 86.1230-96, evaporative canisters, if the vehicle is so equipped, shall be preconditioned according to the following procedure. For vehicles with multiple canisters, each canister shall be preconditioned separately.

(1)(i) Prepare the evaporative emission canister for the canister purging and loading operation. The canister shall not be removed from the vehicle, unless access to the canister in its normal location is so restricted that purging and loading can only reasonably be accomplished by removing the canister from the vehicle. Special care shall be taken during this step to avoid damage to the components and the integrity of the fuel system.

(ii) The canister purge shall be performed with ambient air of humidity controlled to 50±25 grains per pound of dry air. This may be accomplished by purging the canister in a room that is conditioned to this level of absolute humidity. The flow rate of the purge air shall be maintained at a nominal flow rate of 0.8 cfm and the duration shall be determined to provide a total purge volume flow through the canister equivalent to 300 canister bed volume exchanges. The bed volume is based on the volume of adsorbing material in the canister.

(iii) The evaporative emission canister shall then be loaded by sending to the canister an amount of commercial grade butane vapors equivalent to 1.5 times its

nominal working capacity. The canister shall be loaded with a mixture composed of 50 percent butane and 50 percent nitrogen by volume at a rate of 15±2 grams butane per hour. If the canister loading at that rate takes longer than 12 hours, a manufacturer may determine a new rate, based on completing the canister loading in no less than 12 hours. The new rate may be used for all subsequent canister loading according to paragraph (h) of this section. The time of initiation and completion of the canister loading shall be recorded.

(iv) The determination of a canister's nominal working capacity shall be based on the average capacity of no less than five canisters that are in a stabilized condition.

(A) For stabilization, each canister must be loaded no less than 10 times and no more than 100 times to 2-gram breakthrough with a 50/50 mixture by volume of butane and nitrogen, at a rate of 15 grams butane per hour. Each canister loading step must be preceded by canister purging with 300 canister bed volume exchanges at 0.8 cfm.

(B) For determining working capacity, each canister must first be purged with 300 canister bed volume exchanges at 0.8 cfm. The working capacity of each canister shall be established by determining the mass of butane required to load the canister from the purged state so that it emits 2 grams of hydrocarbon vapor; the canister must be loaded with a 50/50 mixture by volume of butane and nitrogen, at a rate of 15 grams butane per hour.

(2) For vehicles designed to use only fuel consisting of at least 80 percent methanol by volume, canister preconditioning shall be performed with a fuel vapor composition representative of the composition of the vapor space in the vehicle's fuel tank under in-use conditions. Manufacturers shall develop a procedure to precondition the evaporative canister, if the vehicle is so equipped, for the different fuel. The procedure shall represent a canister loading equivalent to that specified in paragraph (h)(1) of this section and shall be approved in advance by the Administrator.

(i) [Reserved]

(j) For the supplemental two-diurnal test sequence described in § 86.1230-96, one of the following methods shall be used to precondition evaporative canisters during the soak period specified in paragraph (g) of this section. For vehicles with multiple canisters, each canister shall be preconditioned separately. Canister emissions are measured to determine breakthrough. Breakthrough is here

defined as the point at which the cumulative quantity of hydrocarbons emitted is equal to 2 grams.

(1) *Butane loading to breakthrough.* The following procedure provides for emission measurement in an enclosure. Breakthrough may also be determined by measuring the weight gain of an auxiliary evaporative canister connected downstream of the vehicle's canister, in which case, the following references to the enclosure can be ignored. The auxiliary canister shall be well purged with dry air prior to loading.

(i) Prepare the evaporative emission canister for the canister loading operation. The canister shall not be removed from the vehicle, unless access to the canister in its normal location is so restricted that loading can only reasonably be accomplished by removing the canister from the vehicle. Special care shall be taken during this step to avoid damage to the components and the integrity of the fuel system.

(ii) The evaporative emission enclosure shall be purged for several minutes. **Warning:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(iii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the canister loading procedure.

(iv) If not already on, the evaporative enclosure mixing fan shall be turned on at this time.

(v) Place the vehicle in a sealed enclosure and measure emissions with a FID.

(vi) Load the canister with a mixture composed of 50 percent butane and 50 percent nitrogen by volume at a rate of 40 grams butane per hour (0.010 cfm butane at lab temperatures).

(vii) As soon as the canister reaches breakthrough, the vapor source shall be shut off.

(viii) Reconnect the evaporative emission canister and restore the vehicle to its normal operating condition.

(2) *Load with repeated diurnal heat builds to breakthrough.* The following procedure provides for emission measurement in an enclosure. Breakthrough may also be determined by measuring the weight gain of an auxiliary evaporative canister connected downstream of the vehicle's canister, in which case, the following references to the enclosure can be ignored. The auxiliary canister shall be well purged with dry air prior to loading.

(i) The evaporative emission enclosure shall be purged for several minutes. **Warning:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the diurnal heat builds.

(iii) If not already on, the evaporative enclosure mixing fan shall be turned on at this time.

(iv) The fuel tank(s) of the prepared vehicle shall be drained and filled with test fuel, as specified in § 86.1213, to the "tank fuel volume" defined in § 86.082-2. The average temperature of the dispensed fuel shall be  $60 \pm 12$  °F ( $16 \pm 7$  °C). The fuel tank cap(s) shall be installed within 1 minute after refueling.

(v) Within one hour of being refueled, the vehicle shall be placed, with the engine shut off, in the evaporative emission enclosure. The fuel tank temperature sensor shall be connected to the temperature recording system. A heat source, specified in § 86.1207-90(d), shall be properly positioned with respect to the fuel tank(s) and connected to the temperature controller.

(vi) The temperature recording system shall be started.

(vii) The fuel may be artificially heated to the starting diurnal temperature.

(viii) When the fuel temperature reaches at least 69 °F (21 °C), immediately turn off purge blower (if not already off); close and seal enclosure doors; and initiate measurement of the hydrocarbon level in the enclosure.

(ix) When the fuel temperature reaches  $72 \pm 2$  °F ( $22 \pm 1$  °C), start the diurnal heat build.

(x) The fuel shall be heated in such a way that its temperature change conforms to the following function to within  $\pm 4$  °F ( $\pm 3$  °C):

$$F = T_o + 0.4t; \text{ or} \\ \text{for SI units,} \\ C = T_o + (2/9)t.$$

Where,

F=fuel temperature, °F;  
C=fuel temperature, °C;  
t=time since beginning of test,  
minutes; and

$T_o$ =initial temperature in °F (°C for SI units).

(xi) As soon as breakthrough occurs or when the fuel temperature reaches 96 °F (36 °C), whichever occurs first, the heat

source shall be turned off, the enclosure doors shall be unsealed and opened, and the vehicle fuel tank cap(s) shall be removed. If breakthrough has not occurred by the time the fuel temperature reaches 96 °F (36 °C), the heat source shall be removed from the vehicle, the vehicle shall be removed (with engine still off) from the evaporative emission enclosure and the entire procedure outlined in paragraph (j)(2) of this section shall be repeated until breakthrough occurs.

(xii) After breakthrough occurs, the fuel tank(s) of the prepared vehicle shall be drained and filled with test fuel, as specified in § 86.1213, to the "tank fuel volume" defined in § 86.082-2. The fuel shall be stabilized to a temperature within 3 °F of the lab ambient before beginning the driving cycle for the dynamometer run.

(k) The Administrator may conduct the vehicle preparation and preconditioning for measurement of fuel economy or exhaust emissions according to the procedures specified in §§ 86.1232-90 and 86.1233-90, in lieu of the procedures specified in this section.

(l) Vehicles to be tested for exhaust emissions only shall be processed according to §§ 86.1235 through 86.1237. Vehicles to be tested for evaporative emissions shall be processed in accordance with the procedures in §§ 86.1233 through 86.1238, starting with § 86.1235.

(m) Vehicles to be tested for evaporative emissions with the supplemental two-diurnal test sequence described in § 86.1230-96, shall proceed according to §§ 86.1235 through 86.1237, followed by the supplemental hot soak test (see § 86.1238-96(k)) and the supplemental diurnal emission test (see § 86.1233-96(p)).

59. A new § 86.1233-96 is added to subpart M to read as follows:

#### § 86.1233-96 Diurnal emission test.

(a) (1) The diurnal emission test for gasoline- and methanol-fueled vehicles consists of three 24-hour test cycles following the hot soak test. Emissions are measured for each 24-hour cycle, with the highest emission level used to determine compliance with the standards specified in subpart A of this part. The Administrator may truncate a test after any 24-hour cycle without affecting the validity of the collected data. Sampling of emissions from the running loss and hot soak tests is not required as preparation for the diurnal emission test. The diurnal emission test may be conducted as part of either the three-diurnal test sequence or the

supplemental two-diurnal test sequence, as described in § 86.1230-96.

(2) For the full three-diurnal test sequence, the diurnal emission test outlined in paragraphs (b) through (o) of this section follows the high-temperature hot soak test concluded in § 86.1238-96(j).

(3) For the supplemental two-diurnal test sequence, the diurnal emission test outlined in paragraph (p) of this section follows the alternate hot soak test specified in § 86.1238-96(k).

(b) The test vehicle shall be soaked for not less than 6 hours nor more than 36 hours between the end of the hot soak test and the start of the diurnal emission test. For at least the last 6 hours of this period, the vehicle shall be soaked at  $72 \pm 3$  °F. The temperature tolerance may be waived for up to 10 minutes to allow purging of the enclosure or transporting the vehicle into the enclosure at the beginning of the diurnal emission test.

(c) The test vehicle shall be exposed to ambient temperatures cycled according to the profile specified in § 86.133 and Appendix II of this part with a maximum deviation of 3 °F at any time. The average temperature deviation from the profile, calculated using the absolute value of each measured deviation, shall not exceed 2 °F. Ambient temperatures shall be measured at least every minute. Temperature cycling shall begin when time=0 minutes, as specified in paragraph (i)(5) of this section.

(d) The diurnal enclosure shall be purged for several minutes prior to the test. **Warning:** If at any time the concentration of hydrocarbons, of methanol or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(e) The test vehicle, with the engine shut off and the test vehicle windows and luggage compartment(s) opened, shall be moved into the diurnal enclosure.

(f) [Reserved]

(g) [Reserved]

(h) Prior to sampling for emissions and throughout the period of cycled ambient temperatures, the mixing fan(s) shall circulate the air at a rate of  $0.8 \pm 0.2$  cfm per cubic foot of ambient volume. The fans shall also maintain a minimum air circulation of 5 mph (8 km/hr) under the fuel tank of the test vehicle. The Administrator may adjust fan speed and location to ensure sufficient air circulation around the fuel tank.

(i) Emission sampling may begin as follows:

(1) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the sampling.

(2) Impingers charged with known volumes of pure deionized water shall be placed in the methanol sampling system (methanol-fueled vehicles only).

(3) Turn off purge blowers (if not already off).

(4) Close and seal enclosure doors (if not already closed and sealed).

(5) Within 10 minutes of closing and sealing the doors, analyze enclosure atmosphere for hydrocarbons and record. This is the initial (time=0 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.1243.

(6) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the initial methanol concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses. If the test is conducted in a fixed-volume enclosure that allows airflow into and out of the enclosure, the effect of makeup air dilution must be factored into the analysis.

(j) If testing indicates that a vehicle design may result in fuel temperature responses during enclosure testing that are not representative of in-use summertime conditions, the Administrator may adjust air circulation and temperature during the test as needed to ensure that the test sufficiently duplicates the vehicle's in-use experience.

(k) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of each emission sampling period.

(l) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of each emission measurement, if applicable.

(m) The end of the first, second, and third emission sampling period shall occur  $1440 \pm 6$ ,  $2880 \pm 6$ ,  $4320 \pm 6$  minutes, respectively, after the beginning of the initial sampling, as specified in paragraph (i)(5) of this section.

(1) At the end of each emission sampling period, analyze the enclosure atmosphere for hydrocarbons and record. This is the final hydrocarbon

concentration,  $C_{HC}$ , required in § 86.1243. The emission measurement at the end of each period becomes the initial hydrocarbon concentration,  $C_{HC}$ , of the next emission sampling period.

(2) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the final (time=1440 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses. If the test is conducted in a fixed-volume enclosure that allows airflow into and out of the enclosure, the effect of makeup air dilution must be factored into the analysis.

(n) At the end of the temperature cycling period the enclosure doors shall be unsealed and opened, the test vehicle windows and luggage compartments may be closed and the test vehicle, with the engine shut off, shall be removed from the enclosure.

(o) This completes the full three-diurnal evaporative emission test sequence described in § 86.1230-96.

(p) For the supplemental two-diurnal test sequence described in § 86.1230-96, the following steps shall be performed in lieu of the steps described in paragraphs (b) through (n) of this section.

(1) For the supplemental two-diurnal test sequence, the test vehicle shall be soaked for not less than 6 hours nor more than 36 hours between the end of the hot soak test described in § 86.1238-96(k), and the start of the two-diurnal emission test. For at least the last 6 hours of this period, the vehicle shall be soaked at  $72 \pm 3$  °F.

(2) The vehicle shall be tested for diurnal emissions according to the procedures specified in paragraphs (c) through (n) of this section, except that the test includes only two 24-hour periods. Therefore the end of the first and second emission sampling periods shall occur  $1440 \pm 6$  and  $2880 \pm 6$  minutes, respectively, after the initial sampling.

(3) This completes the supplemental two-diurnal test sequence for evaporative emission measurement.

60. A new § 86.1234-96 is added to subpart M to read as follows:

**§ 86.1234-96 Running loss test.**

(a) *Overview.* Gasoline- and methanol-fueled vehicles are to be tested for running loss emissions during simulated high-temperature urban driving. During operation, tank temperatures are controlled according to a prescribed profile to simulate in-use conditions. If the vehicle is determined to have exceeded the standard before the end of the running loss test, the test may be terminated without invalidating the data. The test can be run either in a sealed enclosure or with the point-source method, as specified in paragraph (g) of this section.

(b) *Driving schedule.* Conduct the running loss test by operating the test vehicle through three Heavy-Duty Vehicle Urban Dynamometer Driving Schedules (see § 86.1215 and appendix I of this part). Fifteen seconds after the engine starts, place the transmission in gear. Twenty seconds after the engine starts, begin the initial vehicle acceleration of the driving schedule. The transmission shall be operated according to the specifications of § 86.1228 during the driving cycles.

(c) *Dynamometer operation.* (1) The exhaust from the vehicle must be routed outside the test cell or enclosure. Exhaust gases may, but need not, be collected and sampled.

(2) Provisions of § 86.1235-85(c) shall apply.

(3) Practice runs over the prescribed driving schedule may not be performed at test point.

(4) Provisions of § 86.1235-85 (e) and (f) shall apply.

(5) If the dynamometer horsepower must be adjusted manually, it shall be set within 1 hour prior to the running loss test phase. The test vehicle shall not be used to make this adjustment. Dynamometers using automatic control of preselectable power settings may be set any time prior to the beginning of the emissions test.

(6) Dynamometer roll or shaft revolutions shall be used to determine the actual driving distance for the running loss test,  $D_{RL}$ , required in § 86.1243. The revolutions shall be measured on the same roll or shaft used for measuring the vehicle's speed.

(7) Provisions of § 86.1235-85(i) shall apply.

(8) The test run may be stopped if a warning light or gauge indicates that the vehicle's engine coolant has overheated.

(d) *Engine starting and restarting.* (1) Provisions of § 86.1236-85(a) shall apply.

(2) If the vehicle does not start after the manufacturer's recommended cranking time (or 10 continuous seconds in the absence of a manufacturer's

recommendation), cranking shall cease for the period recommended by the manufacturer (or 10 seconds in the absence of a manufacturer's recommendation). This may be repeated for up to three start attempts. If the vehicle does not start after three attempts, the reason for failure to start shall be determined. If failure to start is an operational error, the vehicle shall be rescheduled for testing, starting with the soak period immediately preceding the running loss test.

(3) If failure to start is caused by a vehicle malfunction, corrective action of less than 30 minutes duration may be taken (according to § 86.090-25), and the test continued, provided that the ambient conditions to which the vehicle is exposed are maintained at  $95 \pm 5$  °F ( $35 \pm 3$  °C). When the engine starts, the timing sequence of the driving schedule shall begin. If failure to start is caused by vehicle malfunction and the vehicle cannot be started, the test shall be voided, the vehicle removed from the dynamometer, and corrective action may be taken according to § 86.090-25. The reason for the malfunction (if determined) and the corrective action taken shall be reported to the Administrator.

(4) Provisions of § 86.1236-85(b) shall apply.

(e) *Pressure checks.* No pressure checks of the evaporative system shall be allowed. Under no circumstances will any changes/repairs to the evaporative emissions control system be allowed.

(f) *Temperature Stabilization.* Immediately after the dynamometer run, the vehicle shall be soaked in a temperature controlled area for a maximum of 4 hours until the fuel temperature is stabilized at  $95 \pm 3$  °F. Cooling or heating of the fuel tank may be induced to bring the fuel tank to  $95 \pm 3$  °F.

(g) *Running loss test.* The running loss test may be conducted either by the enclosure method, or by the point-source method.

(1) *Enclosure method.* (i) The running loss enclosure shall be purged for several minutes immediately prior to the test. **Warning:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the test.

(iii) If not already on, the running loss enclosure mixing fan(s) shall be turned

on at this time. Throughout the test, the mixing fan(s) shall circulate the air at a rate of at least 1.0 cfm per cubic foot of ambient volume.

(iv) The test vehicle, with the engine off, shall be moved onto the dynamometer in the running loss enclosure. The vehicle engine compartment cover shall be unlatched, but closed as much as possible, allowing for the air intake equipment specified in paragraph (g)(1)(vii) of this section. The vehicle engine compartment cover may be closed if alternate routing is found for the air intake equipment. Any windows, doors, and luggage compartments shall be closed. A window may be opened to direct cooling air into the passenger compartment of the vehicle, if the vehicle is not equipped with its own air conditioning.

(v) Fans shall be positioned as described in §§ 86.1235-85(b), 86.1207-96(d), and 86.1207-96(h).

(vi) The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed. Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(vii) Connect the air intake equipment to the vehicle. This connection shall be made to minimize leakage.

(viii) The temperature and pressure recording systems shall be started. The Administrator may omit measurement of fuel tank pressure.

(ix) Turn off purge blowers (if not already off).

(x) The temperature of the liquid fuel shall be monitored and recorded at least every 15 seconds with the temperature recording system specified in § 86.1207-96(e).

(xi) Close and seal the enclosure doors.

(xii) When the ambient temperature is  $95 \pm 5$  °F ( $35 \pm 3$  °C) and the fuel tank temperature is  $95 \pm 3$  °F ( $35 \pm 2$  °C) the running loss test may begin. Measure the initial ambient temperature and pressure.

(A) Analyze enclosure atmosphere for hydrocarbons and record. This is the initial (time=0 minutes) hydrocarbon concentration,  $C_{HC1}$ , required in § 86.1243.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the initial (time=0 minutes) methanol

concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(xiii) Start the engine and begin operation of the vehicle over the drive cycle specified in paragraph (b) of this section.

(xiv) The ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 3$  °F on average) during the running loss test; it shall be recorded at least every 60 seconds.

(xv) The fuel temperature during the dynamometer drive shall be controlled to match the fuel tank temperature profile determined in § 86.1229. Measured fuel temperatures must be within  $\pm 3$  °F of the profile temperatures during the first 3420 seconds of the running loss test, and within  $\pm 2$  °F for the remaining 120 seconds of the test run. If the test vehicle has more than one fuel tank, the fuel temperatures for both fuel tanks shall follow the temperature profiles determined in § 86.1229. The control system shall be tuned and operated to provide a smooth and continuous fuel tank temperature profile that is representative of the on-road profile.

(xvi) Tank pressure shall not exceed 10 inches of water at any time during the running loss test unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(xvii) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of the test.

(xviii) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of the test, if applicable.

(xix) The running loss test ends with the completion of the third 2-minute idle period.

(xx) At the end of the running loss test:

(A) Analyze the enclosure atmosphere for hydrocarbons and record. This is the final hydrocarbon concentration,  $C_{HCR}$ , required in § 86.1243.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start prior to the end of the test and continue for  $4.0 \pm 0.5$  minutes. The methanol sampling must be completed within 2

minutes after the end of the running loss test. This is the final methanol concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(xxi) Turn off any CVS apparatus (if not already turned off).

(2) *Point-source method.* (i) The test vehicle, with the engine off, shall be moved onto the dynamometer. The vehicle engine compartment cover and any windows, doors, and luggage compartments shall be closed.

(ii) Fans shall be positioned as described in §§ 86.1235–85(b) and 86.1207–96(d).

(iii) The running loss vapor vent collection system shall be properly positioned at the potential fuel vapor vents or leaks of the vehicle's fuel system. Typical vapor vents for current fuel systems are the ports of the evaporative emission canister and the pressure relief vent of the fuel tank (typically integrated into the fuel tank cap).

(iv) The running loss vapor vent collection system may be connected to a PDP-CVS or CFV-CVS bag collection system. Otherwise, running loss vapors shall be sampled continuously with analyzers meeting the requirements of § 86.1207–96(b).

(v) Measured emissions must be compared with background hydrocarbon levels to determine the reported running loss emissions.

(vi) The vehicle air conditioning system (if so equipped) shall be set to the "normal" air conditioning mode and adjusted to the minimum discharge air temperature and high fan speed. Vehicles equipped with automatic temperature controlled air conditioning systems shall be set to operate in "automatic" temperature and fan modes with the system set at 72 °F.

(vii) The temperature and pressure recording systems shall be started. The Administrator may omit measurement of fuel tank pressure.

(viii) The temperature of the liquid fuel shall be monitored and recorded at least every 15 seconds with the temperature recording system specified in § 86.1207–96(e).

(ix) When the ambient temperature is  $95 \pm 5$  °F ( $35 \pm 3$  °C) and the fuel tank

temperature is  $95 \pm 3$  °F the running loss test may begin.

(x) The ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 3$  °F on average) during the running loss test; it shall be recorded at least every 60 seconds.

(xi) Fuel temperatures shall be controlled according to the specifications of paragraph (g)(1)(xv) of this section.

(xii) Tank pressure shall not exceed 10 inches of water at any time during the running loss test unless a pressurized system is used and the manufacturer demonstrates that vapor would not be vented to the atmosphere upon fuel cap removal.

(xiii) The running loss test ends with completion of the third 2-minute idle period.

(xiv) If emissions are collected in bags, the sample bags must be analyzed within 20 minutes of their respective sample collection phases, as described in § 86.137–94(b)(15). The results of the analysis are used in § 86.1243 to calculate the mass of hydrocarbons emitted.

(h) Following the completion of the running loss drive, the vehicle may be tested for hot soak emissions as specified in § 86.1238–96.

61. A new § 86.1235–96 is added to subpart M to read as follows:

**§ 86.1235–96 Dynamometer procedure.**

Section 86.1235–96 includes text that specifies requirements that differ from § 86.1235–85. Where a paragraph in § 86.1235–85 is identical and applicable to § 86.1235–96, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.1235–85."

(a) The dynamometer run consists of one HDV urban dynamometer driving schedule cycle starting not less than 12 nor more than 36 hours after completion of the drive specified in § 86.1232–96. This run includes engine startup (with all accessories turned off) and operation over the driving schedule.

(b) through (i) [Reserved]. For guidance see § 86.1235–85.

62. Section 86.1236–85 of subpart M is amended by revising paragraph (a)(4) to read as follows:

**§ 86.1236–85 Engine starting and restarting.**

(a) \* \* \*

(4) If the vehicle does not start after the manufacturer's recommended cranking time (or 10 continuous seconds in the absence of a manufacturer's recommendation), cranking shall cease for the period recommended by the

manufacturer (or 10 seconds in the absence of a manufacturer's recommendation). This may be repeated for up to three start attempts. If the vehicle does not start after three attempts, the reason for failure to start shall be determined. If failure to start is an operational error, the vehicle shall be rescheduled for the dynamometer run. If failure to start is caused by a vehicle malfunction, corrective action of less than 30 minutes duration may be taken, and the test continued. When the engine starts, the driving schedule timing sequence shall begin. If failure to start is caused by vehicle malfunction and the vehicle cannot be started, the test shall be voided, the vehicle removed from the dynamometer, and corrective action may be taken. The reasons for the malfunction (if determined) and the corrective action taken shall be recorded.

\* \* \* \* \*

63. A new § 86.1237-96 is added to subpart M to read as follows:

**§ 86.1237-96 Dynamometer runs.**

Section 86.1237-96 includes text that specifies requirements that differ from § 86.1237-85. Where a paragraph in § 86.1237-85 is identical and applicable to § 86.1237-96, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.1237-85."

(a) The vehicle shall be either driven or pushed onto the dynamometer; however, if driven, the total time of engine operation during the 12 to 36 hour soak period shall not exceed 3 minutes, and the vehicle shall be driven at minimum throttle. The vehicle shall be stored prior to dynamometer operation in such a manner that it is not exposed to precipitation (e.g., rain or dew).

(b) [Reserved]. For guidance see § 86.1235-85.

64. Section 86.1238-90 of subpart M is amended by revising paragraph (i) to read as follows:

**§ 86.1238-90 Hot soak test.**

\* \* \* \* \*

(i) The enclosure doors shall be closed and sealed within 2 minutes of engine shutdown and within 5 minutes after the end of the dynamometer run.

\* \* \* \* \*

65. A new § 86.1238-96 is proposed to be added to subpart M to read as follows:

**§ 86.1238-96 Hot soak test.**

(a) For gasoline- and methanol-fueled vehicles, the hot soak test shall be conducted immediately following the

running loss test. However, sampling of emissions from the running loss test is not required as preparation for the hot soak test.

(b) The hot soak test may be conducted in the running loss enclosure as a continuation of that test or in a separate enclosure.

(1) If the hot soak test is conducted in the running loss enclosure, the driver may exit the enclosure after the running loss test. If exiting, the driver should use the personnel door described in § 86.1207-96(a)(2), exiting as quickly as possible with a minimum disturbance to the system. The final hydrocarbon and methanol concentration for the running loss test, measured in § 86.1234-96(g)(1)(xx), shall be the initial hydrocarbon and methanol concentration (time=0 minutes)  $C_{HC}$  and  $C_{CH_3OH}$ , for the hot soak test.

(2) If the vehicle must be moved to a different enclosure, the following steps must be taken:

(i) The enclosure for the hot soak test shall be purged for several minutes prior to completion of the running loss test.

**Warning:** If at any time the concentration of hydrocarbons, of methanol, or of methanol and hydrocarbons exceeds 15,000 ppm C the enclosure should be immediately purged. This concentration provides at least a 4:1 safety factor against the lean flammability limit.

(ii) The FID hydrocarbon analyzer shall be zeroed and spanned immediately prior to the test.

(iii) Fresh impingers shall be installed in the methanol sample collection system immediately prior to the start of the test, if applicable.

(iv) If not already on, the mixing fan(s) shall be turned on at this time. Throughout the hot soak test, the mixing fan(s) shall circulate the air at a rate of  $0.8 \pm 0.2$  cfm per cubic foot of the nominal enclosure volume.

(v) Begin sampling as follows:

(A) Analyze the enclosure atmosphere for hydrocarbons and record. This is the initial (time = 0 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.1243.

(B) Analyze the enclosure atmosphere for methanol, if applicable, and record. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the initial (time=0 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag

and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(vi) The vehicle engine compartment cover shall be closed (if not already closed), the cooling fan shall be moved, the vehicle shall be disconnected from the dynamometer and any sampling system, and then driven at minimum throttle to the enclosure for the hot soak test. These steps should be done as quickly as possible to minimize the time needed to start the hot soak test.

(vii) The vehicle's engine must be stopped before any part of the vehicle enters the enclosure.

(viii) The vehicle shall enter the enclosure; the enclosure doors shall be closed and sealed within two minutes of engine shutdown and within five minutes after the end of the running loss test.

(ix) The test vehicle windows and any luggage compartments shall be opened (if not already open). The vehicle engine compartment cover shall be closed (if not already closed).

(c) [Reserved]

(d) The temperature recording system shall be started and the time of engine shutoff shall be noted on the evaporative emission hydrocarbon data recording system.

(e) For the first 5 minutes of the hot soak test, the ambient temperature shall be maintained at  $95 \pm 10$  °F. For the remainder of the hot soak test, the ambient temperature shall be maintained at  $95 \pm 5$  °F ( $95 \pm 2$  °F on average).

(f) The  $60 \pm 0.5$  minute hot soak begins when the enclosure doors are sealed (or when the running loss test ends, if the hot soak test is conducted in the running loss enclosure).

(g) The FID (or HFID) hydrocarbon analyzer shall be zeroed and spanned immediately prior to the end of the test.

(h) Fresh impingers shall be installed in the methanol collection system immediately prior to the end of the test, if applicable.

(i) [Reserved]

(j) At the end of the  $60 \pm 0.5$  minute test period:

(1) Analyze the enclosure atmosphere for hydrocarbons and record. This is the final (time=60 minutes) hydrocarbon concentration,  $C_{HC}$ , required in § 86.1243.

(2) Analyze the enclosure atmosphere for methanol and record, if applicable. The methanol sampling must start simultaneously with the initiation of the hydrocarbon analysis and continue for  $4.0 \pm 0.5$  minutes. This is the final

(time=60 minutes) methanol concentration,  $C_{CH_3OH}$ , required in § 86.1243. Record the time elapsed during this analysis. If the 4-minute sample period is inadequate to collect a sample of sufficient concentration to allow accurate GC analysis, rapidly collect the methanol sample in a bag and then bubble the bag sample through the impingers at the specified flow rate. The time elapsed between collection of the bag sample and flow through the impingers should be minimized to prevent any losses.

(k) For the supplemental two-diurnal test sequence (see § 86.1230-96), the hot soak test described in § 86.1238-90 shall

be conducted immediately following the dynamometer run. This test requires ambient temperatures between 68° and 86 °F at all times. The equipment and calibration specifications of §§ 86.1207-90 and 86.1207-90 may apply for this testing. Enclosures meeting the requirements of §§ 86.1207-96 and 86.1217-96 may also be used. This hot soak test is followed by two consecutive diurnal heat builds, described in § 86.1233-96(p).

(l) If the vehicle is to be tested for diurnal emissions, follow the procedure outlined in § 86.1233-96.

66. A new § 86.1243-96 is added to subpart M to read as follows:

**§ 86.1243-96 Calculations; evaporative emissions.**

(a) The following equations are used to calculate the evaporative emissions from gasoline- and methanol-fueled vehicles.

(b) Use the measurements of initial and final concentrations to determine the mass of hydrocarbons and methanol emitted. For testing with pure gasoline, methanol emissions are assumed to be zero.

