

technical and service rules for a new mobile-satellite service in the frequency bands below 1 GHz.

- 3—Office of Engineering and Technology—Title: Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum to the Fixed-Satellite Service and the Mobile-Satellite Service for Low-Earth Orbit Satellites (ET Docket No. 91-280, RMs-7334, 7399, 7612, PPs-1, 2, & 3). Summary: The Commission will consider adoption of a *Report and Order* addressing allocation of the 137-138, 148-150.05, 399.9-400.05, and 400.15-401 MHz bands for low-Earth orbit satellite services.
- 4—Office of Engineering and Technology—Title: Amendment of the Commission's Rules Regarding Compatibility Between Cable Systems and Consumer Electronics Equipment. Summary: The Commission will consider adoption of a *Notice of Inquiry* regarding issues pertaining to regulations for assuring compatibility between cable systems and consumer electronics equipment.
- 5—Private Radio and Managing Director—Title: Amendment of Parts 1, 2 and 21 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands (PR Docket No. 92-80). Summary: The Commission will consider adoption of a *Report and Order* amending its rules in a manner designed to expedite the processing of applications for stations in the Multipoint Distribution Service (MDS) and to streamline the MDS regulatory scheme.
- 6—Private Radio—Title: Amendment of Part 90 of the Commission's Rules to Create the Emergency Medical Radio Service (PR Docket No. 91-72, RM-7336). Summary: The Commission will consider adoption of a *Report and Order* concerning the creation of the Emergency Medical Radio Service.
- 7—Private Radio—Title: Amendment of Part 13 of the Commission's Rules to Privatize the Administration of Examinations for Commercial Operator Licenses and to Clarify Certain Rules (FO Docket No. 92-206). Summary: The Commission will consider adoption of a *Report and Order* privatizing the administration of commercial radio operator examinations.
- 8—Private Radio—Title: Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and 935-940 MHz Bands Allocated to the Specialized Mobile Radio Service (PR Docket No. 89-553, RMs-6724 and 6579). Summary: The Commission will consider adoption of a *First Report and Order* and *Further Notice of Proposed Rulemaking* concerning the licensing of the 200 channels in the 900 MHz band allocated for use in the Specialized Mobile Radio Service.
- 9—Mass Media—Title: Amendment of the Commission's Rules Regarding Implementation of the Cable Television Consumer Protection and Competition Act of 1992—Carriage of Home Shopping Stations. Summary: The Commission will consider adoption of a *Notice of Proposed Rulemaking* that seeks comment on implementation of the provision of the

Cable Television Consumer Protection and Competition Act of 1992 relating to the carriage of broadcast television stations that are predominantly utilized for the transmission of sales presentations or program length commercials ("home shopping stations").

This meeting may be continued the following work day to allow the Commission to complete appropriate action.

Additional information concerning this meeting may be obtained from Steve Svab, Office of Public Affairs, telephone number (202) 632-5050.

Issued: January 8, 1993.

Federal Communications Commission.

Donna R. Searcy,

Secretary.

[FR Doc. 93-743 Filed 1-8-93; 12:05 am]

BILLING CODE 6712-01-M

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

January 7, 1993.

TIME AND DATE: 10:00 a.m., Thursday, January 14, 1993.

PLACE: Room 600, 1730 K Street, NW., Washington, DC.

STATUS: Open.

MATTERS TO BE CONSIDERED: The Commission will consider and act upon the following:

1. *Island Creek Coal Company*, Docket No. VA 91-47-R, etc. (Issues include whether the judge erred in vacating two imminent danger orders of withdrawal issued to Island Creek by the Secretary of Labor, pursuant to 30 U.S.C. § 817(a), alleging that the south gob at its mine contained an explosive level of methane and that Island Creek violated 30 CFR § 75.316)

Any person attending this meeting who requires special accessibility features and/or auxiliary aids, such as sign language interpreters, must inform the Commission in advance of those needs. Subject to 29 CFR § 2706.150(a)(3) and § 2706.160(e).

CONTACT PERSON FOR MORE INFORMATION: Jean Ellen (202) 653-5629/(202) 708-9300 for TDD Relay/1-800-877-8339 for toll free.

Jean H. Ellen,

Agenda Clerk.

[FR Doc. 93-786 Filed 1-8-93; 2:24 pm]

BILLING CODE 6735-01-M

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD

TIME AND DATE: 10:00 a.m., January 19, 1993.

PLACE: 4th Floor, Conference Room, 1250 H Street, NW., Washington, DC.

STATUS: Open.

MATTERS TO BE CONSIDERED:

1. Approval of the minutes of the last meeting.
2. Thrift Savings Plan activity report by the Executive Director.
3. Review of audit reports:
 - "Executive Summary of Fiscal Year 1991 Federal Agency Fiduciary Compliance Reviews."
 - "Pension and Welfare Benefits Administration Review of the Thrift Savings Plan Annuity Operations at the Metropolitan Life Insurance Company and the Federal Retirement Thrift Investment Board."
 - "Pension and Welfare Benefits Administration Review of ADP Operations Management of the Thrift Savings Plan at the United States Department of Agriculture, Office of Finance and Management, National Finance Center."

CONTACT PERSON FOR MORE INFORMATION:

Tom Trabucco, Director, Office of External Affairs, (202) 942-1640.

Dated: January 8, 1993.

Francis X. Cavanaugh,

Executive Director, Federal Retirement Thrift Investment Board.

[FR Doc. 93-824 Filed 1-8-93; 8:45 am]

BILLING CODE 6760-01-M

SECURITIES AND EXCHANGE COMMISSION Agency Meetings

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Pub. L. 94-409, that the Securities and Exchange Commission will hold the following meeting during the week of January 11, 1993.

Closed meetings will be held on Wednesday, January 13, 1993, at 2:30 p.m. and on Friday, January 15, 1993 following the 11:00 a.m. open meeting. An open meeting will be held on Friday, January 15, 1993 at 11:00 a.m., in Room 1C20.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the closed meetings. Certain staff members who have an interest in the matters may also be present.

The General Counsel of the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c) (4), (8), (9)(A) and (10) and 17 CFR 200.402(a) (4), (8), (9)(i) and (10), permit consideration of the scheduled matters at closed meetings.

Commissioner Roberts, as duty officer, voted to consider the items listed for the closed meetings in closed session.

The subject matter of the closed meeting scheduled for Wednesday, January 13, 1993, at 2:30 p.m., will be:

Institution of administrative proceedings of an enforcement nature.

Settlement of administrative proceedings of an enforcement nature.
Institution of injunctive action.
Settlement of injunctive action.
Opinion.

The subject matter of the open meeting scheduled for Friday, January 15, 1993, at 11:00 a.m., will be:

Oral argument on an appeal from an administrative law judge's initial decision by V.F. Minton Securities, Inc., a registered broker-dealer, and Vernon F. Minton, the firm's President. The firm and Minton have appealed from findings that they violated

antifraud and registration provisions of the securities laws. For further information, please contact George J. Zornada at (202) 272-2435.

The subject matter of the closed meeting scheduled for Friday, January 15, 1993, following the 11:00 a.m. open meeting will be:

Post oral argument discussion.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if

any, matters have been added, deleted or postponed, please contact: Steve Luparello at (202) 272-2100.

Dated: January 5, 1993.

Jonathan G. Katz,

Secretary.

[FR Doc. 93-711 Filed 1-7-93; 4:49 pm]

BILLING CODE 8010-01-M

Federal Register

Tuesday
January 12, 1993

Part II

**Environmental
Protection Agency**

40 CFR Part 86

**Control of Air Pollution from New Motor
Vehicles and New Motor Vehicle Engines;
Regulations for Light-Duty Vehicle and
Light-Duty Truck 1994, 1995 and 1996;
Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 86

[FRL-4550-2]

RIN 2060-AD 36

Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines; Regulations for Light-Duty Vehicle and Light-Duty Truck 1994, 1995, and 1996 Model Year Durability Testing Procedures, and 1994 and Later Model Year Allowable Maintenance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action revises durability procedures and allowable maintenance provisions in the Federal motor vehicle emission certification regulations. The durability program revisions apply to model year 1994, 1995, and 1996 light-duty vehicles (LDVs) and light-duty trucks (LDTs). The rule includes durability procedures for the certification of vehicles subject to the Tier 1 emission standards promulgated on June 5, 1991. The revised durability procedures are in large part consistent with those adopted by the State of California.

The allowable maintenance provisions apply to model year 1994 and later LDVs and LDTs. The new regulations generally extend maintenance intervals for LDVs in response to the longer Tier 1 definition of LDV useful life and update the provisions applicable to LDTs.

EFFECTIVE DATE: January 12, 1993. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 12, 1993.

ADDRESSES: Materials relevant to this final rule are contained in the EPA Air Docket, Attention Docket No. A-90-24, located at the Air Docket Section, USEPA, room M-1500, 401 M Street SW., Washington, DC 20460; telephone (202) 260-7548. The docket may be inspected between the hours of 8:30 am to 12 noon and from 1:30 to 3:30 pm. Monday through Friday. A reasonable fee may be charged by EPA for copying docket materials.

FOR FURTHER INFORMATION CONTACT: James A. McCargar, Certification Division, U.S. Environmental Protection Agency, National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, Michigan, 48105. Telephone (313) 668-4244.

SUPPLEMENTARY INFORMATION:

I. Introduction

The Agency published a Notice of Proposed Rulemaking (NPRM) for this rulemaking on April 30, 1992.¹ The preamble to that proposed rule contains substantial information relevant to the matters discussed throughout this Notice. The reader is referred to that document for additional background information as well as for discussion of the various issues raised during the rulemaking. The NPRM preamble also includes a discussion of the important role durability procedures play in the Federal motor vehicle certification process.²

The Clean Air Act Amendments of 1990 (hereafter referred to as the Amendments) mandated new, more stringent motor vehicle emission standards and modified the definitions of motor vehicle useful life.³ The Environmental Protection Agency (EPA) published regulations setting forth certain of these new requirements, referred to as the Tier 1 light-duty emission standards and useful life levels, on June 5, 1991.⁴

Lengthening of useful life mileages mandated by the Amendments for light-duty vehicles (LDVs) and light-duty trucks (LDTs) subject to the Tier 1 standards made some sections of the current durability regulations obsolete, prompting EPA to make changes for model year 1994 (MY94), the first year Tier 1 standards take effect.⁵ Prior to the Amendments, the Agency had been considering broad improvements to various aspects of the certification durability procedures, due to input from the General Accounting Office, the vehicle manufacturers, and the Agency's own assessments of the program. Given the effect of the Amendments on the useful life mileages, EPA determined there was insufficient time to resolve all the key technical issues involved with a broad durability program revision before vehicle makers had to certify MY94 vehicles.

Consequently, the Agency's NPRM proposed revisions to establish interim durability procedures for MY94 and MY95 LDVs and LDTs; light-duty durability procedures for the 1996 and later model years would be proposed in a separate notice to address technical

and procedural improvements to the durability program undergoing evaluation by the Agency.⁶ The two rulemakings have been referred to as Revised Durability Program I and II (RDP-I and RDP-II).

Previous EPA regulations have specified that before a manufacturer performs maintenance on vehicles or components used to determine deterioration factors (DFs), it must demonstrate that the maintenance is "technologically necessary to assure in-use compliance with emission standards."⁷ The Agency has promulgated a list of emission-related components and systems together with the shortest "allowable maintenance intervals" considered technologically necessary. These intervals are also the shortest periods of time in which a manufacturer can require owners to perform emission-related maintenance as a condition of continued Federal emission warranty coverage.

In the RDP-I NPRM, the Agency proposed increasing LDV allowable maintenance intervals based on the adoption of a 100,000-mile useful life for Tier 1 LDVs. The Agency also proposed limited adjustments to the LDT allowable maintenance intervals and additions to the list of maintained components. The Agency based the proposed changes to these intervals on its technical analysis of what interval was technologically necessary, the current LDT requirements, intervals used in manufacturers' current maintenance manuals, and current California Air Resources Board (CARB) requirements.

A public hearing was held on May 15, 1992, in Ann Arbor, Michigan, at which the Agency took comment on the RDP-I NPRM. The comment period remained open until June 15, 1992. The next two sections of this preamble provide a description of this final rule action and the consideration of public comment that led to changes from the NPRM. The final sections of the preamble describe the economic, environmental, and cost-benefit impacts of the rule and address certain administrative requirements.

II. Description of the Action

A. Revisions to Durability Procedures

With this rule the Agency is modifying the current durability procedures for use in certifying MY94 through MY96 LDVs and LDTs. The addition of MY96 to the applicability of the interim durability program is in response to public comment and in

¹ 57 FR 18544 (April 30, 1992).

² 57 FR 18544, 18545 (April 30, 1992).

³ Pub. L. No. 101-549, 104 Stat. 2399.

⁴ 56 FR 25724, June 5, 1991.

⁵ The Amendments added a "full" useful life of 10 years/100,000 miles for LDVs, a 50,000 mile "intermediate" useful life for LDTs, and truncated the full useful life of the lighter LDTs at 10 years/100,000 miles.

⁶ 57 FR 18544, April 30, 1992.

⁷ See 40 CFR 86.090-25(b)(2).

recognition of the short leadtimes remaining before manufacturers must know with some certainty their durability program options for that model year.

As proposed in the NPRM, much of the structure of the current LDV durability program remains intact. The standard LDV durability program still calculates DFs on the basis of data from preproduction durability data vehicles (DDVs). The Automobile Manufacturers Association (AMA) cycle is carried forward in its historical form as the standard EPA-defined procedure for LDV mileage accumulation. For Tier 0 LDVs, the duration of AMA mileage accumulation remains at 50,000 miles.⁸ Manufacturers may still petition the Administrator for the use of modified versions of the AMA (substitute AMA option) and to apply for an alternative durability program based in large part on data from production DDVs (Production AMA Durability Program option).

Much of the current LDT durability program is also maintained. Manufacturers may continue to develop and submit DFs under a Standard Self-Approval Durability Program based on their own service accumulation and vehicle/component selection methodologies, if the program design is consistent with good engineering practice. However, as proposed in the NPRM, the Production AMA Durability Program option based on production DDVs has been deleted for LDTs. As noted in the proposal, the 1985 promulgation of the self-approval program for LDTs made this earlier alternative essentially moot.

Several important new durability program elements will apply for MY94 through MY96. First, the duration of AMA mileage accumulation for Tier 1 LDVs certified under the Standard AMA Durability Program is set at 100,000 miles. Manufacturers may request approval to terminate DDV mileage accumulation and emission testing on Tier 1 LDVs at any point beyond 75,000 miles and to calculate 100,000-mile DFs based on extrapolations from those test data. The manufacturer's request for approval to extrapolate must include information demonstrating the durability of the vehicle's emission control components and systems at or

beyond the full useful life. The Agency will approve such requests based primarily on evaluations of the linear correlation of the test data, the impact of outlier data, the maintenance history of the DDV, and the supplemental data provided by the manufacturer to substantiate satisfactory 100,000-mile component durability. Other information may also be considered. These provisions have been adopted without change from the proposal. Further discussion of the Agency's rationale for these provisions may be found in the NPRM.

Second, the Agency is adding the new Alternative Service Accumulation Durability Program (ASADP) option that was proposed in the NPRM for LDVs and LDTs.⁹ Under this option, the manufacturer submits for the Administrator's approval an ASADP using preproduction vehicles and including the following elements: (1) An alternative service accumulation procedure; (2) a selection method for vehicles and components; (3) procedures for determining the DF, including a demonstration that the alternative procedures would generate DFs that are representative of actual in-use deterioration; (4) an in-use verification program (the "reality check"); and (5) data showing that all emission-related components are designed to operate properly for the entire useful life of vehicles in actual use (or for the minimum intervals specified in the allowable scheduled maintenance regulations).

The service accumulation procedure may consist of whole-vehicle mileage accumulation, bench cycling techniques that simulate in-use aging and operating environments, or a combination of the two. For the in-use verification program, the manufacturer agrees to recruit and test in-use vehicles in subsequent years to determine whether the alternative procedures accurately predict the deterioration of the vehicle's emissions in actual use for the applicable useful life. The manufacturer's proposal for the in-use reality check should include the method for selecting the vehicle sample, the criteria to be used in evaluating the results of the vehicle testing, and the

remedies for failure to satisfy those criteria.

The Agency believes the ASADP will lead to increased flexibility in the durability process of motor vehicle certification, resulting in manufacturers developing more accurate durability programs that cost less than current procedures. The Agency structured the ASADP rules to meet this goal, allowing EPA to restrict its approval to those alternative programs that it believes are an improvement over current durability procedures. Approval is limited to programs where EPA is confident the ASADP will generate DFs that are representative of actual in-use deterioration and confident of the full-life durability of emission-related components. In addition, the ASADP approach includes an important feedback mechanism or reality check not present under EPA's current durability procedures. The Agency therefore believes the resulting durability programs will lead to more accurate DFs. Based on CARB's experience to date with a similar program, along with the interest expressed by various manufacturers in using the ASADP approach, the Agency believes the increased flexibility allowed under these rules will also lead to cost savings for manufacturers.

If the Administrator approves the manufacturer's proposed ASADP, all necessary aspects of the program will be included in a written agreement between the manufacturer and EPA. Any certificate of conformity issued by EPA based on such an alternative durability program will be conditioned on full compliance by the manufacturer with the terms of the in-use verification component of the written agreement.¹⁰ If the manufacturer fails to fully execute the in-use verification program, then the manufacturer will be viewed as failing to comply with the terms and conditions upon which the certificate has been issued. As a result, the vehicles or trucks originally covered by the certificate will instead not be covered by the certificate, and the manufacturer may be subject, at the Agency's enforcement discretion, to the imposition of civil penalties violating section 203(a)(1) of the Act.

The Agency recognizes that manufacturers may develop ongoing improvements to their in-use verification testing programs. Therefore, the manufacturer and EPA may agree to amend the in-use verification portion of the initial agreement, if the

⁸ In compliance with the Amendments, the Tier 1 regulations established new vehicle emission standards starting with MY94 and providing a phase-in for the manufacturers. For LDVs, for example, 40 percent of a manufacturer's MY94 vehicles must meet the new tighter standards, increasing to 80 percent in MY95, and finally, 100 percent in MY96. Tier 0 refers to those vehicles that, during the phase-in years, continue to be certified to the older, less stringent standards.

⁹ The "service accumulation method" is the method used in a durability program to simulate the accumulation of actual in-use age and mileage on a vehicle; "mileage accumulation cycles" are the subset of service accumulation methods that employ whole-vehicle mileage accumulation. The Agency chose the name Alternative Service Accumulation Durability Program to distinguish it from EPA's historical Alternative Durability Program and to make clear the availability of both whole-vehicle and bench-aging options under the new option.

¹⁰ Manufacturers must comply with all other terms of the written agreement prior to issuance of the certificate of conformity.

manufacturer demonstrates and the Agency determines that the amended agreement will improve the in-use verification portion of the agreement.

Another change included in the interim procedures for MY94 through MY96 is a provision for a manufacturer to request alternative mileage intervals between test points for DDVs. This is expected to facilitate common testing with the California Air Resources Board (CARB).

For the convenience of readers, EPA is summarizing many of the durability requirements in a single section, 40 CFR 86.094-13, "Light Duty Exhaust Durability Programs." Finally, the term "durability useful life" has been added to the definitions of section 86.094-2. The durability useful life is the highest useful life mileage of all the useful life mileages that apply to a particular vehicle. More than one useful life may apply to a vehicle because emission standards for a given pollutant may exist at more than one mileage point and because the definition of full useful life may be different for different pollutants. In these cases, the new term simplifies the regulatory language for determination of the duration of service accumulation on a given durability data vehicle.

B. Revisions to Allowable Maintenance Intervals

The Agency is also adopting revisions to the allowable maintenance regulations, applicable to MY94 and later LDVs and LDTs, exactly as proposed in the NPRM and for the reasons discussed in the NPRM. No adverse comment was received on these changes. For all LDTs, two modifications are included: the maintenance interval for exhaust gas recirculation systems increases from 50,000 miles to 100,000 miles, and a new supercharger interval is established at 100,000 miles. For diesel cycle LDTs, the fuel injector tip cleaning interval is extended from 50,000 miles to 100,000 miles; because a 100,000-mile interval already existed in the regulations for other diesel-cycle LDT fuel injector maintenance, this change is accomplished by simply deleting the separate tip cleaning interval that existed in earlier regulations. The maintenance intervals for all LDVs are proposed to match the complete list of LDT intervals, as revised.

III. Public Participation

This section summarizes significant comments received from the public and EPA's response to those comments. Submissions were received from a total of seven commenters, including four

motor vehicle manufacturers, one State government agency, and a joint submission from two professional associations. Copies of the comments in their entirety can be obtained from the docket for this rule (see "ADDRESSES"). The docket also includes a Response to Comments document for this rule, which provides greater detail on the comments received and EPA's response.

A. Model Year Applicability

Model Years of the Interim Program

One commenter recommended that EPA amend the interim durability program in RDP-I to cover certification of MY94 through MY97, which would be more orderly and economical, and would permit it to learn more about the new ASADP process and to perfect ASADP procedures. Another manufacturer commented that its leadtime requirements made it desirable to have the RDP-II rule completed by the end of calendar year 1992.

Based on the current status of the long-term durability program (RDP-II) rulemaking and the above comments, EPA has chosen to finalize the RDP-I regulations with a period of applicability for the interim durability program of MY94 through MY96. In EPA's judgment, the addition of MY96 to the interim program should provide sufficient time for promulgation of the RDP-II rule effective in MY97, while providing manufacturers with three model years to experiment with the ASADP option for Federal certification. The Agency believes this duration is an appropriate response to the issues raised by the commenter; in addition, the issue will, by its nature, again be considered in the RDP-II rulemaking.

Carryover and Carryacross to Future Model Years¹¹

One manufacturer commented that EPA regulations should allow case-by-case carryover of data derived from AMA durability programs or Standard Self Approval durability programs to MY98, presuming EPA accepted the manufacturer's recommended duration for the interim durability program (through MY97). Another encouraged EPA to provide greater assurance that durability data from MY94 and MY95 durability demonstrations could be carried over to MY96 and beyond.

¹¹ Under 40 CFR 86.094-24(f), manufacturers may use data generated by one test vehicle to represent data in a different engine family, if certain design similarities exist. This is generally termed "carryover" when applying data from one model year to the next, or "carryacross" when applying data from one engine family to another within the same model year.

As noted in the response to the previous issue, EPA has chosen to extend the applicability for the interim durability program to the period from model years 1994 through 1996. The issue of carryover to model years beyond the interim period is outside the scope of the RDP-I rulemaking and will be addressed by EPA as part of the RDP-II rulemaking.

B. Linecrossing

The RDP-I NPRM did not propose changes to the current regulations defining linecrossing policy.¹² One manufacturer commented that Federal linecrossing criteria are too stringent. The commenter apparently does not question the basic policy that, if the DDV is a surrogate for the eventual calibration, linecrossing data provides clear evidence of potential in-use emission problems. Rather, it appears to be addressing the more narrow issue of consistency between EPA and CARB linecrossing policy.

The Agency's understanding is that CARB permits use of linecrossing durability data in only two limited circumstances. In the first, a manufacturer may conditionally carry over durability data gathered from a Federal Tier 0 durability data vehicle to a California Tier 1 certification, in order to save the expense of running a second DDV solely for California certification. However, CARB prohibits this option if the Federal certification had been denied on the basis that the original 50,000-mile durability data linecrossed the Federal standards, and this situation is largely mooted by promulgation of the Federal Tier 1 standards.

In the second circumstance, a manufacturer might seek to carry across durability data between two vehicles that have essentially identical engine and emission control systems, but that fall in different vehicle classes. The manufacturer cited a hypothetical example of this case where it uses an essentially identical system in two different trucks, and the weights of the two trucks fall on either side of the boundary between the LDT1 and LDT2 subclasses, which have different Tier 1 emission standards; the manufacturer wishes to avoid running one DDV for each system. The commenter states that California permits the conditional use of the LDT2 durability data for

¹² Data from the DDV is used to develop a straight-line graph reflecting emissions versus mileage. Linecrossing occurs when the emissions from the first official test point, the interpolated intermediate useful life mile point, or the interpolated full useful life mile point on this line exceed the applicable low-altitude emission standards.

certification of the LDT1, even if the data linecross at the tighter LDT1 standards, by calculating DFs from a revised deterioration line drawn parallel to the LDT2 deterioration line and intersecting the applicable CARB LDT1 emission standard. The commenter then states that the EPA linecrossing policy in the NPRM would prohibit the additional step of carrying across the durability data to a Tier 1 LDV certification, where California would permit the carryacross.

As noted above, the linecrossing language in the NPRM was not a new proposal; it was carried forward intact from current regulations. For trucks, manufacturers self-approve their durability programs, and may self-approve the kind of carryover from LDT2s to LDT1s cited in the comment. For LDVs, however, all durability program options other than the standard (AMA) program require specific EPA approval. Thus, the policy would preclude the additional step in the commenter's example where LDT carryacross data were linecrossing at the LDV standards. The commenter provided no data to support a reversal of the Agency's policy. The consequence that a new DDV must be run to replace the linecrossing data has always been present, and in the Agency's view, appropriate. Without new information with which to justify a change in the long-established policies for LDVs, the Agency has chosen in the final rule to continue the present policy.

C. Restrictions on Multiple-Standard Engine Families

A manufacturer commented that requiring separate engine families for vehicles certified to different standards increases the number of DDVs. This comment was apparently in response to the requirements of 40 CFR 86.094-30, which states that only one certificate be issued per engine family and that each certificate must certify compliance with no more than one set of in-use and certification emission standards. The effect of these requirements is to prohibit certification of multiple-standard engine families.

These provisions are part of existing regulations and were neither modified nor raised for comment in the RDP-I proposal. The commenter also failed to detail sufficient reason to modify this provision, therefore EPA has not changed the RDP-I final rule in response to this comment.

D. Fuels

Durability Programs for Alternative-Fuel Vehicles

One respondent expressed concern about the applicability of the proposed durability revisions to gaseous-fueled vehicles such as compressed natural gas and liquid petroleum gas (LPG) vehicles. The commenter requested that the Agency insert language specifically restricting the durability regulations to certification of vehicles fueled by gasoline, diesel fuel, and methanol.

The Agency believes that the durability regulations as proposed can appropriately be applied to all motor vehicles currently subject to emission standards promulgated under the Act, notwithstanding the fuel for which the vehicle was designed. While the Agency has not yet promulgated standards and procedures applicable to gaseous-fueled vehicles, a proposal for such a rulemaking is in preparation. The Agency expects to propose these revised durability procedures for new natural gas and LPG vehicles in the context of that separate rulemaking. This is consistent with the "level playing field" approach the Agency has applied and continues to apply to its treatment of alternative fueled vehicles.

Service Accumulation Fuels

Two commenters jointly sought careful consideration by EPA of the potential impact of in-use fuels on emission durability. The organizations requested that the Agency clarify several aspects of current policy on service accumulation fuels and any changes that might be implied by the RDP-I proposal.

The RDP-I NPRM did not propose any amendments to the service accumulation fuel regulations for current LDV and LDT durability programs. While a careful re-evaluation of these regulations was impossible in this rulemaking to establish the interim durability program, EPA may propose revisions to the service accumulation fuel requirements as part of the RDP-II rulemaking, including aspects such as the sulfur content of the fuel.

For manufacturers seeking to use the new ASADP option, the elements of the in-use verification, including any consideration of customer fuel usage as a criterion in the recruitment process, are a subject for proposal by the manufacturer and approval by the Agency as part of the manufacturer's ASADP plan. The Agency would consider all elements of the in-use verification, including vehicle recruitment plans and fuels, in determining whether the ASADP

strategy overall is likely to generate DFs that reflect in-use deterioration. However, because ASADP plans will be manufacturer specific and potentially quite different from one another, the Agency believes it is inappropriate to define specific fuels criteria for the in-use verification. At the same time, in its case-by-case review of in-use verifications, EPA would not expect to approve an in-use verification program that would reject a candidate test vehicle solely on the basis of customer fuel use, if the fuel was reasonably commercially available and lawful. EPA takes this position to be consistent with the goal of predicting in-use deterioration. If EPA obtains information that differences among legal in-use fuels or manufacturer targeting of recruitment on the basis of likely customer fuel usage may be affecting the results of the in-use verification, then EPA may consider adoption of fuels criteria in the future, and in the meantime, it would apply that knowledge to its case-by-case evaluations.

E. Approval Mechanisms for the Extrapolation Option

One manufacturer commented that, without advance approval to extrapolate a durability vehicle from three-quarters of the applicable durability useful life to the full useful life prior to starting mileage accumulation, it is required to start on a time schedule that assumes a full 100,000 miles may be required. For related reasons, a second manufacturer suggested that EPA delegate the authority for making an extrapolation determination to the manufacturer under the Abbreviated Certification Protocol. The first commenter also expressed the opinion that the extrapolation criteria should require only that the extrapolated data comply with the applicable emission standards.

The Agency believes it should only approve extrapolation if the data are reasonably expected to generate DFs that are equivalent to those that would have resulted from full-useful-life mileage accumulation. The Agency sees no basis for legitimately presuming that extrapolation from data not yet gathered will be acceptable. This is based on the need to consider factors such as unscheduled maintenance, as well as linearity and scatter of the data in determining whether extrapolation is appropriate. Even with minimal leadtime benefits, however, manufacturers that successfully complete three-quarter-life mileage accumulation and obtain Agency approval to extrapolate the data will accrue significant savings from the

foregone mileage accumulation. In addition, a manufacturer may verify with EPA in advance the sample size, outlier procedure, and linearity evaluation it seeks to apply; approval to extrapolate would then be expedited, assuming verification that the actual data meet the agreed-upon criteria.

Because of the sensitivity of linear regressions to data at the extremes on the abscissa, EPA believes it cannot justify accepting extrapolated data which merely projects that the line falls below applicable emission standards. In such cases, the manufacturer must demonstrate through an increase in the sample size or tighter data fit that the extrapolated data represent no loss in predictive power caused by loss of the high-mileage data.

The Abbreviated Certification Protocol relies on a significant amount of prior certification experience being gained before manufacturers are allowed to make determinations on individual items. As the Agency gains experience with the extrapolation decision process, allowing manufacturers to determine whether 75,000-mile extrapolation is appropriate in a given case may also be considered. In the meantime, EPA will seek to minimize delays in a manufacturer's durability time schedule. Manufacturers can speed this approval process as well by ensuring completeness of their responses to the regression line fit criteria and documentation of emission system component durability.

F. General Provisions of the Alternative Service Accumulation Durability Programs (ASADP)

Use of Additive Deterioration Factors

Two commenters acknowledged that the proposal allowed for use of additive DFs for LDVs under an approved ASADP and requested changes in the final regulations to allow the same provision for LDTs. A third manufacturer commented that it made sense from both a practical and mathematical standpoint to use additive DFs irrespective of the type of certification durability program. The commenter supported this position with the statement that positive prediction bias occurred for multiplicative DFs calculated for vehicles under the tighter Tier 1 emission levels.¹³

As indicated at the May 15, 1992, public hearing, EPA intends to allow a manufacturer to request an additive DF as an option when certifying with an ASADP for LDTs as well as LDVs.

Omission of this option in the proposal was an oversight.

The Agency continues to believe that a multiplicative DF most accurately reflects the deterioration characteristics of actual emission control systems. Catalysts, which will continue to be the dominant emission control technology for the foreseeable future, are best characterized by their conversion efficiency, and the loss of conversion efficiency over time in the presence of stable engine-out emissions is a phenomenon that may be directly modeled as multiplicative deterioration. The Agency will continue to analyze this position as data become available from new systems designed to meet more stringent emission control standards.

Nevertheless, EPA does not wish to exclude the possibility that additive DFs may represent a more appropriate model for durability options that are tailored to a particular manufacturer's fleet. For this reason, EPA may accept alternative DF calculation methodologies for manufacturers choosing the ASADP option. In such cases, the in-use verification requirement provides necessary additional safeguards against additive DFs that would be poor predictors of actual deterioration.

Costs of In-Use Verification

One manufacturer commented that it was not apparent whether EPA included the cost estimates for conducting in-use verification testing in the economic impact analysis and calculation of reporting burden.

The calculations cited in the Economic Impact section in this preamble include in-use verification testing for ASADPs. The Information Collection Request (ICR) for this rule provides additional details.

The Agency projected respondent burden for the in-use verification portion of an ASADP at 750 hours per engine family for recruitment, testing, data reporting, and record storage. This constitutes about 37 percent of the total burden of running an ASADP for one engine family. The costs of running the verification are approximately \$45,000 out of the total \$122,000 cost per ASADP engine family. This is equivalent to approximately \$3,000 per vehicle test, which is consistent with the current EPA average cost for surveillance and confirmatory testing.

Substitute AMA Option

Four vehicle manufacturers have approached the Agency with questions related to, or draft proposals for, the use of substitute AMA cycles that would be substantially dissimilar to the AMA

procedure. These manufacturers have sought to clarify their prospects for approval of the substitute cycles for MY94 certification and to assess their options for carryover of data from California to Federal durability programs. The Agency considers these inquiries as requests to allow substitute AMA cycles that are substantially dissimilar to the AMA.

The RDP-I proposal did not propose amendments to substantively change current EPA regulations on substitute AMA cycles. Historically, the Agency has approved numerous requests for minor variations in the AMA procedure in order, for example, to accommodate differences between the length of a manufacturer's test track and the length of one standard AMA circuit. On the other hand, EPA has not approved any request by a manufacturer to employ a mileage accumulation cycle that includes major revisions to the AMA. In each case, EPA has concluded that the justifications for the proposed substitutes were not sufficient to ensure a substantial improvement in the accuracy of the resulting DFs.

These more recent inquiries by manufacturers indicate a renewed interest in the substitute AMA option by initiating or resubmitting work on a spectrum of potential cycles. These include not only cycles based on full-life mileage accumulation, but also cycles that attempt to simulate full-life mileage accumulation through very high-speed, abbreviated-mileage operation, an approach not anticipated by EPA in the RDP-I NPRM.

After evaluating these most recent inquiries, EPA believes that the up-front justifications provided by the manufacturers are insufficient to demonstrate likely, substantial improvement in the resulting DFs and, further, the Agency remains reluctant to ignore the risk of degradation in the quality of the durability program. The Agency acknowledges that the current policy has proven to be a difficult hurdle. Since there is insufficient time to initiate new test programs in support of a request for a substantially dissimilar substitute AMA for use in certification in the model years 1994 through 1996, manufacturers must necessarily rely on available historical data to justify their request. Approval of requests based on such data bears inherent risks because historical data will not be recent enough to reflect adequately on new designs being certified. Moreover, testing programs performed for other purposes and then used in a substitute AMA petition do not necessarily provide adequate coverage of each manufacturer's fleet.

¹³ Positive prediction bias is the tendency of the data to produce DFs that err on the high side.

Based on the above considerations, no change is made in the finalized RDP-I regulations; they continue to permit Administrator approval of substitute AMA cycles. Manufacturers may continue to seek approval of substitute cycles that incorporate either minor or major deviations from the AMA schedule. However, for cycles that bear little resemblance to the AMA, EPA is convinced that it will be unable to establish preapproval acceptance criteria for these cycles. The Agency is not optimistic that it will be possible to conclude that such cycles are indeed substantially more effective in predicting in-use emission deterioration.

On the other hand, EPA believes that the ASADP option may provide a more fruitful avenue, and the final regulations permit manufacturers to seek approval of programs based on substantially different substitute mileage accumulation cycles under that option. As with other ASADPs, manufacturers requesting this option must include an in-use verification in their agreement. This policy will permit manufacturer innovation while addressing the Agency's concern over the quality of the DFs they generate.

G. In-Use Verification

Range of Configurations Subject to Recruitment

The preamble to the NPRM stated that the vehicles recruited under an ASADP in-use verification must represent the range of vehicle configurations in each engine family certified using the ASADP. Three manufacturers commented that this requirement would reduce the reliability of any comparison between the in-use data and the certification DF, which by implication suggest that ASADPs would be limited in their ability to accurately reflect in-use deterioration. Commenters speculated on the additional test costs that might be required to compensate for increased scatter in the data, an added burden that would be inconsistent with the objectives of the rule.

Two manufacturers sought consistency with CARB policy, which permits manufacturers to restrict recruitment to the DDV configuration. A third manufacturer supported recruitment across a "reasonably representative mix" of vehicles in the family, achieved by proportional recruitment across the configurations in a family, with exceptions allowed for small sales families, small sales powertrains, and others.

The Agency has always acknowledged that differences between configurations

in the same engine family would mean that the broader the sampling across the family, the greater the scatter in the resulting data. Conversely, if the sampling is narrowly confined to a few configurations, the general applicability of the results across the engine family is less secure. Based on these comments and considerations, EPA has concluded that requiring either single-configuration sampling or sampling across all configurations would cement the manufacturers' options at the extremes of this tradeoff, when the most effective choice may vary based on other considerations in the ASADP. The Agency is therefore deleting the requirement that in-use verification must in each case include vehicles from each engine system combination certified under the program. Instead, the regulations will require testing of in-use vehicles certified under the program, with the range of vehicle testing to be determined on a case by case basis. The Agency believes that manufacturers can propose options that will adequately address the issue of the reliability of their data but will not require a proliferation of testing. For example, the Agency would consider foregoing some engine-family-specific comparisons where scatter would weaken the conclusions in favor of cross-family analyses of data aggregated from several ASADP engine families.

This final rule places only one explicit restriction on the recruitment method for the in-use verification, applicable only to those manufacturers seeking to use the additive DF option. The risk of the additive DF arises where the DDV configuration is calibrated lower than other configurations in the family; in this case, certain vehicle configurations may show passing certification values with an additive DF when certification values calculated with a multiplicative DF would fail. If in-use vehicles actually behave according to the multiplicative model, and manufacturers calibrate their configurations sufficiently above the DDV, vehicles with additive DFs may be inappropriately certified. Consequently, EPA will not accept in-use verification programs relying on single-configuration recruitment schemes if the manufacturer employs an additive DF. EPA maintains that if a manufacturer has no other program element explicitly designed to verify use of the additive DF and the DDV configuration alone is sampled, the testing will be unable to verify whether employing an additive DF was appropriate.

Basis for Determining Pass/Fail

One manufacturer commented that the variability of in-use data would make comparisons between in-use DFs and certification DFs inappropriate. It argued that a manufacturer should not be required to modify its ASADP as long as the in-use data complies with the emission standards.

The basis for determining pass/fail during the in-use verification will depend on the quality of the data, which in turn will depend on factors like the sample size, recruitment methods, and deterioration model (e.g., additive or multiplicative DF) employed in the ASADP. With today's rule, each of these program elements is proposed by the manufacturer; consequently, EPA has not specified an algorithm for evaluating the in-use data against the certification DFs.

The Agency does not wish to restrict manufacturer initiative in choosing from among the many statistical measures and the tolerances that may be applied to those measures when comparing in-use and certification results. Therefore, EPA finds it inappropriate to reject the possibility of a direct comparison between DFs derived from in-use data and DFs derived from certification. Similarly, EPA believes that restricting the pass/fail decision to a simple test of whether the in-use vehicles pass emission standards ignores the purpose of the check, which is to verify the adequacy of the manufacturer-designed elements of the ASADP in predicting the deterioration of the vehicle's emissions over its useful life.

Certification emission values almost never fall directly on the emission standard. The suggestion by the commenter to use only an in-use pass/fail criteria would therefore permit the manufacturer to perpetuate an ASADP that erroneously and consistently underpredicted deterioration. If the flawed ASADP were subsequently applied to an engine family with higher emission levels, an improper certification of this engine family would not be detected until surveillance testing (or a subsequent in-use verification) occurred some years later. This is precisely one of the problems that EPA is trying to address in revising the durability program.

The Agency believes that this rule, by not restricting the options a manufacturer may propose to use, provides an appropriate middle ground. Through flexibility in the regulations, EPA neither mandates criteria that may be unnecessarily burdensome nor settles for criteria that may be ineffective due to oversimplification.

H. Condition on the Certificates

The Agency proposed that completion of the in-use verification would be a condition on the certificate because of the importance of the in-use reality check. If a manufacturer failed to satisfy this condition, then all or some of the motor vehicles in that engine family would not be covered by the certificate, potentially subjecting the manufacturer to civil penalties for introduction of new motor vehicles into commerce that are not covered by a certificate of conformity. The Agency made it clear that it would exercise all appropriate enforcement discretion in evaluating any such situations.

Two manufacturers objected to this provision. They maintained that the Act did not authorize a retrospective determination that vehicles previously sold in good faith under a certificate could later be considered not sold under a valid certificate. This essentially amounted to voiding the certificate ab initio and was not authorized under the Act. They argued that the Agency's Selective Enforcement Audit (SEA) assembly line testing under section 206(b)(2)(A) was an appropriate analogy to the in-use verification. That provision authorizes EPA to suspend or revoke an engine family's certificate of conformity based on a failure of such audit, but limits it to vehicles still in the hands of the manufacturer or yet to be manufactured. According to the commenters, EPA therefore does not have the authority to condition a certificate of conformity as proposed.

The commenters also argued that the proposed use of a condition on the certificate was unnecessary, as section 208 of the Act authorized EPA to require the in-use testing involved in the reality check. Failure to comply with a valid test order under section 208 would potentially subject a manufacturer to civil penalties of \$25,000 per day. In the commenters' opinion, this was an adequate and lawful mechanism for EPA to ensure completion of the in-use verification.