(1) For enclosure testing of diurnal, hot soak, and running loss emissions:

(i) Methanol emissions:

$$M_{CH_3OH} = \left( \frac{V_n \times C_{MR}}{A_{MR}} \right) \times \left( \frac{T_{E_f}}{V_{E_f} \times T_{SHED_f}} \times [(A_{MS1f} \times AV_{1f}) + (A_{MS2f} \times AV_{2f})] - \frac{T_{E_i}}{V_{E_i} \times T_{SHED_i}} \times [(A_{MS1i} \times AV_{1i}) + (A_{MS2i} \times AV_{2i})] \right) + (M_{CH_3OH,out} - M_{CH_3OH,in})$$

Where,

(A)  $M_{CH_3OH}$ =Methanol mass change,  $\mu$ g.

(B)  $V_n$ =Net enclosure volume,  $ft^3$ , as determined by subtracting 50  $ft^3$  (1.42  $m^3$ ) (volume of vehicle with trunk and windows open) from the enclosure volume. A manufacturer may use the measured volume of the vehicle (instead of the nominal 50  $ft^3$ ) with advance approval by the Administrator, provided the measured volume is determined and used for all vehicles tested by that manufacturer.

(C)  $C_{MR}$ =Concentration of methanol in standard sample for calibration of GC,  $\mu$ g/ml.

(D)  $A_{MR}$ =GC peak area of standard sample.

(E)  $T_E$ =Temperature of sample withdrawn, °R.

(F)  $V_E$ =Volume of sample withdrawn,  $ft^3$ .

(G)  $T_{SHED}$ =Temperature of enclosure, °R.

(H)  $A_{MS}$ =GC peak area of sample.

(I)  $AV$ =Volume of absorbing reagent in impinger.

(J)  $P_B$ =Barometric pressure at time of sampling, in. Hg.

(K) i=Initial sample.

(L) f=Final sample.

(M) 1=First impinger.

(N) 2=Second impinger.

(O)  $M_{CH_3OH,out}$ =mass of methanol exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing,  $\mu$ g.

(P)  $M_{CH_3OH,in}$ =mass of methanol entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing,  $\mu$ g.

(ii) Hydrocarbon emissions:

$$M_{HC} = (kV_n \times 10^{-4}) \times \left( \frac{(C_{HCf} - rC_{CH_3OHf})P_{Bf}}{T_f} - \frac{(C_{HCi} - rC_{CH_3OHi})P_{Bi}}{T_i} \right) + M_{HC,out} - M_{HC,in}$$

Where,

(A)  $M_{HC}$ =Hydrocarbon mass change, g.

(B)  $C_{HC}$ =FID hydrocarbon concentration as ppm carbon including FID response to methanol in the sample.

(C)  $C_{CH_3OH}$ =Methanol concentration as ppm carbon.

$$C_{CH_3OH} = \left( \frac{1.501 \times 10^{-3} C_{MR} \times T}{A_{MR} \times P_B \times V_n} \right) \times [(A_{S1} \times AV_1) + (A_{S2} \times AV_2)]$$

(D)  $V_n$ =Net enclosure volume  $ft^3$  ( $m^3$ ) as determined by subtracting 50  $ft^3$  (1.42  $m^3$ ) (volume of vehicle with trunk and windows open) from the enclosure volume. A manufacturer may use the measured volume of the vehicle (instead of the nominal 50  $ft^3$ ) with advance approval by the Administrator, provided the measured volume is determined and used for all vehicles tested by that manufacturer.



- (E)  $r$ =FID response factor to methanol.  
 (F)  $P_B$ =Barometric pressure, in Hg (Kpa).  
 (G)  $T$ =Enclosure temperature, °R(°K).  
 (H)  $i$ =initial reading.  
 (I)  $f$ =final reading.  
 (J) 1=First impinger.  
 (K) 2=Second impinger.  
 (L) Assuming a hydrogen to carbon ratio of 2.3:  
 (1)  $k=2.97$ ; and  
 (2) For SI units,  $k=17.16$ .

(M)  $M_{HC,out}$ =mass of hydrocarbons exiting the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(N)  $M_{HC,in}$ =mass of hydrocarbons entering the enclosure, in the case of fixed-volume enclosures for diurnal emission testing, g.

(2) For running loss testing by the point-source method, the mass emissions of each test phase are calculated below, then summed for a total mass emission for the running loss test. If emissions are continuously sampled, the following equations can be used in integral form.

(i) Methanol emissions:

$$M_{CH_3OH} = \rho_{CH_3OH} V_{mix} \times (C_{CH_3OH,rl} - C_{CH_3OH,d})$$

Where,

- (A)  $M_{CH_3OH}$ =methanol mass change,  $\mu\text{g}$ .  
 (B)  $\rho_{CH_3OH}$ =36.85 g/ft<sup>3</sup>, density of pure vapor at 74 °F.  
 (C)  $V_{mix}$ =total dilute sample volume, in ft<sup>3</sup>, calculated as appropriate for the collection technique used.  
 (D)  $C_{CH_3OH,rl}$ =methanol concentration of diluted running loss sample, in ppm carbon equivalent.  
 (E)  $C_{CH_3OH,d}$ =methanol concentration of dilution air, in ppm carbon equivalent.

(ii) Hydrocarbon emissions:

$$M_{HC} = \rho_{HC} V_{mix} \times 10^{-6} \times (C_{HC,rl} - C_{HC,d})$$

Where,

- (A)  $M_{HC}$ =hydrocarbon mass change, g.  
 (B)  $\rho_{HC}$ =16.46 g/ft<sup>3</sup>, density of pure vapor at 74 °F (for hydrogen to carbon ratio of 2.3).  
 (C)  $V_{mix}$ =total dilute sample volume, in ft<sup>3</sup>, calculated as appropriate for the collection technique used.  
 (D)  $C_{HC,rl}$ =hydrocarbon concentration of diluted running loss sample, in ppm carbon equivalent.  
 (E)  $C_{HC,d}$ =hydrocarbon concentration of dilution air, in ppm carbon equivalent.

(c) Calculate the adjusted total mass emissions for each test segment.

$$(1) \quad M_{DI} = \left( M_{HC} + \frac{14.3594}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{DI}$$

where  $M_{DI}$ =mass emissions from the diurnal emission test (see § 86.1233), g.

$$(2) \quad M_{HS} = \left( M_{HC} + \frac{14.2284}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{HS}$$

where  $M_{HS}$ =mass emissions from the hot soak test (see § 86.1238), g.

$$(3) \quad M_{RL} = \left( M_{HC} + \frac{14.2284}{32.042} \times 10^{-6} M_{CH_3OH} \right)_{RL}$$

where  $M_{RL}$ =mass emissions from the running loss test (see § 86.1234), g.

(d) (1) For the full three-diurnal test sequence, there are two final results to report:

(i) The sum of the adjusted total mass emissions for the diurnal and hot soak tests ( $M_{DI}+M_{HS}$ ); and

(ii) The adjusted total mass emissions for the running loss test, on a grams per mile basis= $M_{RL}/D_{RL}$ , where  $D_{RL}$ =miles driven for the running loss test (see § 86.1234-96(c)(6)).

(2) For the supplemental two-diurnal test sequence, there is one final result to report: the sum of the adjusted total mass emissions for the diurnal and hot soak tests ( $M_{DI}+M_{HS}$ ), described in §§ 86.1233-96(p) and 86.1238-96(k), respectively.

67. A new § 86.1246-96 is added to subpart M to read as follows:

**§ 86.1246-96 Fuel dispensing spitback procedure.**

(a) The vehicle is fueled at a rate of 10 gal/min to test for fuel spitback emissions. All liquid fuel spitback emissions that occur during the test are collected in a bag made of a material impermeable to hydrocarbons or methanol. The bag shall be designed and used so that liquid fuel does not spit back onto the vehicle body,

adjacent floor, etc., and it must not impede the free flow of displaced gasoline vapor from the orifice of the filler pipe. The bag must be designed to permit passage of the dispensing nozzle through the bag. If the bag has been used for previous testing, sufficient time shall be allowed for the bag to dry out. The dispensing nozzle shall be a commercial model, not equipped with vapor recovery hardware.

(b) Ambient temperature levels encountered by the test vehicle shall be not less than 68 °F nor more than 86 °F. The temperatures monitored during testing must be representative of those experienced by the test vehicle. The vehicle shall be approximately level during all phases of the test sequence to prevent abnormal fuel distribution.

(c) Measure and record the mass of the bag to be used for collecting spitback emissions to the nearest 0.01 gram.

(d) Drain the fuel tank(s) and fill with test fuel, as specified in § 86.1213, to 10 percent of the reported nominal fuel tank capacity. The fuel cap(s) shall be installed immediately after refueling.

(e) The vehicle shall be soaked at 80±6 °F (27±3 °C) for a minimum of six hours, then placed, either by being driven or pushed, on a dynamometer and operated through one Heavy-Duty Vehicle Urban Dynamometer Driving Schedule (specified in § 86.1215 and appendix I of this part). The test vehicle may not be used to set dynamometer horsepower.

(f) Following the preconditioning drive, the vehicle shall be driven at minimum throttle to the refueling area.

(g) All areas in proximity to the vehicle fuel fill orifice and the dispenser nozzle itself shall be completely dry of liquid fuel.

(h) The fuel filler neck shall be snugly fitted with the vented bag to capture any fuel emissions. The fuel nozzle shall be inserted through the bag into the filler neck of the test vehicle to its maximum penetration. The plane of the nozzle's handle shall be perpendicular to the floor of the laboratory.

(i) The fueling procedure consists of dispensing fuel through a nozzle, interrupted by a series of automatic shutoffs. A minimum of 3 seconds shall elapse between any automatic shutoff and subsequent resumption of dispensing. Dispensing may not be manually terminated, unless the test vehicle has already clearly failed the test. The vehicle shall be fueled according to the following procedure:

(1) The fueling operation shall be started within 4 minutes after the vehicle is turned off. The average temperature of the dispensed fuel shall be 65±5 °F (18±3 °C).

(2) The fuel shall be dispensed at a rate of 10.0±0.1 gallons/minute (37.9±0.4 ℓ/min) until the automatic shutoff is activated.

(3) If the automatic shutoff is activated before the nozzle has dispensed an amount of fuel equal to 70 percent of the tank's nominal capacity, the dispensing may be resumed at a reduced rate. Repeat as necessary until the nozzle has dispensed an amount of fuel equal to at least 70 percent of the tank's nominal capacity.

(4) Once the automatic shutoff is activated after the nozzle has dispensed an amount of fuel equal to 70 percent of the tank's nominal capacity, the fuel shall be dispensed at a rate of 5±1 gallons/minute (19±4 ℓ/min) for all subsequent dispensing. Dispensing shall be restarted two additional times.

(5) If the nozzle has dispensed an amount of fuel less than 85 percent of the tank's nominal capacity after the two additional dispensing restarts, dispensing shall be resumed, and shall continue through as many automatic shutoffs as necessary to achieve this level. This completes the fueling procedure.

(j) Withdraw the nozzle from the vehicle and the bag, holding the tip of the nozzle upward to avoid any dripping into the bag.

(k) Within 1 minute after completion of the fueling event, the bag shall be folded to minimize the vapor volume inside the bag. The bag shall be folded as quickly as possible to prevent evaporation of collected emissions.

(l) Within 5 minutes after completion of the fueling event, the mass of the bag and its contents shall be measured and recorded (consistent with paragraph (c) of this section). The bag shall be weighed as quickly as possible to prevent evaporation of collected emissions.

#### Subpart N—[Amended]

68. A new § 86.1306–96 is added to subpart N to read as follows:

##### § 86.1306–96 Equipment required and specifications; overview.

(a) *Exhaust emission tests.* All engines subject to this subpart are tested for exhaust emissions. Petroleum- and methanol-fueled Otto-cycle and diesel engines are tested identically with two exceptions. First, the systems used to measure hydrocarbon, nitrogen oxide, methanol, formaldehyde, and particulate depend on the type of engine being tested; petroleum-fueled diesel engines require a heated, continuous hydrocarbon detector and a heated, continuous nitrogen oxide detector (see § 86.1310); methanol-fueled engines

require a heated hydrocarbon detector, a methanol detector and a formaldehyde detector; gasoline-fueled and methanol-fueled Otto-cycle engines are not tested for particulate emissions (see § 86.1309). Second, if a gasoline-fueled and methanol-fueled engine is to be used in a vehicle equipped with an evaporative canister, the test engine must have a loaded evaporative canister attached for the exhaust emission test. Necessary equipment and specifications appear in §§ 86.1308, 86.1309, 86.1310 and 86.1311.

(b) *Fuel, analytical gas, and engine cycle specifications.* Fuel specifications for exhaust emission testing are specified in § 86.1313. Analytical gases are specified in § 86.1314. The EPA heavy-duty transient engine cycles for use in exhaust testing are described in § 86.1333 and specified in Appendix I to this part.

69. A new § 86.1327–96 is added to subpart N to read as follows:

##### § 86.1327–96 Engine dynamometer test procedures; overview.

(a) The engine dynamometer test procedure is designed to determine the brake-specific emissions of hydrocarbons, carbon monoxide, oxides of nitrogen, particulate (petroleum-fueled and methanol-fueled diesel engines), and methanol and formaldehyde (for methanol-fueled diesel engines). The test procedure consists of a "cold" start test following either natural or forced cool-down periods described in §§ 86.1334 and 86.1335, respectively. A "hot" start test follows the "cold" start test after a hot soak of 20 minutes. The idle test of subpart P may be run after the "hot" start test. The exhaust emissions are diluted with ambient air and a continuous proportional sample is collected for analysis during both the cold- and hot-start tests. The composite samples collected are analyzed either in bags or continuously for hydrocarbons (HC), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and oxides of nitrogen (NO<sub>x</sub>), or in sample collection impingers for methanol (CH<sub>3</sub>OH) and sample collection impingers (or capsules) for formaldehyde (HCHO). A bag or continuous sample of the dilution air is similarly analyzed for background levels of hydrocarbon, carbon monoxide, carbon dioxide, and oxides of nitrogen and, if appropriate, methanol and formaldehyde. In addition, for petroleum-fueled and methanol-fueled diesel engines, particulates are collected on fluorocarbon-coated glass fiber filters or fluorocarbon-based (membrane) filters, and the dilution air may be prefiltered.

(b) Engine torque and rpm shall be recorded continuously during both the cold- and hot-start tests. Data points shall be recorded at least once every second.

(c) Using the torque and rpm feedback signals, integrate the brake horsepower with respect to time for the cold and hot cycles. This produces a brake horsepower-hour value that enables the brake-specific emissions to be determined (see §§ 86.1342, and 86.1343).

(d)(1) When an engine is tested for exhaust emissions or is operated for service accumulation on an engine dynamometer, the complete engine shall be tested, with all emission control devices installed and functioning.

(2) For gasoline- and methanol-fueled engines, evaporative emission canisters must be loaded with fuel vapors and connected to the engine. The canisters used for testing must be of the same design as those used in engine applications.

(3) On air-cooled engines, the fan shall be installed.

(4) Additional accessories (e.g., oil cooler, alternators, air compressors, etc.) may be installed or their loading simulated if typical of the in-use application.

(5) The engine may be equipped with a production-type starter.

(e) Means of engine cooling that will maintain the engine operating temperatures (e.g., temperatures of intake air, oil, water, etc.) at approximately the same temperature as specified by the manufacturer shall be used. An auxiliary fan(s) may be used to maintain engine cooling during operation on the dynamometer. Rust inhibitors and lubrication additives may be used, up to the levels recommended by the additive manufacturer. Antifreeze mixtures and other coolants typical of those approved for use by the manufacturer may be used.

(f) *Exhaust system.* The exhaust system shall meet the following requirements:

(1) *Gasoline-fueled and methanol-fueled Otto-cycle engines.* A chassis-type exhaust system shall be used. For all catalyst systems, the distance from the exhaust manifold flange(s) to the catalyst shall be the same as in the vehicle configuration unless the manufacturer provides data showing equivalent performance at another location.

(2) *Petroleum-fueled and methanol-fueled diesel engines.* Either a chassis-type or a facility-type exhaust system or both systems simultaneously may be used. The exhaust back pressure or restriction shall be typical of those seen

in the actual average vehicle exhaust system configuration and may be set with a valve (muffler omitted).

(i) The engine exhaust system shall meet the following requirements:

(A) The total length of the tubing from the exit of the engine exhaust manifold or turbocharger outlet to the primary dilution tunnel should not exceed 32 feet (9.8 m).

(B) The initial portion of the exhaust system may consist of a typical in-use (i.e., length, diameter, material, etc.) chassis-type exhaust system.

(C) The distance from the exhaust manifold flange(s) to any exhaust after-treatment device shall be the same as in the vehicle configuration unless the manufacturer is able to demonstrate equivalent performance at another location.

(D) If the exhaust system tubing from the exit of the engine exhaust manifold or turbocharger outlet to the primary dilution tunnel exceeds 12 feet (3.7 m) in length, then all tubing in excess of 12 feet (3.7 m) (chassis and/or facility type) shall be insulated.

(E) If the tubing is required to be insulated, the radial thickness of the insulation must be at least 1.0 inch. The thermal conductivity of the insulating material must have a value no greater than 0.75 BTU-in/hr/ft<sup>2</sup>/°F measured at 700 °F.

(F) A smoke meter or other instrumentation may be inserted into the exhaust system tubing. If this option is exercised in the insulated portion of the tubing, then a minimal amount of tubing not to exceed 18 inches may be left uninsulated. However, no more than 12 feet of tubing can be left uninsulated in total, including the length at the smoke meter.

(ii) The facility-type exhaust system shall meet the following requirements:

(A) It must be composed of smooth tubing made of typical in-use steel or stainless steel. This tubing shall have a maximum inside diameter of 6.0 in (15 cm).

(B) Short sections (altogether not to exceed 20 percent of the entire tube length) of flexible tubing at connection points are allowed.

70. Section 86.1336-84 of subpart N is amended by revising paragraph (e) to read as follows:

**§ 86.1336-84 Engine starting, restarting, and shutdown.**

\* \* \* \* \*

(e) *Test equipment malfunction—(1) Gasoline- and methanol-fueled engines.* If a malfunction occurs in any of the required test equipment during the test run, the test shall be voided.

(2) *Diesel-fueled engines.* (i) If a malfunction occurs in any of the

required test equipment during the cold cycle portion of the test, the test shall be voided.

(ii) If a malfunction occurs in any of the required test equipment (computer, gaseous emissions analyzer, etc.) during the hot cycle portion of the test, complete the full engine cycle before engine shut-down then re-soak for 20 minutes.

(A) If the test equipment malfunction can be corrected before the re-soak period has been completed, the hot cycle portion of the test may be rerun.

(B) (1) If the test equipment malfunction is corrected after the completion of the re-soak period, then the preconditioning cycle must be run before the hot cycle. This consists of a full 20 minute transient cycle followed by a 20 minute soak and then the for-record hot cycle.

(2) In no case can the start of the cold cycle and the start of the hot cycle be separated by more than 4 hours.

\* \* \* \* \*

71. A new § 86.1337-96 is added to subpart N to read as follows:

**§ 86.1337-96 Engine dynamometer test run.**

(a) The following steps shall be taken for each test:

(1) *Prepare for the cold-start test.* (i) For gasoline- and methanol-fueled engines only, evaporative emission canisters shall be prepared for use in this testing in accordance with the procedures specified in § 86.1232-96 (h) or (j). The size of the canisters used for testing shall correspond with the largest canister capacity expected in the range of vehicle applications for each engine. The Administrator may, at his discretion, use a smaller canister capacity. Attach the evaporative emission canister(s) to the engine, using the canister purge plumbing and controls employed in vehicle applications of the engine being tested. Plug the canister port that is normally connected to the fuel tank.

(ii) Prepare the engine, dynamometer, and sampling system.

(iii) Change filters, etc., and leak check as necessary. For a single dilution particulate system, a propane check will not reveal a pressure side leak (that portion of the system downstream of the pump) since the volume concentration in ppm will not change if a portion of the sample is lost. A separate leak check is needed. A leak check of a filter assembly that has only one seal ring in contact with the filter media will not detect a leak when tested under vacuum. A pressure leak test should be performed.

(2) Connect evacuated sample collection bags to the dilute exhaust and dilution air sample collection systems.

(3) For methanol-fueled vehicles, install fresh methanol and formaldehyde impingers (or capsules) in the exhaust and dilution air sample systems for methanol and formaldehyde. A single dilution air sample covering the total test period may be utilized for formaldehyde background.

(4) Attach the CVS to the engine exhaust system any time prior to starting the CVS.

(5) Start the CVS (if not already on), the sample pumps (except for the particulate sample pump(s), if applicable), the engine cooling fan(s), and the data collection system. The heat exchanger of the constant volume sampler (if used), and the heated components of any continuous sampling system(s) (if applicable) shall be preheated to their designated operating temperatures before the test begins. (See § 86.1340(e) for continuous sampling procedures.)

(6) Adjust the sample flow rates to the desired flow rates and set the CVS gas flow measuring devices to zero. CFV-CVS sample flow rate is fixed by the venturi design.

(7) For petroleum-fueled and methanol-fueled diesel engines, carefully install a clean particulate sample filter into each of the filter holders and install the assembled filter holders in the sample flow line. (Filter holders may be preassembled.)

(8) Follow the manufacturer's choke and throttle instructions for cold starting. Simultaneously start the engine and begin exhaust and dilution air sampling. For petroleum-fueled diesel engines (and methanol-fueled diesels, if used) turn on the hydrocarbon and NO<sub>x</sub> (and CO and CO<sub>2</sub>, if continuous) analyzer system integrator (if used), and turn on the particulate sample pumps and indicate the start of the test on the data collection medium.

(9) As soon as it is determined that the engine is started, start a "free idle" timer.

(10) Begin the transient engine cycles such that the first non-idle record of the cycle occurs at 25±1 seconds. The free idle time is included in the 25±1 seconds.

(i) During diesel particulate testing without the use of flow compensation, adjust the sample pump(s) so that the flow rate through the particulate sample probe or transfer tube is maintained at a value within ±5 percent of the set flow rate.

(ii) During diesel particulate sampling with the use of flow compensation (i.e.,

proportional control of sample flow), it must be demonstrated that the ratio of main tunnel flow to particulate sample flow does not change by more than ±5.0 percent of its set point value (except for the first 10 seconds of sampling). For double dilution operation, sample flow is the net difference between the flow rate through the sample filters and the secondary dilution airflow rate.

(iii) Record the average temperature and pressure at the gas meter(s) or flow instrumentation inlet. If the set flow rate cannot be maintained because of high particulate loading on the filter, the test shall be terminated. The test shall be rerun using a lower flow rate and/or a larger diameter filter.

(11) Begin the transient engine cycles such that the first non-idle record of the cycle occurs at 25±1 seconds. The free idle time is included in the 25±1 seconds. During particulate testing without the use of flow compensation, adjust the sample pump(s) so that the flow rate through the particulate sample probe or transfer tube is maintained at a constant value within ±5 percent of the set flow rate. Record the average temperature and pressure at the gas meter(s) or flow instrumentation inlet. If the set flow rate cannot be maintained because of high particulate loading on the filter, the test shall be terminated. The test shall be rerun using a lower flow rate and/or a larger diameter filter.

(12) On the last record of the cycle, cease sampling. Immediately turn the engine off and start a hot-soak timer. Also turn off the particulate sample pumps, the gas flow measuring device(s) and any continuous analyzer system integrator and indicate the end of the test on the data collection medium. Sampling systems should continue to sample after the end of the test cycle until system response times have elapsed.

(13) Immediately after the engine is turned off, turn off the engine cooling fan(s) if used, and the CVS blower (or disconnect the exhaust system from the CVS). As soon as possible, transfer the "cold start cycle" exhaust and dilution air bag samples to the analytical system and process the samples according to § 86.1340. A stabilized reading of the exhaust sample on all analyzers shall be obtained within 20 minutes of the end of the sample collection phase of the test. Analysis of the methanol and formaldehyde samples shall be obtained within 24 hours of the end of the sample collection period. For petroleum-fueled and methanol-fueled diesel engines, carefully remove the filter holder from the sample flow apparatus, remove each particulate sample filter from its holder, and place each in a petri dish and cover.

(14) Allow the engine to soak for 20±1 minutes.

(15) Prepare the engine and dynamometer for the hot start test.

(16) Connect evacuated sample collection bags to the dilute exhaust and dilution air sample collection systems.

(17) Install fresh methanol and formaldehyde impingers (or capsules) in the exhaust and dilution air sample systems for methanol and formaldehyde.

(18) Start the CVS (if not already on) or connect the exhaust system to the CVS (if disconnected). Start the sample pumps (except the particulate sample pump(s), if applicable), the engine cooling fan(s) and the data collection system. The heat exchanger of the constant volume sampler (if used) and the heated components of any continuous sampling system(s) (if applicable) shall be preheated to their designated operating temperatures before the test begins. See § 86.1340(e) for continuous sampling procedures.

(19) Adjust the sample flow rates to the desired flow rate and set the CVS gas flow measuring devices to zero.

(20) For petroleum-fueled and methanol-fueled diesel engines, carefully install a clean particulate filter in each of the filter holders and install assembled filter holders in the sample flow line. (Filter holders may be preassembled.)

(21) Follow the manufacturer's choke and throttle instruction for hot starting. Simultaneously start the engine and begin exhaust and dilution air sampling. For diesel engines, turn on the hydrocarbon and NO<sub>x</sub> (and CO and CO<sub>2</sub>, if continuous) analyzer system integrator (if used), indicate the start of the test on the data collection medium, and turn on the particulate sample pump(s).

(22) As soon as it is determined that the engine is started, start a "free idle" timer.

(23) Allow the engine to idle freely with no-load for 24±1 seconds. The provisions and interpretations of paragraph (a)(10) of this section apply.

(24) Begin the transient-engine cycle such that the first non-idle record of the cycle occurs at 25±1 seconds. The free idle is included in the 25±1 seconds.

(25) On the last record of the cycle, allow sampling system response times to elapse and cease sampling. Turn off the particulate sample pump(s) (if appropriate), the gas flow measuring device(s) and any continuous analyzer system integrator and indicate the end of the test on the data collection medium.

(26) As soon as possible, transfer the "hot start cycle" exhaust and dilution

air bag samples to the analytical system and process the samples according to § 86.1340. A stabilized reading of the exhaust sample on all analyzers shall be obtained within 20 minutes of the end of the sample collection phase of the test. Analyze the methanol and formaldehyde samples within 24 hours. (If it is not possible to perform analysis within 24 hours, the samples should be stored in a cold (approximately 0 °C) dark environment until analysis can be performed). For petroleum-fueled and methanol-fueled diesel engines, carefully remove the assembled filter holder from the sample flow lines and

remove each particulate sample filter from its holder and place in a clean petri dish and cover as soon as possible. Within 1 hour after the end of the hot start phase of the test, transfer the four particulate filters to the weighing chamber for post-test conditioning.

(27) The CVS and the engine may be turned off, if desired.

(b) The procedure in paragraph (a) of this section is designed for one sample bag for the cold start portion and one for the hot start portion. It is also permissible to use more than one sample bag per test portion.

(c) If a dynamometer test run is determined to be void, corrective action

may be taken. The engine may then be allowed to cool (naturally or forced) and the dynamometer test rerun per paragraph (a) or (b) of this section.

72. Appendix I of part 86 is amended by adding paragraph (e) to read as follows:

**Appendix I to Part 86—Urban Dynamometer Schedules**

\* \* \* \* \*

(e) EPA New York City Cycle for Light-Duty Vehicles and Light-Duty Trucks.