The Agency notes that the Act authorizes the use of conditions or terms on the certificate of conformity. Specifically, section 206(a)(1) of the Act authorizes issuance of a certificate of conformity "upon such terms as * * * [the Administrator] may prescribe." This broadly phrased grant includes authority to prescribe appropriate conditions or terms that must be met, whether prior or subsequent to introduction of the motor vehicles into commerce. Section 206(b)(2)(A) does not limit this authority. That provision is not applicable; it establishes separate

EPA authority to suspend or revoke a certificate in those situations where SEA testing produces evidence of noncompliance. It does not address the scope of "terms" that EPA may prescribe under section 206(a)(1).

Violation of the condition on the certificate does not amount to voiding of the certificate ab initio. While EPA believes it could adopt such an enforcement posture, EPA instead proposed a condition on certificates such that all or some of the vehicle configurations in the engine family would lose certificate coverage if the manufacturer failed to comply with conditions on the certificate.¹⁴ Determination of the number of vehicles subject to loss of coverage under a certificate would be based on the specific facts involved in a failure to comply with the in-use verification conditions. For example, the scope of testing conducted compared to the scope required would be an important factor in determining whether all or some of the vehicles in an engine family are covered under the certificate. The Agency recently adopted a similar enforcement approach in rulemakings involving a phase-in over time of certain new motor vehicle standards.^{15 16}

Notwithstanding existing authority under section 208 of the Act to require manufacturers to perform emission testing, EPA believes it is appropriate to condition certificates as proposed. Rather than issuing requests to test under section 208 to each individual manufacturer participating in the alternative durability program, the Agency has decided to take advantage of the opportunity provided by this rulemaking to establish this condition beforehand for all manufacturers opting to use the ASADP programs. In the interest of ensuring the integrity of this new program, EPA wants to make manufacturer responsibilities and liabilities very clear. The Agency also believes that the importance of the in-use verification requirement warrants the potentially larger civil penalties associated with failing to comply with conditions on the certificate.

As stated in the NPRM, the Agency plans to exercise enforcement discretion to determine whether civil penalties are appropriate. The EPA recognizes that circumstances may arise in which it becomes reasonable to terminate the in-use reality check before all agreed-upon

testing would have been completed (e.g., if initial testing were to clearly demonstrate that the deterioration factor applied is unacceptable). The EPA also recognizes that a manufacturer, notwithstanding its best efforts, may fail to perform the required in-use reality check due to circumstances beyond its control. Thus, the Agency will consider all relevant factors when determining whether a manufacturer has complied with the reality check condition on the certificate.

I. Sunsetting

One manufacturer recommended that the Administrator have the authority to waive reality check testing for a manufacturer if that manufacturer demonstrates its projections are consistently accurate.

The Agency distinguishes between curtailing an in-use verification that is already in progress and sunsetting the requirement proposed in 40 CFR 86.094-13(e)(5) that new ASADPs must include an in-use verification. The Agency believes the proposed regulations explicitly provided the authority in section 86.094-13(e)(5) for the former, and this language is retained in the final rule. At this time, however, EPA does not believe it appropriate to accept an ASADP that does not contain in-use verification, even if a manufacturer demonstrates the ability of prior ASADPs to consistently develop accurate DFs. Manufacturers are likely to propose ASADPs for a wide variety of engine families and model years, and the in-use verification provides a constant incentive for the development of accurate DFs. In the three years of the interim durability program, EPA does not believe it is feasible to develop the historical data needed to substitute for this necessary incentive. Thus, the final RDP-I regulation does not provide for sunsetting of 40 CFR 86.094-13(e)(5). However, EPA will revisit this issue in the RDP-II rulemaking, which will address ASADPs for 1997 and subsequent model years.

IV. Economic, Environmental, and Cost-Benefit Impacts

A. Economic Impacts

As noted in the preamble to the proposal, the costs of this rulemaking are almost exclusively those incurred by the manufacturers in running the durability program itself a reporting the results to EPA. These costs are considered to be costs of information collection, and details on EPA's cost projections were therefore included in the proposed ICR prepared in conjunction with the proposal. This

¹⁴ EPA employs this provision in other enforcement mechanisms under Title II of the Act, such as remedies for banking, trading and averaging programs and for violations of the recordkeeping and reporting requirements under those programs.

¹⁵ 56 FR 25734, June 5, 1991.

¹⁶ 57 FR 31888, July 17, 1992.

proposed ICR was an amendment to the larger ICR covering the certification program as a whole.

Due to changes incorporated in the final rule (primarily the extension by one model year of the interim durability program), the Agency has revised the ICR and the impact projections. The methodology in the revision is the same: total annual costs are projected by calculating the unit cost of running a DDV and applying that unit cost to the number of DDVs projected for a given model year. The incremental burden attributable to the rule was determined by comparing the results of the mean year from the durability program to the base year of the current certification ICR.

In the revised ICR, EPA again derived the projections for the number of engine families and DDVs from the Tier 1 regulation. Essentially all manufacturers employing Standard AMA Durability Program are presumed to utilize the extrapolation option. As in the proposal, EPA examined a matrix of possible outcomes based on the percentage of carryover from California data and the percentage penetration of the ASADP option.

Table 1 projects EPA's revised estimate for the final rule for the change in the mean annual cost of the interim light-duty durability program under several of these scenarios. The carryover and ASADP penetrations in Table 1 were selected to bracket the most extreme cases that might occur. The

Agency believes that manufacturers will seek as much California carryover as possible and will actually achieve on the order of 90 percent. Based on indications from the manufacturers of their intent to implement ASADPs, the likely penetration rate will average between 40 percent and 60 percent over the three years the program will be effective. On this basis, Table 1 shows that EPA projects the rule to generate a net annual savings to manufacturers of approximately \$8.6 million.

Allowing the use of alternative durability programs federally is expected to promote their use in California and ultimately to result in cost savings of an additional \$2.5 million per year for the California durability program.

TABLE 1.—MEAN ANNUAL REDUCTION IN TOTAL COST OF THE LIGHT-DUTY DURABILITY PROGRAM
(in Millions of Dollars (\$M))

California carryover (percent)	Alternative durability program use			
	0%	25%	50%	75%
50	(\$0.3)	(\$1.0)	(\$1.8)	(\$2.5)
80	(6.2)	(6.6)	(6.8)	(7.1)
90	(8.3)	(8.4)	(8.6)	(8.7)
100	(10.2)	(10.2)	(10.2)	(10.2)

Estimates of the per-vehicle impact of the durability regulations may then be obtained by spreading the total cost of a given scenario across the projected MY96 Tier 1 new-vehicle fleet size (derived in the Tier 1 Regulatory Impact Analysis) of 15.25 million vehicles. The range of impacts thus obtained is a decrease of 2.0 cents per vehicle for the highest-cost scenario (50 percent carryover; no alternative durability programs) to a decrease of 67 cents per vehicle for the lowest-cost scenario (full California carryover, with 75 percent alternative durability program penetration). The \$8.6 million cost savings for EPA's projected most likely scenario corresponds to approximately 56 cents per vehicle.

As noted in the proposal, the cost savings of the durability rule is attributable primarily to the use of California carryover durability data and secondarily to the use of alternative durability programs.

The Agency has not inserted any increase or decrease in costs associated with the revised allowable maintenance intervals adopted through this regulation. As noted in the proposal, the Agency believes that no incremental costs will accrue to manufacturers, over and above any redesign costs that have already been addressed in the Tier 1 rulemaking. No comments were

received from the public on the issue of costs from the changed allowable maintenance intervals.

B. Environmental and Cost-Benefit Impacts

The current proposal provides revisions to the testing and administrative procedures that are necessary to determine compliance with the Tier 1 rules promulgated in June 1991. The emission benefits of the Tier 1 standards and the revised useful life definitions were analyzed in conjunction with the Tier 1 rule. No environmental benefit is claimed for this revision to the durability procedures, beyond that already accounted for in the Tier 1 rule.

V. Administrative Requirements

A. Administrative Designation

Under Executive Order 12291, EPA must judge whether a regulation is a "major" rule and, therefore, subject to the requirement that a Regulatory Impact Analysis (RIA) be prepared. Since EPA has determined that this regulation is not major, an RIA has not been prepared.

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. Reporting and Recordkeeping Requirement

The information collection requirements in this final rule have been approved by the Office of Management and Budget (OMB) under the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* An Information Collection Request document has been prepared by EPA (ICR No. 2060-0104) and a copy may be obtained from Sandy Farmer, Information Policy Branch; EPA; 401 M St., SW. (PM-223Y); Washington, DC 20460 or by calling (202) 260-2740.

Public reporting burden for this collection of information is estimated to be a reduction of 5740 hours per response annually for the 25 affected respondents. However, the estimate decreases to a reduction of 1670 hours per response when distributed across all 86 respondents to which the entire program applies. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information.

C. Impact on Small Entities

The Regulatory Flexibility Act of 1980 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 (RFA).

EPA has determined that the regulations adopted today will not have a significant impact on a substantial number of small entities. This regulation will affect only manufacturers of motor vehicles, a group which does not contain a substantial number of small 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.

VI. Statutory Authority

The promulgation of these regulations is authorized by sections 202, 203, 205, 206, 207, 208, 215, 216, and 301(a) of the Clean Air Act as amended by the Clean Air Act Amendments of 1990 (42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, 7549, 7550, and 7601(a)).

VII. Judicial Review

Under section 307(b)(1) of the Act, EPA hereby finds that these regulations are of national applicability. Accordingly, judicial review of this action is available only by filing of 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, Confidential business information, Environmental protection, Gasoline, Imports, Incorporation by reference, Labeling, Motor vehicles, Motor vehicle pollution, Reporting and recordkeeping requirements.

Dated: December 19, 1992.

William K. Reilly,
Administrator.

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 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)).

Subpart A—[Amended]

2. Section 86.094-1 is added to read as follows:

§ 86.094-1 General applicability.

(a) The provisions of this subpart generally apply to 1994 and later model year new Otto-cycle and diesel-cycle light-duty vehicles, 1994 and later model year new Otto-cycle and diesel-cycle light-duty trucks, and 1994 and later model year new Otto-cycle and diesel-cycle heavy-duty engines. In cases where a provision applies only to a certain vehicle group based on its model year, vehicle class, motor fuel, engine type, or other distinguishing characteristics, the limited applicability is cited in the appropriate section or paragraph.

(b) *Optional applicability.* A manufacturer may request to certify any heavy-duty vehicle of 10,000 pounds Gross Vehicle Weight Rating or less in accordance with the light-duty truck provisions. Heavy-duty engine or vehicle provisions do not apply to such a vehicle.

(c) [Reserved]

(d) [Reserved]

(e) *Small volume manufacturers.* Special certification procedures are available for any manufacturer whose projected combined U.S. sales of light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines in its product line (including all vehicles and engines imported under the provisions of §§ 85.1505 and 85.1509 of this chapter are fewer than 10,000 units for the model year in which the manufacturer seeks certification. To certify its product line under these optional procedures, the small-volume manufacturer must first obtain the Administrator's approval. The manufacturer must meet the eligibility criteria specified in § 86.092-14(b) before the Administrator's approval will be granted. The small-volume manufacturer's certification procedures are described in § 86.092-14.

(f) *Optional procedures for determining exhaust opacity.* (1) The provisions of subpart I of this part apply to tests which are performed by the Administrator, and optionally, by the manufacturer.

(2) Measurement procedures, other than that described in subpart I of this part, may be used by the manufacturer provided the manufacturer satisfies the requirements of § 86.091-23(f).

(3) When a manufacturer chooses to use an alternative measurement procedure it has the responsibility to determine whether the results obtained by the procedure will correlate with the results which would be obtained from the measurement procedure in subpart I of this part. Consequently, the Administrator will not routinely approve or disapprove any alternative opacity measurement procedure or any associated correlation data which the manufacturer elects to use to satisfy the data requirements for subpart I of this part.

(4) If a confirmatory test(s) is performed and the results indicate there is a systematic problem suggesting that the data generated under an optional alternative measurement procedure do not adequately correlate with data obtained in accordance with the procedures described in subpart I of this part, EPA may require that all certificates of conformity not already issued be based on data obtained from procedures described in subpart I of this part.

3. Section 86.094-2 is amended by adding in alphabetical order the definition for "Durability useful life":

§ 86.094-2 Definitions.

Durability useful life means the highest useful life mileage out of the set of all useful life mileages that apply to a given vehicle. The durability useful life determines the duration of service accumulation on a durability data vehicle. The determination of durability useful life shall reflect any alternative useful life mileages approved by the Administrator under § 86.094-21(f). The determination of durability useful life shall exclude any standard and related useful life mileage for which the manufacturer has obtained a waiver of emission data submission requirements under § 86.094-23(c).

4. Section 86.094-13 is added to read as follows:

§ 86.094-13 Light-duty exhaust durability programs.

(a) (1) This section describes the various durability programs available to

manufacturers for determining exhaust deterioration factors (DFs) for the certification of 1994, 1995, and 1996 model year light-duty vehicles and light-duty trucks. While this section describes many of the important elements of these durability programs, it is not intended as an exhaustive list of all requirements applicable either to these programs or to the certification process.

(2) The durability programs consist of various elements, such as a statement of

applicability, a service accumulation method, vehicle/component selection methods, durability data vehicle compliance requirements, in-use verification requirements, optional elements, data reporting requirements, and additional requirements. Cross references to other sections in this subpart are indicated where appropriate.

(b) The following table summarizes the durability programs available to all manufacturers of light-duty vehicles and

light-duty trucks. The Tier 1 and Tier 0 standards cited in the table are those specified in § 86.094-8 (for light-duty vehicles) and § 86.094-9 (for light-duty trucks). The durability programs described in this section are separate and distinct alternatives, such that determination of an exhaust deterioration factor under one program does not require compliance with the requirements of a different durability program.

Class	Standards	Durability program name	Optional elements
Light-duty Vehicles	Tier 1	Standard AMA	Carryover.
		Production AMA	Extrapolation.
	Tier 0	Alternative Service Accumulation	Substitute AMA.
		Standard AMA	Carryover.
		Production AMA	Extrapolation.
		Alternative Service Accumulation	Substitute AMA.
Light-duty Trucks	Tier 1 & Tier 0	Standard Self-Approval	Carryover.
		Alternative Service Accumulation	Substitute AMA.
		Standard Self-Approval	Carryover.
		Alternative Service Accumulation	Carryover.

(c) *Standard AMA durability program*—(1) *Applicability*. The standard AMA durability program is applicable to light-duty vehicles in model years 1994, 1995, and 1996.

(2) *Service accumulation method*. The method shall be mileage accumulation performed on whole durability data vehicles, using the Durability Driving Schedule (commonly referred to as the AMA schedule) specified in Appendix IV to this part. The provisions of § 86.094-26(a), which include vehicle weight requirements, the duration of mileage accumulation, and the specification of emission tests to be performed during the mileage accumulation, shall apply. Scheduled and unscheduled maintenance may be performed on the vehicle in accordance with the provisions of § 86.094-25.

(3) *Vehicle/component selection method*. Durability data vehicles shall be selected by the Administrator as required in § 86.090-22(a) and in accordance with the provisions of § 86.094-24(c)(1). Typically, the Administrator selects one durability data vehicle to represent each engine-system combination. The selection of durability data vehicles is also governed by § 86.091-7(a)(2)(i)(A), which generally requires that vehicles used for certification must be representative of production vehicles.

(4) *Durability data vehicle compliance requirements*. Durability data vehicle compliance requirements for the Standard AMA Durability Program are

contained in § 86.094-28(a). These include the method of calculating deterioration factors, line crossing criteria, and related requirements.

(5) *In-use verification*. Manufacturer testing of in-use vehicles subsequent to certification is not a requirement of the Standard AMA Durability Program.

(6) *Optional elements*—(i) *Extrapolation*. Manufacturers selecting the Standard AMA Durability Program may petition the Administrator for the use of extrapolated mileage accumulation data according to the provisions of § 86.094-26(a)(4) for use in certifying light-duty vehicles to the Tier 1 standards of § 86.094-8. If use of extrapolated data is approved, deterioration factors are determined by the method of linear extrapolation described in § 86.094-28(a)(4)(i).

(ii) *Substitute AMA*. Manufacturers selecting the Standard AMA Durability Program may petition the Administrator under § 86.094-26(a)(2)(ii) to substitute a different whole-vehicle mileage accumulation schedule for the Durability Driving Schedule (standard AMA) specified in Appendix IV to this part.

(iii) *Carryover and carryacross*. Manufacturers selecting the Standard AMA Durability Program may petition the Administrator for the use of carryover or carryacross mileage accumulation data according to the provisions of § 86.094-24(f). If use of carryover or carryacross data is approved, deterioration factors are

determined by the method of linear extrapolation described in § 86.094-28(a)(4)(i).

(7) *Data reporting requirements*. Data reporting requirements for the Standard AMA Durability Program are contained in § 86.094-21, § 86.094-23(b)(1)(i), and § 86.094-26 (a)(6)(ii) and (a)(7).

(d) *Production AMA durability program*—(1) *Applicability*. The production AMA durability program is applicable to light-duty vehicles in model years 1994, 1995, and 1996.

(2) *Service accumulation method*. The method shall be mileage accumulation performed on whole durability data vehicles, using the Durability Driving Schedule (commonly referred to as the AMA schedule) specified in Appendix IV to this part. The provisions of § 86.094-26(a), which include vehicle weight requirements, the duration of mileage accumulation, and the specification of emission tests to be performed during the mileage accumulation, shall apply. Scheduled and unscheduled maintenance may be performed on the vehicle in accordance with the provisions of § 86.094-25.

(3) *Vehicle/component selection method*. Durability data vehicles shall be selected by the Administrator as required in § 86.090-22(a) and in accordance with the provisions of § 86.094-24(h). Typically, the Administrator selects several random production durability data vehicles, up to a maximum of three vehicles per engine family group.

(4) *Durability data vehicle compliance requirements.* Durability data vehicle compliance requirements for the Production AMA Durability Program are contained in § 86.094-28(a)(7). These include the method of calculating deterioration factors, line crossing criteria, and related requirements.

(5) *In-use verification.* The Production AMA Durability Program includes no requirement for manufacturer testing of in-use vehicles subsequent to certification.

(6) *Optional elements—(i) Extrapolation.* Manufacturers selecting the Production AMA Durability Program may petition the Administrator for the use of extrapolated mileage accumulation data according to the provisions of § 86.094-26(a)(4) for use in certifying light-duty vehicles to the Tier I standards of § 86.094-8. If use of extrapolated data is approved, deterioration factors are determined by the method of linear extrapolation described in § 86.094-28(a)(7)(ii)(B).

(ii) *Substitute AMA.* Manufacturers selecting the Production AMA Durability Program may petition the Administrator under § 86.094-26(a)(2)(ii) to substitute a different whole-vehicle mileage accumulation schedule for the Durability Driving Schedule (standard AMA) specified in Appendix IV to this part.

(iii) *Carryover and carryacross.* Manufacturers selecting the Production AMA Durability Program may petition the Administrator for the use of carryover or carryacross mileage accumulation data according to the provisions of § 86.094-24(h)(1)(v). If use of carryover or carryacross data is approved, deterioration factors are determined by the method of linear extrapolation described in § 86.094-28(a)(7)(ii)(B).

(7) Data reporting requirements for the Production AMA Durability Program are contained in § 86.094-21, § 86.094-23(b)(1)(i), and § 86.094-26(a)(6)(ii) and (a)(7).

(8) *Additional requirements.* (i) For engine families subject to the procedures of the Production AMA Durability Program, the manufacturer shall submit deterioration factors to the Administrator for approval to use them for certification. The Administrator shall approve the use of deterioration factors that:

(A) The manufacturer attests are representative of the durability performance of its vehicles in actual field use when maintained according to the manufacturer's maintenance instructions (as limited under § 86.094-25(a)); and

(B) Are equal to or greater than the deterioration factors that EPA determines under paragraph (d)(8)(ii) of this section.

(ii) EPA shall determine minimum deterioration factors for engine families subject to the Production AMA Durability Program. This determination shall be based on a procedure of grouping engine families (see § 86.094-24(a)) in order to use historical certification data to determine deterioration factors for each engine family group. The historical data shall be updated yearly through the testing of production durability data vehicles. Test vehicle requirements under these procedures are contained in § 86.094-24(h) and compliance requirements are contained in § 86.094-28(a)(7).

(iii) *Request procedures.* (A) A manufacturer wishing to participate in the Production AMA Durability Program must submit to the Administrator, for each model year, a written request describing the engine families that the manufacturer elects to be included in the program.

(B) The Administrator may declare ineligible any engine family for which the Administrator determines there is unreasonable risk in determining a deterioration factor using the methods of the Production AMA Durability Program. Furthermore, the Administrator may limit the number of engine families within the manufacturer's product line that are eligible for the Production AMA Durability Program.

(C) Upon approval of the manufacturer's request to participate, the Administrator and the manufacturer may enter into a written agreement prescribing the terms and conditions of the program. This agreement shall be equitable as compared to agreements entered into with other manufacturers. The agreement shall specify:

(1) The engine families to be included in the program and the engine family groups that have been established by the provisions of § 86.094-24(a)(8) and (9);

(2) The procedures for the selection of production durability data vehicles specified under the provisions of § 86.094-24(h); and

(3) The procedures for the determination of minimum exhaust emission deterioration factors for each engine family group.