**EPA NEW YORK CITY CYCLE**

[Speed versus time sequence]

Time (sec)	Speed (mph)	Time (sec)	Speed (mph)	Time (sec)	Speed (mph)
0	0	1	0	2	0
3	0	4	0	5	0
6	0	7	0	8	0
9	0	10	0	11	0
12	0	13	0	14	0
15	0	16	0	17	0
18	0	19	0	20	0
21	0	22	0	23	0
24	0	25	0	26	0
27	0	28	0	29	0
30	0	31	0	32	0
33	0	34	0	35	0
36	0	37	0	38	0
39	0	40	0	41	0
42	0	43	0	44	0
45	0	46	0	47	0.4
48	2.8	49	5.6	50	7.0
51	7.6	52	7.6	53	6.2
54	6.4	55	7.6	56	9.5
57	8.9	58	8.6	59	9.6
60	12.4	61	15.0	62	17.8
63	21.0	64	22.9	65	21.7
66	18.2	67	14.5	68	10.2
69	5.6	70	2.5	71	2.1
72	3.1	73	5.7	74	9.0
75	10.8	76	10.8	77	9.5
78	6.5	79	3.9	80	2.6
81	1.0	82	0.8	83	0.1
84	0	85	0	86	0
87	0	88	0	89	0
90	0	91	0	92	0
93	0	94	0	95	0
96	2.7	97	8.3	98	12.4
99	15.7	100	17.4	101	17.3
102	17.2	103	15.1	104	11.2
105	8.6	106	5.9	107	5.4
108	6.8	109	6.9	110	4.8
111	5.7	112	7.1	113	6.8
114	5.9	115	6.0	116	6.0
117	5.9	118	5.6	119	5.5
120	7.2	121	9.9	122	10.8
123	11.4	124	11.9	125	12.1
126	12.6	127	12.3	128	10.6
129	9.9	130	9.4	131	8.9
132	7.6	133	6.1	134	5.0
135	3.7	136	2.6	137	1.0
138	0.8	139	0.1	140	0.4
141	0.2	142	0	143	0
144	0	145	1.3	146	6.0
147	10.2	148	12.1	149	13.8
150	15.1	151	16.2	152	15.9

## EPA NEW YORK CITY CYCLE—Continued

[Speed versus time sequence]

Time (sec)	Speed (mph)	Time (sec)	Speed (mph)	Time (sec)	Speed (mph)
153	16.0	154	16.8	155	17.5
156	18.0	157	19.6	158	21.7
159	23.1	160	23.7	161	24.1
162	24.5	163	25.0	164	25.2
165	24.6	166	24.3	167	23.3
168	22.7	169	22.1	170	21.6
171	21.1	172	20.3	173	19.2
174	17.0	175	13.9	176	14.1
177	14.6	178	14.6	179	14.5
180	14.4	181	14.2	182	14.2
183	13.2	184	11.5	185	8.4
186	5.5	187	3.7	188	2.9
189	1.3	190	0.8	191	0.3
192	0.1	193	0.1	194	0
195	1.3	196	3.9	197	9.9
198	15.9	199	19.3	200	20.7
201	21.4	202	21.4	203	20.5
204	19.0	205	16.7	206	13.1
207	11.2	208	14.9	209	19.8
210	23.8	211	25.7	212	26.2
213	26.4	214	23.3	215	19.6
216	18.9	217	19.3	218	19.4
219	18.5	220	17.5	221	16.4
222	15.6	223	15.6	224	16.0
225	16.8	226	17.5	227	18.0
228	19.6	229	21.7	230	23.5
231	24.6	232	25.0	233	24.3
234	23.1	235	20.7	236	17.2
237	13.5	238	9.2	239	3.3
240	0	241	0	242	0
243	0	244	0	245	0
246	0	247	0	248	0
249	0	250	0	251	0
252	0	253	0	254	0.2
255	2.0	256	4.5	257	6.4
258	7.2	259	7.6	260	7.2
261	6.6	262	6.5	263	5.1
264	4.4	265	5.5	266	3.0
267	3.4	268	3.0	269	2.9
270	1.3	271	0.8	272	0.3
273	0	274	0	275	0.3
276	4.7	277	9.7	278	13.9
279	16.7	280	19.1	281	20.5
282	20.5	283	19.7	284	19.9
285	20.4	286	20.9	287	21.4
288	21.9	289	22.4	290	22.1
291	21.4	292	20.8	293	20.3
294	20.5	295	19.3	296	17.3
297	17.1	298	16.7	299	14.3
300	11.9	301	10.7	302	10.2
303	9.4	304	10.6	305	12.8
306	13.7	307	12.3	308	10.4
309	8.6	310	5.5	311	3.2
312	2.0	313	0.6	314	0
315	0	316	0	317	0
318	0	319	0	320	0
321	0	322	0	323	2.5
324	6.1	325	5.5	326	3.2
327	3.6	328	6.1	329	9.1
330	9.8	331	8.6	332	6.8
333	5.9	334	5.6	335	6.0
336	7.2	337	8.4	338	9.3
339	7.6	340	5.5	341	2.5
342	0.1	343	0	344	0
345	0	346	0	347	0
348	0	349	0	350	0
351	0	352	0	353	0
354	0	355	0	356	0
357	0	358	0	359	0
360	0	361	0	362	0
363	0	364	0	365	0

## EPA NEW YORK CITY CYCLE—Continued

[Speed versus time sequence]

Time (sec)	Speed (mph)	Time (sec)	Speed (mph)	Time (sec)	Speed (mph)
366	0	367	0	368	0
369	0	370	0	371	0
372	0	373	0	374	0
375	0	376	0	377	0
378	0	379	0	380	0
381	0	382	0	383	0
384	0	385	0	386	0
387	0	388	0	389	0
390	0	391	0	392	0
393	0	394	0	395	0.2
396	1.6	397	3.0	398	3.0
399	2.1	400	2.3	401	4.6
402	7.8	403	9.9	404	10.7
405	10.2	406	10.1	407	10.7
408	10.9	409	11.4	410	11.1
411	10.0	412	8.8	413	8.2
414	8.6	415	10.2	416	11.8
417	13.0	418	13.3	419	12.8
420	11.7	421	11.7	422	12.4
423	13.7	424	14.4	425	14.3
426	14.7	427	15.1	428	15.3
429	15.8	430	14.5	431	12.2
432	11.1	433	12.0	434	13.1
435	12.2	436	8.9	437	7.7
438	7.6	439	8.0	440	5.5
441	3.3	442	2.4	443	1.4
444	0.6	445	0	446	0
447	0	448	0	449	0
450	0	451	0	452	0
453	0	454	0	455	0
456	0	457	0	458	0
459	0	460	0	461	0
462	0	463	0	464	0
465	0	466	0	467	0
468	0	469	0	470	0
471	0	472	0	473	0
474	0	475	0	476	0
477	0	478	0	479	0
480	0	481	0	482	0
483	0	484	0	485	0
486	0	487	0	488	0
489	0	490	0	491	0
492	0	493	0	494	0
495	1.0	496	4.1	497	7.4
498	10.2	499	11.3	500	11.8
501	12.2	502	14.3	503	16.0
504	17.8	505	18.6	506	19.6
507	20.2	508	19.9	509	19.7
510	20.8	511	21.0	512	18.8
513	17.6	514	13.0	515	7.5
516	2.9	517	0.8	518	0
519	0.2	520	0.7	521	1.4
522	2.3	523	2.7	524	3.0
525	2.6	526	1.2	527	0.1
528	0.7	529	1.8	530	3.1
531	3.9	532	5.3	533	7.8
534	9.7	535	10.3	536	10.2
537	9.4	538	7.1	539	6.8
540	8.9	541	10.6	542	11.9
543	15.5	544	19.6	545	22.8
546	25.1	547	26.0	548	26.7
549	27.3	550	27.7	551	27.6
552	27.3	553	25.7	554	23.3
555	20.6	556	17.8	557	14.9
558	11.3	559	7.4	560	4.6
561	1.7	562	0.7	563	0
564	0	565	0	566	0
567	0	568	0	569	0
570	0	571	0	572	0
573	0	574	0	575	0
576	0	577	0	578	0

EPA NEW YORK CITY CYCLE—Continued  
[Speed versus time sequence]

Time (sec)	Speed (mph)	Time (sec)	Speed (mph)	Time (sec)	Speed (mph)
579	0	580	0	581	0
582	0	583	0	584	0
585	0	586	0	587	0
588	0	589	0	590	0
591	0	592	0	593	0
594	0	595	0	596	0
597	0	598	0	599	0
600	0				

73. A new appendix II is added to part 86 to read as follows:

Appendix II to Part 86—Temperature Schedules

(a) Ambient temperature cycle for the diurnal emission portion of the evaporative emission test (see § 86.133).

TABLE I.—TEMPERATURE VERSUS TIME SEQUENCE

Use linear interpolation between hourly temperatures

Time (min)	Temp. (°F)	Time (min)	Temp. (°F)	Time (min)	Temp. (°F)
0	72.0	60	72.5	120	75.5
180	80.3	240	85.2	300	89.4
360	93.1	420	95.1	480	95.8
540	96.0	600	95.5	660	94.1
720	91.7	780	88.6	840	85.5
900	82.8	960	80.9	1020	79.0
1080	77.2	1140	75.8	1200	74.7
1260	73.9	1320	73.3	1380	72.6
1440	72.0	1500	72.5	1560	75.5
1620	80.3	1680	85.2	1740	89.4
1800	93.1	1860	95.1	1920	95.8
1980	96.0	2040	95.5	2100	94.1
2160	91.7	2220	88.6	2280	85.5
2340	82.8	2400	80.9	2460	79.0
2520	77.2	2580	75.8	2640	74.7
2700	73.9	2760	73.3	2820	72.6
2880	72.0	2940	72.5	3000	75.5
3060	80.3	3120	85.2	3180	89.4
3240	93.1	3300	95.1	3360	95.8
3420	96.0	3480	95.5	3540	94.1
3600	91.7	3660	88.6	3720	85.5
3780	82.8	3840	80.9	3900	79.0
3960	77.2	4020	75.8	4080	74.7
4140	73.9	4200	73.3	4260	72.6
4320	72.9				

[FR Doc. 93-5415 Filed 3-23-93; 8:45 am]

BILLING CODE 6560-50-P



# Federal Register

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Wednesday  
March 24, 1993

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Part III

## Department of Commerce

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National Telecommunications and  
Information Administration

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Grants for Planning and Construction of  
Public Telecommunications Facilities;  
Notice

**DEPARTMENT OF COMMERCE****National Telecommunications and Information Administration****Grants for Planning and Construction of Public Telecommunications Facilities; Acceptance of Applications for Filing****I. New Applications and Major Amendments to Deferred Applications**

Notice is hereby given that the following described applications for Federal financial assistance are accepted for filing under provision title III, part IV, of the Communications Act of 1934, as amended (47 U.S.C. 390-393, 397) and in accordance with 15 CFR part 2301. All of the applications listed in this section were received by January 14, 1993. The effective date of acceptance of these proposals, unless otherwise indicated herein, is "Date Received". Applications are listed by their State.

The acceptance of applications for filing is a procedure designed for making preliminary determinations of eligibility and for providing the opportunity for public comment on applications. Acceptance of an application does not preclude subsequent return or disapproval of an application if it is found to be not in accordance with the provision of either the Act or 15 CFR part 2301, or if the applicant fails to file any additional information requested by the Public Telecommunications Facilities Program (PTFP).

Acceptance for filing does not ensure that an application will be funded; it merely qualifies that application to compete for funding with other applications which have also been accepted for filing.

Any interested party may file comments with the Agency supporting or opposing an application and setting forth the grounds for support or opposition. Such comments must contain a certification that a copy of the comments has been delivered to the applicant. Comments must be sent to the address listed in 15 CFR 2301.5(a).

The Agency will incorporate all comments from the public and any replies from the applicant in the applicant's official file.

**Dennis R. Connors,**  
*Associate Administrator.*

**AK (Alaska)**

File No. 93080 CRB Raven Radio Foundation, 102-B Lincoln St., P.O. Box 520, Sitka, AK 99835. Signed By: Mr. Richard V. McClear, Chief Operation Officer. Funds Requested: \$131,130.

Total Project Cost: \$174,840. To extend and improve the transmission and programming capabilities of public radio station KCAW-FM operating on 104.7 Mhz, Sitka, Alaska, by constructing translators in Elfin Cove and Yakutat to bring first public radio service to 13,500 residents of the Alaska panhandle. The other items requested will replace worn out and obsolete studio and test equipment.

File No. 93091 CTB Capital Community Brdcstg., Inc., 224 Fourth Street, Juneau, AK 99801-1198. Signed By: Mr. Bill Legere, President. Funds Requested: \$176,062. Total Project Cost: \$234,750. To upgrade the production and transmission capability of public television station KTOO-TV operating on channel 3 in Juneau, Alaska, by replacing worn out and obsolete equipment including video tape recorders, master control switcher and audio distribution amplifiers to better serve 50,000 residents of the Alaska panhandle.

File No. 93157 CTN Alaska Public Broad. Commission, 333 Willoughby Ave., Juneau, AK 99801-. Signed By: Mr. Douglas P. Samimi-Moore, Executive Director. Funds Requested: \$949,830. Total Project Cost: \$1,983,400. To construct a C-band satellite interconnection system that employs digital compression technology to serve the state's distance delivery needs in education, training and other programs, and public broadcasting. The system would lease a transponder for three full-time video channels, one each for public television, education (University of Alaska and the Department of Education) and government.

File No. 93191 CRB Kashunamiut School District, 985 KSD Way, Chevak, AK 99563. Signed By: Mr. B.A. Weinberg, Superintendent. Funds Requested: \$67,524. Total Project Cost: \$90,032. To extend the signal of noncommercial station KCUK-FM operating on 88.1 Mhz in Chevak, Alaska, by increasing the power of their transmitter power to 6 Kw and replacing an existing translator with a new solar powered unit. These changes will improve radio service to 1900 existing listeners and add 450 additional listeners in Scammon and Hooper Bays.

File No. 93199 CRB Rainbird Cmty. Brdcstg. Corp., 123 Stedman Street, Ketchikan, AK 99901. Signed By: Mr. Paul Crowl, President. Funds Requested: \$42,592. Total Project Cost: \$56,790. To improve the production and transmission facilities of public radio station KRBD-FM operating on 105.9 Mhz in Ketchikan, Alaska, by replacing obsolete studio production equipment

to better serve the 25,000 residents of the Ketchikan Gateway Borough.

File No. 93233 CRB Kuskokwim Public Brdcstg. Corp., Box 70, Mile 389, Iditarod Trail, McGrath, AK 99627. Signed By: Ms. Helen Wittenkeller, President. Funds Requested: \$43,185. Total Project Cost: \$57,580. To improve the transmission and programming capability of public radio station KSKO-AM, operating on 870 Khz McGrath, Alaska, by installing a diesel generator and dummy load at the transmitter site, and an automation equipment package and test equipment at the studio. This equipment will be used as a demonstration project for full time operation of remote stations throughout the state.

File No. 93234 CRB Kuskokwim Public Brdcstg. Corp., Box 70, Mile 389, Iditarod Trail, McGrath, AK 99627. Signed By: Ms. Helen Wittenkeller, President. Funds Requested: \$35,925. Total Project Cost: \$47,900. To extend the signal of public radio station KSKO-AM operating on 870 Khz in McGrath, Alaska by placing a translator in Anvik to provide a first public radio service to 725 residents of Anvik, Grayling, Holy Cross and Shageluk.

File No. 93259 CTBN University of Alaska-Fairbanks, Fairbanks North Star Borough, Fairbanks, AK 99775-1420. Signed By: Dr. Charles E. Graham, Director, Sponsored Prog. Off. Funds Requested: \$231,000. Total Project Cost: \$308,000. To upgrade the fiber optic inter-building link and purchase replacement video tape equipment, an ITFS microwave STL, and items of test equipment for public television station KUAC, ch. 9, Fairbanks, AK. The equipment will allow the station to provide new services via ITFS to public schools.

File No. 93268 CRB Bethel Broadcasting, Inc., 640 Radio St., P.O. Box 468, Bethel, AK 99559. Signed By: Mr. Andrew Guy, President. Funds Requested: \$96,075. Total Project Cost: \$128,100. To extend and improve the signal of public radio station KYUK-AM operating in 640 Khz in Bethel, Alaska, by constructing a translator in St. Mary to bring first public radio service to 1,850 residents of the lower Yukon area. The application also requests a replacement for their remote pickup unit, STL and various studio production items to better serve the 20,000 residents of the entire lower Yukon region.

**AL (Alabama)**

File No. 93009 CTB Alabama ETV Commission, 2112 11th Avenue S, suite 400, Birmingham, AL 35205-2884. Signed By: Ms. Judy Stone, Executive

Director. Funds Requested: \$2,057,468. Total Project Cost: \$2,758,000. To improve the service of Alabama Public Television by replacing basic transmission equipment, including new transmitters at WCIQ-TV, Channel 7, Mt. Cheaha, AL; WIIQ-TV, Channel 41, Demopolis; and WFIQ-TV, Channel 36, Florence. The WCIQ transmitter was installed in 1978; the WIIQ transmitter in 1970; and the WFIQ transmitter in 1966. In addition, Alabama Public Television plans to replace an antenna and transmission line at the Demopolis site, and install surge protection equipment at Mt. Cheaha. Alabama Public Television serves approximately 4 million viewers; the antenna replacement at Demopolis will bring first signal to approximately 12,642 viewers.

File No. 93084 CTB Auburn University, Auburn Television, Auburn, AL 36849-5423. Signed By: Mr. Paul F. Parks, Vice President for Research. Funds Requested: \$339,399. Total Project Cost: \$678,798. To purchase diverse production equipment, including color cameras, lenses, switchers, recorders, monitors, and test equipment, for the Auburn Studio, which operates as an affiliate of the Alabama Public Television Network. The project would improve the Studio's capability of providing instructional and other programming to the Network, as well as to the Public Broadcasting System.

File No. 93192 PTN Shelton State Community College, 1301 15th Street East, Tuscaloosa, AL 35404-. Signed By: Dr. Thomas E. Umphrey, President. Funds Requested: \$77,784. Total Project Cost: \$77,784. To develop a telecommunications plan using a variety of technologies to provide interactive video, audio and computer-based distance learning services to individuals who may be disadvantaged and may not normally take courses ranging from GED preparation to college-level instruction. Businesses will also be included in the project by participating in the preparation and offering of training courses for workers. The plan will examine the telecommunications technologies that seem practical for an interconnection system, including ITFS, T-1 Lines, and use of an existing satellite downlink for teleconferences.

#### AR (Arkansas)

File No. 93130 CTB Arkansas ETV Commission, 350 South Donaghey, Conway, AR 72032. Signed By: Ms. Susan Howarth, Executive Director. Funds Requested: \$591,244. Total Project Cost: \$1,182,489. To improve the services of the Arkansas Educational

Television Network by replacing outmoded 3/4" U-Matic video equipment with state-of-the-art Beta SP equipment, as well as to acquire video editing equipment and a router to facilitate the format change. The project also would add a character generator to broadcast news, weather, and emergency bulletins over the AETN's five-transmitter network. Arkansas Educational Television serves approximately 2.3 million viewers.

File No. 93131 CTB Arkansas ETV Commission, 350 South Donaghey, Conway, AR 72032. Signed By: Ms. Susan Howarth, Executive Director. Funds Requested: \$706,148. Total Project Cost: \$1,412,296. To purchase a portable Ku-band satellite uplink and related television production equipment. The project will address direct instruction to pre-school, elementary, secondary and post secondary schools, in-service training for educators and state employees, state-wide town meetings and training and teleconferencing for businesses.

File No. 93175 CTN University of Arkansas, 120 Ozark Hall, Fayetteville, AR 72701. Signed By: Mr. John K. Stokes, Dir., Research & Spon. Prog. Funds Requested: \$591,120. Total Project Cost: \$788,160. To purchase a mobile Ku-band satellite uplink and related television production equipment. The project will address the distance learning needs of the University, other Arkansas institutions of higher education, public schools, state agencies and business groups.

#### AS (American Samoa)

File No. 93243 CTB American Samoa Government, KVZK, Office of Public Info., Pago Pago, AS 96799. Signed By: Ms. Vaioita Savali, Director. Funds Requested: \$614,859. Total Project Cost: \$614,859. To improve the transmission and production facilities of KVZK-TV, Ch. 2, in Pago Pago, American Samoa. The project will repair/replace the antenna, tower, and transmitter air conditioning that were damaged by Hurricane Val. The project will also replace obsolete test equipment, video and audio distribution equipment necessary to maintain KVZK-TV program services to 47,000 residents of American Samoa.

#### AZ (Arizona)

File No. 93056 CRB Northern Arizona University, Riordan Road, Flagstaff, AZ 86011-. Signed By: Ms. Jeanette S. Baker, Assoc. V.P., Univ. Relations. Funds Requested: \$98,477. Total Project Cost: \$131,303. To improve the facilities of public radio station KNAU-FM by acquiring a remote pickup system to

enhance the news gathering and remote production capability. In addition, will equip a second production control room at the station in Flagstaff.

File No. 93067 CTB University of Arizona, KUAT, Modern Language Building, Tucson, AZ 85721. Signed By: Mr. William Noyes, Associate Vice President. Funds Requested: \$25,308. Total Project Cost: 50,616. To improve the facilities of public television station KUAT-TV, Channel 6, in Tucson by replacing old, obsolete film and slide chain equipment with digital still store equipment. Area is also served by KUAS-TV, Channel 27.

File No. 93107 CTN Northern Arizona University, P.O. Box 5751, Flagstaff, AZ 86011-5751. Signed By: Dr. Jeanette S. Baker, Assoc. Vice President. Funds Requested: \$2,143,789. Total Project Cost: \$2,858,386. To extend the existing duplex microwave distance learning system of Northern Arizona University to three Native American reservation educational institutions, one Native American non-reservation educational institution, and three neighboring community colleges.

File No. 93148 CTB Arizona State University, Stauffer Hall, Tempe, AZ 85287-1903. Signed By: Ms. Janice D. Bennett, Asst. Dir., Research. Funds Requested: \$166,205. Total Project Cost: \$332,410. To improve the facilities of public television station KAET-TV, Channel 8, in Phoenix by replacing worn-out and obsolete basic production and broadcast operations equipment. Equipment requested includes a lighting board, 2 1/2 inch VTR's, 1 frame synchronizer, 2 waveform monitors, 6 video monitors and a routing switcher.

#### CA (California)

File No. 93017 CRB Univ. of California, Santa Barbara, 3227 Cheadle Hall, Santa Barbara, CA 93106-. Signed By: Mr. David Mayo, Contracts & Grants Officer. Funds Requested: \$44,494. Total Project Cost: \$59,326. To upgrade the programming capability of student operated public radio station KCSB-FM operating on 91.9 Mhz in Santa Barbara, CA, by installing a satellite receive dish to provide a first national public radio service to 750,000 residents of Ventura, Santa Barbara and San Luis Obispo Counties.

File No. 93031 CTB KTEH Foundation, 100 Skyport Drive, MC 54, San Jose, CA 95110-. Signed By: Mr. Thomas E. Fanella, President. Funds Requested: \$482,450. Total Project Cost: \$964,900. To improve the facilities of public television station KTEH-TV, operating on channel 54 San Jose, CA, by replacing aging quadruplex video

tape recorders needed for continued station operation.

File No. 93038 CTB KQED, Inc., 2601 Mariposa Street, San Francisco, CA 94110-1400. Signed By: Mr. Anthony S. Tiano, President and CEO. Funds Requested: \$465,975. Total Project Cost: \$931,950. To improve the production and transmission facilities of public television station KQED-TV operating on channel 9 in San Francisco, California, by replacing obsolete video tape and master control equipment with an automated master control switching system and digital video recorders to better serve 7 million residents of the greater San Francisco bay area.

File No. 93040 CRB Nevada City Cmnty Broadcast Group, P.O. Box 1327, Nevada City, CA 95959-. Signed By: Mr. Steve Ramsey, General Manager. Funds requested: \$61,583. Total Project Cost: \$123,166. To upgrade the production and programming capability of public radio station KVMR-FM operating on 89.5 Mhz in Nevada City, California, by replacing the present transmission system, satellite downlink, production and master control studio equipment to better serve 250,000 residents of Nevada County, Placer County and Sierra County.

File No. 93407 CTN California State Univ. Foundation, 400 Golden Shore, Suite 122, Long Beach, CA 90802-. Signed By: Mr. Robert D. Maners, President, CSU Foundation. Funds Requested: \$927,368. Total Project Cost: \$1,901,868. To establish a two-way interactive telecommunications system consisting of a high-speed data network for three Model Schools in the K-12 range. The schools will be interconnected with each other and with the California State University system via switching centers operated by the Regional Bell Operating Company.

File No. 93073 CTB Valley Public TV, Inc., 1544 Van Ness Avenue, Fresno, CA 93721. Signed By: Mr. Colin Dougherty, General Manager. Funds Requested: \$506,808. Total Project Cost: \$1,055,851. To upgrade the production and program origination capability of public television station KVPT-TV, operating on channel 18 in Fresno, California, by replacing obsolete and worn out equipment including transmitter monitoring, master control and production switchers, studio and field video recorders, audio processors and recorders and video test systems. This equipment will be used to continue the only public television service to 1.6 million residents of the California central valley.

File No. 93125 CRB Mendocino Cty. Public Broadcasting, 9300 Hwy 128,

P.O. Box 180, Philo, CA 95466. Signed By: Mr. Carrol Pratt, Treasurer, Board of Directors, Funds Requested: \$45,187. Total Project Cost: \$60,250. To extend the signal of public radio station KZYX-FM operating on 90.7 Mhz in Philo, California by installing a repeater station in Willits to serve 50,000 residents of Redwood Valley, Little Lake Valley, Potter Valley, and Ukiah Valley.

File No. 93126 CRB Mendocino Cty. Public Broadcasting, 9300 Hwy 128, P.O. Box 180, Philo, CA 95466. Signed By: Mr. Carrol Pratt, Board Treasurer. Funds Requested: \$9,974. Total Project Cost: \$13,298. To upgrade the production capability of public radio station KZYX-FM operating on 90.7 Mhz in Philo, California, by acquiring equipment for a news production studio. The equipment will bring the three year old station to minimum equipment standard. This station is the only public radio service in this section of the north coast of California.

File No. 93132 CRB Pataphysical Broadcasting Fdn., P.O. Box 423, 203 8th Avenue, Santa Cruz, CA 95062-. Signed By: Ms. Marcia Kraus, Station Manager. Funds Requested: \$168,590. Total Project Cost: \$224,787. To expand and improve the transmission and programming capabilities of public radio station KUSP-FM, operating on 88.9 Mhz in Santa Cruz, California, by replacing their 19 year old transmitter, upgrading two ten year old translators, adding a booster station and replacing worn out and obsolete studio production equipment. These activities will increase the station audience by 37,000 and improve service to 1 million residents of the central coast of California.

File No. 93139 CTB San Diego St. University Found., 5164 College Avenue, San Diego, CA 92182. Signed By: Mr. Lawrence B. Feinberg, Assoc. Dean, Grad Div. & Res. Funds Requested: \$675,840. Total Project Cost: \$1,126,400. To improve the transmission and production capability of public television station KPBS-TV operating on channel 15, in San Diego, California by replacing an obsolete master control routing system, studio video and audio switchers, still store and editing systems. The replacement equipment will be installed in a new studio facility.

File No. 93144 CTB San Bernardino Community College, 701 S. Mount Vernon Avenue, San Bernardino, CA 92410. Signed By: Mr. Stuart M. Bundy, Chancellor. Funds Requested: \$345,000. Total Project Cost: \$690,000. To upgrade the production capability of public television station KVCR-TV, operating on channel 24, San Bernardino,

California by replacing worn out and obsolete studio and field production cameras, video tape recorders and an editing control unit to better serve 3.5 million residents of the San Bernardino area.

File No. 93176 PRTN California Community Colleges, 1107 Ninth Street, Sacramento, CA 95838-. Signed By: Mr. Ernest Leach, Deputy Chancellor. Funds Requested: \$764,856. Total Project Cost: \$1,031,892. To develop a strategic telecommunications plan for a statewide, community college "virtual network" capable of video, voice and data interaction among the community colleges in the state of California for distance learning applications and for training the state's workforce. The California community college system is one of three public systems of higher education in the state, and one out of every seventeen adults in the state attends classes at a community college. The plan will explore all possible technologies that may be appropriate and feasible for such a statewide network.

File No. 93207 CTN Sandigan California Inc., 6489 47th St., Sacramento, CA 95823-. Signed By: Ms. Leni M. Lacson, Executive Director. Funds Requested: \$41,804. Total Project Cost: \$55,738. To establish a video production center to originate instructional course work designed to meet the needs of migrant workers throughout California. The center will also create programming targeted for the Filipino community. The programming will be distributed by over-the-air broadcast facilities and cable television systems in many California communities.

File No. 93212 CTN Community TV of S. California, 4401 Sunset Boulevard, Los Angeles, CA 90027. Signed By: Mr. Donald B. Youpa, Executive Vice President. Funds Requested: \$165,761. Total Project Cost: \$331,523. To equip public television station KCET, Ch. 28, Los Angeles, with basic authoring and playback/demonstration equipment for its Interactive Media Center. The station will use the equipment to begin producing multimedia interactive educational programming for K-12 and post-secondary schools.

File No. 93218 CTB Community TV of S. California, 4401 Sunset Boulevard, Los Angeles, CA 90027. Signed By: Mr. Donald G. Youpa, Executive Vice President. Funds Requested: \$322,288. Total Project Cost: \$429,718. To extend the signal of public television station KCET-TV, operating on channel 28, Los Angeles, California by constructing a microwave fed translator system which will bring a first over the air public

television service to 400,000 residents of Kern County including 11,000 residents of Lake Isabella who have no public television service what so ever.

File No. 93219 CRB Cal. State Univ., Sacramento, 3416 American River Dr. suite B, Sacramento, CA 95864. Signed By: Mr. Phil Corriveau, General Manager. Funds Requested: \$106,602. Total Project Cost: \$213,204. To construct a Ku-band uplink to distribute programming from the applicant's public radio stations KXPR and KXJZ, Sacramento, to a series of repeater stations and translators which will serve communities in northern California. Satellite downlinks will be placed at the applicant's public radio stations KXSR, Groveland, CA, KXKB, Kings Beach, CA, and a proposed translator for St. Helena, CA. Small studios will also be constructed at KXSR and KXKB to originate local news programming. The applicant also intends to use the Ku-band uplink to distribute news coverage from the state capitol to other public radio stations in California.

File No. 93223 CRB Radio Bilingue, Inc., 1111 Fulton Mall, #700, Fresno, CA 93721. Signed By: Mr. Hugo Morales, Executive Director. Funds Requested: \$64,520. Total Project Cost: \$86,027. To expand the capabilities of existing Hispanic public radio stations to receive the satellite distributed national Spanish language program service offered by the applicant. The project will construct C-band downlink facilities at the following public radio stations: KERU, Blythe, CA; KHDC, Salinas, CA; KTQX, Bakersfield, CA; and KXCR, El Paso, TX. Additional equipment will also be purchased for downlink facilities at public radio stations KBBF, Santa Rosa, CA and KDNA, Granger WA, to make them compatible with the network. A microwave will also be constructed to interconnect public radio station WIPR, Hato Rey, PR to an existing downlink at WRTU, San Juan, so WIPR can access the network.

#### CO (Colorado)

File No. 93032 CRB Leadville Cmnty Broadcast Assoc., 229 West 6th Street, Leadville, CO 80461-. Signed By: Ms. Kathy Bedell, President. Funds Requested: \$109,985. Total Project Cost: \$146,645. To activate a new public radio station in Leadville. Station would provide a first public radio service to approximately 6,000 residents of Leadville and Lake County.

File No. 93037 CTB Univ. of Southern Colorado, 2200 Bonforte Boulevard, Pueblo, CO 81001-4901. Signed By: Dr. Robert C. Shirley, President, Univ. of So. CO. Funds Requested: \$434,684.

Total Project Cost: \$869,369. To extend and improve the facilities of public television station, KTSC-TV, Channel 8, in Pueblo by constructing four new translators, a microwave interconnection system and improving some of the station's origination equipment by replacing worn, obsolete equipment and acquiring a variety of test equipment. KTSC-TV will be upgraded to broadcast in stereo. New translator stations will serve Grand Junction (Ch. 53), Durango (Ch. 29), Ignacio (Ch. 15) and Cortez-Red Mesa (Ch. 64). Project will provide first public television service to 24,670 residents in western and southern CO.

File No. 93055 CRB Region 1 Translator Association, County Commissioner's Office, Wray, CO 80758-. Signed By: Mr. Stanley Shafer, Secretary-Treasurer. Funds Requested: \$38,850. Total Project Cost: \$51,806. To extend the signal of KUNC-FM (91.5 MHz) in Greeley, CO, by constructing three new 100-watt FM translators located in Holyoke (89.9 MHz), Julesburg (89.1 MHz) and Wray (93.5 MHz). In addition, project would relocate existing translator, K204BH, licensed to the University of Northern Colorado, and increase the translator's power to 100 watts. Project would provide first service to about 13,000 residents of Phillips, Sedgwick and Yuma counties.

File No. 93059 CRB Denver Ed. Broadcasting, Inc., 2246 Federal Blvd., PO Box 11111, Denver, CO 80211. Signed By: Ms. Florence Hernandez-Ramos, President & General Manager. Funds Requested: \$217,518. Total Project Cost: \$290,025. To improve the facilities of public radio station KUVU-FM, 89.3 MHz, in Denver by acquiring a backup studio-to-transmitter link (STL), a new transmitter. The old 1985 transmitter which will be used as a backup. KUVU-FM will replace a variety of master control room equipment including a new console. Project will also replace console and other origination equipment such as reel-to-reel recorders, CD players/recorders, DAT machines and a variety of associated equipment in the station's production/news rooms. KUVU-FM also seeks a selection of test equipment. The replacement and upgrading of KUVU-FM's equipment will allow it to better serve its multi-cultural audience. The Denver area is also served by KCFR-FM and KGNU-FM (Boulder).

File No. 93072 CTB Front Range Educ. Media Corp., 2246 North Federal Blvd., Denver, CO 80211. Signed By: Mr. Ted Krichels, General Manager. Funds Requested: \$224,561. Total Project Cost: \$320,802. To improve the

facilities of public television station KBDI-TV, Channel 12, Bloomfield by replacing its old 2 GHz microwave studio-to-transmitter link (STL) with a new 7 GHz microwave system. This will reduce the risk of interference with broadcasting mobile operations. KBDI-TV also seeks to replace its obsolete 3/4" format origination equipment with the newer BETA format by acquiring new video cassette recorder/players. In addition, a new routing switcher and some test equipment will also be acquired. KBDI-TV serves the Bloomfield/Denver market and surrounding area.

File No. 93079 CRB Public Brdcstg. of Colorado, Inc., 2249 South Josephine Street, Denver, CO 80210. Signed By: Mr. Max Wycisk, General Manager. Funds Requested: \$62,772. Total Project Cost: \$102,772. To activate a new full-service public radio station on 89.9 MHz, in Vail by increasing the power of an existing translator station from 10 watts to 1,500 watts and adding local origination. Existing translator was installed in 1992 as an interim step leading to the establishment of the full-service station. Current translator covers about 7,603 persons while the new station will cover about 16,955 residents. Station will also serve as the applicant's third radio production center.

File No. 93210 PTN University of Colorado, Campus Box 19, Boulder, CO 80309-0019. Signed By: Mr. Laurence D. Nelson, Director, Grants and Contracts. Funds Requested: \$90,000. Total Project Cost: \$100,905. To plan for the application of telecommunications technologies to innovative forms of distance education. The capabilities of modern communications facilities to meet educational needs, particularly in the area of the sciences, will be studied and planned. The project will examine and design educationally appropriate interfaces and equipment configurations using the Telecommunications Education and Research Network (TERN), INTERNET, ITFS systems, fiber optic lines, satellite distribution, cable TV systems, and private line and public switched networks. Coordination with faculty members and educational specialists at the K-12 and college levels will be included to develop a schedule for representative courses and lessons to test the results of the plan.

File No. 93221 CTB Rio Grand County, Sixth & Cherry, Del Norte, CO 81132-. Signed By: Mr. Vern Rominger, Chairman of the Board. Funds Requested: \$33,075. Total Project Cost: \$44,100. To construct two new public television translator stations in Del Norte/South Fork (Channel 41) and

South Fork (K18DE, Channel 18). The new translators will re-broadcast the signal of KTSC-TV, Channel 8, in Pueblo. Stations will provide first service to about 2,500 permanent residents and as many as 6,000 during the summer months and the ski season.

File No. 93252 PTN Community Information Center-2000, 14302 North 107th, Longmont, CO 80501-. Signed By: Mr. Paul H. Spieker, Secretary. Funds Requested: \$85,700. Total Project Cost: \$184,400. To plan for Community Information Centers in Boulder County, Colorado that would incorporate telecommunications technologies to provide strategic programs and services in education and training to educational, medical, governmental, social and business organizations. The services provided at these centers would benefit all aspects of the communities in sharing information and interacting over long distances to remote locations, to improve the economic conditions and environmental health of the area. These proposed pilot Community Information Centers might then serve as models for centers elsewhere.

File No. 93287 CTN National Technological Univ., 700 Centre Avenue, Fort Collins, CO 80526. Signed By: Dr. Lionel V. Baldwin, President. Funds Requested: \$341,467. Total Project Cost: \$616,467. To expand the services of the National Technological University by adding five channels of compressed digital video programming for distribution by Ku-band satellite. The equipment will permit the establishment of "on-demand" overnight delivery of instructional programming to students at their place of work.

#### CT (Connecticut)

File No. 93226 CRN Connecticut Radio Info. Service, 589 Jordan Lane, Wethersfield, CT 06109-1041. Signed By: Mr. David W. Judy, Executive Director. Funds Requested: \$66,150. Total Project Cost: \$100,500. To extend the Connecticut Radio Information System (CRIS) network by activating two satellite studios, one at 198 Main Street in Danbury, CT and one at the University of New Haven in West Haven, CT, and by activating an SCA transmitting facility in New London County in cooperation with WCNI-FM at Connecticut College in New London, which plans to provide the applicant with its SCA. Completion of this project would complete SCA service to all the major areas of the state.

File No. 93293 CTB Connecticut Public Brdcstg., Inc., 240 N. Britain Ave., Hartford, CT 06106-0240. Signed By: Mr. Jerry Franklin, President. Funds

Requested: \$227,371. Total Project Cost: \$454,742. To complete the move of the WEDW-TV studio from its former site at Harbor Plaza in Stamford to the Stamford Center for the Arts in downtown Stamford. WEDW-TV operates on Channel 49 in Bridgeport, CT. Requested equipment would provide stereo/DVS broadcast capability, studio cameras, character generator, a Beta VTR, master control switcher, additional m/w equipment necessary to reach the WEDW-TV transmitter, plus monitoring equipment, and related studio items.

#### DC (District of Columbia)

File No. 93060 CTN Video/Action Inc., 3034 Q Street, NW., Washington, DC 20007-. Signed By: Ms. Raeanne Hytone, Treasurer. Funds Requested: \$273,966. Total Project Cost: \$365,288. To establish a community-based, digital post-production studio facility that will create programming for local public television and nonbroadcast entities. Among its objectives would be the reconfiguration of traditional broadcast-style video programs into interactive programs for educational and institutional use nationwide.

File No. 93227 PTN CTNA Telecommunications, Inc., 3211 4th Street, NE., Washington, DC 20017-1194. Signed By: Ms. Christine Irvin, Acting President. Funds Requested: \$81,000. Total Project Cost: \$81,000. To plan for the expansion of the applicant's existing nationwide satellite service to serve the needs of immigrants and refugees. CTNA currently serves downlinks at 199 locations at diocesan centers, hospitals and colleges. The proposed service would provide services to immigrants and refugees by combining the educational capability of national television with already established community-based sites, such as parishes, churches and schools throughout America. The project would concentrate on five states, New York, Texas, Florida, California and Illinois, which receive the most immigrants and refugees. CTNA is owned by the United States Catholic Conference, but the programming would not be dogmatic and would be directed at the non-religious audience.

#### FL (Florida)

File No. 93001 CRB Bascomb Memorial Brdcstg. Fdn., 4848 SW., 74th Court, Miami, FL 33155. Signed By: Ms. Margarita Pelleyá, President. Funds Requested: \$20,139. Total Project Cost: \$26,852. To restore the services of community radio station WDNA-FM, 88.9 MHz, serving the Greater Miami area, through replacement of an

antenna, STL, and transmission line destroyed by Hurricane Andrew.

File No. 93010 PTN St. Petersburg Junior College, 6605 5th Avenue North, St. Petersburg, FL 33710-. Signed By: Mr. Carl M. Kuttler, President. Funds Requested: \$43,734. Total Project Cost: \$87,468. To plan for the possible expansion of an ITFS system in order for St. Petersburg Jr. College to reach community sites and groups that have a need for credit and non-credit distance learning courses. A planning grant would help the college identify the equipment and costs for an expanded nonbroadcast system that would provide distance learning opportunities for a number of professional, support and community groups, and "at risk" audiences in Florida's most densely-populated county—Pinellas County.

File No. 93025 CTB University of South Florida, 4202 Fowler Avenue, WRB 219, Tampa, FL 33620. Signed By: Mr. Richard B. Streeter, Director, Sponsored Research. Funds Requested: \$83,308. Total Project Cost: \$166,616. To improve the service of public television station WUSF-TV, Ch. 16, Tampa, FL, by replacing a worn-out 27-year-old transmission line and associated equipment. Failure in the present transmission line caused the station to be off the air for six days in 1992. WUSF-TV is one of two public television stations serving the 3.5 million residents of the Tampa area.

File No. 93043 CRB Florida State University, 2561 Pottsdamer Street, Tallahassee, FL 32310-. Signed By: Mr. Robert M. Johnson, Vice President for Research. Funds Requested: \$9,075. Total Project Cost: \$18,150. To improve the service of public radio station WFSQ-FM, 91.5 MHz, Tallahassee, FL, by replacing the present studio-to-transmitter (STL) microwave link, which is 18 years old and unreliable. The current STL employs dual Marti STL-8 microwave receivers and transmitters, with a 6-foot Marti transmit dish antenna and 8-foot Mark receive dish antenna; the new system will replace the analog Marti transmitters and receivers with a Mosely DSP6000/PCL6020 digital system. WFSQ-FM serves approximately 305,000 listeners in the Tallahassee area.

File No. 93048 CRB University of South Florida, 4202 Fowler Avenue, WRB 219, Tampa, FL 33620-6860. Signed By: Ms. Priscilla Pope, Assoc. Dir., Sponsored Res.: Funds Requested: \$69,112. Total Project Cost: \$138,223. To improve the service of public radio station WUSF-FM, 89.7 MHz, Tampa, FL, by installing a new transmission line and upgrading the antenna system.

The current transmission line is 27 years old and close to failure; the existing antenna system produces a broadcast signal coverage pattern inadequate to meet the needs of the station's listeners. WUSF-FM is one of two public radio stations serving 3 million listeners in the Tampa area.

File No. 93050 PRTN Miami-Dade Community College, 11011 SW., 104 Street, Miami, FL 33176-3393. Signed By: Dr. Robert McCabe, President. Funds Requested: \$80,250. Total Project Cost: \$138,575. To plan and conduct a feasibility study of existing and potential interactive telecommunications capabilities for distance learning applications in and around the greater Miami and Homestead, Florida areas. This planning project would examine telecommunications resources and explore alternative technologies to determine ways of providing interactive video, audio, and data distance learning and training services to a large population of ethnically and racially diverse people, many of them disadvantaged.

File No. 93112 CRB University of Florida, 219 Grinter Hall, Gainesville, FL 32611. Signed By: Mr. Dillard Marshall, Assistant Director. Funds Requested: \$93,937. Total Project Cost: \$188,874. To extend the service of public radio station WUFT-FM, 89.1 MHz, Gainesville, FL, by constructing a 2,500 watt repeater station to be located in Citronelle, FL, that would serve approximately 153,515 unserved listeners in Citrus County, as well as parts of Hernando and Sumter Counties. WUFT-FM currently serves approximately 1.4 million listeners in Gainesville, FL, and a 16-county area.

File No. 93153 CTN National Technical Association, 835 Sycamore Street, Titusville, FL 32780-. Signed By: Mr. Eric C. Green, President. Funds Requested: \$2,092,800. Total Project Cost: \$2,794,400. To purchase studio production and test equipment for the National Technical Association's community learning center in Brevard County, Florida. The production studio will be used to provide state-of-the-art training to the County's minority youth.

File No. 93160 CTN Florida Atlantic University, 500 N.W. 20th Street, Boca Raton, FL 33431-. Signed By: Dr. Stanley Andrews, Director of Sponsored Research. Funds Requested: \$116,524. Total Project Cost: \$233,048. To extend the ITFS service of Florida Atlantic University into the western Palm Beach County region, in and around the communities of Belle Glade, Pahokee, and South Bay. The application would also purchase a satellite receive-only

earth station and video classroom equipment.

File No. 93198 CRB University of Central Florida, 4000 Central Florida Boulevard, Orlando, FL 32816-2199. Signed By: Mr. Rusty Okoniewski, Dir., Div. of Sponsored Res. Funds Requested: \$112,695. Total Project Cost: \$150,260. To improve and expand the service of public radio station WUCF-FM, 89.9 MHz, Orlando, FL, by replacing the existing transmitter and antenna, increasing the power from 7.94 KW to 40 KW, effectively doubling the service area and providing additional public radio service to 325,495 listeners. The station also seeks to acquire an audio console, recorders, and related equipment. WUCF-FM is one of two public radio stations serving the Orlando area.

File No. 93235 CTB Florida Keys Educ Broadcasting, 909 Fleming Street, Key West, FL 33040-. Signed By: Mr. Charles P. Curry, President. Funds Requested: \$1,338,078. Total Project Cost: \$1,784,105. To activate public television station WWFD-TV, Ch. 8, Key West, FL, to serve approximately 85,000 permanent residents, 121,240 seasonal residents, 13,000 transient residents, and 2,000 outlying residents in Monroe County, FL, 85,047 of whom would be receiving first public television service. Monroe County consists of 43 islands stretching over 126 miles.

File No. 93288 CTB WJCT, Inc., 100 Festival Park Avenue, Jacksonville, FL 32202-1397. Signed By: Mr. Gene Napier, President and General Manager. Funds Requested: \$370,780. Total Project Cost: \$741,560. To improve the service of public television station WJCT-TV, Ch. 7, Jacksonville, FL, by replacing a 10-year-old, and badly worn-out, master control router, master control on-air switcher, video frame synchronizers, color monitors, modulation monitors, and a spectrum analyzer, in order to restore daily on-air broadcast and instructional services and allow activation and incorporation of an additional educational television technical facility now under construction. WJCT-TV serves approximately 1.3 million viewers in the Jacksonville area.

#### GA (Georgia)

File No. 93058 PTN Macon College, 100 College Station Drive, Macon, GA 31297-4899. Signed By: Dr. S. Aaron Hyatt, President. Funds Requested: \$19,736. Total Project Cost: \$20,736. To develop a comprehensive plan for a non-broadcast, two-way interactive video link between Macon College's main campus and its largest off-campus

center—Middle Georgia Area Technology Development Center (MGATDC). The proposed facility considered in the plan will provide college credit courses, in-service teacher education, non-credit continuing education courses, and programs that will supplement classroom instruction for elementary and secondary students. Funds are needed for a preliminary engineering design study that will help determine the feasibility, construction cost and operational expenses of a possible system, and to evaluate alternative technologies that may be appropriate.

File No. 93174 CRB GA Public Telecomm. Commission, 1540 Stewart Avenue, SW, Atlanta, GA 30310-. Signed By: Mr. Richard Ottinger, Executive Director. Funds Requested: \$80,168. Total Project Cost: \$160,336. To improve the service of public radio station WSVH-FM, 91.1 MHz, Savannah, GA, by replacing a worn-out transmitter, antenna, and transmission line. The present equipment was inherited by the Georgia Public Telecommunications Commission when it assumed ownership of the former community station in 1988. This equipment was poorly maintained and located on an inadequately grounded site; frequently lightning strikes have exacerbated the problem, causing the station to be off the air for more than 63 hours in 1992. WSVH-FM is one of nine stations affiliated with Peach State Public Radio and reaches approximately 740,000 listeners.

#### HI (Hawaii)

File No. 93254 CTN University of Hawaii, 2540 Maile Way, Spalding Hall 253, Honolulu, HI 96822-. Signed By: Dr. Moheb A. Ghali, Director of Research. Funds Requested: \$1,005,996. Total Project Cost: \$2,724,296. To extend the geographic coverage of the state's distance learning technologies and applications by integrating existing distance learning networks, expanding the capacity of the ITFS system, building new origination and receive sites, and sharing programming resources.

#### IA (Iowa)

File No. 93120 CRB Iowa State University, 204 Communications Building, Ames, IA 50011-. Signed By: Mr. Richard Hasbrook, Contracts & Grants Officer. Funds Requested: \$249,870. Total Project Cost: \$333,160. To improve the transmission capabilities of WOI-FM, operating on 90.1 MHz in Ames, IA, by replacing its 23-year-old transmitter, 20-year-old antenna and securing its own

microwave (because using WOI-TV's microwave will be unavailable shortly because this tv station is being sold to a commercial entity). Also, this project would improve the production capabilities of WOI-FM, by upgrading its digital and audio tape recorders. This project would enable WOI-FM to continue to serve as the sole provider of NPR, American Public Radio, Radio Reading Service and local programming to the 12-county area of central Iowa.

File No. 93147 CTB Iowa Public Broadcasting Board, 6450 Corporate Drive, Johnston, IA 50131. Signed By: Mr. George Carpenter, III, Executive Director. Funds Requested: \$164,000. Total Project Cost: \$328,000. To upgrade the programming capabilities of KDIN-TV, operating on Channel 11 in Johnston, IA, by replacing three ¾" video cassette machines with six Betacam machines and to expand the capabilities of the audio/video routing switcher. This project would improve the quality of the programs produced by this originating station of the Iowa Public Television State Network, serving over 2,776,755 potential viewers.

#### ID (Idaho)

File No. 93033 CRB Boise State University, 1910 University Drive, Boise, ID 83725. Signed By: Mr. Asa M. Ruyle, V.P./Finance & Administration. Funds Requested: \$367,731. Total Project Cost: \$490,308. To extend the signal of station KBSU-AM, 730 KHz, Boise, ID, to provide first public radio service to approximately 22,000 persons, comprised of those living on the Duck Valley Indian Reservation, the members of Idaho's largest concentration of Spanish-speaking people, and in small, widely scattered communities. The project will also equip KBSU-AM to transmit programs in stereo.

File No. 93238 CTN University of Idaho, Moscow, ID 83843-. Signed By: Mr. Jerry Reynolds, Assistant Financial VP. Funds Requested: \$1,153,099. Total Project Cost: \$1,706,564. To purchase equipment to provide video production and dissemination capabilities for the University of Idaho's National Center for Advanced Transportation Technology. The objective is to use distant learning technologies to transmit courses, seminars and other forms of technology transfer in transportation-related engineering to learning sites throughout the state. In part, the goal is to retrain engineers displaced from the aerospace, defense, and energy industries.

#### IL (Illinois)

File No. 93027 CRB WBEZ Alliance, Inc., 105 West Adams Street, Chicago, IL 60603-. Signed By: Ms. Carol R. Nolan, President. Funds Requested: \$27,500. Total Project Cost: \$55,000. To reinstate WBEZ's request to construct an STL link between WBEZ's new broadcast center at Navy Pier in Chicago, IL, with its transmitter on top of the John Hancock Center. The STL was withdrawn by amendment from the equipment list approved for grant #17-01-91227 when PTFP determined that the new facility would not be ready by the end of the grant's project period. WBEZ-FM operates on 91.5 MHz and serves over 7,300,000 residents in the greater metropolitan area of Chicago.

File No. 93042 CTB Eastern Illinois University, Charleston, IL 61920-. Signed by: Mr. David Jorns, President. Funds Requested: \$230,627. Total Project Cost: \$461,255. To improve the programming capabilities of WEIU-TV, operating on Channel 51 in Charleston, Illinois by replacing 3 TV studio cameras, pedestals and heads, production switcher, character generator, monitors, master control switcher and master control routing switcher. Project will improve the production of local programs for 242,000 potential viewers.

File No. 93106 CTB University of Illinois, 801 South Wright Street, Champaign, IL 61820-6242. Signed by: Mr. Craig Bazzani, Comptroller. Funds Requested: \$72,237. Total Project Cost: \$144,475. To improve the programming capabilities of WILL-TV, operating on Channel 12 in Champaign, IL, by replacing wornout, malfunctioning studio cameras in order to provide essential local programming services to approximately 1.3 million viewers.

File No. 93135 CTB Chicago Educational TV Assoc., 5400 North St. Louis Avenue, Chicago, IL 60625. Signed by: Mr. Martin J. McLaughlin, V.P. Corporate Affairs. Funds Requested: \$427,680. Total Project Cost: \$648,000. To improve the transmission capabilities of WTTW-TV, operating on Channel 11, in Chicago, Illinois, by replacing the 20-year old, malfunctioning transmitter to enable this flagship station to continue to serve the 10.5 million viewers in its coverage area.

File No. 93263 CTN Lake Land Community College Dist., 5001 Lake Land Boulevard, Mattoon, IL 61938-. Signed by: Mr. Robert K. Luther, President. Funds Requested: \$659,840. Total Project Cost: \$1,127,276. To purchase the equipment required to establish a two-way interactive, fiber

optic system that will interconnect the applicant and nine other entities in rural East Central Illinois. The system will provide diverse programming to other institutions of higher learning, public schools, a training facility, and a nursing center.

File No. 93283 CTB Southern Illinois University, 1048 Communications Bldg., SIU-C, Carbondale, IL 62901. Signed By: Mr. Benjamin A. Shepherd, Vice Pres. for Acad. Affairs. Funds Requested: \$99,980. Total Project Cost: \$199,960. To improve the programming capabilities of WSIU-TV, operating on Channel 8 in Carbonvale, Illinois, by replacing a grossly inadequate routing/switching system. The expanded system requested would enable WSIU-TV to take full advantage of its current production and satellite capabilities and alleviate problems in facilities scheduling.

File No. 93296 CTB Southern Illinois University, 1048 Communications Bldg., SIU-C, Carbondale, IL 62901. Signed By: Mr. Benjamin Shepherd, Vice President. Funds Requested: \$97,157. Total Project Cost: \$194,314. To improve the program production capability of WUSI-TV, operating on Channel 16 in Olney, IL, by replacing wornout and malfunctioning VTR's for master control, for studio and field production and replace an editing system and character generator. This project would make critical improvements in the quality of the WUSI-TV's broadcast service.

#### IN (Indiana)

File No. 93089 CTB Metropolitan Indianapolis TV, 1401 North Meridian Street, Indianapolis, IN 46202-2389. Signed By: Mr. Lloyd Wright, President and General Manager. Funds Requested: \$250,000. Total Project Cost: \$500,000. To improve the operational capability of public television station WFYI-TV, Ch. 20, Indianapolis, IN, by replacing worn-out and obsolete production and test equipment, including video tape recorders and an editor, a still store, camcorders, and a spectrum analyzer.

File No. 93138 CTB Southwest IN Pub. Broad, Inc., 405 Carpenter Street, Evansville, IN 47708-1027. Signed By: Mr. David L. Dial, President and General Manager. Funds Requested: \$56,695. Total Project Cost: \$113,391. To improve the operation of public television station WNIN-TV, Ch. 9, Evansville, IN, by replacing worn-out and obsolete production and test equipment, including videotape recorders, monitors, waveform vectorscopes, an oscilloscope, and a modulation monitor.



File No. 93149 CRB Purdue University, West Lafayette, IN 47907. Signed By: Mr. Larry E. Pherson, Contract Administrator. Funds Requested: \$22,500. Total Project Cost: \$45,000. To install an emergency generator at public radio station WBAA-FM, 101.3 MHz, West Lafayette, IN.

File No. 93249 CRB Purdue University, West Lafayette, IN 47907. Signed By: Mr. Larry E. Pherson, Contract Administrator. Funds Requested: \$30,000. Total Project Cost: \$60,000. To replace an emergency power generator at public radio station WBAA-AM, 920 KHz, West Lafayette, IN.

#### KS (Kansas)

File No. 93164 CTB Kansas Public TC Service, Inc., 320 West 21st St. N., Wichita, KS 67203-. Signed By: Mr. Zoel Parenteau, President/General Manager. Funds Requested: \$41,790. Total Project Cost: \$83,580. To improve the facilities of public television station KPTS-TV, Channel 8, in Wichita by acquiring a new character generator, four video tape machines and an edit controller. Requested equipment will replace old, obsolete equipment that is causing the station recurring problems. Station serves approximately 387,773 residents plus those that receive service via cable television.

File No. 93260 CTB Washburn University of Topeka, 301 N. Wanamaker Rd., Topeka, KS 66606-9601. Signed By: Mr. Hugh L. Thompson, President. Funds Requested: \$431,675. Total Project Cost: \$575,567. To improve the facilities of public television station KTWU-TV, Channel 11, in Topeka by acquiring key items of broadcast dissemination and origination equipment in conjunction with a planned move to a new building under construction on the campus. In addition to acquiring replacement equipment of old, obsolete equipment, station will begin the first steps in implementing stereo conversion. KTWU-TV provides service to about 1.25 million residents of its service area.

File No. 93271 CTB Smoky Hills Public Television, 604 Elm, Bunker Hill, KS 67626-. Signed By: Mr. Nicholas V. Slechta, CEO and General Manager. Funds Requested: \$142,800. Total Project Cost: \$238,000. To improve and augment the facilities of public television station KOOD-TV, Channel 9, in Hays by acquiring equipment that would permit the use of the secondary audio programming (SAP) channel. This would provide separate audio to the approximately 22,000 Hispanics and Descriptive Video Services (DVS) to the

sight-impaired in the station's service area.

File No. 93272 CRB Univ. of Kansas, 1120 W. 11th Street, Box 847, Lawrence, KS 66044-. Signed By: Ms. Kim Mooreland, Director. Funds Requested: \$8,076. Total Project Cost: \$10,768. To extend a radio reading service for the print-handicapped to public radio station KXCV-FM, 90.5 MHz, in Maryville, Missouri by acquiring a SCA generator/audio processor, a satellite demodulator, 50 SCA radio receivers and a SCA demodulator/test card. This project would extend the University of Kansas Audio-Reader Network to an unserved area in northwest MO.

#### KY (Kentucky)

File No. 93104 CTN City of Bowling Green, 1001 College Street/P.O. Box 430, Bowling Green, KY 42102-0430. Signed By: Mr. Johnny D. Webb, Mayor. Funds Requested: \$12,412. Total Project Cost: \$24,825. To equip a small production facility for the City of Bowling Green, KY, for use on the government access channel on the local cable television system. The facility will be used to accommodate the needs of the deaf and hard of hearing and to produce programming to serve the interests of the community's Asian-American populations.

File No. 93169 CTB Kentucky Educational Television, 600 Cooper Drive, Lexington, KY 40502. Signed By: Ms. Virginia G. Fox, Executive Director. Funds Requested: \$287,113. Total Project Cost: \$382,818. To improve the operations of the statewide Kentucky Authority for Educational Television by replacing worn-out and obsolete transmission, production, and test equipment, including digital videotape recorders, audio processors, line regulators, cart players, studio monitors, waveform monitors, oscilloscopes, and field strength meters. KET operates 15 transmitters and 8 translators across Kentucky.

#### LA (Louisiana)

File No. 93034 CTN New Orleans Educ. T/C Consortium, 1215 Prytanian Street, Suite 205, New Orleans, LA 70130-. Signed By: Dr. Robert J. Lucas, Executive Director. Funds Requested: \$98,657. Total Project Cost: \$148,612. To purchase portable production and interconnect equipment to allow the applicant to originate programming from any site throughout its system. The New Orleans Educational Telecommunications Consortium comprises seven members, all colleges and universities in greater New Orleans. The schools are interconnected via ITFS and cable television systems to each

other and to business sites throughout the area. All member-schools have production equipment. This project would allow the production of programming from any of the business sites.

File No. 93035 CTB Greater New Orleans ETV Found., 916 Navarre Avenue, New Orleans, LA 70124-. Signed By: Mr. Randall Feldman, President and General Manager. Funds Requested: \$91,397. Total Project Cost: \$182,793. To improve service of public television station WYES-TV, Ch. 12, New Orleans, LA, by replacing two outmoded and obsolete 1" VTRs with state-of-the-art digital machines. WYES-TV is one of two public television stations serving the 1.75 million residents of the New Orleans area.

File No. 93088 PRTB Greater New Orleans Compact, 4440 Jefferson Highway, Jefferson, LA 70121-1309. Signed By: Ms. Carolyn Sanders-O'Hare, Managing Partner. Funds Requested: \$37,430. Total Project Cost: \$87,130. To plan for six school systems' use of satellite uplinking to communicate and share with the nation ideas and innovations for cost effective and productive management, and effective learning techniques of local school districts through a series of ongoing teleconferences.

File No. 93269 CRB Univ. of Southwest Louisiana, Hebrard Blvd, P.O. Box 42171, Lafayette, LA 70504-. Signed By: Dr. Ray Authement, President. Funds Requested: \$159,634. Total Project Cost: \$212,846. To extend the signal of public radio station KRVS-FM, 88.7 MHz, Lafayette, LA, by constructing a repeater/satellite station in the area of Lake Charles, LA, in order to provide first public radio service to 151,800 listeners in the parishes of Calcasieu, Beauregard, Laaen, Jeff David, Cameron, and Acadia. This is approximately 23% of the unserved residents of Louisiana. KRVS-FM currently serves approximately 480,000 listeners in southwest Louisiana.

#### MA (Massachusetts)

File No. 93007 PRNT Newton Public Schools, 100 Walnut Street, Newton, MA 02160-. Signed By: Mr. Irwin Blumer, Superintendent. Funds Requested: \$54,000. Total Project Cost: \$108,000. To plan for the coordinated use of telecommunications systems in the city of Newton, Massachusetts, through a Telecommunications Master Plan. This proposed plan is to identify existing resources and provide a needs assessment regarding the use of telecommunications in distance learning applications for the school system, municipal government,

educational and cultural institutions, and city residents in general.

File No. 93140 PTN Mass. Corp. for Educational T/C, 38 Sidney Street, Suite 300, Cambridge, MA 02139-4135. Signed By: Dr. Inabeth Miller, Executive Director. Funds Requested: \$200,000. Total Project Cost: \$424,909. To plan for the feasibility of interactive telecommunications methods for video, voice and data through an interconnection system to educational institutions, libraries, government agencies, prisons, hospitals and other organizations statewide and beyond. The proposed network could potentially incorporate many forms of technology including satellite systems, ITFS, cable television and fiber optic lines for multiple channels of distribution.

File No. 93141 CTN Bunker Hill Community College, 250 New Rutherford Avenue, Boston, MA 02129. Signed By: Mr. C. Scully Stikes, President. Funds Requested: \$306,815. Total Project Cost: \$409,086. To interconnect three community colleges in the greater Boston area with fiber optics cable and with video classroom equipment to allow them to engage in distance learning. The schools are Bunker Hill Community College, Roxbury Community College, and North Shore Community College/Lynn Campus.

File No. 93142 CRB Lower Cape Communications, Inc., 14 Center Street, Provincetown, MA 02657-. Signed By: Mr. Erraon W.H. Perry, Station Manager. Funds Requested: \$78,612. Total Project Cost: \$104,817. To improve the transmission and production capabilities of WOMR-FM, operating on 91.9 MHz in Provincetown, MA, by replacing the worn out transmitter, acquiring the essential satellite downlink, and replacing the main on-air and production studio equipment, especially the audio console.

File No. 93178 CTB WGBH Educational Found., WGBY, 44 Hampden Street, Springfield, MA 01103. Signed By: Mr. Steven Bass, VP and General Manager. Funds Requested: \$173,586. Total Project Cost: \$347,173. To upgrade the programming capabilities of WGBY-TV, operating on channel 57 in Springfield, MA, by replacing its 13 year old, inadequate routing switcher which will enable WGBY to distribute additional programs for the visually-impaired that use the "Descriptive Video Service", and adding an automation system capable of controlling the distribution of multiple program services to schools and institutions. Both items account for the

increase of an estimated 123,788 viewers.