(iv) *Withdrawal from Production AMA Durability Program.* (A) Subject to the conditions of paragraphs (d)(8)(iv) (B) through (F) of this section, a manufacturer may, at any time, withdraw all of its product line or separate engine family groups from this

program. Only entire engine family groups may be withdrawn.

(B) Once any engine family in an engine family group is certified using deterioration factors determined in the Production AMA Durability Program, the manufacturer shall operate and test the production durability data vehicles specified in § 86.094-24(h) in accordance with the procedures of this part.

(C) The Administrator shall notify the manufacturer if a nonconformity of a category of vehicles within the engine family group is indicated by the production durability data. For the purpose of this paragraph, a nonconformity is determined to exist if:

(1) Any emission data vehicle within an engine family of the model year most recently certified under the Production AMA Durability Program is projected to exceed an emission standard by applying deterioration factors generated by a production durability data vehicle within the same engine family; or

(2) Any of the most recent model year's production durability data vehicle configurations tested under paragraph (d)(8)(iv)(B) of this section line crosses as defined in § 86.094-28(a)(7)(ii)(C). For the purpose of this paragraph, data from identical vehicles will be averaged as under § 86.094-28(a)(4)(i) (A) and (B).

(D) If the Administrator notifies a manufacturer of such a nonconformity, the manufacturer shall submit, by a date specified by the Administrator, a plan to remedy the nonconformity which is acceptable to the Director, Office of Mobile Sources. For the purpose of this paragraph, the term "remedy the nonconformity" will have the same meaning as it does when it appears in section 207(c)(1) of the Clean Air Act (42 U.S.C. 7541(c)(1)).

(E) The manufacturer shall comply with the terms of the remedial plan approved by the Director, Office of Mobile Sources.

(F) If a manufacturer does not comply with the requirements of paragraph (d)(8)(iv) (B), (D), or (E) of this section, the Administrator may deem the certificate of conformity for the affected engine families void ab initio.

(e) *Alternative Service Accumulation Durability Program—(1) Applicability.* The Alternative Service Accumulation Durability Program is applicable to light-duty vehicles and light-duty trucks in model years 1994, 1995, and 1996.

(2) *Service accumulation method.* (i) The manufacturer shall propose a service accumulation method for the Alternative Service Accumulation Durability Program, for advance approval by the Administrator. The

method shall be consistent with good engineering practice and be designed to accurately predict the deterioration of the vehicle's emissions in actual use over its full useful life.

(ii) Manufacturers may propose service accumulation methods based upon whole-vehicle mileage accumulation, bench aging of individual components or systems, or a combination of the two approaches. Bench procedures should simulate the aging of components or systems over the applicable durability useful life as defined in § 86.094-2 and should simulate cycles and environments found in actual use. For this purpose, manufacturers may remove the emission-related components, in whole or in part, from the durability vehicle itself and deteriorate them independently. Vehicle testing for the purpose of determining deterioration factors may include the testing of durability vehicles that incorporate such bench-aged components.

(iii) Service accumulation shall be according to the method approved in advance by the Administrator.

(3) *Vehicle/component selection method.* The manufacturer shall propose a vehicle/component selection method for the Alternative Service Accumulation Durability Program for advance approval by the Administrator. The vehicle/component selection shall be according to the method approved in advance by the Administrator. The selection of durability data vehicles and components is also governed by § 86.091-7(a)(2)(i)(A), which generally requires that vehicles and components used for certification must be representative of production vehicles and components.

(4) *Durability data vehicle compliance requirements.* The manufacturer shall propose procedures for the calculation of deterioration factors and for the determination of vehicle compliance for advance approval by the Administrator. The Administrator may approve the use of such procedures if the manufacturer demonstrates that the resulting deterioration factors are likely to be representative of the in-use performance of the vehicles. The calculation of deterioration factors and the determination of vehicle compliance shall be according to the procedures approved in advance by the Administrator.

(5) *In-use verification.* Manufacturers selecting the Alternative Service Accumulation Durability Program shall agree to perform an in-use verification program, which shall include testing on in-use vehicles certified under the program in the years subsequent to

certification. The purpose of the in-use verification program is to confirm the adequacy of the manufacturer-designed components of the Alternative Service Accumulation Durability program. The manufacturer shall propose sample sizes, recruitment procedures, testing procedures, optional provisions for the cessation of testing in the event the in-use testing confirms the adequacy of elements of the Alternative Service Accumulation Durability Program, and remedies in the event the in-use testing fails to confirm the adequacy of elements of the Alternative Service Accumulation Durability program. These and other elements of in-use verification are subject to advance approval by the Administrator.

(6) *Optional element: Carryover and carryacross.* Manufacturers selecting the Alternative Service Accumulation Durability Program may petition the Administrator for the conditional use of carryover or carryacross mileage accumulation data according to the provisions of § 86.094-24(f). If use of carryover or carryacross data is approved, deterioration factors are determined by the method described in paragraph (e)(4) of this section.

(7) *Data reporting requirements.* (i) Data reporting requirements for the Alternative Service Accumulation Durability Program are contained in §§ 86.094-21, 86.094-23(b)(1)(i), and 86.094-26(a)(6)(ii) and (a)(7).

(ii) In addition to the reporting of deterioration factors determined under paragraph (e)(4) of this section, the manufacturer shall provide reliability data that shows to the Administrator's satisfaction that all emission-related components are designed to operate properly for the durability useful life of the vehicles in actual use (or such shorter intervals as permitted in section § 86.094-25).

(8) *Additional requirements.* (i) The manufacturer shall consolidate the approved versions for each of the required elements of the Alternative Service Accumulation Durability Program into a written agreement that documents the details of the program and the manufacturer's responsibilities. The manufacturer shall submit this agreement for approval by the Administrator as part of the application for certification.

(ii) The manufacturer may amend the written agreement entered into pursuant to paragraph (e)(8)(i) of this section so long as the manufacturer demonstrates to the satisfaction of the Administrator that the proposed amendments to the agreement improve upon the in-use verification portion of the existing agreement. Such amendment to the

Alternative Service Accumulation Durability Program agreement is subject to the prior approval of the Administrator.

(iii) The certification requirements described in § 86.094-30(a)(14) are applicable.

(f) *Standard Self-Approval Durability Program—(1) Applicability.* The Standard Self-Approval Durability Program is applicable to light-duty trucks in the 1994, 1995, and 1996 model years.

(2) *Service accumulation method.* The manufacturer shall determine the form and extent of service accumulation used in the Standard Self-Approval Durability Program, according to the provisions of § 86.094-26(b)(2). The method shall be consistent with good engineering practice and be designed to evaluate the mechanisms that are expected to cause deterioration of the vehicle's emissions over its full useful life.

(3) *Vehicle/component selection method.* The manufacturer shall determine the vehicle/component selection method for use in the Standard Self-Approval Durability Program according to the provisions of § 86.094-24(c)(2). Manufacturers shall select the vehicles, engines, subsystems, or components for each engine-system so that their emissions deterioration characteristics may be expected to represent those of in-use vehicles, based on good engineering judgment. The selection of durability data vehicles or components is also governed by § 86.091-7(a)(2)(A), which generally requires that vehicles and components used for certification must be representative of production vehicles and components.

(4) *Durability data vehicle compliance requirements.* Durability data vehicle compliance requirements for the Standard Self-approval Durability Program are contained in § 86.094-28(b). These include the method of calculating deterioration factors and related requirements.

(5) *In-use verification.* The Standard Self-Approval Durability Program includes no requirement for manufacturer testing of in-use vehicles subsequent to certification.

(6) *Data reporting requirements.* Data reporting requirements for the Standard Self-Approval Durability Program are contained in § 86.094-21, § 86.094-23(b)(1)(ii), and § 86.094-26(d).

(7) *Additional requirement.* The Administrator does not approve the test procedures for establishing exhaust emission deterioration factors. The manufacturer shall submit these

procedures and determinations as required in § 86.094-21(b)(5)(i)(A).

(g) *Assigned deterioration factor durability program*—(1) *Applicability*—(i) *Small volume manufacturers*. The Assigned Deterioration Factor Durability Program is applicable to light-duty vehicles and light-duty trucks certified under the small volume manufacturer provisions of §§ 86.094-1(e) and 86.094-14(b).

(ii) *Small volume engine families*. The Assigned Deterioration Factor Durability Program is available to light-duty vehicles and light-duty trucks certified under the small volume engine family provisions of § 86.094-24(e)(2).

(2) *Determination of deterioration factors*. No service accumulation method or vehicle/component selection method is required. Deterioration factors are proposed by the manufacturer or assigned by the Administrator based on the provisions of § 86.094-14(c)(7)(i)(C).

(3) *In-use verification*. The Assigned Deterioration Factor Durability Program includes no requirement for manufacturer testing of in-use vehicles subsequent to certification.

(4) *Data reporting requirements*. Data reporting requirements for the Assigned Deterioration Factor Durability Program are contained in § 86.094-14 (c)(4), (c)(6), and (c)(11)(ii).

5. Section 86.094-14 is added to read as follows:

§ 86.094-14 Small-volume manufacturers certification procedures.

(a) The small-volume manufacturers certification procedures described in paragraphs (b) and (c) of this section are optional. Small-volume manufacturers may use these optional procedures to demonstrate compliance with the general standards and specific emission requirements contained in this subpart.

(b)(1) The optional small-volume manufacturers certification procedures apply to light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines produced by manufacturers with U.S. sales, including all vehicles and engines imported under the provisions of §§ 85.1505 and 85.1509 of this chapter (for the model year in which certification is sought) of fewer than 10,000 units (Light-Duty Vehicles, Light-Duty Trucks, Heavy-Duty Vehicles and Heavy-Duty Engines combined).

(2) For the purpose of determining the applicability of paragraph (b)(1) of this section, the sales the Administrator shall use shall be the aggregate of the projected or actual sales of those vehicles and/or engines in any of these groupings:

(i) Vehicles and/or engines produced by two or more firms, one of which is 10 percent or greater part owned by another;

(ii) Vehicles and/or engines produced by any two or more firms if a third party has equity ownership of 10 percent or more in each of the firms;

(iii) Vehicles and/or engines produced by two or more firms having a common corporate officer(s) who is (are) responsible for the overall direction of the companies;

(iv) Vehicles and/or engines imported or distributed by all firms where the vehicles and/or engines are manufactured by the same entity and the importer or distributor is an authorized agent of the entity.

(3) If the aggregated sales, as determined in paragraph (b)(2) of this section are less than 301 units, the manufacturers in the aggregated relationship may certify under the provisions in this section that apply to manufacturers with sales of less than 301 units.

(4) If the aggregated sales, as determined in paragraph (b)(2) of this section are greater than 300 but fewer than 10,000 units, the manufacturers in the aggregated relationship may certify under the provisions in this section that apply to manufacturers with sales from and including 301 through 9,999 motor vehicles and motor vehicles engines per year.

(5) If the aggregated sales, as determined in paragraph (b)(2) of this section are equal to or greater than 10,000 units, then the manufacturers involved in the aggregated relationship will be allowed to certify a number of units under the small-volume engine family certification procedures (reference § 86.094-24(e)) in accordance with the criteria identified in paragraphs (b)(5) (i) through (iii) of this section.

(i) If a manufacturer purchases less than 50 percent of another manufacturer, each manufacturer retains its right to certify 9,999 units using the small-volume engine family certification procedures.

(ii) If a manufacturer purchases 50 percent or more of another manufacturer, the manufacturer with the over 50 percent interest must share, with the manufacturer it purchased, its 9,999 units under the small-volume engine family certification procedures.

(iii) In a joint venture arrangement (50/50 ownership) between two manufacturers, each manufacturer retains its eligibility for 9,999 units under the small-volume engine family certification procedures, but the joint venture must draw its maximum 9,999

units from the units allocated to its parent manufacturers.

(c) Small-volume manufacturers shall demonstrate compliance with the applicable sections of this subpart. The appropriate model year of the applicable sections detailed in paragraphs (c) (1) through (15) of this section shall be determined in accordance with § 86.084-4.

(1) Sections 86.094-1, 86.094-2, 86.094-3, 86.084-4, 86.090-5, 86.078-6, 86.094-7, 86.094-8, 86.094-9, and 86.094-11 are applicable.

(2) Section 86.080-12 is not applicable.

(3) Sections 86.094-13, 86.094-14, 86.084-15, and 86.085-20 are applicable.

(4) Small-volume manufacturers shall include in their records all of the information that EPA requires in § 86.094-21. This information will be considered part of the manufacturer's application for certification. However, the manufacturer is not required to submit the information to the Administrator unless the Administrator requests it.

(5) Section 86.094-22 is applicable except as noted in paragraph (c)(5)(i) of this section.

(i) Small-volume light-duty vehicle and light-duty truck manufacturers may satisfy the requirements of § 86.094-22(e) by including a statement of compliance on adjustable parameters in the application for certification. In the statement of compliance the manufacturer shall state that the limits, stops, seals, or other means used to inhibit adjustment have been designed to accomplish their intended purpose based on good engineering practice and past experience. If the vehicle parameter is adjustable the vehicle must meet emission standards with the parameter set any place within the adjustable range (reference § 86.094-21).

(ii) [Reserved]

(6) Section 86.094-23 is applicable.

(7) Section 86.094-24 is applicable except as noted in paragraphs (c)(7) (i) through (ii) of this section.

(i) Small-volume manufacturers may satisfy the requirements of § 86.094-24 (b) and (c) in accordance with paragraphs (c)(7)(i) (A) through (C) of this section.

(A) *Emission data*. Selecting one emission data test vehicle (engine) per engine family by the worst-case emissions criteria in accordance with paragraph (c)(7)(i)(A) (1), (2), or (3) of this section.

(1) *Light-duty vehicles and light-duty trucks*. The manufacturer shall select the vehicle with the heaviest equivalent test weight (including options) within

the engine family. Then within that vehicle the manufacturer shall select, in the order listed, the highest road load power, largest displacement, the transmission with the highest numerical final gear ratio (including overdrive), the highest numerical axle ratio offered in the engine family, and the maximum fuel flow calibration.

(2) *Heavy-duty Otto-cycle engines.*

The manufacturer shall select one emission data engine first based on the largest displacement within the engine family. Then within the largest displacement the manufacturer shall select, in the order listed, highest fuel flow at the speed of maximum rated torque, the engine with the most advanced spark timing, no EGR or lowest EGR flow, and no air pump or lowest actual flow air pump.

(3) *Heavy-duty diesel engines.* The manufacturer shall select one emission data engine based on the highest fuel feed per stroke, primarily at the speed of maximum rated torque and secondarily at rated speed.

(B) Testing light-duty vehicles or light-duty truck emission data vehicles at any service accumulation distance of at least 2,000 miles (3,219 kilometers) or, catalyst equipped heavy-duty emission data engines at any service accumulation time of at least 62 hours, or non-catalyst equipped heavy-duty engine emission data engines at any service accumulation time determined by the manufacturer to result in stabilized emissions. The emission performance of the emission data vehicle or engine must be stabilized prior to emission testing.

(C) *Durability data.* Satisfying the durability data requirements by complying with the applicable procedures described in paragraphs (c)(7)(i)(C)(1) through (4) of this section.

(1) Manufacturers with aggregated sales of less than 301 motor vehicles and motor vehicle engines per year may use assigned deterioration factors that the Administrator determines and prescribes. The factors will be the Administrator's estimate, periodically updated and published in an advisory letter or advisory circular, of the 70th percentile deterioration factors calculated using the industry-wide data base of previously completed durability data vehicles or engines used for certification. However, the manufacturer may, at its option, accumulate miles (hours) on a durability data vehicle (engine) and complete emission tests for the purpose of establishing its own deterioration factors.

(2)(i) Manufacturers with aggregated sales from and including 301 through 9,999 motor vehicles and motor vehicle

engines per year certifying light-duty vehicle exhaust emissions from vehicles equipped with proven emission control systems shall use assigned deterioration factors that the manufacturer determines based on its good engineering judgment. However, the manufacturer may not use deterioration factors less than either the average or 70th percentile of all of that manufacturer's deterioration factor data, whichever is less. These minimum deterioration factors shall be calculated according to procedures in paragraph (c)(7)(i)(C)(2)(ii), of this section. If the manufacturer does not have at least two data points to calculate these manufacturer specific average deterioration factors, then the deterioration factors shall be no less than the EPA supplied industry-wide deterioration factors. However, the manufacturer may, at its option, accumulate miles on a durability data vehicle and complete emission tests for the purpose of establishing its own deterioration factors.

(ii) The manufacturer's minimum deterioration factors shall be calculated using the deterioration factors from all engine families, within the same vehicle/engine-fuel usage category (e.g., gasoline-fueled light-duty vehicle, etc.) previously certified to the same emission standards. The manufacturer shall use only deterioration factors from engine families previously certified by the manufacturer and the deterioration factors shall not be included in the calculation more than once. The deterioration factors for each pollutant shall be calculated separately. The manufacturer may, at its option, limit the deterioration factors used in the calculation of the manufacturer's minimum deterioration factors to those from all similar systems to the system being certified if sufficient data (i.e., from at least two certified systems) exists. All data eligible to be grouped as similar system data shall be used in calculating similar system deterioration factors. Any deterioration factors used in calculating similar system deterioration factors shall not be included in calculating the manufacturer's minimum deterioration factors used to certify any of the manufacturer's remaining vehicle systems.

(3) Manufacturers with aggregated sales from 301 through 9,999 motor vehicles and motor vehicle engines and certifying light-duty vehicle exhaust emissions from vehicles equipped with unproven emission control systems shall use deterioration factors that the manufacturer determines from official certification durability data generated by vehicles from engine families

representing a minimum of 25 percent of the manufacturer's sales equipped with unproven emission control systems. The sales projections are to be based on total sales projected for each engine/system combination. The durability programs applicable to such manufacturers for this purpose shall be the Standard AMA, the Production AMA and the Alternative Service Accumulation Durability Programs of § 86.094-13. The durability data vehicle (engine) mileage accumulation and emission tests are to be conducted in accordance with § 86.094-13. The manufacturer must develop deterioration factors by generating durability data in accordance with § 86.094-13 on a minimum of 25 percent of the manufacturer's projected sales (by engine/system combination) that is equipped with unproven emission control systems. The manufacturer must complete the 25 percent durability requirement before the remainder of the manufacturer's sales equipped with unproven emission control systems is certified using manufacturer-determined assigned deterioration factors. Alternatively, any of these manufacturers may, at their option, accumulate miles on durability data vehicles and complete emission tests for the purpose of establishing their own deterioration factors on the remaining sales.

(4) For light-duty vehicle, light-duty truck, and heavy-duty vehicle evaporative emissions and for light-duty truck, and heavy-duty engine exhaust emissions, deterioration factors shall be determined in accordance with § 86.094-24.

(ii) Section 86.094-24(d) and (e) are not applicable.

(8) Section 86.094-25 is applicable to maintenance performed on durability data light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines when the manufacturer completes durability data vehicles or engines; § 86.087-38 is applicable to the recommended maintenance the manufacturer includes in the maintenance instructions furnished the purchasers of new motor vehicles and new motor vehicle engines under § 86.087-38.

(9)(i) Section 86.094-26 is applicable if the manufacturer completes durability data vehicles or engines.

(ii) Section 86.090-27 is applicable.

(10) Sections 86.094-28 and 86.091-29 are applicable.

(11)(i) Section 86.094-30 is applicable, except for § 86.094-30 (a)(2) and (b). In the place of § 86.094-30 (a)(2) and (b), small-volume manufacturers shall comply with

paragraphs (c)(11) (ii) through (v) of this section.

(ii) Small-volume manufacturers shall submit an application for certification containing the elements contained in paragraphs (c)(11)(ii) (A) through (E) of this section.

(A) The names, addresses, and telephone numbers of the persons the manufacturer authorizes to communicate with us.

(B) A brief description of the vehicles (or engines) covered by the certificate (the manufacturers' sales data book or advertising, including specifications, may satisfy this requirement for most manufacturers). The description shall include, as a minimum, the items listed in paragraphs (c)(11)(ii)(B)(1) through (18) of this section as applicable.

(1) Engine evaporative family names and vehicle (or engine) configurations.

(2) Vehicle carlines or engine models to be listed on the certificate of conformity.

(3) The test weight and horsepower setting for each vehicle or engine configuration.

(4) Projected sales.

(5) Combustion cycle.

(6) Cooling mechanism.

(7) Number of cylinders.

(8) Displacement.

(9) Fuel system type.

(10) Number of catalytic converters, type, volume, composition, surface area, and total precious metal loading.

(11) Method of air aspiration.

(12) Thermal reactor characteristics.

(13) Suppliers' and/or manufacturers' name and model number of any emission related items of the above, if purchased from a supplier who uses the items in its own certified vehicles(s) or engine(s).

(14) A list of emission component part numbers.

(15) Drawings, calibration curves, and descriptions of emission related components, including those components regulated under § 86.085-22(e), and schematics of hoses and other devices connecting these components.

(16) Vehicle adjustments or modifications necessary for light-duty trucks to assure that they conform to high-altitude standards.

(17) A description of the light-duty vehicles and light-duty trucks which are exempted from the high-altitude emission standards.

(18) Proof that the manufacturer has obtained or entered an agreement to purchase, when applicable, the insurance policy, required by § 85.1510(b) of this chapter. The manufacturer may submit a copy of the insurance policy or purchase agreement as proof that the manufacturer has

obtained or entered an agreement to purchase the insurance policy.

(C) The results of all emission tests the manufacturer performs to demonstrate compliance with the applicable standards.

(D)(1) The following statement signed by the authorized representative of the manufacturer: "The vehicles (or engines) described herein have been tested in accordance with (list of the applicable subparts A, B, D, I, M, N, or P) of part 86, title 40, Code of Federal Regulations, and on the basis of those tests are in conformance with that subpart. All of the data and records required by that subpart are on file and are available for inspection by the EPA Administrator. We project the total U.S. sales of vehicles (engines) subject to this subpart (including all vehicles and engines imported under the provisions of §§ 85.1505 and 85.1509 of this chapter to be fewer than 10,000 units."

(2) A statement as required by and contained in paragraph (c)(5) of this section signed by the authorized representative of the manufacturer.

(3) A statement that the vehicles or engines described in the manufacturer's application for certification are not equipped with auxiliary emission control devices which can be classified as a defeat device as defined in § 86.094-2.

(4) A statement of compliance with section 206(a)(3) of the Clean Air Act (42 U.S.C. 7525(a)(3)).

(5) A statement that, based on the manufacturer's engineering evaluation and/or emission testing, the light-duty vehicles comply with emission standards at high altitude unless exempt under § 86.094-8(h).

(6) A statement that, based on the manufacturer's engineering evaluation and/or emission testing, the light-duty trucks sold for principle use at designated high-altitude locations comply with the high-altitude emission requirements and that all other light-duty trucks are at least capable of being modified to meet high-altitude standards unless exempt under § 86.094-9(g)(2).

(7) A statement affirming that the manufacturer will provide a list of emission and emission-related service parts, including part number designations and sources of parts, to the vehicle purchaser for all emission and emission-related parts which might affect vehicle emission performance throughout the useful life of the vehicle. Secondly, it must state that qualified service facilities and emission-related repair parts will be conveniently available to serve its vehicles. In addition, if service facilities are not

available at the point of sale or distribution, the manufacturer must indicate that the vehicle purchaser will be provided information identifying the closest authorized service facility to the point of sale, if in the United States, or the closest authorized service facility to the point of distribution to the ultimate purchaser if the vehicle was purchased outside of the United States by the ultimate purchaser. Such information should also be made available to the Administrator upon request.

(E) Manufacturers utilizing deterioration factors determined by the manufacturer based on its good engineering judgment (reference paragraph (c)(7)(i)(C)(2) of this section) shall provide a description of the method(s) used by the manufacturer to determine the deterioration factors.

(iii) If the manufacturer meets the requirements of this subpart, the Administrator will issue a certificate of conformity for the vehicles or engines described in the application for certification.

(iv) The certificate will be issued for such a period not to exceed one model year as the Administrator may determine and upon such terms as he may deem necessary to assure that any vehicle or engine covered by the certificate will meet the requirements of the Act and of this subpart.

(v)(A) If, after a review of the statements and descriptions submitted by the manufacturer, the Administrator determines that the manufacturer has not met the applicable requirements, the Administrator shall notify the manufacturer in writing of his intention to deny certification, setting forth the basis for his determination. The manufacturer may request a hearing on the Administrator's determination.

(B) If the manufacturer does not request a hearing or present the required information, the Administrator will deny certification.

(12) Sections 86.079-31 and 86.079-32 are not applicable.

(13) Under § 86.079-33, small-volume manufacturers are covered by paragraphs (c)(13) (i) and (ii) of this section.

(i) Small-volume manufacturers may make production changes (running changes) without receiving the Administrator's prior approval. The manufacturer shall assure (by conducting emission tests as it deems necessary) that the affected vehicles (engines) remain in compliance with the requirements of this part.

(ii) The manufacturer shall notify the Administrator within seven days after implementing any production related change (running change) that would

affect vehicle emissions. This notification shall include any changes to the information required under paragraph (c)(11)(ii) of this section. The manufacturer shall also amend as necessary its records required under paragraph (c)(4) of this section to confirm with the production design change.

(14) Section 86.082-34 is not applicable.

(15) Sections 86.094-35, 86.079-36, 86.085-37, 86.087-38 and 86.079-39 are applicable.

(Approved by the Office of Management and Budget under control number 2060-0104)

6. Section 86.094-21 is revised to read as follows:

§ 86.094-21 Application for certification.

(a) A separate application for a certificate of conformity shall be made for each set of standards (or family emission limits, as appropriate) and each class of new motor vehicles or new motor vehicle engines. Such application shall be made to the Administrator by the manufacturer and shall be updated and corrected by amendment.

(b) The application shall be in writing, signed by an authorized representative of the manufacturer, and shall include the following:

(1)(i) Identification and description of the vehicles (or engines) covered by the application and a description of their engine (vehicles only), emission control system, and fuel system components. This description will include:

(A) A detailed description of each Auxiliary Emission Control Device (AECDD) to be installed in or on any vehicle (or engine) covered by the application;

(B) A detailed justification of each AECDD (described in (b)(1)(i)(A) of this section) which results in a reduction in effectiveness of the emission control system. Such a justification may be disapproved by consideration of currently available technology, whereupon the application for certification may be disapproved under § 86.094-22(b) for the incorporation of a defeat device;

(C) The manufacturer must submit a Statement of Compliance in the application for certification which attests to the fact that they have assured themselves that the engine family is designed to be within the intermediate temperature cold testing defeat device guidance as described in § 86.094-16.

(7) This Statement of Compliance will be supported by a brief description of the vehicle's technological method of controlling CO emissions at intermediate temperatures.

(2) The manufacturer will determine a method (e.g., a test program, an engineering evaluation) which is adequate to support their Statement of Compliance. The manufacturer will support this Statement with a brief summary of the chosen method. Further details must be made available upon the Administrator's request.

(ii)(A) The manufacturer shall provide to the Administrator in the application for certification:

(1) A list of those parameters which are physically capable of being adjusted (including those adjustable parameters for which access is difficult) and that, if adjusted to settings other than the manufacturer's recommended setting, may affect emissions;

(2) A specification of the manufacturer's intended physically adjustable range of each such parameter, and the production tolerances of the limits or stops used to establish the physically adjustable range;

(3) A description of the limits or stops used to establish the manufacturer's intended physically adjustable range of each adjustable parameter, or any other means used to inhibit adjustment;

(4) The nominal or recommended setting, and the associated production tolerances, for each such parameter.

(B) The manufacturer may provide, in the application for certification, information relating to why certain parameters are not expected to be adjusted in actual use and to why the physical limits or stops used to establish the physically adjustable range of each parameter, or any other means used to inhibit adjustment, are effective in preventing adjustment of parameters on in-use vehicles to settings outside the manufacturer's intended physically adjustable ranges. This may include results of any tests to determine the difficulty of gaining access to an adjustment or exceeding a limit as intended or recommended by the manufacturer.

(C) The Administrator may require to be provided detailed drawings and descriptions of the various emission related components, and/or hardware samples of such components, for the purpose of making his determination of which vehicle or engine parameter will be subject to adjustment for new certification and Selective Enforcement Audit testing and of the physically adjustable range for each such vehicle or engine parameter.

(2) Projected U.S. sales data sufficient to enable the Administrator to select a test fleet representative of the vehicles (or engines) for which certification is requested, and, for model year 1994 through 1995 light-duty vehicles and

light light-duty trucks and model year 1996 heavy light-duty trucks, data sufficient to determine projected compliance with the Tier 1 standards implementation schedules of §§ 86.094-8 and 86.094-9. The data shall also include the altitude of intended sale for model year 1994 light-duty trucks certified to the Tier 0 standards of § 86.094-9. Volume projected to be produced for U.S. sale may be used in lieu of projected U.S. sales.

(3) A description of the test equipment and fuel proposed to be used.

(4)(i) For light-duty vehicles and light-duty trucks, a description of the test procedures to be used to establish the evaporative emission deterioration factors required to be determined and supplied in § 86.094-23(b)(2).

(ii) For heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines, the Administrator does not assume that each evaporative emission family-evaporative emission control system combination will deteriorate in a unique manner during the useful life of the vehicle. The manufacturer shall therefore identify those evaporative emission deterioration factors which shall be applied to the various evaporative emission family-evaporative emission control system combinations which are expected to exhibit similar deterioration characteristics during the useful life of the vehicle.

(5)(i)(A) A description of the test procedures to be used to establish the durability data or the exhaust emission deterioration factors required to be determined and supplied in § 86.094-23(b)(1).

(B) For each light-duty truck engine family provided an optional useful life period under the provisions of paragraph (f) of this section, and for each heavy-duty engine family, a statement of the useful life.

(C) For engine families provided an alternative useful-life period under paragraph (f) of this section, a statement of that alternative period and a brief synopsis of the justification.

(ii) For heavy-duty diesel engine families, a statement of the primary intended service class (light, medium, or heavy) and an explanation as to why that service class was selected. Each diesel engine family shall be certified under one primary intended service class only. After reviewing the guidance in § 86.090-2, the class shall be determined on the basis of which class best represents the majority of the sales of that engine family.

(iii)(A) For each light-duty vehicle engine family, each light-duty truck engine family, and each heavy-duty

engine family, a statement of recommended maintenance and procedures necessary to assure that the vehicles (or engines) covered by a certificate of conformity in operation conform to the regulations, and a description of the program for training of personnel for such maintenance, and the equipment required.

(B) A description of vehicle adjustments or modifications necessary, if any, to assure that light-duty vehicles and light-duty trucks covered by a certificate of conformity conform to the regulations while being operated at any altitude locations, and a statement of the altitude at which the adjustments or modifications apply.

(iv) At the option of the manufacturer, the proposed composition of the emission data test fleet or (where applicable) the durability data test fleet.

(6) *Participation in averaging programs*—(i) *Particulate averaging*. (A) If the manufacturer elects to participate in the particulate averaging program for diesel light-duty vehicles and/or diesel light-duty trucks or the particulate averaging program for heavy-duty diesel engines, the application must list the family particulate emission limit and the projected U.S. production volume of the family for the model year.

(B) The manufacturer shall choose the level of the family particulate emission limits, accurate to hundredth of a gram per mile or hundredth of a gram per brake horsepower-hour for heavy-duty engines.

(C) The manufacturer may at any time during production elect to change the level of any family particulate emission limit(s) by submitting the new limit(s) to the Administrator and by demonstrating compliance with the limit(s) as described in §§ 86.090–2 and 86.094–28(b)(5)(i).

(ii) *NO_x averaging*. (A) If the manufacturer elects to participate in the NO_x averaging program for light-duty trucks or the NO_x averaging program for heavy-duty engines, the application must list the family NO_x emission limit and the projected U.S. production volume of the family for the model year.

(B) The manufacturer shall choose the level of the family NO_x emission limits, accurate to one-tenth of a gram per mile or to one-tenth of a gram per brake horsepower-hour for heavy-duty engines.

(C) The manufacturer may at any time during production elect to change the level of any family NO_x emission limit(s) by submitting the new limits to the Administrator and by demonstrating compliance with the limit(s) as described in §§ 86.088–2 and 86.094–28(b)(5)(ii).

(7)(i) For Otto-cycle heavy-duty engines, the application must state whether the engine family is being certified for use in all vehicles regardless of their Gross Vehicle Weight Rating (see § 86.091–10 (a)(1)(i) and (a)(3)(i)), or only for use in vehicles with a Gross Vehicle Weight Rating greater than 14,000 pounds.

(ii) If the engine family is being certified for use in all vehicles and is being certified to the emission standards applicable to Otto-cycle engines for use only in vehicles with a Gross Vehicle Weight Rating over 14,000 pounds under the provisions of § 86.091–10(a)(3), then the application must also attest that the engine family, together with all other engine families being certified under the provisions of § 86.091–10(a)(3), represent no more than 5 percent of model year sales of the manufacturer of all Otto-cycle heavy-duty engines for use in vehicles with Gross Vehicle Weight Ratings of up to 14,000 pounds.

(8) For each light-duty vehicle or light-duty truck engine family, the exhaust emission standards (or family emission limits, if applicable) to which the engine family is to be certified, and the corresponding exhaust emission standards (or family emission limits, if applicable) which the engine family must meet in-use.

(c) Complete copies of the application and of any amendments thereto, and all notifications under §§ 86.079–32, 86.079–33, and 86.082–34 shall be submitted in such multiple copies as the Administrator may require.

(d) Incomplete light-duty trucks shall have a maximum completed curb weight and maximum completed frontal area specified by the manufacturer.

(e) For vehicles equipped with gasoline-fueled or methanol-fueled heavy-duty engines, the manufacturer shall specify a maximum nominal fuel tank capacity for each evaporative emission family-evaporative emission control system combination.

(f) Light-duty truck and heavy-duty engine manufacturers who believe that the useful life periods of § 86.094–2 are significantly unrepresentative for one or more engine families (either too long or too short), may petition the Administrator to provide an alternative useful-life period. This petition must include the full rationale behind the request together with any supporting data and other evidence. Based on this or other information the Administrator may assign an alternative useful-life period. Any petition should be submitted in a timely manner, to allow adequate time for a thorough evaluation. For model year 1994 and later light-duty

trucks not subject to the Tier 0 standards of § 86.094–9, alternative useful life periods will be granted only for THC, OMHCE, and idle CO requirements.

(g) The manufacturer shall identify those families which will not comply with cold temperature carbon monoxide standards.

(Approved by the Office of Management and Budget under control number 2060–0104)

7. Section 86.094–22 is revised to read as follows:

§ 86.094–22 Approval of application for certification; test fleet selections; determinations of parameters subject to adjustment for certification and Selective Enforcement Audit, adequacy of limits, and physically adjustable ranges.

(a) After a review of the application for certification and any other information which the Administrator may require, the Administrator may approve the application and select a test fleet in accordance with § 86.094–24.

(b) *Disapproval of application*. (1) The Administrator may disapprove in whole or in part an application for certification for reasons including incompleteness, inaccuracy, inappropriate proposed mileage (or service) accumulation procedures, test equipment, or fuel; or incorporation of defeat devices in vehicles (or on engines) described by the application.

(2) The issuance of a certificate of conformity does not exempt the covered vehicles from further evaluation or testing for defeat device purposes as described in § 86.094–16.

(c) Where any part of an application is rejected, the Administrator shall notify the manufacturer in writing and set forth the reasons for such rejection. Within 30 days following receipt of such notification, the manufacturer may request a hearing on the Administrator's determination. The request shall be in writing, signed by an authorized representative of the manufacturer and shall include a statement specifying the manufacturer's objections to the Administrator's determinations, and data in support of such objections. If, after the review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, he shall provide the manufacturer a hearing in accordance with § 86.078–6 with respect to such issue.

(d) *Approval of test procedures*. (1) The Administrator does not approve the test procedures for establishing the evaporative emission deterioration factors for light-duty vehicles and light-duty trucks. The manufacturer shall submit the procedures as required in

§ 86.094-21(b)(4)(i) prior to the Administrator's selection of the test fleet under § 86.094-24(b)(1), and if such procedures will involve testing of durability data vehicles selected by the Administrator or elected by the manufacturer under § 86.094-24(c)(1), prior to initiation of such testing.

(2) *Light-duty trucks using the Standard Self-Approval durability Program and heavy-duty engines only.* The Administrator does not approve the test procedures for establishing exhaust emission deterioration factors for light-duty trucks using the Standard Self-Approval Durability Program described in § 86.094-13(f) nor for heavy-duty engines. The manufacturer shall submit these procedures and determinations as required in § 86.094-21(b)(5)(i) prior to determining the deterioration factors.

(3) *Heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines only.* The Administrator does not approve the test procedures for establishing the evaporative emission deterioration factors. The test procedure will conform to the requirements in § 86.094-23(b)(3).

(e) *Parameter adjustment requirements.* When the Administrator selects emission data vehicles for the test fleet, he will at the same time determine those vehicle or engine parameters which will be subject to adjustment for certification, Selective Enforcement Audit and Production Compliance Audit testing, the adequacy of the limits, stops, seals, or other means used to inhibit adjustment, and the resulting physically adjustable ranges for each such parameter and will then notify the manufacturer of his determinations.

(1) *Determining parameters subject to adjustment.* (i) Except as noted in paragraph (e)(1)(iv) of this section, the Administrator may determine to be subject to adjustment the idle fuel-air mixture parameter on Otto-cycle vehicles (or engines) (carbureted or fuel-injected); the choke valve action parameter(s) on carbureted, Otto-cycle vehicles (or engines); or any parameter on any vehicle (or engine) (Otto-cycle or diesel) which is physically capable of being adjusted, may significantly affect emissions, and was not present on the manufacturer's vehicles (or engines) in the previous model year in the same form and function.

(ii) The Administrator may, in addition, determine to be subject to adjustment any other parameters on any vehicle or engine which is physically capable of being adjusted and which may significantly affect emissions. However, the Administrator may do so only if he has previously notified the

manufacturer that he might do so and has found, at the time he gave this notice, that the intervening period would be adequate to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period. In no event will this notification be given later than September 1 of the calendar year two years prior to the model year.

(iii) In determining the parameters subject to adjustment, the Administrator will consider the likelihood that, for each of the parameters listed in paragraphs (e)(1)(i) and (ii) of this section, settings other than the manufacturer's recommended setting will occur on in-use vehicles (or engines). In determining likelihood, the Administrator may consider such factors as, but not limited to, information contained in the preliminary application, surveillance information from similar in-use vehicles (or engines), the difficulty and cost of gaining access to an adjustment, damage to the vehicle (or engine) if an attempt is made to gain such access and the need to replace parts following such attempt, and the effect of settings other than the manufacturer's recommended setting on vehicle (or engine) performance characteristics including emission characteristics.

(iv) Manual chokes of heavy-duty engines only will not be considered a parameter subject to adjustment under the parameter adjustment requirements.

(2)(i) The Administrator shall determine a parameter to be adequately inaccessible or sealed if:

(A) In the case of an idle mixture screw, the screw is recessed within the carburetor casting and sealed with lead, thermosetting plastic, or an inverted elliptical spacer or sheared off after adjustment at the factory, and the inaccessibility is such that the screw cannot be accessed and/or adjusted with simple tools in one-half hour or for \$20 (1978 dollars) or less;

(B) In the case of a choke bimetal spring, the plate covering the bimetal spring is riveted or welded in place, or held in place with nonreversible screws;

(C) In the case of a parameter which may be adjusted by elongating or bending adjustable members (e.g., the choke vacuum break), the elongation of the adjustable member is limited by design or, in the case of a bendable member, the member is constructed of a material which when bent would return to its original shape after the force is removed (plastic or spring steel materials);

(D) In the case of any parameter, the manufacturer demonstrates that

adjusting the parameter to settings other than the manufacturer's recommended setting takes more than one-half hour or costs more than \$20 (1978 dollars).

(ii) The Administrator shall determine a physical limit or stop to be an adequate restraint on adjustability if:

(A) In the case of a threaded adjustment, the threads are terminated, pinned, or crimped so as to prevent additional travel without breakage or need for repairs which take more than one-half hour or cost more than \$20 (1978 dollars);

(B) The adjustment is ineffective at the end of the limits of travel regardless of additional forces or torques applied to the adjustment;

(C) The manufacturer demonstrates that travel or rotation limits cannot be exceeded with the use of simple and inexpensive tools (screwdriver, pliers, open-end or box wrenches, etc.) without incurring significant and costly damage to the vehicle (or engine) or control system or without taking more than one-half hour or costing more than \$20 (1978 dollars).

(iii) If manufacturer service manuals or bulletins describe routine procedures for gaining access to a parameter or for removing or exceeding a physical limit, stop, seal or other means used to inhibit adjustment, or if surveillance data indicate that gaining access, removing, or exceeding is likely, paragraphs (e)(2)(i) and (ii) of this section shall not apply for that parameter.

(iv) In determining the adequacy of a physical limit, stop, seal, or other means used to inhibit adjustment of a parameter not covered by paragraph (e)(2)(i) or (ii) of this section, the Administrator will consider the likelihood that it will be circumvented, removed, or exceeded on in-use vehicles. In determining likelihood, the Administrator may consider such factors as, but not limited to, information contained in the preliminary application; surveillance information from similar in-use vehicles (or engines); the difficulty and cost of circumventing, removing, or exceeding the limit, stop, seal, or other means; damage to the vehicle (or engine) if an attempt is made to circumvent, remove, or exceed it and the need to replace parts following such attempt; and the effect of settings beyond the limit, stop, seal, or other means on vehicle (or engine) performance characteristics other than emission characteristics.