File No. 93225 CRB University of Massachusetts, 100 Morrissey Boulevard, Boston, MA 02125-3393. Signed By: Mr. David Edwards, Associate Vice Chancellor. Funds Requested: \$43,000. Total Project Cost: \$58,009. To extend the signal of WUMB-FM, operating on 91.9 MHz, in Boston, MA, by activating a transmitter and antenna to provide the first public radio signal for greater Falmouth, MA, which will receive the signal on the same frequency, 91.9 MHz. WUMB will provide 20 hours of programming daily to a potential unserved 40,517 listeners.

File No. 93267 PRTN Bridgewater State College, Bridgewater, MA 02325-. Signed By: Dr. John Bardo, Vice President, Academic Aff. Funds Requested: \$90,318. Total Project Cost: \$90,318. To develop a strategic plan for the operation of the Center for the Advancement of Research and Teaching to serve Southeastern Massachusetts. The Center is intended to use telecommunications for distance learning and job training services through technologies such as satellite uplink and downlink facilities and fiber optic lines. A consortium has been formed that includes ten organizations in education, public service, telecommunications and business to develop the concept of a Total School Network, to incorporate video, voice and data services into education and training.

#### MD (Maryland)

File No. 93013 CTN Catonsville Community College, 800 South Rolling Road, Catonsville, MD 21228-. Signed By: Mr. Frederick J. Walsh, President. Funds Requested: \$257,402. Total Project Cost: \$514,805. To interconnect five Baltimore region community colleges and two extension centers in a compressed video network to extend distance learning.

File No. 93068 PRTN National Info Technology Center, 2092 Gaither Road, Suite 200, Rockville, MD 20850-. Signed By: Mr. Henry Schlenker, VP--Operations. Funds Requested: \$91,260. Total Project Cost: \$238,260. To plan for the possible interconnection of a number of secondary schools in Maryland for interactive video, voice and data communications, to explore "test bed" possibilities using various educational technology applications, provide teacher training and curriculum enhancements in science and mathematics, and consider the implementation of a "virtual high school" with many member institutions without having to build a high school.

Participants in the plan with the National Information Technology Center (NITC) include the University of Maryland, Johns Hopkins University, the Supercomputing Research Center, AT&T, IBM, C&P Telephone, and twenty-two other educational and corporate members of the project.

File No. 93076 CRB Baltimore City Community College, 2901 Liberty Heights Avenue, Baltimore, MD 21215. Signed By: Mr. Carey Smith, General Manager. Funds Requested: \$14,760. Total Project Cost: \$29,570. To improve the service of public radio station WBJC-FM, 91.5 MHz, Baltimore, MD, by replacing a master control room console and purchasing 5 digital audiotape (DAT) recorders to replace deteriorating equipment originally purchased in 1982 and 1984. WBJC-FM serves 2.1 million listeners in the Baltimore area with a schedule consisting of news and information and classical music.

File No. 93108 CRB Salisbury State University, Route 13 P.O. Box 2596, Salisbury, MD 21801. Signed By: Mr. Henry Hanna, III, Chairman. Funds Requested: \$83,871. Total Project Cost: \$111,828. To extend the service of public radio station WSCL-FM, 89.5 MHz, Salisbury, MD, by constructing a repeater station at Millington, MD, bringing first public radio service to 70,000 residents of northern Delaware and the northern Eastern Shore of Maryland. WSCL-FM currently serves approximately 280,000 listeners in the lower half of Delaware and all or part of Worcester, Wicomico, Somerset, Dorchester, Caroline, Talbot, and Queen Anne's Counties on Maryland's Eastern Shore.

File No. 93115 PTN Maryland Public Brdcstg. Comm., 11767 Owings Mills Boulevard, Owings Mills, MD 21117. Signed By: Mr. Raymond Ho, President and CEO. Funds Requested: \$85,850. Total Project Cost: \$159,276. To prepare a comprehensive plan for the use of telecommunications technologies in distance education applications in the State of Maryland. The proposed project would include organizations in all levels of education, with a particular emphasis on providing a two-way interactive video, voice and data service to minority K-12 students and those in remote, rural areas. It would also provide education and training opportunities to adults in these rural areas. The plan will examine the feasibility of alternative technologies to interconnect fourteen sites throughout the state, and is proposed to result in a solution to the educational equity problem in Maryland.

File No. 93156 CTB Maryland Public Brdcstg. Comm., 11767 Owings Mills Boulevard, Owings Mills, MD 21117. Signed By: Mr. Raymond Ho, President and CEO. Funds Requested: \$123,942. Total Project Cost: \$247,885. To allow Maryland Public Television to modify its receive-only Ku satellite earth station to a transmit/receive Ku satellite system. Such a modification will allow Maryland Public Television to continue to supply programming to its member stations in Maryland, to the PBS system (which is scheduled to begin using the Telstar 401 satellite in December, 1993), and internationally. Maryland Public Television is the fourth largest producer and supplier of programs to the nation's public broadcasting system.

#### ME (Maine)

File No. 93275 CTB Maine Public Broadcasting Corp., 65 Texas Avenue, Bangor, ME 04401. Signed By: Mr. Robert Gardiner, President. Funds Requested: \$275,604. Total Project Cost: \$459,340. To improve the transmission capabilities of all five Maine network stations: WMEB-TV in Bangor, WMEA-TV in Portland, WCBB-TV in Lewiston, WMED-TV in Calais, and WMEM-TV in Mars Hill, by replacing the 20 year old modulator at Portland, the monitoring equipment in the transmitting plants at Lewiston and Bangor, plus stereo generators for SAP at Calais, Mars Hill, and Bangor and test equipment throughout the system; to improve the programming capabilities at the mother station, WMEB, Bangor, by replacing the 24 year old studio cameras and upgrading the routing system. This project will improve the overall service to the 1,200,000 residents in Maine by this state-wide network.

File No. 93281 CRB Maine Public Broadcasting Corp., 65 Texas Avenue, Bangor, ME 04401. Signed By: Mr. Robert H. Gardiner, President. Funds Requested: \$67,920. Total Project Cost: \$113,200. To improve the transmission capabilities of the Maine Public Broadcasting Radio Network by replacing the transmitter, stereo generator, transfer coaxial switch and digital encoder STL; to improve the origination capabilities of the network by securing RDAT machines, and frequency extenders in order to provide an uninterrupted signal and quality programming to the entire state of Maine numbering 1,200,000 residents.

#### MI (Michigan)

File No. 93004 CTN Clare-Gladwin Intermed. Sch. Dist., 4041 East Mansing Road, Clare, MI 48617-. Signed By: Dr. George R. Zubulake, Superintendent. Funds Requested:

\$742,659. Total Project Cost: \$1,027,659. To construct a two-way, interactive fiber optics video system to interconnect school districts in a five-county area of central Michigan. For this project, the applicant will be joined by the Clinton County Intermediate School District, Gratiot-Isabella Regional Education Service District, Mid Michigan Community College, and Central Michigan University.

File No. 93028 CRB Blue Lake Fine Arts Camp, Route 2, Twin Lake, MI 49457. Signed By: Mr. William F. Stansell, President. Funds Requested: \$8,794. Total Project Cost: \$17,588. To improve the operational quality of public radio station WBLV, 90.3 MHz, Twin Lake, MI, by replacing a worn-out and obsolete audio console.

File No. 93090 CTB Grand Valley State University, 301 West Fulton, Grand Rapids, MI 49504-6492. Signed By: Ms. Jean Enright, Secretary, Board of Control. Funds Requested: \$391,808. Total Project Cost: \$783,616. To improve the operation of public television station WGVU-TV, Ch. 35, Grand Rapids, MI, by replacing worn-out and obsolete videotape recorders, monitoring equipment, an automation system, and test equipment.

File No. 93116 CTB Michigan State University, 283 Communications Arts Bldg., East Lansing, MI 48824-1212. Signed By: Mr. Richard L. Howe, Asst Dir, Contract & Grant Adm. Funds Requested: \$332,174. Total Project Cost: \$664,348. To improve the operational capability of public television station WKAR-TV, Ch. 23, East Lansing, MI, by replacing worn-out and obsolete audio and video distribution equipment, including routing, master control, synchronization, and automation systems.

File No. 93179 CRB Central Michigan University, 3965 East Broomfield Road, Mt. Pleasant, MI 48859. Signed By: Mr. Leonard E. Plachta, President. Funds Requested: \$380,980. Total Project Cost: \$507,974. To activate a public radio station to bring first public radio service to approximately 51,501 persons in and around Oscoda, MI. The station will repeat the programming of public radio station WCMU, 89.5 MHz, Mt. Pleasant, MI.

File No. 93185 CTB Central Michigan University, 3965 East Broomfield Road, Mt. Pleasant, MI 48859. Signed By: Mr. Leonard E. Plachta, President. Funds Requested: \$142,000. Total Project Cost: \$284,000. To improve the broadcast signal of public television station WCMU-TV, Ch. 14, Mt. Pleasant, MI, by replacing its 27-year-old antenna and transmission line.

File No. 93208 CRTN Wayne Co. Regnl. Ed. Service Agency, 33500 Van Born Road, Wayne, MI 48184-. Signed By: Mr. William Simmons, Superintendent. Funds Requested: \$1,207,719. Total Project Cost: \$1,610,292. To purchase diverse transmission, interconnection and studio equipment to assist the applicant interconnect the 34 school districts of Wayne County, which includes Detroit, with a telecommunications system that will include six video instructional classrooms, a satellite uplink earth station and 34 satellite receive-only downlinks, an FM radio station, and an ITFS system.

#### MN (Minnesota)

File No. 93118 CTB Northern Minnesota Public TV, Inc., 1400 Birchmont Drive, Bemidji, MN 56601-2699. Signed By: Ms. Emily K. Lahti, Interim General Manager. Funds Requested: \$42,912. Total Project Cost: \$57,216. To improve the operation of public television station KAWE, Ch. 9, Bemidji, MN, by replacing worn-out and malfunctioning video tape recorders and monitors.

File No. 93183 CTN Saint Mary's College of Minnesota, 700 Terrace Heights, Winona, MN 55987-. Signed By: Br. Louis DeThomasis, FSC, President. Funds Requested: \$565,416. Total Project Cost: \$1,130,832. To construct a compressed video network to allow eight colleges and universities within Minnesota to exchange undergraduate course work. The academic institutions to be interconnected are the following: Saint Mary's College of Minnesota, with campuses in Winona and Minneapolis; Bethel College, College of Saint Catherine, and University of St. Thomas, all in St. Paul; College of St. Benedict, St. Joseph; College of St. Scholastica, Duluth; and Saint John's University, Collegeville.

File No. 93184 CTB West Central Minn. Educ. TV Corp., 120 West Schlieman Avenue, Appleton, MN 56208. Signed By: Mr. Phil Greseth, President. Funds Requested: \$1,245,497. Total Project Cost: \$2,490,995. To activate a public television repeater station on Channel 20 in Worthington, MN, to provide approximately 84,284 persons in southwest Minnesota with their first Minnesota-originated public television service. It will rebroadcast the service of public television station KWCM, Ch. 10, Appleton, MN.

File No. 93273 CRB Center for Communications & Dev., 501 Bryant Avenue, North, Minneapolis, MN 55405. Signed By: Mr. Ronald A. Edwards, President. Funds Requested:

\$39,370. Total Project Cost: \$52,495. To improve the program service of public radio station KMOJ, 89.9 MHz, Minneapolis, MN, by acquiring a downlink interconnection with the public radio satellite system.

File No. 93289 CRB Minnesota Public Radio, Inc., 45 East 7th Street, St. Paul, MN 55101. Signed By: Mr. Thomas J. Kigin, Vice President. Funds Requested: \$355,859. Total Project Cost: \$711,719. To improve the signal and service of Minnesota Public Radio by replacing aged, worn-out, and obsolete production equipment used to provide 24-hour-a-day programming for regional and national broadcast. Included are audio consoles, microphones, tape decks, CD players, and a music editing workstation.

#### MO (Missouri)

File No. 93005 CTB Ozark Public T/ C, Inc., 821 North Washington, Springfield, MO 65802. Signed By: Mr. Arthur J. Luebke, President and General Manager. Funds Requested: \$550,483. Total Project Cost: \$733,978. To extend the service area of public television station KOZJ, Ch. 26, Joplin, MO, by replacing its transmitter and raising the power from 5KW to 30KW, thereby providing first public television service to approximately additional 103,563 persons.

File No. 93109 CTB Public Television 19, Inc., 125 East 31st Street, Kansas City, MO 64108. Signed By: Mr. William T. Reed, President. Funds Requested: \$245,950. Total Project Cost: \$491,000. To improve public television station KCPT, Ch. 19, Kansas City, MO, by replacing worn-out and obsolete studio cameras, 3/4-inch videotape recorders, and its studio-transmitter link.

File No. 93146 CRB Univ. of Missouri—St. Louis, 8001 Natural Bridge Road, St. Louis, MO 63121. Signed By: Mr. Douglas Wartzok, Associate Vice Chancellor. Funds Requested: \$21,840. Total Project Cost: \$43,680. To improve public radio station KWMU, 90.7 MHz, St. Louis, MO, by replacing worn-out and obsolete production equipment, including an audio console, an audio processor, and a switcher.

File No. 93201 CTB Ozark Public T/ C, Inc., 821 North Washington, Springfield, MO 65802. Signed By: Mr. Arthur J. Luebke, President and General Manager. Funds Requested: \$419,008. Total Project Cost: \$838,016. To improve the service and signal reliability of public television station KOZJ, Ch. 21, Springfield, MO, by replacing its obsolete, 19-year-old transmitter.

File No. 93242 CRB Missouri Valley College, 500 East College Street, Marshall, MO 65340-. Signed By: Dr. Earl J. Reeves, President. Funds Requested: \$104,099. Total Project Cost: \$138,798. To extend the signal of public radio station KMVC, 91.7 MHz, Marshall, MO, to approximately 25,000 persons by replacing its 19-year-old transmitter and increasing its power from 10 watts to 3 KW. KMVC-FM is a service of Missouri Valley College, and currently serves approximately 10,000 listeners in central Missouri. The power increase would allow the station to serve the cities of Marshall, Slater, Malta Bend, Arrow Rock, and Sweet Springs, all located in Saline County, MO.

File No. 93278 CTB St. Louis Reg. Educ. Public TV, 6996 Millbrook Blvd., St. Louis, MO 63130. Signed By: Mr. Michael Hardgrove, President and CEO. Funds Requested: \$325,362. Total Project Cost: \$650,725. To improve the operation of public television station KETC, Ch. 9, St. Louis, MO, by replacing worn-out and obsolete video cassette machines and by acquiring automation equipment.

#### MS (Mississippi)

File No. 93012 CTB Jackson State University, 1375 Lynch Street, Box 18590, Jackson, MS 39217-0990. Signed By: Mr. James E. Lyons, Sr., President. Funds Requested: \$1,171,942. Total Project Cost: \$1,562,589. To support the activation of a Low Power television station in Jackson, MS, to be used to train students in the Department of Mass Communication at Jackson State University in all phases of broadcasting, as well as to provide special programming to the approximately 27,000 persons within the proposed station's signal area.

File No. 93134 PTN University of Mississippi, University, MS 38677. Signed By: Dr. Michael R. Dingerson, Assoc. Vice Chancellor/Res. Funds Requested: \$112,092. Total Project Cost: \$145,571. The University of Mississippi, in conjunction with the Southern Educational Communications Association, proposes a planning project for the creation of a telecommunications infrastructure to distribute workplace literacy, education, and training to the people of Mississippi and to other states in the South, and the nation. The project would expand on the applicant's existing Ku-band satellite uplink which distributes life-coping skills, job preparedness and literacy programming to areas of Mississippi.

File No. 93246 CTB University of Mississippi, 201 Bishop Hall, University, MS 38677. Signed By: Dr.

Michael R. Dingerson, Assoc. Vice Chancellor/Res. Funds Requested: \$60,000. Total Project Cost: \$120,000. To continue the improvement and expansion of the Teleproductions Resource Center of the University of Mississippi, Oxford, by acquiring electronic field production, ENG, and post-production equipment. The Center provides instructional and other programming to the Mississippi Educational Television Network.

#### MT (Montana)

File No. 93029 CTB Plains—Paradise TV District, 417 Rittenour Street, Plains, MT 95859-. Signed By: Mr. Leo S. Rambur, Chairman. Funds Requested: \$47,194. Total Project Cost: \$62,925. To upgrade and improve the production and post-production capabilities of noncommercial low power television station K21CA operating on channel 21 in Plains, Montana, by replacing their present 3/4" production equipment with a new video editing system, cameras, a video production switcher and related items.

File No. 93030 CRB Montana State University, 325 Strand Union Building, Bozeman, MT 59717. Signed By: Mr. Philip H. Charles, IV, General Manager. Funds Requested: \$5,440. Total Project Cost: \$10,880. To extend the signal of public radio station KGLT-FM operating on 91.9 MHz, Bozeman, Montana, by installing a translator in Helena which will provide an alternative public radio service to 60,000 residents of Lewis and Clark county.

File No. 93062 CTB Baker School District #12, 1015 S. 3 West, Baker, MT 59313-. Signed By: Mr. James Stanton, Superintendent. Funds Requested: \$36,810. Total Project Cost: \$49,080. To extend the signal of the RTS low power television station in Plevna, Montana, by feeding the signal via fiber optic cable to a low power transmitter in Baker, Montana, to provide a first public television service to 1,800 residents of Fallon county.

File No. 93077 CRB Fort Belknap College, P.O. Box 159, Harlem, MT 59526-. Signed By: Ms. Margaret Perez, President. Funds Requested: \$562,106. Total Project Cost: \$775,775. To establish a native controlled noncommercial FM radio station operating on 88.1 MHz in Harlem, Montana, to provide a first public radio service to 25,000 residents of north central Montana.

File No. 93078 CTN Stone Child College, Rocky Boy Route, Box 1082, Box Elder, MT 59521-. Signed By: Ms. Peggy Nagel, President. Funds Requested: \$83,250. Total Project Cost:

\$111,000. To utilize video satellite uplink technology to broadcast telecourses to residents of the Rocky Boy Indian Reservation, which is in an extremely remote area of north central Montana.

File No. 93110 CTBN Powder River Co. Dist. High School, 500 North Trautman, Broadus, MT 59317-. Signed By: Mr. George Bailey, Superintendent. Funds Requested: \$735,724. Total Project Cost: \$980,965. To interconnect the applicant with the Rural Television System, Inc., (RTS), which has its headquarters in Carson City, NV, so as to bring the first PBS signal to this area of southeast Montana. Via a donated fiber optic line, the PBS programming will be transmitted to numerous communities in the Broadus-Colstrip-Miles City region. The project will also allow distance learning course work to be transmitted between schools at all levels within this region and between these schools and academic institutions throughout the state. The project involves the Southeast Montana Telecommunications Cooperative, which is an organization composed of eight public school districts and two community colleges.

File No. 93145 CTB Rural Television System, Inc., P.O. Box 84, Cardwell, MT 59721. Signed By: Mr. David Nelson, Board President. Funds Requested: \$274,774. Total Project Cost: \$366,365. To upgrade the satellite reception and message processing facilities of 19 low power television stations serviced by Rural Television Systems, Inc., the sites are located throughout 5 western states. Existing C band receiver will be replaced by movable Ku band dishes and CPM processors will be replaced by MS-DOS processor at each site.

#### NC (North Carolina)

File No. 93039 CRB University Radio Foundation, Inc., One University Place, Suite 91, Charlotte, NC 28262-. Signed By: Mr. Roger Sarow, President. Funds Requested: \$160,572. Total Project Cost: \$214,096. To provide first public service to approximately 47,672 residents of Hickory, NC, by constructing a repeater transmitter to rebroadcast the signal of public radio station WFAE-FM, Charlotte, NC. The community to be served lies in the foothills of the Blue Ridge Mountains, and is just far enough from existing public radio stations to make reception of service difficult or impossible.

File No. 93071 CTN Pembroke State University, Pembroke, NC 28372. Signed By: Mr. Joseph B. Oxendine, Chancellor. Funds Requested: \$123,131. Total Project Cost: \$164,175. To purchase two microwave links to

interconnect the applicant's production studio to the cable television system at Lumberton, NC, and to commercial television station WFCT, Lumber Bridge, NC. The project will also purchase a portable microwave system to allow the applicant to originate programming from sites throughout the school's service area.

File No. 93081 CRB Better Life, Inc., 230-B Roanoke, Roanoke Rapids, NC 27870-. Signed By: Mr. Kenneth Harris, President. Funds Requested: \$201,078. Total Project Cost: \$269,078. To activate a new public radio station, WZRU-FM, 88.5 MHz, in Roanoke Rapids, NC, to serve the northeastern corner of North Carolina, including Halifax and Northampton Counties. Approximately 160,000 persons would receive first service. The proposed station would serve the area previously served by WVSP-FM, Warrenton, NC, which has ceased operations.

File No. 93085 CRB University of North Carolina, CB No. 6230 Swain Hall, Room 205, Chapel Hill, NC 27599-6230. Signed By: Mr. Robert Lowman, Director, Off. Res. Services. Funds Requested: \$270,350. Total Project Cost: \$540,700. To improve and extend the service of public radio station WUNC-FM, 91.5 MHz, Chapel Hill, NC, by installing a new antenna, transmission line, STL, transmitter, and STL tower. The upgrade of the station's transmission system is part of a major construction project which also involves construction of a new broadcast facility, beginning in 1993. The improved transmission system will bring first public radio service to 70,270 listeners, and provide additional service to 133,627 listeners. The proposal also seeks to install a new satellite uplink/downlink to maintain interconnection to the public radio system. WUNC-FM currently serves 1.341 million listeners in central North Carolina.

File No. 93295 CTB University of North Carolina, Box 14900, 10 T.W. Alexander Dr., Research Triangle, NC 27709-4900. Signed By: Mr. Tom Howe, Director. Funds Requested: \$1,500,000. Total Project Cost: \$3,628,200. To improve and extend the service of public television station WUNC-TV, Ch. 4, Chapel Hill, NC, by replacing an obsolete tower (and increasing its height from 750' to 1,250'), transmitter, antenna, and transmission line. The current tower has been in use since 1955 and is rusting and worn-out; the current transmitter and transmission system were purchased two years ago as a temporary replacement for a 26-year-old RCA transmitter that was no longer serviceable. The present transmitter, though clearly inadequate for the needs

of the station, can be refurbished and used as a backup. WUNC-TV serves approximately 2.4 million viewers; by replacing the transmission system, approximately 400,000 additional viewers will receive first service.

#### ND (North Dakota)

File No. 93170 CTN Central Dakota T/C Consortium, 120 2nd Street S.E., Jamestown, ND 58401-. Signed By: Mr. Frank Fischer, Chairperson. Funds Requested: \$550,000. Total Project Cost: \$795,078. To construct an 11-site ITFS system that will constitute the Central Dakota Rural Area Network. The Network will serve 11 public school districts that have organized the consortium, primarily, to provide interactive video programming for K-12 schools, but with the intent to interconnect with business, industry, medical and government users.

File No. 93195 CTN Turtle Mountain Community College, Box 340, Belcourt, ND 58316-. Signed By: Mr. Gerald Monette, President. Funds Requested: \$76,921. Total Project Cost: \$102,563. To purchase studio and compressed video interconnection equipment to allow Turtle Mountain Community College—which serves the Turtle Mountain Chippewa Reservation in north central North Dakota—to link its facilities to the University of North Dakota fiber optics system so as to be able to receive course work transmitted via that system.

File No. 93230 CTB Prairie Public Broadcasting, Inc., P.O. Box 3240, 207 N. 5th St., Fargo, ND 58108-3240. Signed By: Mr. Dennis Falk, President. Funds Requested: \$34,246. Total Project Cost: \$68,493. To acquire additional television production equipment required to produce and distribute via satellite the nation's first "distance learning" Level III Spanish course for high school students.

#### NE (Nebraska)

File No. 93075 CRB Native American Public Brdcstg., 1800 North 33rd Street, Room 309, Lincoln, NE 68583-. Signed By: Mr. Frank Blythe, Executive Director. Funds Requested: \$34,401. Total Project Cost: \$45,869. To purchase C-band satellite downlink terminals to permit four Native American public radio stations to receive programming from the AIROS (American Indian Radio on Satellite) Project. The AIROS project will distribute programming to public radio stations by and about Native Americans and of interest to Native Americans. The four stations included in this application are: KCIE, Dulce, NM; KGHR, Tuba City, AZ; KIDE, Hoopa, CA; and KSWS, Sisseton, SD.

File No. 93239 CTB Nebraska Educ. T/C Commission, P.O. Box 83111, 1800 N. 33rd St., Lincoln, NE 68501-3111. Signed By: Mr. Paul Few, Assistant Secretary. Funds Requested: \$295,250. Total Project Cost: \$590,500. To improve the facilities of public television station KHNE-TV, Channel 29, in Hastings by replacing a twenty-five year old RCA transmitter and related items. The current RCA transmitter can not be updated to current technology. In addition, project will replace old, obsolete post-production videotape recording equipment with four state-of-the-art digital recorders. Equipment will serve the state public television network as well as regional and national program services.

File No. 93240 CRB Nebraska Educ. T/C Commission, P.O. Box 83111, 1800 N. 33rd St., Lincoln, NE 68501-3111. Signed By: Mr. Paul Few, Assistant Secretary. Funds Requested: \$20,556. Total Project Cost: \$41,112. To extend the signal of the Nebraska Public Radio network by constructing two 250-watt FM translators in Harrison, on 89.5 MHz, and Max (Benkelman), on 93.3 MHz, the translators would fill in areas not currently covered by the public radio network's signal. In addition, project would replace the network's twelve year old, obsolete on-air broadcast console with a state-of-the-art unit capable of supporting the statewide network.

File No. 93245 CTN Agricultural Satellite Corp., 1800 North 33rd Street, Lincoln, NE 68583-. Signed By: Mr. Irvin Omtvedt, Chairman. Funds Requested: \$620,750. Total Project Cost: \$1,241,500. To expand the services of the Agricultural Satellite Corporation network (AG\*SAT) operating from Lincoln, NE, which provides agricultural courses to universities and agricultural extension programs nationally by installing two Ku-band satellite uplinks in Arkansas and New Hampshire. The project will also construct 77 Ku/C band satellite downlinks in the following 15 states: Colorado, Delaware, Florida, Illinois, Indiana, Maine, Mississippi, Nebraska, Nevada, New Hampshire, North Carolina, Pennsylvania, South Carolina, Tennessee and West Virginia.

#### NH (New Hampshire)

File No. 93154 CTN Dresden Access Television, Inc., Lebanon Street, Hanover, NH 03755-. Signed By: Mr. Joseph Della Badia, President. Funds Requested: \$31,500. Total Project Cost: \$63,000. To establish a community access channel capability in the Upper Connecticut River Valley, with

programming provided by the communities of Hanover, NH, and Norwich, VT.

File No. 93217 CTB University of New Hampshire, Mast Road, Route 155A Box 1100, Durham, NH 03824. Signed By: Ms. Kathryn Cataneo, Director. Funds Requested: \$225,500. Total Project Cost: \$451,000. To extend the New Hampshire Public Television signal to the unserved rural areas of the State through the mother station, WENH-TV, C Ch. 11 in Durham, NH, by activating two translators, one in Coos County, the northernmost county, and one in Grafton County, known as the Upper Connecticut River Valley. The second objective is to improve WENH's production and transmission capabilities by replacing video tape recorders, audio mixer, still store, field ENG equipment and a transmission line dehydrator. The NHPTV State Network now serves 1,030,000 viewers, and this project, if funded, would add approximately another 89,444 viewers.

#### NJ (New Jersey)

File No. 93054 CTN Borough of Metuchen, Main St. & Middlesex Ave., Metuchen, NJ 08840-0592. Signed By: Mr. William Boerth, Borough Business Administrator. Funds Requested: \$74,500. Total Project Cost: \$104,500. To establish a production studio, with interconnection equipment, for the use of a public/educational/governmental (PEG) channel on cable companies serving six municipalities in Middlesex Co., New Jersey.

File No. 93143 CTN Foundation at NJ Inst. of Tech., 214 Central Avenue, Newark, NJ 07102-. Signed By: Mr. Henry A. Mauermeyer, V.P. for Admin. & Treasurer. Funds Requested: \$216,150. Total Project Cost: \$432,300. To purchase a Ku-band satellite uplink to allow NJIT to offer instructional video programming in science, engineering and management to students at remote sites throughout the United States.

File No. 93244 CTN New Jersey Intercampus Network, Inc., Castle Point on the Hudson, Hoboken, NJ 07030-. Signed By: Mr. Joseph Moeller, Administrator. Funds Requested: \$1,018,596. Total Project Cost: \$2,037,192. To establish a two-way microwave system to interconnect existing production and telecommunications resources of forty-one New Jersey schools: 11 colleges, 30 K-12 schools, and a research facility. The project will involve 11 of New Jersey's 21 counties.

File No. 93291 CTB NJ Public Broadcasting Auth., 1573 Parkside Avenue, CN777, Trenton, NJ 08625-0777. Signed By: Mr. Harvey Fisher,

Executive Director. Funds Requested: \$443,732. Total Project Cost: \$887,465. To improve the service of public television station WNJT-TV, Ch. 52, Trenton, NJ, by replacing a 21-year-old transmitter and transmitter test equipment with a high-efficiency transmitter that will reduce energy consumption by fifty percent. WNJT-TV is one of four stations and a system of translators and booster stations of the New Jersey Public Broadcasting Network, serving 7.4 million residents of New Jersey, and an additional 2.4 million residents of neighboring states.

#### NM (New Mexico)

File No. 93098 CTN University of New Mexico, 1128 University Blvd., NE., Albuquerque, NM 87131-. Signed By: Ms. Ann Powell, Director, Research Administrator. Funds Requested: \$477,757. Total Project Cost: \$637,010. To add additional uplink capability to an existing Ku-band satellite uplink to provide distance learning to the state of New Mexico. The system will use compressed digital video compatible with the National Technological University to uplink two channels of video from New Mexico University and one channel of video from New Mexico State University. Also included in the application are funds for 20 Ku-band downlink receive terminals to be placed at institutions throughout the state.

File No. 93122 CRB Western New Mexico University, 1000 W. College Avenue, Silver City, NM 88061-. Signed By: Mr. Jerry L. Gallentine, President. Funds Requested: \$199,678. Total Project Cost: \$266,238. To activate a new 100-watt public radio station on 89.3 MHz in Silver City and five FM translators: Cliff-Gila (92.1 MHz), Lordsburg (92.7 MHz), Reserve-Luna (96.9 MHz), Glenwood (94.7 MHz) and Deming-Columbia Highway (104.1 MHz). The Silver City station will be a Rocky Mt. Alternative Station (RMAS) that will re-broadcast KRWG-FM from Las Cruces, NM. Station will also have local origination capacity. The translators will re-broadcast the new Silver City RMAS station.