(3) The Administrator shall determine two physically adjustable ranges for each parameter subject to adjustment:

(i)(A) In the case of a parameter determined to be adequately inaccessible or sealed, the

Administrator may include within the physically adjustable range applicable to testing under this subpart (certification testing) all settings within the production tolerance associated with the nominal setting for that parameter, as specified by the manufacturer in the preliminary application for certification; or

(B) In the case of other parameters, the Administrator shall include within this range all settings within physical limits or stops determined to be adequate restraints on adjustability. The Administrator may also include the production tolerances on the location of these limits or stops when determining the physically adjustable range.

(ii)(A) In the case of a parameter determined to be adequately inaccessible or sealed, the Administrator shall include within the physically adjustable range applicable to testing under subparts G or K (Selective Enforcement Audit and Production Compliance Audit) only the actual settings to which the parameter is adjusted during production; or

(B) In the case of other parameters, the Administrator shall include within this range all settings within physical limits or stops determined to be adequate restraints on adjustability, as they are actually located on the test vehicle (or engine).

(f) *Submittal of advance information.*

(1) If the manufacturer submits the information specified in § 86.094-21(b)(1)(ii) in advance of its full preliminary application for certification, the Administrator shall review the information and make the determinations required in paragraph (e) of this section within 90 days of the manufacturer's submittal.

(2) The 90-day decision period is exclusive of the elapsed time during which EPA may request additional information from manufacturers regarding an adjustable parameter and the receipt of the manufacturers' response(s).

(g) Within 30 days following receipt of notification of the Administrator's determinations made under paragraph (e) of this section, the manufacturer may request a hearing on the Administrator's determinations. The request shall be in writing, signed by an authorized representative of the manufacturer, and shall include a statement specifying the manufacturer's objections to the Administrator's determinations, and data in support of such objections. If, after review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, he shall provide the manufacturer a hearing in accordance

with § 86.078-6 with respect to such issue.

8. Section 86.094-23 is revised to read as follows:

§ 86.094-23 Required data.

(a) The manufacturer shall perform the tests required by the applicable test procedures and submit to the Administrator the information described in paragraphs (b) through (f) of this section, provided, however, that if requested by the manufacturer, the Administrator may waive any requirement of this section for testing of vehicle (or engine) for which emission data are available or will be made available under the provisions of § 86.091-29.

(b) *Durability data.* (1)(i) The manufacturer shall submit exhaust emission durability data on such light-duty vehicles tested in accordance with applicable test procedures and in such numbers as specified, which will show the performance of the systems installed on or incorporated in the vehicle for extended mileage, as well as a record of all pertinent maintenance performed on the test vehicles.

(ii) The manufacturer shall submit exhaust emission deterioration factors for light-duty trucks and heavy-duty engines and all test data that are derived from the testing described under § 86.094-21(b)(5)(i)(A), as well as a record of all pertinent maintenance. Such testing shall be designed and conducted in accordance with good engineering practice to assure that the engines covered by a certificate issued under § 86.094-30 will meet each emission standard (or family emission limit, as appropriate) in § 86.094-9, § 86.091-10, or § 86.094-11 as appropriate, in actual use for the useful life applicable to that standard.

(2) For light-duty vehicles and light-duty trucks, the manufacturer shall submit evaporative emission deterioration factors for each evaporative emission family-evaporative emission control system combination and all test data that are derived from testing described under § 86.094-21(b)(4)(i) designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under § 86.094-30 will meet the evaporative emission standards in § 86.094-8 or § 86.094-9, as appropriate, for the useful life of the vehicle.

(3) For heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit evaporative emission deterioration factors for each evaporative emission family-evaporative emission control

system combination identified in accordance with § 86.094-21(b)(4)(ii). Furthermore, a statement that the test procedure(s) used to derive the deterioration factors includes, but need not be limited to, a consideration of the ambient effects of ozone and temperature fluctuations, and the service accumulation effects of vibration, time, and vapor saturation and purge cycling. The deterioration factor test procedure shall be designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under § 86.094-30 will meet the evaporative emission standards in §§ 86.091-10 and 86.094-11 in actual use for the useful life of the engine. Furthermore, a statement that a description of the test procedure, as well as all data, analyses, and evaluations, is available to the Administrator upon request.

(4)(i) For heavy-duty vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs and equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit a written statement to the Administrator certifying that the manufacturer's vehicles meet the standards of § 86.091-10 or § 86.094-11 (as applicable) as determined by the provisions of § 86.094-28. Furthermore, the manufacturer shall submit a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the requested statement is based, are available to the Administrator upon request.

(ii) For heavy-duty vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs and equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit a written statement to the Administrator certifying that the manufacturer's evaporative emission control systems are designed, using good engineering practice, to meet the standards of § 86.091-10 or § 86.094-11 (as applicable) as determined by the provisions of § 86.094-28. Furthermore, the manufacturer shall submit a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the requested statement is based, are available to the Administrator upon request.

(c) *Emission data—(1) Certification vehicles.* The manufacturer shall submit emission data, including, in the case of methanol fuel, methanol, formaldehyde, and organic material hydrocarbon equivalent, on such vehicles tested in accordance with applicable test

procedures and in such numbers as specified. These data shall include zero-mile data, if generated, and emission data generated for certification as required under § 86.094-26(a)(3) (i) or (ii). In lieu of providing emission data the Administrator may, on request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other information) that the engine will conform with certain applicable emission standards of § 86.094-8 or § 86.094-9. Standards eligible for such manufacturer requests are those for idle CO emissions, smoke emissions, or particulate emissions from methanol-fueled diesel-cycle certification vehicles, and those for particulate emissions from model year 1994 and later gasoline-fueled or methanol-fueled Otto-cycle certification vehicles that are not certified to the Tier 0 standards of § 86.094-9(a)(1) (i), (ii), or § 86.094-8(a)(1)(i). Also eligible for such requests are standards for total hydrocarbon emissions from model year 1994 and later certification vehicles that are not certified to the Tier 0 standards of § 86.094-9(a)(1)(i), (ii), or § 86.094-8(a)(1)(i). By separate request, including appropriate supporting test data, the manufacturer may request that the Administrator also waive the requirement to measure particulate emissions when conducting Selective Enforcement Audit testing of Ottocycle vehicles.

(2) *Certification engines.* (i) The manufacturer shall submit emission data on such engines tested in accordance with applicable emission test procedures of this subpart and in such numbers as specified. These data shall include zero-hour data, if generated, and emission data generated for certification as required under § 86.094-26(c)(4). In lieu of providing emission data on idle CO emissions or particulate emissions from methanol-fueled diesel-cycle certification engines, or on CO emissions from petroleum-fueled or methanol-fueled diesel certification engines the Administrator may, on request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other information) that the engine will conform with the applicable emission standards of § 86.094-11.

(ii) For heavy-duty diesel engines, a manufacturer may submit hot-start data only, in accordance with subpart N of this part, when making application for certification. However, for conformity Selective Enforcement Audit and recall testing by the Agency, both the cold-start and hot-start test data, as specified

in subpart N of this part, will be included in the official results.

(d) The manufacturer shall submit a statement that the vehicles (or engines) for which certification is requested conform to the requirements in § 86.084-5(b), and that the descriptions of tests performed to ascertain compliance with the general standards in § 86.084-5(b), and that the data derived from such tests are available to the Administrator upon request.

(e)(1) The manufacturer shall submit a statement that the test vehicles (or test engines) for which data are submitted to demonstrate compliance with the applicable standards (or family emission limits, as appropriate) of this subpart are in all material respects as described in the manufacturer's application for certification, that they have been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification, and that on the basis of such tests the vehicles (or engines) conform to the requirements of this part. If such statements cannot be made with respect to any vehicle (or engine) tested, the vehicle (or engine) shall be identified, and all pertinent data relating thereto shall be supplied to the Administrator. If, on the basis of the data supplied and any additional data as required by the Administrator, the Administrator determines that the test vehicles (or test engine) was not as described in the application for certification or was not tested in accordance with the applicable test procedures utilizing the fuels and equipment as described in the application for certification, the Administrator may make the determination that the vehicle (or engine) does not meet the applicable standards (or family emission limits, as appropriate). The provisions of § 86.094-30(b) shall then be followed.

(2) For evaporative emission durability, or light-duty truck or heavy-duty engine exhaust emission durability, the manufacturer shall submit a statement of compliance with paragraph (b)(1)(ii), (b)(2), or (b)(3) of this section, as applicable.

(f) Additionally, manufacturers participating in the particulate averaging program for diesel light-duty vehicles and diesel light-duty trucks shall submit:

(1) In the application for certification, a statement that the vehicles for which certification is requested will not, to the best of the manufacturer's belief, when included in the manufacturer's production-weighted average emission level, cause the applicable particulate standard(s) to be exceeded; and

(2) No longer than 90 days after the end of a given model year of production of engine families included in one of the diesel particulate averaging programs, the number of vehicles produced in each engine family at each certified particulate FEL, along with the resulting production-weighted average particulate emission level.

(g) Additionally, manufacturers participating in the NO_x averaging program for light-duty trucks shall submit:

(1) In the application for certification, a statement that the vehicles for which certification is required will not, to the best of the manufacturer's belief, when included in the manufacturer's production-weighted average emission level, cause the applicable NO_x standard(s) to be exceeded; and

(2) No longer than 90 days after the end of a given model year of production of engine families included in the NO_x averaging program, the number of vehicles produced in each engine family at each certified NO_x emission level.

(h) Additionally, manufacturers participating in any of the NO_x and/or particulate averaging, trading, or banking programs for heavy-duty engines shall submit for each participating family the items listed in paragraphs (h)(1) through (3) of this section.

(1) *Application for certification.* (i) The application for certification will include a statement that the engines for which certification is requested will not, to the best of the manufacturer's belief, when included in any of the averaging, trading, or banking programs cause the applicable NO_x or particulate standard(s) to be exceeded.

(ii) The application for certification will also include the type (NO_x or particulate) and the projected number of credits generated/needed for this family, the applicable averaging set, the projected U.S. (49-state) production volumes, by quarter, NCPs in use on a similar family and the values required to calculate credits as given in § 86.094-15. Manufacturers shall also submit how and where credit surpluses are to be dispersed and how and through what means credit deficits are to be met, as explained in § 86.094-15. The application must project that each engine family will be in compliance with the applicable NO_x and/or particulate emission standards based on the engine mass emissions, and credits from averaging, trading and banking.

(2) [Reserved]

(3) *End-of-year report.* The manufacturer shall submit end-of-year reports for each engine family participating in any of the averaging,

trading, or banking programs, as described in paragraphs (h)(3)(i) through (iv) of this section.

(i) These reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (EN-340F), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

(ii) These reports shall indicate the engine family, the averaging set, the actual U.S. (49-state) production volume, the values required to calculate credits as given in § 86.094-15, the resulting type (NO_x or particulate) and number of credits generated/required, and the NCPs in use on a similar NCP family. Manufacturers shall also submit how and where credit surpluses were dispersed (or are to be banked) and how and through what means credit deficits were met. Copies of contracts related to credit trading must also be included or supplied by the broker if applicable. The report shall also include a calculation of credit balances to show that net mass emissions balances are within those allowed by the emission standards (equal to or greater than a zero credit balance). The credit discount factor described in § 86.094-15 must be included as required.

(iii) The 49-state production counts for end-of-year reports shall be based on the location of the first point of retail sale (e.g., customer, dealer, secondary manufacturer) by the manufacturer.

(iv) Errors discovered by EPA or the manufacturer in the end-of-year report, including errors in credit calculation, may be corrected up to 90 days subsequent to submission of the end-of-year report. Errors discovered by EPA after 90 days shall be corrected if credits are reduced. Errors in the manufacturer's favor will not be corrected if discovered after the 90 day correction period allowed.

(i) Failure by a manufacturer participating in the averaging, trading, or banking programs to submit any quarterly or end-of-year report (as applicable) in the specified time for all vehicles and engines that are part of an averaging set is a violation of section 203(a)(1) of the Clean Air Act (42 U.S.C. 7522(a)(1)) for each such vehicle and engine.

(j) Failure by a manufacturer generating credits for deposit only in either the HDE NO_x or particulate banking programs to submit their end-of-year reports in the applicable specified time period (i.e., 90 days after the end of the model year) shall result in the credits not being available for use until such reports are received and reviewed by EPA. Use of projected

credits pending EPA review will not be permitted in these circumstances.

(k) Engine families certified using NCPs are not required to meet the requirements outlined in paragraphs (f) through (j) of this section.

(l) Additionally, manufacturers certifying vehicles shall submit for each model year 1994 through 1997 light-duty vehicle and light light-duty truck engine family and each model year 1996 through 1998 heavy light-duty truck engine family the information listed in paragraphs (l)(1) and (2) of this section.

(1) *Application for certification.* In the application for certification, the manufacturer shall submit the projected sales volume of engine families certifying to the respective standards, and the in-use standards that each engine family will meet. 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 engine 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 (EN-340F), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

(ii) These reports shall indicate the model year, engine 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 which 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 engine family(ies) certified to Tier 0 certification standards being voided ab initio plus any applicable civil penalties for failure to submit the required information to the Agency.

(v) These reports shall include the information required under § 86.094-7(h)(1). The information shall be organized in such a way as to allow the Administrator to determine compliance with the Tier 1 standards implementation schedules of §§ 86.094-

8 and 86.094-9, and the Tier 1 and Tier 1, implementation schedules of §§ 86.708-94 and 86.709-94.

(Approved by the Office of Management and Budget under control number 2060-0104)

9. Section 86.094-24 is revised to read as follows:

§ 86.094-24 Test vehicles and engines.

(a) *General.* Paragraph (a) of this section applies to the grouping of vehicles or engines into families.

(1) The vehicles or engines covered by an application for certification will be divided into groupings of engines which are expected to have similar emission characteristics throughout their useful life. Each group of engines with similar emission characteristics shall be defined as a separate engine family.

(2) To be classed in the same engine family, engines must be identical in all the respects listed in paragraphs (a)(2)(i) through (x) of this section.

(i) The cylinder bore center-to-center dimensions.

(ii)-(iii) [Reserved]

(iv) The cylinder block configuration (air-cooled or water-cooled: L-6, 90 deg., V-8, etc.).

(v) The location of the intake and exhaust valves (or ports).

(vi) The method of air aspiration.

(vii) The combustion cycle.

(viii) Catalytic converter characteristics.

(ix) Thermal reactor characteristics.

(x) Type of air inlet cooler (e.g., intercoolers and after-coolers) for diesel heavy-duty engines.

(3)(i) Engines identical in all the respects listed in paragraph (a)(2) of this section may be further divided into different engine families if the Administrator determines that they may be expected to have different emission characteristics. This determination will be based upon a consideration of the features of each engine listed in paragraphs (a)(3)(i)(A) through (G) of this section.

(A) The bore and stroke.

(B) The surface-to-volume ratio of the nominally dimensioned cylinder at the top dead center positions.

(C) The intake manifold induction port sizes and configuration.

(D) The exhaust manifold port size and configuration.

(E) The intake and exhaust valve sizes.

(F) The fuel system.

(G) The camshaft timing and ignition or injection timing characteristics.

(ii) Light-duty trucks and heavy-duty engines produced in different model years and distinguishable in the respects listed in paragraph (a)(2) of this section

shall be treated as belonging to a single engine family if the Administrator requires it, after determining that the engines may be expected to have similar emission deterioration characteristics.

(4) Where engines are of a type which cannot be divided into engine families based upon the criteria listed in paragraphs (a) (2) and (3) of this section, the Administrator will establish families for those engines based upon those features most related to their emission characteristics. Engines that are eligible to be included in the same engine family based on the criteria in paragraphs (a)(2) and (a)(3)(i) of this section may be further divided into different engine families if the manufacturer determines that they may be expected to have different emission characteristics. This determination will be based upon a consideration of the features of each engine listed in paragraphs (a)(4) (i) through (iii) of this section.

(i) The dimension from the center line of the crankshaft to the center line of the camshaft.

(ii) The dimension from the center line of the crankshaft to the top of the cylinder block head face.

(iii) The size of the intake and exhaust valves (or ports).

(5) The gasoline-fueled and methanol-fueled light-duty vehicles and light-duty trucks covered by an application for certification will be divided into groupings which are expected to have similar evaporative emission characteristics throughout their useful life. Each group of vehicles with similar evaporative emission characteristics shall be defined as a separate evaporative emission family.

(6) For gasoline-fueled or methanol-fueled light-duty vehicles and light-duty trucks to be classed in the same evaporative emission family, vehicles must be similar with respect to the items listed in paragraphs (a)(6) (i) through (iii) of this section.

(i) Type of vapor storage device (e.g., canister, air cleaner, crankcase).

(ii) Basic canister design.

(iii) Fuel system.

(7) Where vehicles are of a type which cannot be divided into evaporative emission families based on the criteria listed in paragraph (a)(2) of this section, the Administrator will establish families for those vehicles based upon the features most related to their evaporative emission characteristics.

(8)(i) If the manufacturer elects to participate in the Production AMA Durability Program, the engine families covered by an application for certification shall be grouped based upon similar engine design and

emission control system characteristics. Each of these groups shall constitute a separate engine family group.

(ii) To be classed in the same engine family group, engine families must contain engines identical in all of the respects listed in paragraphs (a)(8)(ii) (A) through (D) of this section.

(A) The combustion cycle.
(B) The cylinder block configuration (air-cooled or water-cooled: L-6, V-8, rotary, etc.).

(C) Displacement (engines of different displacement within 50 cubic inches or 15 percent of the largest displacement and contained within a multidisplacement engine family will be included in the same engine family group).

(D) Catalytic converter usage and basic type (noncatalyst, oxidation catalyst only, three-way catalyst equipped).

(9) Engine families identical in all respects listed in paragraph (a)(8) of this section may be further divided into different engine family groups if the Administrator determines that they are expected to have significantly different exhaust emission control system deterioration characteristics.

(10) A manufacturer may request the Administrator to include in an engine family group engine families in addition to those grouped under the provisions of paragraph (a)(8) of this section. This request must be accompanied by information the manufacturer believes supports the inclusion of these additional engine families.

(11) A manufacturer may combine into a single engine family group those light-duty vehicle and light-duty truck engine families which otherwise meet the requirements of paragraphs (a) (8) through (10) of this section.

(12) Those vehicles covered by an application for certification which are equipped with gasoline-fueled or methanol-fueled heavy-duty engines will be divided into groupings of vehicles on the basis of physical features which are expected to affect evaporative emissions. Each group of vehicles with similar features shall be defined as a separate evaporative emission family.

(13) For gasoline-fueled or methanol-fueled heavy-duty vehicles to be classified in the same evaporative emission family, vehicles must be identical with respect to:

(i) Method of fuel/air metering (i.e., carburetion versus fuel injection); and
(ii) Carburetor bowl fuel volume, within a 10 cc range.

(14) For vehicles equipped with gasoline-fueled or methanol-fueled heavy-duty engines to be classified in

the same evaporative emission control system, vehicles must be identical with respect to the items listed in paragraphs (a)(14) (i) through (ix) of this section.

(i) Method of vapor storage.
(ii) Method of carburetor sealing.
(iii) Method of air cleaner sealing.
(iv) Vapor storage working capacity, within a 20g range.
(v) Number of storage devices.
(vi) Method of purging stored vapors.
(vii) Method of venting the carburetor during both engine off and engine operation.

(viii) Liquid fuel hose material.
(ix) Vapor storage material.

(15) Where vehicles equipped with gasoline-fueled or methanol-fueled heavy-duty engines are types which cannot be divided into evaporative emission family-control system combinations based on the criteria listed above, the Administrator will establish evaporative emission family-control system combinations for those vehicles based on features most related to their evaporative emission characteristics.

(b) *Emission data—(1) Light-duty vehicles and light-duty trucks.*
Paragraph (b)(1) of this section applies to light-duty vehicle and light-duty truck emission data vehicles.

(i) Vehicles will be chosen to be operated and tested for emission data based upon engine family groupings. Within each engine family, one test vehicle will be selected based on the criterion that the Administrator shall select the vehicle with the heaviest equivalent test weight (including options) within the family. If more than one vehicle meets this criterion, then within that vehicle grouping the Administrator shall select, in the order listed, the highest road-load power, largest displacement, the transmission with the highest numerical final gear ratio (including overdrive), the highest numerical axle ratio offered in that engine family, and the maximum fuel flow calibration.

(ii) The Administrator shall select one additional test vehicle from within each engine family. The additional vehicle selected shall be the vehicle expected to exhibit the highest emissions of those vehicles remaining in the engine family. If all vehicles within the engine family are similar the Administrator may waive the requirements of this paragraph.