File No. 93124 CTN Eastern New Mexico University, 15th and Avenue O, Portales, NM 88130. Signed By: Mr. Duane W. Ryan, Director of Broadcasting. Funds Requested: \$332,372. Total Project Cost: \$443,163. To purchase the transmission and studio equipment necessary to expand the current one-channel ITFS system of Eastern New Mexico University to four channels, interconnecting the communities of Carlsbad, Hobbs, Roswell, and Ruidoso, all in New Mexico. In addition to the required

dissemination equipment, the project would purchase a second video production classroom at the University's broadcast center in Portales and receive site classrooms in Roswell, Hobbs, and Ruidoso.

File No. 93163 CTB Univ. of NM + Albq. Public Schools, 1130 University Blvd., N.E., Albuquerque, NM 87102. Signed By: Ms. Ann Powell, Director, Research Adminis. Funds Requested: \$78,478. Total Project Cost: \$104,650. To extend the signal of public television station KNME-TV, Channel 5, in Albuquerque by constructing two television translators which would be licensed to Santa Fe, etc., K26DU, Channel 26, and Horse Springs, etc., K55GI, Channel 55. K26DU would serve Espanola, Tesuque, Chimay and surrounding areas in Santa Fe County from Tesuque Peak and K55GI would serve Horse Springs, Datil and surrounding area in Catron County from Luera Peak. Translators would provide first off-air public television to about 19,000 people.

File No. 93165 CTB Univ. of NM + Albq. Public Schools, 1130 University Blvd., N.E., Albuquerque, NM 87102. Signed By: Ms. Ann Powell, Director. Funds Requested: \$24,000. Total Project Cost: \$48,000. To augment the facilities of public television station KNME-TV, Channel 5, in Albuquerque by acquiring equipment that would permit it to use the Secondary Audio Channel (SAP) to broadcast in Spanish to the Hispanic audience and to provide descriptive video to those that are visually impaired. Project would acquire an SAP generator, router expansion and other related equipment. KNME-TV already broadcasts in stereo.

File No. 93186 CRB New Mexico State University, P.O. Box 3000 Milton Hall Rm 121, Las Cruces, NM 88003. Signed By: Mr. J. Mack Adams, Director. Funds Requested: \$5,568. Total Project Cost: \$7,424. To extend the signal of public radio station KRWG-FM 90.7 MHz, in Las Cruces by constructing a new 10-watt radio translator station on 93.5 MHz in Deming. Station would provide service to about 15,000 residents not currently receiving an acceptable signal level.

File No. 93264 CTB New Mexico State University, Jordan Street. Milton Hall 100, Las Cruces, NM 88003. Signed By: Mr. J. Mack Adams, Director. Funds Requested: \$23,853. Total Project Cost: \$31,805. To extend the signal coverage of public television station KRWG-TV, Channel 22, in Las Cruces by installing a 100-watt translator station on Twin Peakes Mountain. The new translator will provide coverage to the unserved communities along the west side of the

Mesilla Valley which are located within the shadow area of the main KRWG-TV transmitter. There will be partial overlap with the existing coverage of KRWG-TV as well as KCOS-TV, El Paso, TX.

#### NV (Nevada)

File No. 93052 CRB University of Nevada, Coll. of Ed./Rm. 117, Evans Ave., Reno, NV 89557-. Signed By: Ms. Mary Husemoller, Manager, Sponsored Projects. Funds Requested: \$21,192. Total Project Cost: \$42,385. To improve the facilities of public radio station KUNR-FM, 88.7 MHz, in Reno by acquiring a new exciter, antenna alarm, six DAT recorders, transmitter telemetry and remote control equipment, test equipment, an emergency generator and transmitter vent ducting. This equipment will replace old, deteriorating equipment and will improve the quality and reliability of the station's signal. Station serves about 500,000 people.

File No. 93128 CTBN Clark County School District, 4210 Channel 10 Drive, Las Vegas, NV 89119. Signed By: Mr. John K. Hill, Dir. of Television Services. Funds Requested: \$440,916. Total Project Cost: \$587,888. To extend the existing Instructional Television Fixed Service (ITFS) signal to Boulder City, NV. In addition, project would improve the facilities of public television station KLVX-TV, Channel 10, in Las Vegas by upgrading the station's production and origination facilities by replacing outdated and worn out 2" video tape recorders and other production/origination equipment. Equipment being sought includes 3 1/2" VTR's, a 1/2" VTR cut only edit bay, cameras, camera pedestals and mount heads, 2 character generators, a portable microwave system and other related origination equipment. Station serves about 854,000 residents.

#### NY (New York)

File No. 93016 CRB Western NY Public Brdcstg. Assn., 23 North Street, Buffalo, NY 14202. Signed By: Mr. J. Michael Collins, President and CEO. Funds Requested: \$176,370. Total Project Cost: \$352,740. To replace antiquated, wornout and problem causing production/control and microwave equipment for WEBR-AM/WNED-FM in Buffalo, NY, operating on 970 KHz and 94.5 MHz respectively. The items are requested in order to increase the technical quality, reliability and work efficiency of the 2 stations.

File No. 93045 CTN Greece Central School District, 750 Maiden Lane, North Greece, NY 14515-0300. Signed By: Mr. Raymond W. Page, Interim Superintendent. Funds Requested:

\$1,036,922. Total Project Cost: \$1,382,563. To purchase video production and fiber optics-related equipment to activate the first phase of a distance learning system. In this phase, the system will interconnect 11 school sites and three administration buildings. The proposed network involves the cooperation of three other Rochester city and suburban high schools as well as Rochester Institute of Technology, Rochester Telephone, Greater Rochester Cablevision, and the Board of Cooperative Educational Services (BOCES).

File No. 93061 CTB NE NY Public T/C Council, Inc., One Sesame Street, P.O. Box 617, Plattsburgh, NY 12901. Signed By: Mr. Gerald K. Bates, President and General Manager. Funds Requested: \$78,193. Total Project Cost: \$156,387. To upgrade the programming capabilities of WCCE-TV, operating on Ch. 57 in Plattsburgh, NY, by replacing wornout and problem-causing production equipment needed to deliver professional quality programs to residents and schools of the Plattsburgh area.

File No. 93064 CTN Dolgeville Central School District, Slawson Street, Dolgeville, NY 13329-. Signed By: Mr. Robert Smith, Superintendent. Funds Requested: \$63,500. Total Project Cost: \$84,669. To purchase video classroom production and reception equipment to assist in the interconnection of three public schools, all within the Herkimer County Board of Cooperative Educational Services area: Dolgeville Central School, Little Falls City School District, and Oppenheim-Ephratah Central School.

File No. 93069 CRB WSKG Public T/C Council, 531 Gates Road, Vestal, NY 13850. Signed By: Mr. Michael J. Ziegler, President & CEO. Funds Requested: \$161,550. Total Project Cost: \$215,400. To extend the signal of public radio station WSKG-FM, operating on 89.3 MHz in Vestal, NY by providing a repeater FM radio transmitter, operating on 91.1 MHz in Corning, NY, which would result in the first public FM radio signal to 101,494 residents over a 1500 square mile area.

File No. 93074 PTN New York Institute of Technology, Building 66, Central Islip, NY 11722-. Signed By: Dr. King V. Cheek, V.P. for Academic Affairs. Funds Requested: \$57,920. Total Project Cost: \$86,540. To plan for the development of a low cost, nonbroadcast two-way interactive video/audio system, based on compression technologies that will allow for transmission and reception through existing telephone and cable lines. The proposed system will first

focus on medical and health education program sharing with nine rural sites, to expand to fifteen sites or more in the state of New York and eventually to the Northeast in future years. In addition to medical and health care education through telecommunications, the proposed project will also explore other services including teacher in-service training in math and science, literacy courses in the workplace, and college math and science courses for high schools.

File No. 93152 PTN Westchester Community College, 75 Grasslands Road, Valhalla, NY 10595-. Signed By: Mr. Joseph Hankin, President. Funds Requested: \$34,021. Total Project Cost: \$62,326. To plan for the implementation and expansion of educational television, production, and satellite downlink services to all 40 school districts in Westchester County. The plan will consider possible uses of telecommunications to establish an interactive system among the school districts throughout the County, possibly with the interconnection of cooperating cable systems that may permit Westchester Community College to use educational access channels for video courses.

File No. 93255 CTB WHMT Educational Telecomm., P.O. Box 17, 17 Fern Avenue, Schenectady, NY 12301-0017. Signed By: Mr. William Rogosin, President & General Manager. Funds Requested: \$496,897. Total Project Cost: \$993,795. To improve the origination capability of WMHT-TV, operating on Channel 17, in Schenectady, NY, by replacing essential TV equipment for the production studio, production control, post-production, master control, and measurement and test equipment, all of which are causing documented problems.

File No. 93301 PRTN Schoepg Access, Inc., 4 Parkway Drive, Cobleskill, NY 12043-. Signed By: Mr. Michael Vandow, President. Funds Requested: \$71,258. Total Project Cost: \$96,295. To develop a strategic telecommunications plan for the geographic area of the Southern Tier East and Southern Tier Central Regions of New York State. Among the objectives of the plan would be to complete a regional network design for rural implementation of the use of telecommunications for distance learning and workforce training services. The proposed project would provide a needs assessment and develop designs for telecommunications applications in education, government, the workforce, business and industry through cable television and interactive telephone line distribution.

File No. 93304 CTN Dutchess County BOCES, 578 Salt Point Turnpike, Poughkeepsie, NY 12601-9784. Signed By: Mr. Duane E. Hutton, Chief Executive Officer. Funds Requested: \$376,703. Total Project Cost: \$753,406. To purchase fiber optic transmission, video classroom, and computer workstation equipment so as to augment and extend an interactive distance learning system interconnecting students in 12 school districts throughout Dutchess Co., New York.

#### OH (Ohio)

File No. 93127 CTB Greater Dayton Public TV, Inc., 110 South Jefferson Street, Dayton, OH 45402-2402. Signed By: Mr. Jerrold F. Wareham, President and General Manager. Funds Requested: \$774,166. Total Project Cost: \$1,548,332. To improve public television station WPTO, Ch. 14, Oxford, OH, by replacing its 34-year-old, obsolete transmitter; by constructing a new studio-transmitter link; and by acquiring master control, origination, and test equipment.

File No. 93136 CTB Bowling Green State University, 245 Troup Street, Bowling Green, OH 43403-0060. Signed By: Mr. Louis I. Katzner, Associate V.P. for Research. Funds Requested: \$116,050. Total Project Cost: \$232,100. To improve the program service of public television station WBGU-TV, Ch. 27, Bowling Green, OH, by replacing worn-out and obsolete items of production equipment, including video tape recorders, an editing system, and a camcorder.

File No. 93155 CTB Educ. TV Assoc. of Metro Cleveland, 4300 Brookpark Road, Cleveland, OH 44134-. Signed By: Ms. Betty Cope, President and General Manager. Funds Requested: \$56,127. Total Project Cost: \$112,254. To improve the quality and reliability of the signal provided by public television station WVIZ-TV, Ch. 25, Cleveland, OH, from its translator in Ashtabula County, operating on Channel 64, by installing a microwave relay from its translator in Thompson, OH. The Ashtabula translator serves 16 school systems and 39,000 households with a population of 104,215 persons.

File No. 93180 CRB Youngstown State University, 410 Wick Avenue, Youngstown, OH 44555. Signed By: Mr. James M. McCollum, Exec Dir., University Relations. Funds Requested: \$34,292. Total Project Cost: \$45,723. To extend the service of public radio station WYSU, 88.5 MHz, Youngstown, OH, by installation translators in Salem, OH, and New Wilmington, PA, to bring first public radio service to approximately 270,200 persons.

File No. 93200 CTB Ohio University, 9 South College Street, Athens, OH 45701. Signed By: Mr. T. Lloyd Chesnut, Vice President. Funds Requested: \$124,285. Total Project Cost: \$248,570. To improve the production capability of public television station WOUB-TV, Ch. 20, Athens, OH, by replacing worn-out and obsolete video tape recorders, field camera/recorder units, editing equipment, and test equipment.

File No. 93222 CRB Xavier University, 3800 Victory Parkway, Cincinnati, OH 45207. Signed By: Mr. John R. Hirte, Vice-President. Funds Requested: \$143,886. Total Project Cost: \$191,849. To activate a public radio repeater station in Mt. Gilead, OH, on 95.1 MHz, to bring first public radio service to approximately 86,493 persons. The new station will repeat the programming of public radio station WVXU, 89.5 MHz, Cincinnati.

File No. 93237 CTB Ohio State University, 2400 Olentangy River Road, Columbus, OH 43210. Signed By: Mr. Dale K. Ouzts, General Manager WOSU Stations. Funds Requested: \$478,920. Total Project Cost: \$957,840. To improve the production capability of public television station WOSU-TV, Ch. 34, Columbus, OH, by replacing worn-out and obsolete equipment, including 13-year-old studio and field production cameras, 22-year-old videotape recorders, and associated test equipment.

File No. 93256 CRB Ohio State University, 2400 Olentangy River Road, Columbus, OH 43210. Signed By: Mr. Dale K. Ouzts, General Manager WOSU Stations. Funds Requested: \$113,457. Total Project Cost: \$151,276. To improve the remote production capability of WOSU-AM and FM, 820 KHz and 89.7 MHz, Columbus, OH, by replacing worn-out and obsolete equipment, including an audio console, microphones, digital audio recorders, and audio processing items.

File No. 93302 CRB Kent State University, 1613 E. Summit Street, Kent, OH 44242. Signed By: Mr. Harry Tripp, Associate Vice President. Funds Requested: \$303,946. Total Project Cost: \$530,320. This application from public radio station WKSU, 89.7 MHz, Kent, OH, has four objectives: (1) To activate a repeater station in Thompson, OH, to bring first public radio service to approximately 162,596 persons; (2) to replace and relocate its worn-out and obsolete main transmitter; (3) to provide basic origination equipment for repeater stations WKRW, 89.3 MHz, in Wooster, OH, and WKRJ, 91.5 MHz, in New Philadelphia, OH; and (4) to replace and upgrade worn-out and obsolete production equipment for the main



studio at WKSU, including digital audio tape recorders, cart machines, cassette recorders, and an audio console.

#### OK (Oklahoma)

File No. 93150 CTN Pottawatomie County T/C Coop., 36000 Clear Pond Road, Shawnee, OK 74801-. Signed By: Ms. Kaye Steele, President. Funds Requested: \$678,953. Total Project Cost: \$2,445,000. To purchase interconnection and studio equipment required to establish a distance learning system using fiber optics to interconnect eight high schools, a vocational-technical school, and the University of Pottawatomie County. The system will feature two-way interactive video and audio.

File No. 93158 CRB East Central University, 200 Stadium Drive, Ada, OK 74820-6899. Signed By: Dr. Bill Cole, President. Funds Requested: \$143,205. Total Project Cost: \$190,940. To activate a new 2 KW public radio station on 91.3 MHz in Ada. Station will provide a first public radio signal to an estimated 40,000 residents of Pontotoc County. In addition to providing educational programming, public service announcements and news not currently available, station will also provide university students with the opportunity to gain experience in the operation of a radio station. Project includes a satellite earth station.

File No. 93167 PRTN Cherokee Nation, P.O. Box 948, Tahlequah, OK 74465-. Signed By: Ms. Wilma Mankiller, Principal Chief. Funds Requested: \$97,858. Total Project Cost: \$97,858. To develop a comprehensive plan for broadcast and nonbroadcast technologies as a means to provide educational programming to serve rural, isolated American Indian communities in a 14 county area of Oklahoma that would include educational sites and rural clinics. The proposed project could include an interactive system using various technologies such as satellite uplink and downlink sites, broadcast radio, and fiber optic lines to carry video, voice and data. The system would provide educational and instructional programming from pre-school through college, adult literacy, and culturally and linguistically appropriate programs.

File No. 93300 CRB Langston University, State Highway 33, Langston, OK 73050-. Signed By: Dr. Ernest L. Holloway, President. Funds Requested: \$130,638. Total Project Cost: \$174,185. To improve and extend the facilities of public radio station, KALU-FM, on 89.3 MHz, in Langston by increasing the station's power from 10 watts to 151 watts and replacing old, worn out

equipment in the station's production, on-air and newsrooms. KALU-FM is licensed to a Historically Black Educational Institution and provides a minority-oriented public radio service. The area is also served by KOSU-FM, Stillwater, and KCSC-FM, in Edmond.

#### OR (Oregon)

File No. 93024 PRTN KWSO, P.O. Box 489, Warm Springs, OR 97761-. Signed By: Mr. Warren R. Clements, Director of Public Information. Funds Requested: \$50,000. Total Project Cost: \$50,000. To plan for the creation of a possible Public Telecommunications Center that would serve the Confederated Tribes on the Warm Springs Reservation in Oregon. This proposed Center would incorporate facilities for the present broadcast public radio station, a possible public television station, and an interactive two-way video and audio system. The proposed Telecommunications Center would include educational, interactive and training components that would help meet the needs of Native Americans on the reservation.

File No. 93248 PTN University of Oregon, Allen Hall, Eugene, OR 97403-1275. Signed By: Prof. Alan G. Stavitsky, Assistant Professor. Funds Requested: \$14,458. Total Project Cost: \$14,458. To develop a plan toward the establishment of U-O-T-V (University of Oregon Television Service), a program service that would be telecast on an educational access channel on the local cable television system in Eugene, Oregon. The University would manage the proposed service, and would provide a regular schedule of programming to include educational, cultural and public affairs series to be developed and produced by University faculty and students.

#### PA (Pennsylvania)

File No. 93006 CRB Nat. Assoc. of Radio Reading Serv., 2100 Wharton Street, Suite 140, Pittsburgh, PA 15203. Signed By: Mr. Bill Pasco, President. Funds Requested: \$103,770. Total Project Cost: \$138,360. To construct a production studio for the origination of a national radio reading service for the blind and print handicapped. Programming will be distributed by satellite from South Carolina to the one hundred radio reading services throughout the United States.

File No. 93026 CRB Temple University, Annenberg Hall, Philadelphia, PA 19122-. Signed By: Mr. James S. White, Vice President, Public Affairs. Funds Requested: \$185,371. Total Project Cost: \$247,161. To provide first public radio service to approximately 411,882 persons in

Pennsylvania and New Jersey by activating full-power repeater stations operating at 90.7 MHz in Ephrata, PA, and at 90.5 MHz in Ocean City, NJ, and a translator operating at 99.1 MHz in Pottsville, PA. The three new stations will repeat the programming of WRTI, 90.1 MHz, Philadelphia, PA.

File No. 93036 CRB Pennsylvania State University, 202 Wagner Building, University Park, PA 16802-3899. Signed By: Mr. James H. Ryan, V.P. for Continuing Education. Funds Requested: \$201,226. Total Project Cost: \$268,302. To provide first public radio service to approximately 290,298 persons in central Pennsylvania by activating a repeater station in Kane and a translator in Altoona to carry the programming of WPSU, 91.1 MHz, State College, PA. The project will also move the existing transmitter of WPSU to a more favorable location.

File No. 93066 CTB Independence Public Media of Phila., 6117 Ridge Avenue, Philadelphia, PA 19128-1604. Signed By: Mr. Daniel del Solar, General Manager. Funds Requested: \$176,980. Total Project Cost: \$246,980. To improve public television station WYBE, Ch. 35, Philadelphia, PA, by replacing worn-out and obsolete studio production equipment, including cameras, a switcher, videotape recorders, a video editing controller, an audio board, video monitors, microphones, and production lighting fixtures.

File No. 93105 CTB WHYY, Inc., 150 North 6th Street, Philadelphia, PA 19106. Signed By: Mr. Frederick Breitenfeld, Jr., President. Funds Requested: \$495,868. Total Project Cost: \$991,736. To improve public television station WHYY-TV, Ch. 12, Philadelphia, PA, by replacing obsolete and worn-out master control and tape origination equipment, including its on-air routing switchers, audio/video distribution amplifiers, videotape recorders, a character generator, still store and monitoring equipment.

File No. 93171 CRB Duquesne University, 1330 Locust Street, Pittsburgh, PA 15282. Signed By: Ms. Judy D. Jankowski, Director. Funds Requested: \$77,041. Total Project Cost: \$191,930. To improve public radio station WDUQ, 90.5 MHz, Pittsburgh, by replacing worn-out and obsolete transmission and production equipment, including its transmitter, tape recorders, and cart machines.

File No. 93241 CTB NE Pennsylvania Ed TV Association, 70 Old Boston Road, Pittston, PA 18640. Signed By: Mr. A. William Kelly, President & CEO. Funds Requested: \$515,215. Total Project Cost: \$1,030,430. To improve the signal and

service of public television station WVIA-TV, Ch. 44, Scranton (Pittston), PA, by replacing its 25-year-old transmitter and its 23-year-old master control audio console. The station also seeks to add Descriptive Video Service equipment.

File No. 93277 CTB QED Communications, Inc., 4802 Fifth Avenue, Pittsburgh, PA 15213. Signed By: Mr. Lloyd Kaiser, President. Funds Requested: \$384,757. Total Project Cost: \$769,595. To improve public television station WQED-TV, Ch. 13, Pittsburgh, PA, by replacing its worn-out Betacart system.

File No. 93299 CRB Pittsburgh Commun. Brcdstg Corp., Box 66, Woodland Road, Pittsburgh, PA 15232. Signed By: Mr. Peter Rosenfeld, President. Funds Requested: \$87,995. Total Project Cost: \$117,327. To improve the signal and service of public radio station WYEP, 91.3 MHz, Pittsburgh, PA, by replacing its worn-out and obsolete transmitter and antenna.

#### SC (South Carolina)

File No. 93224 PTB Horry-Georgetown Technical College, P.O. Box 1966, Conway, SC 29526-. Signed By: Mr. D. Kent Sharples, President. Funds Requested: \$61,782. Total Project Cost: \$77,846. To plan for a telecommunications facility that would be used by the Horry County Communications Consortium, composed of two colleges, the county school district, the county government and other municipal agencies, a telephone cooperative, and business and industry. The plan will explore the use of technologies such as ITFS, cable television, fiber optics and satellite distribution to provide video, voice and data distance learning services to students at all levels, women, minorities, disadvantaged children and adults, the workforce, and business/industry.

File No. 93258 CTN Satellite Ed. Resources Consort., 939 South Stadium Road, Columbia, SC 29201. Signed By: Mr. Gary N. Vance, Executive Director. Funds Requested: \$877,250. Total Project Cost: \$1,754,500. To extend the use of the applicant's distance learning courses by purchasing 265 receive-only, C and Ku-band steerable satellite earth terminals for predominately small, rural secondary schools in 10 states. Schools covered by this project will be located in: Georgia, Michigan, Mississippi, New York, North Carolina, Ohio, Pennsylvania, Texas, West Virginia and Wisconsin. SERC presently provides specialized instructional materials to

more than 5,000 students in 540 schools located in 27 states.

#### SD (South Dakota)

File No. 93044 CRB Seventh Generation Media Serv. Inc., P.O. Box 32, Little Eagle, SD 57639-. Signed By: Mr. Dave Archambault, Chairperson, Board of Dir.. Funds Requested: \$575,606. Total Project Cost: \$767,475. To activate a new 90 KW public radio station 89.5 MHz in Little Eagle. Station will be located on the Standing Rock Sioux Reservation and will serve residents of the Standing Rock Sioux Reservation and portions of the Cheyenne River Sioux Reservation as well as the non-Native American residents in the area. Service area will encompass about 5 million acres and provide service to about 18,000 residents, 31% of which we Native Americans. Portions of the new proposed service area are within the existing service areas of KQSD-FM (Lowery, SD), KPSD-FM (Faith, SD) and DCND-FM (Bismarck, ND).

File No. 93100 CRB Sisseton Wahpeton Sioux Tribe, P.O. Box 590—R.R. 2, Agency Village/Sisseton, SD 57262-0509. Signed By: Ms. Lorraine Rousseau, Tribal Chairperson. Funds Requested: \$52,732. Total Project Cost: \$70,310. To assist in the activation of a new Class A (3 KW) public radio station on 89.3 MHz in Sisseton by purchasing equipment for an on-air control room. Tribe already has FCC construction permit and has done some of the other station construction. There are approximately 8,500 persons, including about 4,000 tribal members, within the proposed service area. Station will broadcast in English and Dakota (Sioux). Station would provide first local origination to areas also served by the South Dakota Public Radio Network.

File No. 93303 CTB SD State Bd. of Dirs. for ETV, Cherry & Dakota Sts, Box 5000, Vermillion, SD 57069-5000. Signed By: Mr. Larry Miller, Acting Executive Director. Funds Requested: \$125,000. Total Project Cost: \$250,000. To improve the facilities of public television stations KUSD-TV, Channel 2, Vermillion, and KESD-TV, Channel 8, Brookings, by replacing two obsolete, wornout video production switchers. The switchers which were purchased in 1976, will be replaced by two new analog/digital switchers which will serve the production needs of the state public television network.

File No. 93307 CRB So. Dakota Bd. of Dir. for Educ. T/C, Cherry & Dakota Sts, Box 5000, Vermillion, SD 57069-5000. Signed By: Mr. Larry Miller, Acting Executive Director. Funds Requested: \$25,000. Total Project Cost: \$50,000. To

replace one of the two 285 foot towers of public radio station, KUSD-AM, 690 kHz, in Vermillion. The tower fell when two of the tower's guy wires were struck by a motor vehicle. Parts of the station's service area are also served by the network's other Vermillion station, KUSD-FM. KUSD-AM serves approximately 265,000 persons.

#### TN (Tennessee)

File No. 93137 CTB Metropolitan Board of Pub. Educ., 161 Rains Avenue, Nashville, TN 37203-. Signed By: Mr. Richard C. Benjamin, Director of Schools. Funds Requested: \$302,405. Total Project Cost: \$504,008. To improve the service of public television station WDCN-TV, Ch. 8, Nashville, TN, by replacing worn-out and obsolete videocassette recorders, video switchers, audio consoles, and related equipment with Beta SP decks, composite and component video switchers, audio consoles, character generators, still stores, and related equipment. WDCN-TV serves approximately 1.8 million viewers in the Greater Nashville area.

File No. 93187 CRB Univ. of Tennessee-Chattanooga, 104 Cadek Hall, 615 McCallie Ave, Chattanooga, TN 37403-2598. Signed By: Mr. Frederick Obeir, Chancellor. Funds Requested: \$7,775. Total Project Cost: \$15,550. To improve the service of public radio station WUTC-FM, 88.1 MHz, Chattanooga, TN, by replacing the station's current analog microwave system with a more modern digital microwave system, thereby eliminating interference with a local station, increasing channel separation, and improving the overall dynamic range and signal-to-noise ratio. WUTC-FM serves approximately 1 million listeners in the Chattanooga area.

File No. 93205 CRB Memphis/Shelby County Pub. Lbr., 1850 Peabody Avenue, Memphis TN 38104. Signed By: Ms. Judith Drescher, Director. Funds Requested: \$29,182. Total Project Cost: \$38,910. To improve the services of station WYPL-FM, 89.3 MHz, Memphis, TN, by constructing an information/news production studio, updating the station's on-air automation system, and rebuilding the station's satellite receive terminal. WYPL-FM operates as an open-airwaves radio reading service; its target audience is approximately 420,000 of the more than 750,000 persons living in the Memphis area. Although the programming is largely directed toward the hearing impaired, it provides additional informational programming to a wider audience.

File No. 93276 CTB East Tennessee Pub. Comm. Corp., 209

Communications Building, Knoxville, TN 37996-0321. Signed By: Mr. Neal Branch, Chair-Board of Trustees. Funds Requested: \$110,378. Total Project Cost: \$220,756. To improve the service of public television station WSJK-TV, Ch. 2, Sneedville, TN, by replacing an obsolete and unreliable microwave studio-to-transmitter link (STL) and related equipment. The WSJK-TV transmitter is remotely controlled from studios in Knoxville, TN, and has experienced frequent shut-downs because of the age of the STL. WSJK-TV serves approximately 1.25 million viewers in the Knoxville area.

#### TX (Texas)

File No. 93003 CTB Alamo Council of the Blind, 1222 N. Main Street Suite L-16A, San Antonio, TX 78212-. Signed By: Mr. Rene Fernandez, President. Funds Requested: \$31,077. Total Project Cost: \$41,477. To activate a reading service for the print-handicapped using the Pro-channel of public television station KLRN-TV, Channel 9, in San Antonio. Service will benefit an estimated 20,000 persons within the coverage area of KLRN-TV.

File No. 93020 PTN Amarillo Junior College District, 2408 S. Jackson, Amarillo, TX 79109-. Signed By: Mr. W. L. Prather, V.P. Business & Development. Funds Requested: \$45,390. Total Project Cost: \$51,610. To develop a realistic distance learning plan for 26 counties in the Northern Texas panhandle by considering the feasibility of a number of telecommunications technologies including ITFS, compressed video, fiber optic lines, and VSAT satellite systems. The proposed project would provide a broad-based educational service to school systems, colleges, adult educational and training agencies, businesses, government organizations, and health care providers. A consortium of three colleges will be involved in developing this plan, which will be managed by Amarillo College.

File No. 93065 CTN Alamo Community College District, 1801 Martin Luther King Drive, San Antonio, TX 78203-2098. Signed By: Dr. Douglas S. Harlan, Interim Chancellor. Funds Requested: \$410,465. Total Project Cost: \$797,348. To purchase interconnection equipment to allow St. Philip's College, a community college in San Antonio, TX, to be linked via T1 technology with Texas A&M University so as to receive the latter's programming, with emphasis on literacy skills course work. The intent is to have the College eventually receive 3rd- and 4th-year college classes from Texas A&M. The project will also

purchase video classroom equipment and a satellite receive-only earth station.

File No. 93082 CTB Alamo Public T/C Council, 801 South Bowie, San Antonio, TX 78205-3296. Signed By: Ms. Joanne Winik, President and General Manager. Funds Requested: \$79,050. Total Project Cost: \$158,100. To improve the facilities of public television station KLRN-TV, Channel 9, in San Antonio by replacing obsolete, worn out equipment. Equipment being requested includes a master control off-air demodulator, a video waveform measurement set and two record/playback videotape machines. In addition, KLRN-TV seeks to obtain a standby aural/visual exciter system for its transmitter. Currently KLRN-TV doesn't have a standby exciter system.

File No. 93086 CRB University of Texas at Austin, 2504 Whitis Street, Austin, TX 78712-1090. Signed By: Mr. Stephen A. Monti, Vice Provost. Funds Requested: \$64,303. Total Project Cost: \$128,606. To improve the facilities of public radio station KUT-FM, 90.5 MHz, in Austin by replacing and upgrading the following: both the on-air and production audio consoles, two routing switchers and associated equipment used to install the equipment. The current equipment is inadequate for current and future station operations and requires considerable repair and maintenance. The Austin market is served by three other public radio stations: KMFA-FM, KAZI-FM and KNLE-FM located in Round Rock.

File No. 93121 CTB Alliance for Higher Education, 17103 Preston Road, LB107, S-250, Dallas, TX 75248-. Signed By: Dr. Allan Watson, President. Funds Requested: \$586,742. Total Project Cost: \$1,173,485. To construct a Ku-band satellite uplink to provide distance education to a consortium of 26 colleges and universities in the greater Dallas-Ft. Worth area. The project will include a classroom video production facility at the University of Texas at Dallas uplink site. Also included in the project are funds to purchase eight downlink terminals for colleges in the consortium without such capability.

File No. 93177 PRB Panhandle Area Alliance, 500 South Taylor, Amarillo, TX 79101-. Signed By: Ms. Carol J. Farris, Project Director. Funds Requested: \$42,040. Total Project Cost: \$52,550. To plan for the activation of a new public radio station in Amarillo to provide the first National Public Radio (NPR) program service to this market. Area is also served by KACV-FM, licensed to Amarillo Junior College in Amarillo, and KWTS-FM, licensed to West Texas State University which is located in Canyon.

File No. 93189 CTB Capital of TX Public T/C Council, 2504-B Whitis Street, Austin, TX 78705. Signed By: Mr. Bill Arhos, President/General Manager. Funds Requested: \$141,135. Total Project Cost: \$282,270. To improve the facilities of public television station KLRU-TV, Channel 18, in Austin by replacing worn out videotape recorders and a fifteen year old character generator that is no longer supported by the original manufacturer. Project would acquire four video production recorders and associated equipment as well as a new character generator. KLRN-TV produces about 180 hours of programming each year for local, regional and national distribution. KLRU-TV, in addition to serving about one million viewers, also provides daily classroom instructional programs for more than 100,000 students in 27 independent school districts and 10 private schools.

File No. 93266 CRB South Texas Pub. Brdcastg. System, 4455 S. Padre Island Drive #38, Corpus Christi, TX 78411-. Signed By: Mr. Peter Frid, President & General Manager. Funds Requested: \$228,937. Total Project Cost: \$305,250. To extend the signal of public radio station KEDT-FM, 90.3 MHz, in Corpus Christi by constructing a new 25 KW repeater/satellite station in Victoria on 90.7 MHz. Station would provide a first public radio signal to approximately 190,000 residents. Service would be relayed by fiber optic link from Corpus Christi to Victoria, a distance of about 85 miles.

File No. 93290 CRB South Texas Pub. Brdcastg. System, 4455 S. Padre Island Drive #38, Corpus Christi, TX 78411-. Signed By: Mr. Peter Frid, President & General Manager. Funds Requested: \$163,350. Total Project Cost: \$217,800. To improve the facilities of public radio station KEDT-FM, 90.3 MHz, in Corpus Christi by replacing studio equipment in the production and master control rooms with 3 audio consoles, 6 cart machines, 4 reel-to-reel recorders, 6 compact disc players and 8 DAT digital recorders, a stereo generator, an EBS generator/receiver and a 30x30 stereo audio routing switcher. In addition, KEDT-FM seeks a new hot standby studio-to-transmitter link (STL) and an oscilloscope (test equipment). Station provides the only public radio to about 580,000 residents.

#### UT (Utah)

File No. 93292 CRTBN University of Utah, Media Services, Building 002, Salt Lake City, UT 84112. Signed By: Mr. Ted R. Capener, Vice President, Univ. Relation. Funds Requested: \$138,392. Total Project Cost: \$201,390. To extend

and improve the facilities of public television stations KULC-TV, (Ch. 9, Ogden) and KUED-TV, (Ch. 7, Salt Lake City) by installing new translator stations or replacing existing old, worn out units. KULC-TV translators are for Tooele (NEW, Ch. N/A), Dutch John/Manila (NEW, Ch. 19), Fillmore (NEW, Ch. 44), Parowan (NEW, K46DF) and Utah Hill (Replacement, K21CI). KUED-TV translators are for Morgan (Replacement, Ch. 69) and Beryl (NEW, K25EF). KUER-FM translators include Huntsville (NEW 89.7 MHz), Ticaboo (Batteries Only, 88.1 MHz) and Dutch John (NEW, 90.3 MHz). In addition, funding of a studio equipment package for the Snow College EDNET site is requested. As a result of this project, approximately 29,808 persons will receive a first service of this type.

#### VA (Virginia)

File No. 93015 CTN National Captioning Institute, 5203 Leesburg Pike, 15th Floor, Falls Church, VA 22041. Signed By: Mr. John E.D. Ball, President. Funds Requested: \$38,463. Total Project Cost: \$76,927. To improve the services of the National Captioning Institute, Falls Church, VA, by acquiring descriptive video technology to enhance programming for visually disabled Americans. Since 1980, NCI has provided closed captioning services both to commercial and non-commercial broadcasting; to date, NCI has closed captioned more than 60,000 hours of programming, including 3,000 home videos.

File No. 93023 CTN National Captioning Institute, 5203 Leesburg Pike, Suite 1500, Falls Church, VA 22041. Signed By: Mr. John Ball, President. Funds Requested: \$245,216. Total Project Cost: \$490,433. To improve the services of the National Captioning Institute, Falls Church, VA, by replacing worn-out and obsolete closed captioning equipment. NCI provides captioning services to ABC, NBC, and PBS; to date, NCI has provided both commercial and public broadcasting with over 60,000 program hours of captioned material for the hearing impaired, including 3,000 home videos.

File No. 93097 CTN Black College Satellite Network, 2011 Crystall Drive, Suite 1100A, Arlington, VA 22202-. Signed By: Dr. Mabel P. Phifer, President. Funds Requested: \$1,526,486. Total Project Cost: \$2,035,315. To construct eight Ku-band satellite uplinks to provide programming to the approximately 100 colleges and universities affiliated with the Black College Satellite Network (BCSN). Uplinks will be located at Grambling

State University in Louisiana, Virginia State University in Virginia, Cheyney University in Pennsylvania, Clark Atlanta University in Georgia, Langston University in Oklahoma, University of Maryland Eastern Shore in Maryland, Rust College in Mississippi, and at the BCSN headquarters in Arlington, VA.

File No. 93251 CTB Blue Ridge Public TV, Inc., 1215 McNeil Drive, SW, Roanoke, VA 22015-. Signed By: Mr. Larry A. Dyer, President and General Manager. Funds Requested: \$206,652. Total Project Cost: \$413,304. To improve and extend the service of public television station WBRA-TV, Ch. 15, Roanoke, VA, by establishing a Descriptive Video Service for the visually disabled. Employing the station's existing transmitter, along with additional Secondary Audio Program (SAP) equipment, WBRA-TV will be able to reach an estimated 6,500 visually impaired "viewers." This proposal also seeks to replace worn and obsolete remote control and monitoring equipment and VCRs. WBRA-TV currently serves approximately 1.5 million viewers in the Roanoke area.

File No. 93257 CTN Old Dominion University, Room 228 Education Building, Norfolk, VA 23529-0228. Signed By: Dr. James C. Phillips, Director, Academic Television. Funds Requested: \$250,609. Total Project Cost: \$334,145. To construct three electronic classrooms so that Old Dominion University can increase the number of courses it is offering via ITFS and satellite.

#### VI (Virgin Islands)

File No. 93286 CRB Virgin Islands PTV System, P.O. Box 7879, Barbel Plaza S., St. Thomas, VI, 00802-. Signed By: Mr. Patrick Williams, Board Chairman. Funds Requested: \$557,735. Total Project Cost: \$743,647. To establish a first noncommercial FM radio service for the U.S. Virgin Islands through the construction of a new station operating on 89.1 MHz in Charlotte Amalie, St. Thomas and a full power repeater operating on 88.5 MHz in Christianstead, St. Croix. This service will provide a first public radio service to 100,000 residents of the U.S. Virgin Islands.

#### WA (Washington)

File No. 93022 CRB Jack Straw Memorial Foundation, 4261 Roosevelt Way, Seattle, WA 98105. Signed By: Ms. Carmen Ray, Executive Director. Funds Requested: \$26,620. Total Project Cost: \$53,240. To improve the present signal delivery of public radio station KSER-FM, operating on 90.7 MHz in Everett, Washington, by installing two

translators in their present coverage area. The translators will be used to provide service to 140,000 residents of the Everett area who cannot now receive the KSER-FM signal.

File No. 93114 CRB Bellevue Cmty. College, KBCS-FM, 3000 Landerholm Circle SE, Bellevue, WA 98007. Signed By: Ms. Jean Floten, President. Funds Requested: \$49,358. Total Project Cost: \$65,811. To improve the signal of public radio station KBCS-FM operating on 91.3 MHz in Bellevue, Washington, by replacing an aging transmitter and obsolete control room equipment to better serve 1.6 million residents of the greater Seattle area.

File No. 93159 CTB KCTS Television, 401 Mercer Street, Seattle, WA 98109. Signed By: Mr. Burnill F. Clark, President and CEO. Funds Requested: \$55,265. Total Project Cost: \$110,530. To improve the programming capability of public television station KCTS-TV, operating on channel 9 in Seattle, Washington, by replacing worn out and obsolete analog video tape machines with new digital units. The replacement items will improve service to 3 million residents of the greater Seattle area.

File No. 93161 CTB Central WA Assoc. for Pub. T/C, 1105 So. 15th Ave., Yakima, WA-98902-. Signed By: Mr. Warren D. Starr, President and General Manager. Funds Requested: \$42,735. Total Project Cost: \$56,980. To extend the signal of public television station KYVE-TV operating on channel 47 in Yakima, Washington, by installing a translator in Cle Elum to provide a first public television service to 7,500 residents of north Kittitas County.

File No. 93284 CRB Washington State University, Murrow Communication Center, Pullman, WA 99164-2530. Signed By: Mr. R.V. Smith, Vice Provost. Funds Requested: \$27,570. Total Project Cost: \$36,760. To extend the signal of public radio station KRFA-FM operating on 91.7 MHz in Moscow, Idaho by establishing a full power repeater in Cottonwood and two translators in Orofino and Kamiah to bring a first public radio service to 15,600 residents of central Idaho.

#### WI (Wisconsin)

File No. 93236 CRB Lac Cour Orellles Ojibwa Broad. Route 2, Box 2788, Hayward, WI 54843. Signed By: Ms. Camille Lacapa-Morrison, General Manager. Funds Requested: \$14,450. Total Project Cost: \$28,901. To improve the transmission and programming capabilities of WOJB-FM in Hayward, WI, operating on 88.9 MHz, by replacing the STL, remote control, on-air console, reel-to-reel tape recorders, cart machine, turntables and watt meter. This project

would greatly improve the quality of the public radio service provided by this minority station, which is owned and operated by the Lac Courte Oreilles Band of Lake Superior Ojibwa Indians. WOJB-FM's signal serves 4 reservations and 7 surrounding counties in northwest Wisconsin.

File No. 93298 CRB University of Wisconsin-Eau Claire, 105 Garfield Avenue, Eau Claire, WI 54701-. Signed By: Ms. Marjorie R. Smelstor, Vice Chancellor. Funds Requested: \$24,125. Total Project Cost: \$48,250. To extend the coverage of WUEC-FM, operating on 89.1 MHz in Eau Claire, WI, by replacing its present 13 year old 1Kw transmitter with a higher power 5 Kw transmitter which will increase the station's 1 m/v per meter coverage 15 miles in all directions. This project will provide approximately 40,000 potential listeners with their first program service from WUEC-FM.

#### WV (West Virginia)

File No. 93018 CRN West Virginia Library Commission, Cultural Center, Capitol Complex, Charleston, WV 25305. Signed By: Mr. David Lewis, Statewide Coordinator, WVRRS. Funds Requested: \$2,860. Total Project Cost: \$5,720. To improve the operations of the West Virginia Radio Reading Service by replacing cassette machines with broadcast-quality TASCAM recorders and playback machines. The West Virginia Library Commission's radio reading service reaches approximately 4,500 residents of West Virginia through West Virginia Public Radio's subcarriers in Charleston, Huntington, Buckhannon, and Beckley, as well as through cable television in 22 counties. The current equipment is not of fully professional quality.

File No. 93046 CTB WV Educ. Broadcasting Authority, 600 Capitol Street, Charleston, WV 25301-. Signed By: Mr. Kenneth A. Jarvis, Executive Director. Funds Requested: \$45,011. Total Project Cost: \$90,022. To improve the operations of public television station WSWP-TV, Ch. 9, Grandview, WV, by replacing a badly worn and inadequate master control switcher (with associated monitors, controllers, etc.), and to acquire a new CCD color field camera/VTR (with associated lenses, tripods, etc.). WSWP-TV is one of three public television stations in a statewide system, and serves approximately 900,000 viewers as the sole service in south-central West Virginia.

File No. 93280 CRB Pocahontas Comm. Coop. Corp., State Route 28, Dunmore, WV 24934. Signed By: Mr. Gibbs Kinderman, General Manager.

Funds Requested: \$154,448. Total Project Cost: \$205,931. To extend and improve the service of public radio station WVMR-AM, 1370 Khz, Dunmore, WV, by constructing two repeater transmitters to serve residents of Bath and Highland Counties. WVMR will provide twelve hours per day of programming via STL to the two FM transmitters; local origination studios at the transmitter sites will add up to six hours per day of local programming. WVMR-AM currently serves 10,000 listeners; the new transmitters will bring first public radio service to an additional 7,500 persons.

#### WY (Wyoming)

File No. 93095 PRTN Western Wyoming Cmty. College, 2500 College Drive, Rock Springs, WY 82902-0428. Signed By: Mr. Tex Boggs, President. Funds Requested: \$45,826. Total Project Cost: \$166,310. To plan for the possible use of alternative telecommunications technologies as part of Western Wyoming Community College's extended education outreach program to fifteen remote sites in Southwest Wyoming, that potentially could enroll 2000 students in distance learning courses. A feasibility study will be conducted to explore various delivery systems which may be practical in providing a service to these geographically isolated sites, so that potential students could earn an Associate degree from the community college.

File No. 93113 CTB Central Wyoming College, 2660 Peck Avenue, Riverton, WY 82501. Signed By: Dr. Joanne McFarland, President. Funds Requested: \$1,188,702. Total Project Cost: \$1,584,936. To extend and improve the signal of Wyoming Public Television, operating on channel 4, Riverton, Wyoming, by installing a full power repeater on channel 8 in Laramie and replacing obsolete production and master control equipment. The new repeater station will provide a first public television service to 86,400 residents of the Larimie, Cheyenne area.

#### AK (Alaska)

File No. 93101 CRB, Old File Nos. 92054, Koahnic Broadcast Corporation, Anchorage, AK.

File No. 93216 CRN, Old File Nos. 92031, Silakuagvik Communications, Inc., Barrow, AK.

#### AL (Alabama)

File No. 93173 CTB, Old File Nos. 92183, Alabama A&M University, Normal, AL.

File No. 93181 CRB, Old File Nos. 92200, 91129, Alabama State University, Montgomery, AL.

File No. 93193 CRB, Old File Nos. 92141, 91184 University of Alabama, Tuscaloosa, AL.

File No. 93262 CRB, Old File Nos. 92126, Troy State University, Troy, AL.  
CA (California)

File No. 93019 CRB, Old File Nos. 92288, Santa Monica Community College, Santa Monica, CA.

File No. 93021 CRB, Old File Nos. 92292, Poor Peoples Radio, Inc., San Francisco, CA.

File No. 93041 CRB, Old File Nos. 92270, Rural Cal. Broadcasting Corp., Rohnert Park, CA.

File No. 93049 CTN, Old File Nos. 92167, California State Univ. Foundation, Long Beach, CA.

File No. 93051 CRB, Old File Nos. 92275, Pasadena Area Community College, Pasadena, CA.

File No. 93083 CTB, Old File Nos. 92028, Valley Public TV, Inc., Fresno, CA.

File No. 93093 CRB, Old File Nos. 92290, KQED, Inc., San Francisco, CA.

File No. 93213 CTB, Old File Nos. 92210, Community TV of S. California, Los Angeles, CA.

File No. 93214 CTB, Old File Nos. 92233, Rural Cal. Broadcasting Corp., Rohnert Park, CA.

File No. 93250 CTB, Old File Nos. 92294, 91263, Rural Cal. Broadcasting Corp., Rohnert Park, CA.

#### CT (Connecticut)

File No. 93092 CRB, Old File Nos. 92128, Sacred Heart University, Fairfield, CT.

#### FL (Florida)

File No. 93162 CTN, Old File Nos. 92155, Brevard Community College, Cocoa, FL.

File No. 93172 CTB, Old File Nos. 92062, Florida West Coast Pub. Brdcastg., Tampa, FL.  
File No. 93188 CTB, Old File Nos. 92008, University of Florida, Gainesville, FL.

File No. 93247 CTB, Old File Nos. 92232, Florida State University, Tallahassee, FL.

File No. 93285 CTB, Old File Nos. 92052, Community Communications, Inc., Orlando, FL.

File No. 93297 CRB, Old File Nos. 92115, Key West Public Radio, Inc., Key West, FL.

#### GA (Georgia)

File No. 93182 CRTB, Old File Nos. 92090, GA Public Telecomm. Commission, Atlanta, GA.

#### IA (Iowa)

File No. 93103 CTN, Old File Nos. 92204, Indian Hills Community College, Ottumwa, IA.

#### IL (Illinois)

File No. 93087 CTB, Old File Nos. 92189, Southern Illinois University, Carbondale, IL.

File No. 93279 CRB, Old File Nos. 92188, Southern Illinois University, Carbondale, IL.

**IN (Indiana)**

File No. 93228 CRB, Old File Nos. 92309, Purdue University, West Lafayette, IN.

**LA (Louisiana)**

File No. 93008 CRB, Old File Nos. 92317, Friends of WWOZ, Inc., New Orleans, LA.

**ME (Maine)**

File No. 93261 CRB, Old File Nos. 92230, University of Maine System, Portland, ME.

**MI (Michigan)**

File No. 93117 CTN, Old File Nos. 92020, 91084, PACE Telecommunications Consortium, Indian River, MI.

**MO (Missouri)**

File No. 93151 PTN, Old File Nos. 92231, Nat'l Federation TARGET Prog. Inc., Kansas City, MO.

**MS (Mississippi)**

File No. 93231 CRB, Old File Nos. 92060, Jackson State University, Jackson, MS.

**MT (Montana)**

File No. 93096 PTB, Old File Nos. 92181, Rural Television System, Inc., Cardwell, MT.

**NC (North Carolina)**

File No. 93063 CTN, Old File Nos. 92251, NC Agency for Public T/C, Raleigh, NC.

File No. 93253 CRB, Old File Nos. 92114, North Carolina Central University, Durham, NC.

**ND (North Dakota)**

File No. 93194 CTN, Old File Nos. 92301, Standing Rock College, Fort Yates, ND.

**NE (Nebraska)**

File No. 93111 CTB, Old File Nos. 92040, University of Nebraska at Omaha, Omaha, NE.

**NH (New Hampshire)**

File No. 93202 CTN, Old File Nos. 92084, Goffstown School District, Goffstown, NH.

**NJ (New Jersey)**

File No. 93197 CRB, Old File Nos. 92027, 91033, Burlington County College, Pemberton, NJ.

**NV (Nevada)**

File No. 93119 CTB, Old File Nos. 92076, Channel 5 Public Brdcstg., Inc., Reno, NV.

**NY (New York)**

File No. 93011 CRB, Old File Nos. 92193, Fordham University, Bronx, NY.

File No. 93053 CTN, Old File Nos. 92315, Medgar Evers College of CUNY, Brooklyn, NY.

File No. 93070 CTB, Old File Nos. 92050, 91055, WXXI Public Broadcasting Council, Rochester, NY.

File No. 93099 CRB, Old File Nos. 92312, Pacifica Foundation, New York, NY.

File No. 93123 CRB, Old File Nos. 92211, Niagara Frontier Radio Read. Ser. Buffalo, NY.

File No. 93190 CRB, Old File Nos. 92253, Hofstra University, Hempstead, NY.

File No. 93270 CTB, Old File Nos. 92274, Pub. Brdcstg. Council of Cent. NY, Syracuse, NY.

File No. 93294 CRB, Old File Nos. 92245, Board of Coop. Educ. Services, Fairport, NY.

**OH (Ohio)**

File No. 93211 CTB, Old File Nos. 92063, Public Bdcstg Fndn of NW Ohio, Toledo, OH.

**OR (Oregon)**

File No. 93057 CRB, Old File Nos. 92168, Sch District 4J, Lane Co. Oregon, Eugene, OR.

File No. 93102 CTN, Old File Nos. 92295, Portland State University, Portland, OR.

File No. 93129 CTB, Old File Nos. 92066, Southern Oregon Public TV, Inc., Medford, OR.

File No. 93166 CTB, Old File Nos. 92279, Oregon Public Broadcasting, Portland, OR.

**PA (Pennsylvania)**

File No. 93133 CRB, Old File Nos. 92299, 91277, Lehigh Valley Cmty Bdcstrs Assn, Allentown, PA.

File No. 93220 CTB, Old File Nos. 92016, Pennsylvania State University, University Park, PA.

**PR (Puerto Rico)**

File No. 93014 CRB, Old File Nos. 92156, Univ of Puerto Rico—Rio Piedras, San Juan, PR.

**SC (South Carolina)**

File No. 93204 CTN, Old File Nos. 92017, South Carolina ETV Commission, Columbia, SC.

**TN (Tennessee)**

File No. 93206 CTB, Old File Nos. 92045, Upper Cumberland Brdcstg. Cncl., Cookeville, TN.

**TX (Texas)**

File No. 93094 CTB, Old File Nos. 92083, North Texas Public Brdcstg., Inc., Dallas, TX.

**UT (Utah)**

File No. 93002 CTN, Old File Nos. 92293, Southern Utah University, Cedar City, UT.

**VA (Virginia)**

File No. 93168 CTB, Old File Nos. 92100, Shenandoah Valley ETV Corp., Harrisonburg, VA.

File No. 93232 CTB, Old File Nos. 92104, Central VA Educational TV Corp., Falls Church, VA.

**WA (Washington)**

File No. 93282 CRB, Old File Nos. 92139, Washington State University, Pullman, WA.

**WI (Wisconsin)**

File No. 93274 CRTB, Old File Nos. 92316, Wisconsin Ed. Communications Bd., Madison, WI.

File No. 93305 CRTB, Old File Nos. 92316, Wisconsin Ed. Communications Bd., Madison, WI.

[FR Doc. 93-6500 Filed 3-23-93; 8:45 am]

BILLING CODE 3510-60-M

# Federal Register

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Wednesday  
March 24, 1993

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## Part IV

### Environmental Protection Agency

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40 CFR Part 180  
Increase in Tolerance Processing Fees;  
Rule

**ENVIRONMENTAL PROTECTION  
AGENCY**
**40 CFR Part 180**
**[OPP-30072; FRL-4571-5]**
**Tolerance Processing Fees; Increase**
**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This rule increases fees charged for processing tolerance petitions for pesticides under the Federal Food, Drug, and Cosmetic Act (FFDCA). The change in fees reflects a 3.7 percent increase in pay for civilian Federal General Schedule (GS) employees in 1993.

**EFFECTIVE DATE:** April 23, 1993.

**FOR FURTHER INFORMATION CONTACT:** By mail: Ken Wetzel, Program Management and Support Division (H7502C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location and telephone number: Rm. 700-E, CM#2, 1921 Jefferson Davis Highway, Arlington, VA (703-305-5128).

**SUPPLEMENTARY INFORMATION:**

**Electronic Availability:** This document 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 EPA is charged with administration of section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA). (21 U.S.C. 346a). Section 408 authorizes the Agency to establish tolerance levels and exemptions from the requirements for tolerances for raw agricultural commodities. Section 408(o) requires that the Agency collect fees as will, in the aggregate, be sufficient to cover the costs of processing petitions for pesticide products, i.e., that the tolerance process be as self-supporting as possible. The current fee schedule for tolerance petitions (40 CFR 180.33) was published in the *Federal Register* (57 FR 34518) and became effective on September 4, 1992. At that time the fees were increased 4.2 percent in accordance with a provision in the regulation that provides for automatic annual adjustments to the fees based on annual percentage changes in Federal salaries. The specific language in the regulation is contained in paragraph (o) of § 180.33 and reads in part as follows:

(o) This fee schedule will be changed annually by the same percentage as the

percent change in the Federal General Schedule (GS) pay scale... When automatic adjustments are made based on the GS pay scale, the new fee schedule will be published in the *Federal Register* as a final rule to become effective 30 days or more after publication, as specified in the rule.

The pay raise in 1993 for Federal General Schedule employees is 3.7 percent; therefore, the tolerance petition fees are being increased 3.7 percent. The entire fee schedule, § 180.33, is presented for the reader's convenience. (All fees have been rounded to the nearest \$25.00.)

**List of Subjects in 40 CFR Part 180**

Administrative practice and procedures, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: March 3, 1993.

Douglas D. Camp, *Director, Office of Pesticide Programs.*

Therefore, 40 CFR part 180 is amended as follows:

1. The authority citation for part 180 continues to read as follows:

Authority: 21 U.S.C. 346a and 371.

2. Section 180.33 is revised to read as follows:

**§ 180.33 Fees.**

(a) Each petition or request for the establishment of a new tolerance or a tolerance higher than already established, shall be accompanied by a fee of \$56,175, plus \$1,400 for each raw agricultural commodity more than nine on which the establishment of a tolerance is requested, except as provided in paragraphs (b), (d), and (h) of this section.

(b) Each petition or request for the establishment of a tolerance at a lower numerical level or levels than a tolerance already established for the same pesticide chemical, or for the establishment of a tolerance on additional raw agricultural commodities at the same numerical level as a tolerance already established for the same pesticide chemical, shall be accompanied by a fee of \$12,850 plus \$875 for each raw agricultural commodity on which a tolerance is requested.

(c) Each petition or request for an exemption from the requirement of a tolerance or repeal of an exemption shall be accompanied by a fee of \$10,350.

(d) Each petition or request for a temporary tolerance or a temporary exemption from the requirement of a tolerance shall be accompanied by a fee of \$22,450 except as provided in

paragraph (e) of this section. A petition or request to renew or extend such temporary tolerance or temporary exemption shall be accompanied by a fee of \$3,200.

(e) A petition or request for a temporary tolerance for a pesticide chemical which has a tolerance for other uses at the same numerical level or a higher numerical level shall be accompanied by a fee of \$11,200 plus \$875 for each raw agricultural commodity on which the temporary tolerance is sought.

(f) Each petition or request for repeal of a tolerance shall be accompanied by a fee of \$7,025. Such fee is not required when, in connection with the change sought under this paragraph, a petition or request is filed for the establishment of new tolerances to take the place of those sought to be repealed and a fee is paid as required by paragraph (a) of this section.

(g) If a petition or a request is not accepted for processing because it is technically incomplete, the fee, less \$1,400 for handling and initial review, shall be returned. If a petition is withdrawn by the petitioner after initial processing, but before significant Agency scientific review has begun, the fee, less \$1,400 for handling and initial review, shall be returned. If an unacceptable or withdrawn petition is resubmitted, it shall be accompanied by the fee that would be required if it were being submitted for the first time.

(h) Each petition or request for a crop group tolerance, regardless of the number of raw agricultural commodities involved, shall be accompanied by a fee equal to the fee required by the analogous category for a single tolerance that is not a crop group tolerance, i.e., paragraphs (a) through (f) of this section, without a charge for each commodity where that would otherwise apply.

(i) Objections under section 408(d)(5) of the Act shall be accompanied by a filing fee of \$2,800.

(j)(1) In the event of a referral of a petition or proposal under this section to an advisory committee, the costs shall be borne by the person who requests the referral of the data to the advisory committee.

(2) Costs of the advisory committee shall include compensation for experts as provided in § 180.11(c) and the expenses of the secretariat, including the costs of duplicating petitions and other related material referred to the committee.

(3) An advance deposit shall be made in the amount of \$28,050 to cover the costs of the advisory committee. Further advance deposits of \$28,050 each shall be made upon request of the



Administrator when necessary to prevent arrears in the payment of such costs. Any deposits in excess of actual expenses will be refunded to the depositor.

(k) The person who files a petition for judicial review of an order under section 408(d)(5) or (e) of the Act shall pay the costs of preparing the record on which the order is based unless the person has no financial interest in the petition for judicial review.

(l) No fee under this section will be imposed on the Inter-Regional Research Project Number 4 (IR-4 Program).

(m) The Administrator may waive or refund part or all of any fee imposed by this section if the Administrator determines in his or her sole discretion that such a waiver or refund will promote the public interest or that payment of the fee would work an unreasonable hardship on the person on whom the fee is imposed. A request for waiver or refund of a fee shall be submitted in writing to the Environmental Protection Agency, Office of Pesticide Programs, Registration Division (H7505C), Washington, DC 20460. A fee of \$1,400 shall accompany every request for a

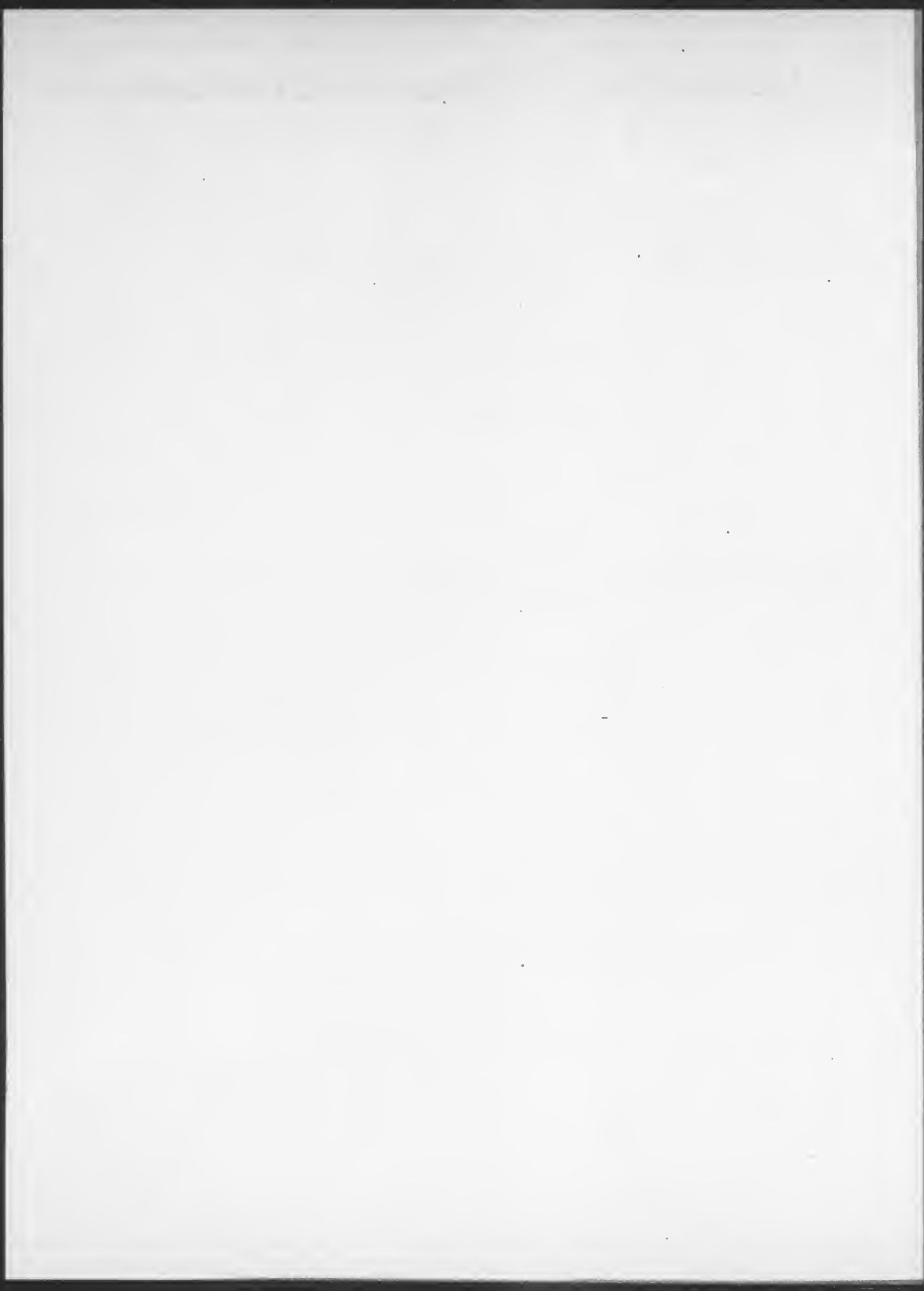
waiver or refund, except that the fee under this sentence shall not be imposed on any person who has no financial interest in any action requested by such person under paragraphs (a) through (k) of this section. The fee for requesting a waiver or refund shall be refunded if the request is granted.