(iii) Within an engine family and exhaust emission control system, the manufacturer may alter any emission data vehicle (or other vehicles such as current or previous model year emission data vehicles, fuel economy data vehicles, and development vehicles provided they meet emission data vehicles' protocol) to represent more

than one selection under paragraph (b)(1) (i), (ii), (iv), or (vii) of this section.

(iv) If the vehicles selected in accordance with paragraphs (b)(1) (i) and (ii) of this section do not represent each engine-system combination, then one vehicle of each engine-system combination not represented will be selected by the Administrator. The vehicle selected shall be the vehicle expected to exhibit the highest emissions of those vehicles remaining in the engine family.

(v) For high-altitude exhaust emission compliance for each engine family, the manufacturer shall follow one of the procedures described in paragraphs (b)(1)(v) (A) and (B) of this section.

(A) The manufacturer will select for testing under high-altitude conditions the vehicle expected to exhibit the highest emissions from the nonexempt vehicles selected in accordance with paragraphs (b)(1) (ii), (iii), and (iv) of this section; or

(B) In lieu of testing vehicles according to paragraph (b)(1)(v)(A) of this section, a manufacturer may provide a statement in its application for certification, based on the manufacturer's engineering evaluation of such high altitude emission testing as the manufacturer deems appropriate.

(1) That all light-duty vehicles not exempt under § 86.094-8(h) comply with the emission standards at high altitude; and

(2) That light-duty trucks sold for principal use at designated high-altitude locations comply with the high-altitude emission requirements and that all light-duty trucks sold at low altitude, which are not exempt under § 86.094-9(h), are capable of being modified to meet high-altitude standards.

(vi) If 90 percent or more of the engine family sales will be in California, a manufacturer may substitute emission data vehicles selected by the California Air Resources Board criteria for the selections specified in paragraphs (b)(1) (i), (ii), and (iv) of this section.

(vii) Vehicles will be chosen to be operated and tested for evaporative emission data based upon evaporative emission family groupings as defined in paragraphs (a) (12) through (15) of this section.

(A) Vehicles of each evaporative emission family will be divided into evaporative emission control systems.

(B) The Administrator will select the vehicle expected to exhibit the highest evaporative emissions from within each evaporative family to be certified. This vehicle is selected from among the vehicles represented by the exhaust emission data selections for the engine family, unless evaporative testing has

already been completed for the vehicle expected to exhibit the highest evaporative emissions for the evaporative family as part of another engine family's testing.

(C) If the vehicles selected in accordance with paragraph (b)(1)(vii)(B) of this section do not represent each evaporative emission control system then the Administrator will select the highest expected evaporative emission vehicle from within the unrepresented evaporative system.

(viii) For high-altitude evaporative emission compliance for each evaporative emission family, the manufacturer shall follow one of the procedures described in paragraphs (b)(1)(viii) (A) and (B) of this section.

(A) The manufacturer will select for testing under high-altitude conditions the one nonexempt vehicle previously selected under paragraph (b)(1)(vii) (B) or (C) of this section which is expected to have the highest level of evaporative emissions when operated at high altitude; or

(B) In lieu of testing vehicles according to paragraph (b)(1)(viii)(A) of this section, a manufacturer may provide a statement in its application for certification, based on the manufacturer's engineering evaluation of such high-altitude emission testing as the manufacturer deems appropriate.

(1) That all light-duty vehicles not exempt under § 86.094-8(h) comply with the emission standards at high altitude; and

(2) That light-duty trucks sold for principal use at designated high-altitude locations comply with the high-altitude emission requirements and that all light-duty trucks sold at low-altitude, which are not exempt under § 86.094-9(h), are capable of being modified to meet high-altitude standards.

(ix) Vehicles selected for high altitude exhaust emission testing under paragraph (b)(1)(v)(A) of this section may be used to satisfy the evaporative emission testing requirements of paragraph (b)(1) (viii) (A) of this section.

(x) *Light-duty trucks only.* (A) The manufacturer may reconfigure any of the low-altitude emission data vehicles to represent the vehicle configuration required to be tested at high altitude.

(B) The manufacturer is not required to test the reconfigured vehicle at low altitude.

(xi) For cold temperature CO exhaust emission compliance for each engine family, the Administrator will select for testing the vehicle expected to emit the highest emissions from the vehicles selected in accordance with paragraphs (b)(1) (i), (ii), (iii), and (iv) of this section. This vehicle shall be tested by

the manufacturer in accordance with the test procedures in subpart C of this part or with alternative procedures requested by the manufacturer and approved in advance by the Administrator.

(2) *Otto-cycle heavy-duty emission data engines.* Paragraph (b)(2) of this section applies to Otto-cycle heavy-duty engines.

(i)-(ii) [Reserved]

(iii) The Administrator shall select a maximum of two engines within each engine family based upon features indicating that they may have the highest emission levels of the engines in the engine family in accordance with the criteria described in paragraphs (b)(2)(iii) (A) and (B) of this section.

(A) The Administrator shall select one emission data engine first based on the largest displacement within the engine family. Then from those within the largest displacement the Administrator shall select, in the order listed, highest fuel flow at the speed of maximum rated torque, the engine with the most advanced spark timing, no EGR or lowest EGR flow, and no air pump or lowest actual flow air pump.

(B) The Administrator shall select one additional engine, from within each engine family. The engine selected shall be the engine expected to exhibit the highest emissions of those engines remaining in the engine family. If all engines within the engine family are similar the Administrator may waive the requirements of this paragraph.

(iv) If the engines selected in accordance with paragraphs (b)(2) (ii) and (iii) of this section do not represent each engine displacement-exhaust emission control system combination, then one engine of each engine displacement-exhaust emission control system combination not represented shall be selected by the Administrator.

(v) Within an engine family/displacement/control system combination, the manufacturer may alter any emission data engine (or other engine including current or previous model year emission data engines and development engines provided they meet the emission data engines' protocol) to represent more than one selection under paragraph (b)(2)(iii) of this section.

(3) *Diesel heavy-duty emission data engines.* Paragraph (b)(3) of this section applies to diesel heavy-duty emission data vehicles.

(i) Engines will be chosen to be run for emission data based upon engine family groupings. Within each engine family, the requirements of paragraphs (b)(3) (i) through (iv) of this section must be met.

(ii) Engines of each engine family will be divided into groups based upon their exhaust emission control systems. One engine of each engine system combination shall be run for smoke emission data (diesel engines only) and gaseous emission data. Either the complete gaseous emission test or the complete smoke test may be conducted first. Within each combination, the engine that features the highest fuel feed per stroke, primarily at the speed of maximum rated torque and secondarily at rated speed, will usually be selected. If there are military engines with higher fuel rates than other engines in the same engine system combinations, then one military engine shall also be selected. The engine with the highest fuel feed per stroke will usually be selected.

(iii) The Administrator may select a maximum of one additional engine within each engine-system combination based upon features indicating that it may have the highest emission levels of the engines of that combination. In selecting this engine, the Administrator will consider such features as the injection system, fuel system, compression ratio, rated speed, rated horsepower, peak torque speed, and peak torque.

(iv) Within an engine family control system combination, the manufacturer may alter any emission data engine (or other engine including current or previous model year emission data engines and development engines provided they meet the emission data engines' protocol) to represent more than one selection under paragraphs (b)(3) (ii) and (iii) of this section.

(c) *Durability data*—(1) *Light-duty vehicle durability data vehicles*. Paragraph (c)(1) of this section applies to light-duty vehicle durability data vehicles.

(i) A durability data vehicle will be selected by the Administrator to represent each engine-system combination. The vehicle selected shall be of the engine displacement with the largest projected sales volume of vehicles with that control-system combination in that engine family and will be designated by the Administrator as to transmission type, fuel system, inertia weight class, and test weight.

(ii) A manufacturer may elect to operate and test additional vehicles to represent any engine-system combination. The additional vehicles must be of the same engine displacement, transmission type, fuel system and inertia weight class as the vehicle selected for that engine-system combination in accordance with the provisions of paragraph (c)(1)(i) of this section. Notice of an intent to operate

and test additional vehicles shall be given to the Administrator no later than 30 days following notification of the test fleet selection.

(2) *Light-duty trucks*. Paragraph (c)(2) of this section applies to vehicles, engines, subsystems, or components used to establish exhaust emission deterioration factors for light-duty trucks.

(i) The manufacturer shall select the vehicles, engines, subsystems, or components to be used to determine exhaust emission deterioration factors for each engine-family control system combination. Whether vehicles, engines, subsystems, or components are used, they shall be selected so that their emissions deterioration characteristics may be expected to represent those of in-use vehicles, based on good engineering judgment.

(ii) [Reserved]

(3) *Heavy-duty engines*. Paragraph (c)(3) of this section applies to engines, subsystems, or components used to establish exhaust emission deterioration factors for heavy-duty engines.

(i) The manufacturer shall select the engines, subsystems, or components to be used to determine exhaust emission deterioration factors for each engine-family control system combination. Whether engines, subsystems, or components are used, they shall be selected so that their emissions deterioration characteristics may be expected to represent those of in-use engines, based on good engineering judgment.

(ii) [Reserved]

(d) For purposes of testing under § 86.094-26(a)(9) or (b)(11), the Administrator may require additional emission data vehicles (or emission data engines) and durability data vehicles (light-duty vehicles only) identical in all material respects to vehicles (or engines) selected in accordance with paragraphs (b) and (c) of this section, provided that the number of vehicles (or engines) selected shall not increase the size of either the emission data fleet or the durability data fleet by more than 20 percent or one vehicle (or engine), whichever is greater.

(e)(1) [Reserved]

(2) Any manufacturer may request to certify engine families with combined total sales of fewer than 10,000 light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines utilizing the procedures contained in § 86.094-14 for emission data vehicle selection and determination of deterioration factors. The deterioration factors shall be applied only to entire engine families.

(f) *Carryover and carryacross of durability and emission data*. In lieu of testing an emission data or durability data vehicle (or engine) selected under paragraph (b) or (c) of this section, and submitting data therefore, a manufacturer may, with the prior written approval of the Administrator, submit exhaust emission data and/or evaporative emission data, as applicable on a similar vehicle (or engine) for which certification has previously been obtained or for which all applicable data required under § 86.094-23 has previously been submitted.

(g)(1) Paragraph (g) of this section applies to light-duty vehicles and light-duty trucks, but does not apply to the production vehicles selected under paragraph (h) of this section.

(2)(i) Where it is expected that more than 33 percent of a carline, within an engine-system combination, shall be equipped with an item (whether that item is standard equipment or an option), the full estimated weight of that item shall be included in the curb weight computation for each vehicle available with that item in that carline, within that engine-system combination.

(ii) Where it is expected that 33 percent or less of the carline, within an engine-system combination, will be equipped with an item (whether that item is standard equipment or an option), no weight for that item will be added in computing the curb weight for any vehicle in that carline, within that engine-system combination, unless that item is standard equipment on the vehicle.

(iii) In the case of mutually exclusive options, only the weight of the heavier option will be added in computing the curb weight.

(iv) Optional equipment weighing less than three pounds per item need not be considered.

(3)(i) Where it is expected that more than 33 percent of a carline, within an engine-system combination, will be equipped with an item (whether that item is standard equipment or an option) that can reasonably be expected to influence emissions, then such items shall actually be installed (unless excluded under paragraph (g)(3)(ii) of this section) on all emission data and durability data vehicles of that carline, within that engine-system combination, on which the items are intended to be offered in production. Items that can reasonably be expected to influence emissions are: air conditioning, power steering, power brakes, and other items determined by the Administrator.

(ii) If the manufacturer determines by test data or engineering evaluation that the actual installation of the optional

equipment required by paragraph (g)(3)(i) of this section does not affect the emissions or fuel economy values, the optional equipment need not be installed on the test vehicle.

(iii) The weight of the options shall be included in the design curb weight and also be represented in the weight of the test vehicles.

(iv) The engineering evaluation, including any test data, used to support the deletion of optional equipment from test vehicles, shall be maintained by the manufacturer and shall be made available to the Administrator upon request.

(4) Where it is expected that 33 percent or less of a carline, within an engine-system combination, will be equipped with an item (whether that item is standard equipment or an option) that can reasonably be expected to influence emissions, that item shall not be installed on any emission data vehicle or durability data vehicle of that carline, within that engine-system combination, unless that item is standard equipment on that vehicle or specifically required by the Administrator.

(h) *Production AMA Durability Program durability data vehicles.* Paragraph (h) of this section applies to light-duty vehicle durability data vehicles selected under the Production AMA Durability Program described in § 86.094-13.

(1) In order to update the durability data to be used to determine a deterioration factor for each engine family group, the Administrator will select durability data vehicles from the manufacturer's production line. Production vehicles will be selected from each model year's production for those vehicles certified using the Production AMA Durability Program procedures.

(i) The Administrator shall select the production durability data vehicle designs from the designs that the manufacturer offers for sale. For each model year and for each engine family group, the Administrator may select production durability data vehicle designs of equal number to the number of engine families within the engine family group, up to a maximum of three vehicles.

(ii) The production durability data vehicles representing the designs selected in paragraph (h)(1)(i) of this section will be randomly selected from the manufacturer's production. The Administrator will make these random selections unless the manufacturer (with prior approval of the Administrator) elects to make the random selections.

(iii) The manufacturer may select additional production durability data vehicle designs from within the engine family group. The production durability data vehicles representing these designs shall be randomly selected from the manufacturer's production in accordance with paragraph (h)(1)(ii) of this section.

(iv) For each production on durability data vehicle selected under paragraph (h)(1) of this section, the manufacturer shall provide to the Administrator (before the vehicle is tested or begins service accumulation) the vehicle identification number. Before the vehicle begins service accumulation the manufacturer shall also provide the Administrator with a description of the durability data vehicle as specified by the Administrator.

(v) In lieu of testing a production durability data vehicle selected under paragraph (h)(1) of this section, and submitting data therefrom, a manufacturer may, with the prior written approval of the Administrator, submit exhaust emission data from a production vehicle of the same configuration for which all applicable data has previously been submitted.

(2) If, within an existing engine family group, a manufacturer requests to certify vehicles of a new design, engine family, emission control system, or with any other durability-related design difference, the Administrator will determine if the existing engine family group deterioration factor is appropriate for the new design. If the Administrator cannot make this determination or deems the deterioration factor not appropriate, the Administrator shall select preproduction durability data vehicles under the provisions of paragraph (c) of this section. If vehicles are then certified using the new design, the Administrator may select production vehicles with the new design under the provisions of paragraph (h)(1) of this section.

(3) If a manufacturer requests to certify vehicles of a new design that the Administrator determines are a new engine family group, the Administrator shall select preproduction durability data vehicles under the provisions of paragraph (c) of this section. If vehicles are then certified using the new design, the Administrator may select production vehicles of that design under the provisions of paragraph (h)(1) of this section.

(Approved by the Office of Management and Budget under control number 2060-0104)

10. A new § 86.094-25 is added to subpart A to read as follows:

§ 86.094-25 Maintenance.

(a)(1) *Applicability.* This section applies to light-duty vehicles, light-duty trucks, and heavy-duty engines.

(2) Maintenance performed on vehicles, engines, subsystems, or components used to determine exhaust or evaporative emission deterioration factors is classified as either emission-related or non-emission-related and each of these can be classified as either scheduled or unscheduled. Further, some emission-related maintenance is also classified as critical emission-related maintenance.

(b) This section specifies emission-related scheduled maintenance for purposes of obtaining durability data and for inclusion in maintenance instructions furnished to purchasers of new motor vehicles and new motor vehicles engines under § 86.087-38.

(1) All emission-related scheduled maintenance for purposes of obtaining durability data must occur at the same mileage intervals (or equivalent intervals if engines, subsystems, or components are used) that will be specified in the manufacturer's maintenance instructions furnished to the ultimate purchaser of the motor vehicle or engine under § 86.094-35. This maintenance schedule may be updated as necessary throughout the testing of the vehicle/engine, provided that no maintenance operation is deleted from the maintenance schedule after the operation has been performed on the test vehicle or engine.

(2) Any emission-related maintenance which is performed on vehicles, engines, subsystems, or components must be technologically necessary to assure in-use compliance with the emission standards. The manufacturer must submit data which demonstrate to the Administrator that all of the emission-related scheduled maintenance which is to be performed is technologically necessary. Scheduled maintenance must be approved by the Administrator prior to being performed or being included in the maintenance instructions provided to purchasers under § 86.087-38. The Administrator has determined that emission-related maintenance at shorter intervals than those outlined in paragraphs (b) (3) and (4) of this section is not technologically necessary to ensure in-use compliance. However, the Administrator may determine that maintenance even more restrictive (e.g., longer intervals) than that listed in paragraphs (b) (3) and (4) of this section is also not technologically necessary.

(3) For Otto-cycle light-duty vehicles, light-duty trucks and heavy duty engines, emission-related maintenance

in addition to, or at shorter intervals than, that listed in paragraphs (b)(3)(i) through (vii) of this section will not be accepted as technologically necessary, except as provided in paragraph (b)(7) of this section.

(i)(A) The cleaning or replacement of light-duty vehicle or light-duty truck spark plugs shall occur at 30,000 miles of use and at 30,000-mile intervals thereafter.

(B) The cleaning or replacement of Otto-cycle heavy duty engine spark plugs shall occur at 25,000 miles (or 750 hours) of use and at 25,000-mile (or 750-hour) intervals thereafter, for engines certified for use with unleaded fuel only.

(ii) For light-duty vehicles and light-duty trucks, the adjustment, cleaning, repair, or replacement of the items listed in paragraphs (b)(3)(ii) (A) through (D) of this section shall occur at 50,000 miles of use and at 50,000-mile intervals thereafter.

(A) Positive crankcase ventilation valve.

(B) Emission-related hoses and tubes.

(C) Ignition wires.

(D) Idle mixture.

(iii) For heavy-duty engines, the adjustment, cleaning, repair, or replacement of the items listed in paragraphs (b)(3)(iii) (A) through (D) of this section shall occur at 50,000 miles (or 1,500 hours) of use and at 50,000-mile (or 1,500-hour) intervals thereafter.

(A) Positive crankcase ventilation valve.

(B) Emission-related hoses and tubes.

(C) Ignition wires.

(D) Idle mixture.

(iv) For light-duty vehicles, light-duty trucks and heavy-duty engines, the adjustment, cleaning, repair, or replacement of the oxygen sensor shall occur at 80,000 miles (or 2,400 hours) of use and at 80,000-mile (or 2,400-hour) intervals thereafter.

(v) For heavy-duty engines, the adjustment, cleaning, repair, or replacement of the items listed in paragraphs (b)(3)(v) (A) through (G) of this section shall occur at 100,000 miles (or 3,000 hours) of use and at 100,000-mile (or 3,000-hour) intervals thereafter.

(A) Catalytic converter.

(B) Air injection system components.

(C) Fuel injectors.

(D) Electronic engine control unit and its associated sensors (except oxygen sensor) and actuators.

(E) Evaporative emission canister.

(F) Turbochargers.

(G) Carburetors.

(vi) For light-duty vehicles and light-duty trucks, the adjustment, cleaning, repair, or replacement of the items listed in paragraphs (b)(3)(vi) (A) through (I) of

this section shall occur at 100,000 miles of use and at 100,000-mile intervals thereafter.

(A) Catalytic converter.

(B) Air injection system components.

(C) Fuel injectors.

(D) Electronic engine control unit and its associated sensors (except oxygen sensor) and actuators.

(E) Evaporative emission canister.

(F) Turbochargers.

(G) Carburetors.

(H) Superchargers.

(I) EGR System including all related filters and control valves.

(vii) For heavy-duty engines certified for use with unleaded fuel only, the adjustment, cleaning, repair, or replacement of the EGR system (including all related filters and control valves) shall occur at 50,000 miles (or 1,500 hours) of use and at 50,000-mile (or 1,500-hour) intervals thereafter.

(4) For diesel-cycle light-duty vehicles, light-duty trucks, and heavy-duty engines, emission-related maintenance in addition to, or at shorter intervals than that listed in paragraphs (b)(4)(i) through (iv) of this section will not be accepted as technologically necessary, except as provided in paragraph (b)(7) of this section.

(i) For heavy-duty engines, the adjustment, cleaning, repair, or replacement of the items listed in paragraphs (b)(4)(i) (A) through (C) of this section shall occur at 50,000 miles (or 1,500 hours) of use and at 50,000-mile (or 1,500-hour) intervals thereafter.

(A) Exhaust gas recirculation system including all related filters and control valves.

(B) Positive crankcase ventilation valve.

(C) Fuel injector tips (cleaning only).

(ii) For light-duty vehicles and light-duty trucks, the adjustment, cleaning, repair, or replacement of the positive crankcase ventilation valve shall occur at 50,000 miles of use and at 50,000-mile intervals thereafter.

(iii) The adjustment, cleaning, repair, or replacement of items listed in paragraphs (b)(4)(iii) (A) through (D) of this section shall occur at 100,000 miles (or 3,000 hours) of use and at 100,000-mile (or 3,000-hour) intervals thereafter for light heavy-duty engines, or, at 150,000 miles (or 4,500 hours) intervals thereafter for medium and heavy-duty engines.