(n) All deposits and fees required by the regulations in this part shall be paid by money order, bank draft, or certified check drawn to the order of the Environmental Protection Agency. All deposits and fees shall be forwarded to the Environmental Protection Agency, Headquarters Accounting Operations Branch, Office of Pesticide Programs (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. The payments should be specifically labeled "Tolerance Petition Fees" and should be accompanied only by a copy of the letter or petition requesting the tolerance. The actual letter or petition, along with supporting data, shall be forwarded within 30 days of payment to the Environmental Protection Agency, Office of Pesticide Programs, Registration Division, (H7504C) Washington, DC 20460. A petition will

not be accepted for processing until the required fees have been submitted. A petition for which a waiver of fees has been requested will not be accepted for processing until the fee has been waived or, if the waiver has been denied, the proper fee is submitted after notice of denial. A request for waiver or refund will not be accepted after scientific review has begun on a petition.

(o) This fee schedule will be changed annually by the same percentage as the percent change in the Federal General Schedule (GS) pay scale. In addition, processing costs and fees will periodically be reviewed and changes will be made to the schedule as necessary. When automatic adjustments are made based on the GS pay scale, the new fee schedule will be published in the *Federal Register* as a Final Rule to become effective 30 days or more after publication, as specified in the rule. When changes are made based on periodic reviews, the changes will be subject to public comment.

[FR Doc. 93-6726 Filed 3-23-93; 9:45 am]  
BILLING CODE 6560-50-F



# Federal Register

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Wednesday  
March 24, 1993

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Part V

## Department of Transportation

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National Highway Traffic Safety  
Administration

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Insurance Cost Information Booklet;  
Notice

## DEPARTMENT OF TRANSPORTATION

## National Highway Traffic Safety Administration

[Docket No. 74-40; Notice 5]

## Insurance Cost Information Booklet

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.  
ACTION: Text and Data for 1993 Insurance Cost Information Booklet.

**SUMMARY:** This notice provides the 1993 text and data that new car dealers must include in an insurance cost information booklet that they must make available to prospective purchasers, pursuant to 49 CFR 582.4. This information may assist prospective purchasers in comparing differences in passenger vehicle collision loss experience that could affect auto insurance costs.

**FOR FURTHER INFORMATION CONTACT:** Mr. Orron Kee, Office of Market Incentives, NHTSA, 400 Seventh Street SW., Washington, DC 20590 (202-366-4936).

**SUPPLEMENTARY INFORMATION:** Pursuant to section 201(e) of the Motor Vehicle Information and Cost Savings Act, 15 U.S.C. 1941(e), on March 5, 1993, 58 FR 12545, the National Highway Traffic Safety Administration (NHTSA) amended 49 CFR Part 582, *Insurance Cost Information Regulation*, to require dealers of new automobiles to distribute to prospective customers information that compares differences in insurance costs of different makes and models of passenger cars based on differences in damage susceptibility.

Pursuant to 49 CFR 582.4, new automobile dealers are required to make available to prospective purchasers booklets that include this comparative information as well as certain mandatory explanatory text that is set out in § 582.5. Beginning next January, NHTSA will publish updated annual data in the notices section of the Federal Register. The booklets must be revised to reflect the updated data within 30 days from the date of publication of the data in the Federal Register.

NHTSA is today mailing a sample copy of the 1993 booklet to each dealer on the mailing list that the Department of Energy uses to distribute the "Gas Mileage Guide." Dealers will have the responsibility of reproducing a sufficient number of copies of the booklet to assure that they are available for retention by prospective purchasers by April 21, 1993. Dealers who do not receive a copy of the booklet within 15 days of the date of this notice should

contact Mr. Nelson Gordy of NHTSA's Office of Market Incentives ((202) 366-4797) to receive a copy of the booklet and to be added to the mailing list.

The required text and data are as follows:

**Comparison of Differences in Insurance Costs for Passenger Motor Vehicles on the Basis of Damage Susceptibility**  
March 1993.

The National Highway Traffic Safety Administration (NHTSA) has provided the information in this booklet in compliance with Federal law as an aid to consumers considering the purchase of a new car. The booklet compares differences in insurance costs for different makes and models of passenger cars on the basis of damage susceptibility. However, it does not indicate a vehicle's relative safety.

The following table contains the best available information regarding the effect of damage susceptibility on auto insurance premiums. It was taken from data compiled by the Highway Loss Data Institute (HLDI) in its December 1992 Insurance Collision Report, and reflects the collision loss experience of passenger vehicles sold in the United States in terms of the average loss payment per insured vehicle year for model years 1990-1992. NHTSA has not verified the data in this table.

The table presents vehicles' collision loss experience in relative terms, with 100 representing the average for all passenger vehicles. Thus, a rating of 122 reflects a collision loss experience that is 22 percent higher (worse) than average while a rating of 96 reflects a collision loss experience that is 4 percent lower (better) than average. The table does not include information about new models, models that have been substantially redesigned, and models without enough claim experience.

Although many insurance companies use the HLDI information to adjust the "base rate" for the collision portion of their auto insurance premiums, the amount of any such adjustment is usually small. It is unlikely that your total premium will vary more than five percent depending upon the collision loss experience of a particular vehicle. If you do not purchase collision coverage or your insurance company does not use the HLDI information, your premium will not vary at all in relation to these rankings.

In addition, different insurance companies often charge different premiums for the same driver and vehicle. Therefore, you should contact insurance companies directly to determine the actual premium that you

will be charged for insuring a particular vehicle.

**Please Note:** In setting auto insurance premiums, insurance companies mainly rely on factors that are not directly related to the vehicle itself (except for its value). Rather, they mainly consider driver characteristics (such as age, gender, marital status, and driving record), the geographic area in which the vehicle is driven, how many miles are traveled, and how the vehicle is used. Therefore, to obtain complete information about insurance premiums, you should contact insurance companies directly.

Insurance companies do not generally adjust their premiums on the basis of data reflecting the crashworthiness of different vehicles. However, some companies adjust their premiums for personal injury protection and medical payments coverage if the insured vehicle has features that are likely to improve its crashworthiness, such as airbags and automatic seatbelts.

Test data relating to vehicle crashworthiness are available from NHTSA's New Car Assessment Program (NCAP). NCAP test results demonstrate relative frontal crash protection in new vehicles. Information on vehicles that NHTSA has tested in the NCAP program can be obtained by calling the agency's toll-free Auto Safety Hotline at (800) 424-9393.

COLLISION INSURANCE LOSSES 1990-92  
PASSENGER CARS

Make	Model	Relative loss payment
<b>Small Cars:</b>		
<b>Two-Door Models:</b>		
Suzuki .....	Swift .....	74
Dodge .....	Coit .....	97
Mitsubishi .....	Precis .....	99
Dodge .....	Shadow .....	100
	Conv.	
Plymouth .....	Coit .....	103
Ford .....	Festiva .....	106
Volkswagen .....	Fox .....	109
Geo .....	Metro .....	115
Volkswagen .....	Golf/GTI .....	118
Daihatsu .....	Charade .....	120
Saturn .....	SC .....	124
Toyota .....	Celica Conv .....	126
Dodge .....	Shadow .....	126
Pontiac .....	Lemans .....	132
Eagle .....	Talon .....	135
Plymouth .....	Laser .....	136
Hyundai .....	Scoupe .....	137
Dodge .....	Daytona .....	139
Eagle .....	Talon 4WD .....	146
Geo .....	Storm .....	158
Mazda .....	MX-3 Coupe .....	170
Isuzu .....	Impulse .....	189
Subaru .....	Justy .....	86
Subaru .....	Justy 4WD .....	98
Mitsubishi .....	Mirage .....	100

COLLISION INSURANCE LOSSES 1990-92  
PASSENGER CARS—Continued

Make	Model	Relative loss payment
Toyota	Tercel	102
Eagle	Summit	105
Mazda	323	108
Toyota	Paseo	111
Plymouth	Sundance	115
Ford	Escort	119
Hyundai	Excel	122
Nissan	Sentra	125
Ford	Probe	126
Volkswagen	Cabriolet	128
Mitsubishi	Eclipse	135
Geo	Metro Conv	136
Mazda	MX-6	137
Mitsubishi	Eclipse 4WD	137
Toyota	Celica	142
Nissan	240SX	157
Nissan	NX	165
Saab	900	176
Volkswagen	Corrado	218
<b>Four-Door Models:</b>		
Subaru	Justy 4WD	88
Toyota	Corolla	96
Plymouth	Sundance	98
Mercury	Tracer	101
Nissan	Sentra	105
Volkswagen	Fox	105
Volkswagen	Golf	109
Geo	Metro	110
Subaru	Loyale	113
Mazda	323 Protege	117
Hyundai	Elantra	120
Daihatsu	Charade	133
Saab	900	157
Ford	Escort	93
Subaru	Loyale 4WD	98
Suzuki	Swift	99
Dodge	Shadow	101
Toyota	Corolla	105
	Tercel	
Mitsubishi	Mirage	108
Geo	Prizm	110
Eagle	Summit	112
Volkswagen	Jetta	116
Pontiac	Lemans	120
Hyundai	Excel	121
Isuzu	Stylus	156
<b>Station Wagons/ Passenger Vans:</b>		
Mercury	Tracer	68
Ford	Escort	74
Subaru	Loyale 4WD	82
Geo	Storm	160
Subaru	Loyale	72
Toyota	Corolla	79
Toyota	Corolla 4WD	96
<b>Sports Models:</b>		
Mazda	MX-5 Miata Conv.	89
Dodge	Stealth	162
Mitsubishi	3000 GT	172
Alfa Romeo	Splder Conv	184
Saab	900 Conv	195
Nissan	300ZX	229
Mitsubishi	3000 GT 4WD.	238

COLLISION INSURANCE LOSSES 1990-92  
PASSENGER CARS—Continued

Make	Model	Relative loss payment
Porsche	911 Targa/ Coupe.	315
Mercury	Capri Conv	100
Cadillac	Allante Conv	162
Chevrolet	Corvette	178
Toyota	MR2	188
Mercedes	SL Conv. Se- ries.	216
Chevrolet	Corvette Conv.	233
Porsche	911 Conv	281
Dodge	Stealth 4WD	349
<b>Midsized Cars: Two-Door Models:</b>		
Buick	Century	76
Oldsmobile	Cutlass Su- preme.	80
Chevrolet	Cavalier Conv.	82
Buick	Regal	92
Pontiac	Grand Am	94
Buick	Skyhawk	97
Mercury	Topaz	101
Chevrolet	Cavalier	106
Chrysler	LeBaron	110
	Conv.	
Chrysler	LeBaron	116
Acura	Integra	137
Oldsmobile	Achieva	78
Chevrolet	Lumina	91
Pontiac	Sunbird Conv	86
Pontiac	Grand Prix	94
Pontiac	Sunbird	96
Ford	Tempo	99
Honda	Accord	105
Oldsmobile	Cutlass Supr. Conv.	109
Honda	Civic	113
Chevrolet	Beretta	130
Honda	Prelude	180
<b>Four-Door Models:</b>		
Dodge	Dynasty	71
Buick	Century	72
Buick	Regal	74
Oldsmobile	Cutlass Ciera	76
Saturn	SL	78
Dodge	Spirit	79
Mercury	Topaz	81
Plymouth	Acclaim	82
Pontiac	Sunbird	85
Eagle	Premier	87
Chevrolet	Lumina	71
Chrysler	LeBaron	74
Pontiac	Grand Am	76
Oldsmobile	Cutlass Su- preme.	78
Pontiac	Grand Prix	79
Chrysler	New Yorker	80
Ford	Tempo	82
Mitsubishi	Galant 4WD	84
Ford	Taurus	85
Mercury	Sable	87
Chevrolet	Cavalier	89
Mitsubishi	Galant	95
Buick	Skyhawk	94
Dodge	Monaco	95
Oldsmobile	Achieva	99
Subaru	Legacy	104
Volvo	240	106

COLLISION INSURANCE LOSSES 1990-92  
PASSENGER CARS—Continued

Make	Model	Relative loss payment
Nissan	Stanza	110
Toyota	Cressida	115
Infiniti	G20	121
Volkswagen	Passat	150
Chevrolet	Corsica	92
Mitsubishi	Diamante	93
Honda	Accord	95
Toyota	Camry	96
Subaru	Legacy 4WD	103
Mazda	626	106
Nissan	Maxima	109
Honda	Civic	112
Hyundai	Sonata	117
Acura	Integra	123
Peugeot	405	270
<b>Station Wagons/ Passenger Vans:</b>		
Mitsubishi	Expo	60
Ford	Taurus	77
Oldsmobile	Cutlass Ciera	80
Mercury	Sable	82
Subaru	Legacy 4WD	100
Volkswagen	Passat	144
Buick	Century	66
Chevrolet	Cavalier	78
Honda	Accord	81
Subaru	Legacy	95
Volvo	240	104
<b>Sports Models:</b>		
Chevrolet	Camaro	124
	Conv.	
Chevrolet	Camaro	134
Ford	Mustang	158
Nissan	300ZX 2+2	178
Ford	Mustang Conv.	130
Pontiac	Firebird	145
Toyota	Supra	160
Acura	NSX	221
<b>Luxury Models:</b>		
Buick	Riviera	92
Cadillac	Eldorado	97
Volvo	740/760 SW	110
Volvo	940 4D	115
Oldsmobile	Toronado	125
Volvo	940 SW	143
Saab	9000	155
Lexus	ES 300	165
Mercedes	300CE	186
BMW	318/325i Conv.	203
Audi	80/90 Quattro.	213
BMW	318/325i 4D	236
Alfa Romeo	164	297
Lincoln	Continental	93
Infiniti	M30 Conv	100
Lincoln	Mark VII	112
Volvo	740/760 4D	120
Jaguar	XJ-S Conv	133
Mercedes	190E	146
Audi	80/90	164
BMW	525i/535iS	176
Lexus	SC 300/400	192
Infiniti	M30	204
Jaguar	XJ-S	217
Audi	V8 Quattro	258

COLLISION INSURANCE LOSSES 1990-92 PASSENGER CARS—Continued			COLLISION INSURANCE LOSSES 1990-92 PASSENGER CARS—Continued			COLLISION INSURANCE LOSSES 1990-92 PASSENGER CARS—Continued		
Make	Model	Relative loss payment	Make	Model	Relative loss payment	Make	Model	Relative loss payment
<b>Large Cars:</b>			Mercedes	300TE 4WD	126	Jeep	Comanche	84
<b>Two-Door Models:</b>			Mazda	929	146		4x4.	
Mercury	Cougar	96	Mercedes	300TE	156	Chevrolet	S10 Series	88
Ford	Thunderbird	97	Acura	Legend 2D	165	Nissan	Regular/Ext Cab.	94
<b>Four-Door Models:</b>			Mercedes	300E 4WD	170	Mitsubishi	Regular/Ext Cab.	95
Buick	LeSabre	76	BMW	735/750iL	212		Regular/Ext Cab.	102
Chevrolet	Caprice	78	<b>Vans, Pickups and Utility Vehicles:</b>				Regular/Ext Cab.	109
Oldsmobile	Ninety-Eight	85	<b>Cargo Vans and Large Passenger Vans:</b>				Standard Pickups:	
Oldsmobile	Eighty-Eight	88	GMC	Rally Wagon 2500.	39	GMC	3500 Series 4x4.	49
Ford	Crown Victoria.	91	Dodge	B150 Cargo Van.	51	Chevrolet	2500 Series 2500 Series 4x4.	54 57
Acura	Vigor	126	Chevrolet	Chevyvan 30 Vandura 2500.	56 57	Ford	F-150 Series 4x4.	61
Pontiac	Bonneville	77	Chevrolet	Astro Cargo Van.	58	GMC	1500 Series 4x4.	65
Chrysler	New Yorker	84	Chevrolet	Astro Car. Van 4x4.	59	Ford	F-250 Series 4x4.	67
Buick	Park Avenue	85	Chevrolet	Sportvan 20 Vandura 3500.	61	Ford	F-250 Series 4x4.	69 70
Mercury	Grand Marquis.	90	Dodge	B350	82	Dodge	D150 Series	73
	Roadmaster	94	Dodge	B150	46	Dodge	D250 Series	78
<b>Station Wagons/Passenger Vans:</b>			Dodge	B250	56	Chevrolet	3500 Series Reg./Ext Cab 4x4.	84 96
Chevrolet	Astro Van 4WD.	50	Chevrolet	Chevyvan 10 Van.	56 58	Dodge	D350 Series	121
Dodge	Caravan 4WD.	55	Dodge	B250 Cargo Van.	58	GMC	3500 Series 3500 Series 4x4.	51 56
Chevrolet	Astro Van	59	Chevrolet	Chevyvan 20 E-150	56 59	Ford	F-350 Series	59
GMC	Safari Van	60	Ford	Econoline. B350 Cargo Van.	61	GMC	2500 Series 4x4.	65
Chevrolet	Lumina APV	71	GMC	Safari Cargo Van.	64	Chevrolet	1500 Series 4x4.	68
Pontiac	Trans. Sport	72	Ford	Aerostar Car. Van.	115	Chevrolet	1500 Series 4x4.	67
Toyota	Previa Van	77	<b>Pickups:</b>			Ford	F-150 Series 4x4.	70
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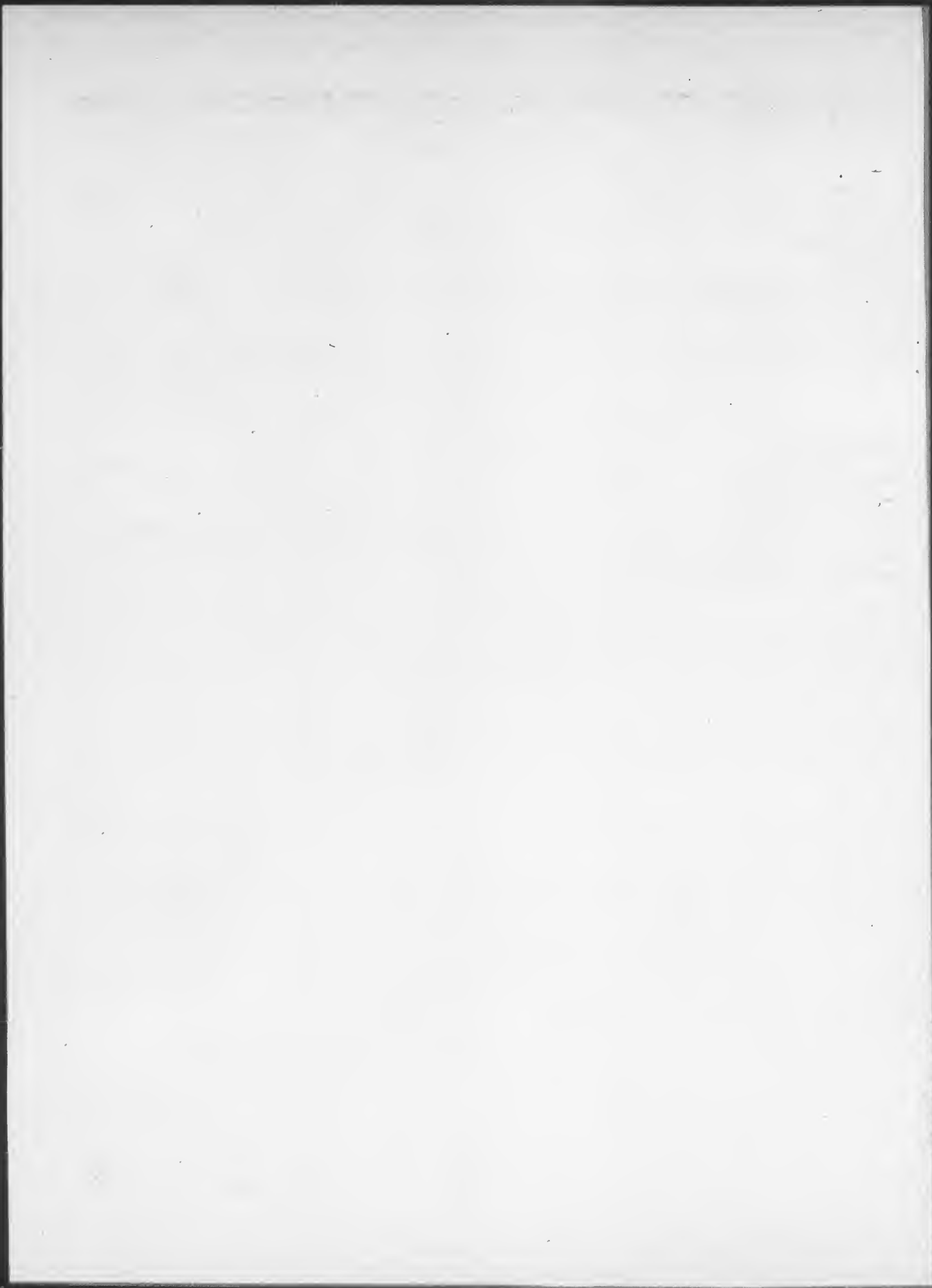
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Authority: 15 U.S.C. 1941(e); delegation of authority at 49 CFR 1.50.

Issued on: March 18, 1993.

**Barry Felrice,**  
Associate Administrator for Rulemaking  
[FR Doc. 93-6660 Filed 3-23-93; 8:45 am]

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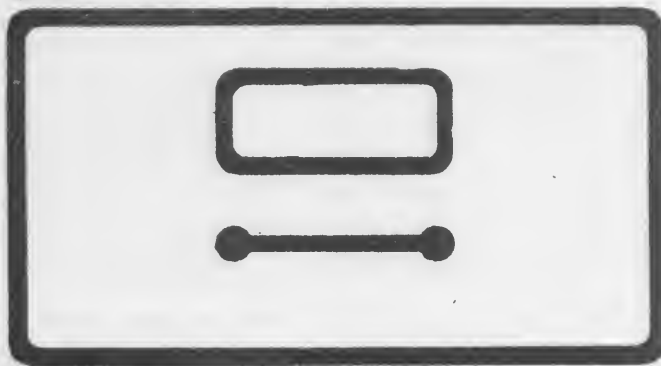
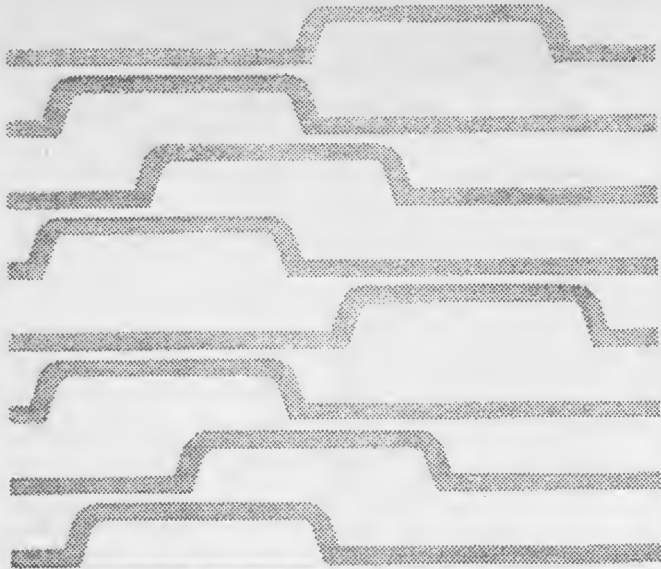
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GUIDE: Revised January 1, 1992

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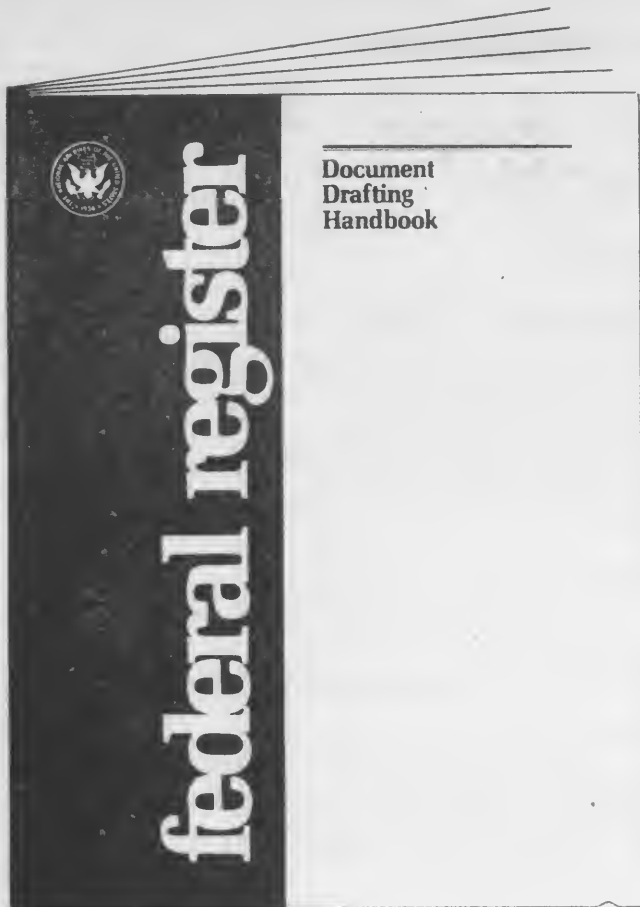
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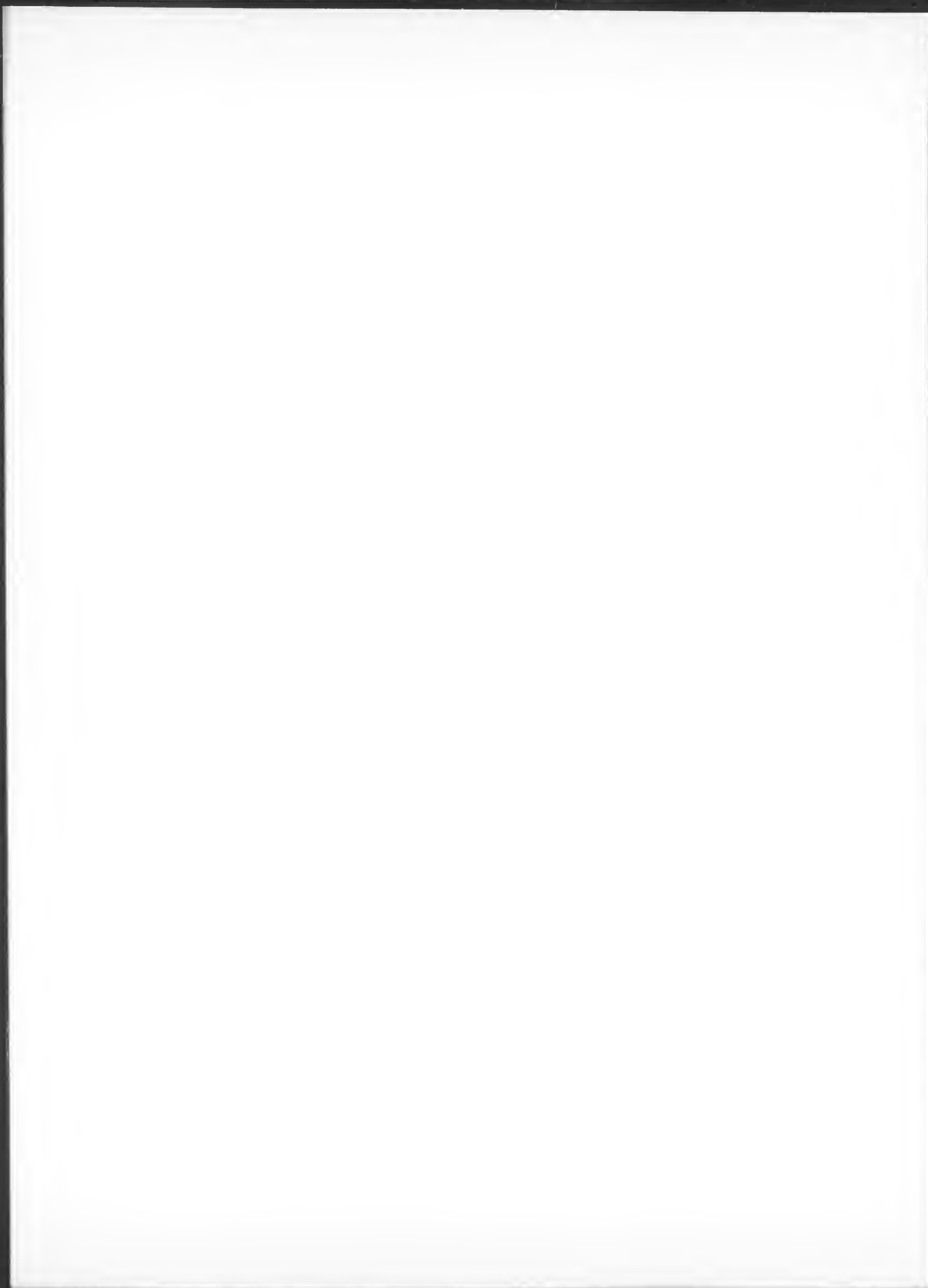
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