(A) Fuel injectors.

(B) Turbocharger.

(C) Electronic engine control unit and its associated sensors and actuators.

(D) Particulate trap or trap-oxidizer system (including related components).

(iv) For light-duty vehicles and light-duty trucks, the adjustment, cleaning,

repair, or replacement shall occur at 100,000 miles of use and at 100,000-mile intervals thereafter of the items listed in paragraphs (b)(4)(iv) (A) through (G) of this section.

(A) Fuel injectors.

(B) Turbocharger.

(C) Electronic engine control unit and its associated sensors and actuators.

(D) Particulate trap or trap-oxidizer system (including related components).

(E) Exhaust gas recirculation system including all related filters and control valves.

(F) Catalytic converter.

(G) Superchargers.

(5) [Reserved]

(6) (i) The components listed in paragraphs (b)(6)(i) (A) through (G) of this section are currently defined as critical emission-related components.

(A) Catalytic converter.

(B) Air injection system components.

(C) Electronic engine control unit and its associated sensors (including oxygen sensor if installed) and actuators.

(D) Exhaust gas recirculation system (including all related filters and control valves).

(E) Positive crankcase ventilation valve.

(F) Evaporative emission control system components (excluding canister air filter).

(G) Particulate trap or trap-oxidizer system.

(ii) All critical emission-related scheduled maintenance must have a reasonable likelihood of being performed in-use. The manufacturer shall be required to show the reasonable likelihood of such maintenance being performed in-use, and such showing shall be made prior to the performance of the maintenance on the durability data vehicle. Critical emission-related scheduled maintenance items which satisfy one of the conditions defined in paragraphs (b)(6)(ii) (A) through (F) of this section will be accepted as having a reasonable likelihood of the maintenance item being performed in-use.

(A) Data are presented which establish for the Administrator a connection between emissions and vehicle performance such that as emissions increase due to lack of maintenance, vehicle performance will simultaneously deteriorate to a point unacceptable for typical driving.

(B) Survey data are submitted which adequately demonstrate to the Administrator that, at an 80 percent confidence level, 80 percent of such engines already have this critical maintenance item performed in-use at the recommended interval(s).

(C) A clearly displayed visible signal system approved by the Administrator

is installed to alert the vehicle driver that maintenance is due. A signal bearing the message "maintenance needed" or "check engine," or a similar message approved by the Administrator, shall be actuated at the appropriate mileage point or by component failure. This signal must be continuous while the engine is in operation and not be easily eliminated without performance of the required maintenance. Resetting the signal shall be a required step in the maintenance operation. The method for resetting the signal system shall be approved by the Administrator.

(D) A manufacturer may desire to demonstrate through a survey that a critical maintenance item is likely to be performed without a visible signal on a maintenance item for which there is no prior in-use experience without the signal. To that end, the manufacturer may in a given model year market up to 200 randomly selected vehicles per critical emission-related maintenance item without such visible signals, and monitor the performance of the critical maintenance item by the owners to show compliance with paragraph (b)(6)(ii)(B) of this section. This option is restricted to two consecutive model years and may not be repeated until any previous survey has been completed. If the critical maintenance involves more than one engine family, the sample will be sales weighted to ensure that it is representative of all the families in question.

(E) The manufacturer provides the maintenance free of charge, and clearly informs the customer that the maintenance is free in the instructions provided under § 86.087-38.

(F) Any other method which the Administrator approves as establishing a reasonable likelihood that the critical maintenance will be performed in-use.

(iii) Visible signal systems used under paragraph (b)(6)(ii)(C) of this section are considered an element of design of the emission control system. Therefore, disabling, resetting, or otherwise rendering such signals inoperative without also performing the indicated maintenance procedure is a prohibited act under section 203(a)(3) of the Clean Air Act (42 U.S.C. 7522(a) (3)).

(7) *Changes to scheduled maintenance.* (i) For maintenance practices that existed prior to the 1980 model year, only the maintenance items listed in paragraphs (b) (3) and (4) of this section are currently considered by EPA to be emission-related. The Administrator may, however, determine additional scheduled maintenance items that existed prior to the 1980 model year to be emission-related by announcement in a Federal Register Notice. In no event

may this notification occur later than September 1 of the calendar year two years prior to the affected model year.

(ii) In the case of any new scheduled maintenance, the manufacturer must submit a request for approval to the Administrator for any maintenance that it wishes to recommend to purchasers and perform during durability determination. New scheduled maintenance is that maintenance which did not exist prior to the 1980 model year, including that which is a direct result of the implementation of new technology not found in production prior to the 1980 model year. The manufacturer must also include its recommendations as to the category (i.e., emission-related or non-emission-related, critical or non-critical) of the subject maintenance and, for suggested emission-related maintenance, the maximum feasible maintenance interval. Such requests must include detailed evidence supporting the need for the maintenance requested, and supporting data or other substantiation for the recommended maintenance category and for the interval suggested for emission-related maintenance. Requests for new scheduled maintenance must be approved prior to the introduction of the new maintenance. The Administrator will then designate the maintenance as emission-related or non-emission-related. For maintenance items established as emission-related, the Administrator will further designate the maintenance as critical if the component which receives the maintenance is a critical component under paragraph (b)(6) of this section. For each maintenance item designated as emission-related, the Administrator will also establish a technologically necessary maintenance interval, based on industry data and any other information available to EPA. Designations of emission-related maintenance items, along with their identification as critical or non-critical, and establishment of technologically necessary maintenance intervals, will be announced in the Federal Register.

(iii) Any manufacturer may request a hearing on the Administrator's determinations in paragraph (b)(7) of this section. The request shall be in writing and shall include a statement specifying the manufacturer's objections to the Administrator's determinations, and data in support of such objections. If, after review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, he shall provide the manufacturer a hearing in accordance

with § 86.078-6 with respect to such issue.

(c) *Non-emission-related scheduled maintenance* which is reasonable and technologically necessary (e.g., oil change, oil filter change, fuel filter change, air filter change, cooling system maintenance, adjustment of idle speed, governor, engine bolt torque, valve lash, injector lash, timing, adjustment of air pump drive belt tension, lubrication of the exhaust manifold heat control valve, lubrication of carburetor choke linkage, retorquing carburetor mounting bolts, etc.) may be performed on durability data vehicles at the least frequent intervals recommended by the manufacturer to the ultimate purchaser, (e.g., not at the intervals recommended for severe service).

(d) *Unscheduled maintenance on light-duty durability data vehicles.* (1) Unscheduled maintenance may be performed during the testing used to determine deterioration factors, except as provided in paragraphs (d) (2) and (3) of this section, only under the following provisions defined in paragraphs (d)(1) (i) through (iii) of this section.

(i) A fuel injector or spark plug may be changed if a persistent misfire is detected.

(ii) Readjustment of an Otto-cycle vehicle cold-start enrichment system may be performed if there is a problem of stalling.

(iii) Readjustment of the engine idle speed (curb idle and fast idle) may be performed in addition to that performed as scheduled maintenance under paragraph (c) of this section if the idle speed exceeds the manufacturer's recommended idle speed by 300 rpm or more, or if there is a problem of stalling.

(2) Any other unscheduled vehicle, emission control system, or fuel system adjustment, repair, removal, disassembly, cleaning, or replacement during testing to determine deterioration factors shall be performed only with the advance approval of the Administrator. Such approval will be given if the Administrator:

(i) Has made a preliminary determination that the part failure or system malfunction, or the repair of such failure or malfunction, does not render the vehicle or engine unrepresentative of vehicles or engines in-use and does not require direct access to the combustion chamber, except for spark plug, fuel injection component, or removable prechamber removal or replacement; and

(ii) Has made a determination that the need for maintenance or repairs is indicated by an overt indication of malfunction such as persistent misfiring, engine stalling, overheating,

fluid leakage, loss of oil pressure, excessive fuel consumption, or excessive power loss. The Administrator shall be given the opportunity to verify the existence of an overt indication of part failure and/or vehicle/engine malfunction (e.g., misfiring, stalling, black smoke), or an activation of an audible and/or visible signal, prior to the performance of any maintenance to which such overt indication or signal is relevant under the provisions of this section.

(3) Emission measurement may not be used as a means of determining the need for unscheduled maintenance under paragraph (d)(2) of this section, except under the conditions defined in paragraphs (d)(3) (i) through (ii) of this section.

(i) The Administrator may approve unscheduled maintenance on durability data vehicles based upon a significant change in emission levels that indicates a vehicle or engine malfunction. In these cases the Administrator may first approve specific diagnostic procedures to identify the source of the problem. The Administrator may further approve of specific corrections to the problem after the problem has been identified. The Administrator may only approve the corrective action after it is determined that:

(A) The malfunction was caused by nonproduction build practices or by a previously undetected design problem;

(B) The malfunction will not occur in production vehicles or engines in-use; and

(C) The deterioration factor generated by the durability data vehicle or engine will remain unaffected by the malfunction or by the corrective action (e.g., the malfunction was present for only a short period of time before detection, replacement parts are functionally representative of the proper mileage or hours, etc.).

(ii) Following any unscheduled maintenance approved under paragraph (d)(3)(i) of this section, the manufacturer shall perform an after-maintenance emission test. If the Administrator determines that the after-maintenance emission levels for any pollutant indicates that the deterioration factor is no longer representative of production, the Administrator may disqualify the durability data vehicle or engine.

(4) If the Administrator determines that part failure or system malfunction occurrence and/or repair rendered the vehicle/engine unrepresentative of vehicles in-use, the vehicle/engine shall not be used for determining deterioration factors.

(5) Repairs to vehicle components of a durability data vehicle other than the

engine, emission control system, or fuel system, shall be performed only as a result of part failure, vehicle system malfunction, or with the advance approval of the Administrator.

(e) *Maintenance on emission data vehicles and engines.* (1) Adjustment of engine idle speed on emission data vehicles may be performed once before the low-mileage/low-hour emission test point. Any other engine, emission control system, or fuel system adjustment, repair, removal, disassembly, cleaning, or replacement on emission data vehicles shall be performed only with the advance approval of the Administrator.

(2) [Reserved]

(3) [Reserved]

(4) Repairs to vehicle components of an emission data vehicle other than the engine, emission control system, or fuel system, shall be performed only as a result of part failure, vehicle system malfunction, or with the advance approval of the Administrator.

(f) Equipment, instruments, or tools may not be used to identify malfunctioning, maladjusted, or defective engine components unless the same or equivalent equipment, instruments, or tools will be available to dealerships and other service outlets and:

(1) Are used in conjunction with scheduled maintenance on such components; or

(2) Are used subsequent to the identification of a vehicle or engine malfunction, as provided in paragraph (d)(2) of this section for durability data vehicles or in paragraph (e)(1) of this section for emission data vehicles; or

(3) Unless specifically authorized by the Administrator.

(g)(1) Paragraph (g) of this section applies to light-duty vehicles.

(2) Complete emission tests (see §§ 86.106 through 86.145) are required, unless waived by the Administrator, before and after scheduled maintenance approved for durability data vehicles.

The manufacturer may perform emission tests before unscheduled maintenance. Complete emission tests are required after unscheduled maintenance which may reasonably be expected to affect emissions. The Administrator may waive the requirement to test after unscheduled maintenance. These test data may be submitted weekly to the Administrator, but shall be air posted or delivered within 7 days after completion of the tests, along with a complete record of all pertinent maintenance, including a preliminary engineering report of any malfunction diagnosis and the corrective action taken. A complete

engineering report shall be delivered to the Administrator concurrently with the manufacturer's application for certification.

(h) All test data, maintenance reports, and required engineering reports shall be compiled and provided to the Administrator in accordance with § 86.090-23.

11. A new § 86.094-26 is added to subpart A to read as follows:

§ 86.094-26 Mileage and service accumulation; emission requirements.

(a)(1) Paragraph (a) of this section applies to light-duty vehicles. It prescribes mileage and service accumulation requirements for durability data vehicles run under either the Standard AMA Durability Program of § 86.094-13(c) or the Production AMA Durability Program of § 86.094-13(d), and for emission data vehicles regardless of the durability program employed. Service accumulation requirements for durability data vehicles run under the Alternative Service Accumulation Program may be found in § 86.094-13(e).

(2) The standard method of whole-vehicle service accumulation for durability data vehicles and for emission data vehicles in model years 1994, 1995, and 1996 shall be mileage accumulation using the Durability Driving Schedule as specified in appendix IV to this part. A modified procedure may also be used if approved in advance by the Administrator. Except with the advance approval of the Administrator, all vehicles will accumulate mileage at a measured curb weight which is within 100 pounds of the estimated curb weight. If the loaded vehicle weight is within 100 pounds of being included in the next higher inertia weight class as specified in § 86.129, the manufacturer may elect to conduct the respective emission tests at higher loaded vehicle weight.

(3) *Emission data vehicles.* Unless otherwise provided for in § 86.094-23(a), emission data vehicles shall be operated and tested as described in paragraphs (a)(3) (i) and (ii) of this section.

(i) *Otto-cycle.* (A) The manufacturer shall determine, for each engine family, the mileage 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 4,000 miles on each test vehicle within an engine family without making a determination. The manufacturer must accumulate a

minimum of 2,000 miles (3,219 kilometers) on each test vehicle within an engine family. All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator. Any vehicle used to represent emission data vehicle selections under § 86.094-24(b)(1) shall be equipped with an engine and emission control system that has accumulated the mileage the manufacturer chose to accumulate on the test vehicle. Fuel economy data generated from certification vehicles selected in accordance with § 86.094-24(b)(1) with engine-system combinations that have accumulated more than 10,000 kilometers (6,200 miles) shall be factored in accordance with § 600.006(c) of this chapter. Complete exhaust and evaporative (if required) emission tests shall be conducted for each emission data vehicle selection under § 86.094-24(b)(1). The Administrator may determine under § 86.094-24(f) that no testing is required.

(B) Emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (v) or (viii) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing under high-altitude conditions.

(C) Exhaust and evaporative emissions tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (i), (ii), (iii), (iv), or (vii)(B) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing under low-altitude conditions.

(D) For each engine family, the manufacturer will either select one vehicle previously selected under § 86.094-24(b)(1) (i) through (iv) to be tested under high-altitude conditions or provide a statement in accordance with § 86.094-24(b)(1)(v). Vehicles shall meet emission standards under both low- and high-altitude conditions without manual adjustments or modifications. In addition, any emission control device used to conform with the emission standards under high-altitude conditions shall initially actuate (automatically) no higher than 4,000 feet above sea level.

(ii) *Diesel-cycle.* (A) The manufacturer shall determine, for each engine family, the mileage 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 4,000 miles on each

test vehicle within an engine family without making a determination. The manufacturer must accumulate a minimum of 2,000 miles (3,219 kilometers) on each test vehicle within an engine family. All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator. Any vehicle used to represent emission data vehicle selections under § 86.094-24(b)(1) shall be equipped with an engine and emission control system that has accumulated the mileage the manufacturer chose to accumulate on the test vehicle. Fuel economy data generated from certification vehicles selected in accordance with § 86.094-24(b)(1) with engine-system combinations that have accumulated more than 10,000 kilometers (6,200 miles) shall be factored in accordance with § 600.006 of this chapter. Complete exhaust emission tests shall be conducted for each emission data vehicle selection under § 86.094-24(b)(1). The Administrator may determine under § 86.094-24(f) that no testing is required.

(B) Emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1)(v) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing under high-altitude conditions.

(C) Exhaust and evaporative emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (i), (ii), (iii), (iv), or (vii)(B) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing under low-altitude conditions.

(D) For each engine family, the manufacturer will either select one vehicle previously selected under § 86.094-24(b)(1) (i) through (iv) to be tested under high-altitude conditions or provide a statement in accordance with § 86.094-24(b)(1)(v). Vehicles shall meet emission standards under both low- and high-altitude conditions without manual adjustments or modifications. In addition, any emission control device used to conform with the emission standards under high-altitude conditions shall initially actuate (automatically) no higher than 4,000 feet above sea level.

(4) (i) *Durability data vehicles.* (A) Unless otherwise provided for in § 86.094-13(e) or § 86.094-23(a) or in paragraph (a)(4)(i)(B) of this section, each durability data vehicle shall be driven on the whole-vehicle mileage accumulation cycle specified in paragraph (a)(2) of this section, with all emission control systems installed and

operating, up to a mileage endpoint corresponding to the vehicle's durability useful life as defined in § 86.094-2.

(B) *Extrapolation of durability data and changes to the mileage accumulation cycle.* (1) Once a durability vehicle has reached the greater of 75,000 miles or three-quarters of the applicable durability useful life, the manufacturer may petition the Administrator to extrapolate the durability data obtained up to that point out to the durability useful life or to replace the mileage accumulation cycle with an alternative that meets the criteria of paragraph (a)(2) of this section. In the petition, the manufacturer shall supplement the durability vehicle data with other information demonstrating the durability of the vehicle's emission control components and systems at or beyond the durability useful life.

(2) Factors the Administrator will consider in evaluating petitions for extrapolation of durability data or for changes to the mileage accumulation cycle include, but are not limited to, any unusual scheduled maintenance, unscheduled maintenance, the general linearity and scatter of the actual data, reasonable explanations for all outlier data, the technical validity of any substitute mileage accumulation cycle, and evidence supplied by the vehicle manufacturer of component and system durability.

(3) If a petition for extrapolation of durability data is approved, the endpoint for whole-vehicle mileage accumulation of the durability data vehicle shall be the mileage attained by the vehicle as reflected in the petition.

(4) Discontinuation of a durability data vehicle shall be allowed only with the consent of the Administrator.

(C) Complete exhaust emission tests shall be made at nominal test point mileage intervals that the manufacturer determines. At a minimum, two complete exhaust emission tests shall be made. The first test shall be made at a distance not greater than 6,250 miles. The last shall be made at the mileage accumulation endpoint determined in paragraph (a)(4)(i) (A) or (B) of this section, whichever is applicable.

(D) Except with advance approval of the Administrator, the mileage interval between nominal test points must be of equal length except for the interval between zero miles and the first test, and any interval before or after testing conducted in conjunction with vehicle maintenance as specified in § 86.094-25(g)(2).

(ii) The manufacturer may, at its option, alter the durability data vehicle at the selected nominal test point to

represent emission data vehicle(s) within the same engine-system combination and perform emission tests on the altered vehicle. Upon completion of emission testing, the manufacturer may return the test vehicle to the durability data vehicle configuration and continue mileage accumulation.

(5)(i) All tests required by this subpart on emission data vehicles shall be conducted at a mileage equal to or greater than the mileage the manufacturer determines under paragraph (a)(3) of this section.

(ii) All tests required by this subpart on durability data vehicles shall be conducted within 250 miles of each of the nominal test points. This ± 250 mile test point mileage tolerance may be modified with the advance approval of the Administrator if the basis for the written request is to prevent an interruption of durability mileage accumulation due to test scheduling conflicts for weekends, holidays, and other similar circumstances.

(6)(i)(A) The manufacturer may conduct multiple tests at any test point at which the data are intended to be used in the deterioration factor. At each test point where multiple tests are conducted, the test results from all valid tests shall be averaged to determine the data point to be used in the deterioration factor calculation, except under paragraph (a)(6)(i)(B) of this section. The test results from emission tests performed before maintenance affecting emissions shall not be averaged with test results after the maintenance.

(B) The manufacturer is not required to average multiple tests if the manufacturer conducts no more than three tests at each test point and if the number of tests at each test point is equal. All test points must be treated the same for all exhaust pollutants.

(ii) The results of all emission testing shall be supplied to the Administrator. The manufacturer shall furnish to the Administrator explanation for voiding any test. The Administrator will determine if voiding the test was appropriate based upon the explanation given by the manufacturer for the voided test. Tests between test points may be conducted as required by the Administrator. Data from all tests (including voided tests) may be submitted weekly to the Administrator, but shall be air posted or delivered to the Administrator within 7 days after completion of the test. In addition, all test data shall be compiled and provided to the Administrator in accordance with § 86.091-23. Where the Administrator conducts a test on a durability data vehicle at a prescribed

test point, the results of that test will be used in the calculation of the deterioration factor.

(iii) The results of all emission tests shall be rounded to the number of places to the right of the decimal point indicated by expressing the applicable emission standard of this subpart to one additional significant figure, in accordance with the rounding off method specified in ASTM E 29-67 (reapproved 1980) ("Standard recommended practice for indicating which places of figures are to be considered significant in specified limiting values," American Society for Testing and Materials). 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 American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103. Copies may be inspected at the U.S. Environmental Protection Agency, Air Docket Section, room M-1500, 401 M Street SW., Washington, DC 20460 or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington DC.

(7) Whenever a manufacturer intends to operate and test a vehicle which may be used for emission or durability data, the manufacturer shall retain in its records all information concerning all emissions tests and maintenance, including vehicle alterations to represent other vehicle selections. For emission data vehicles, this information shall be submitted, including the vehicle description and specification information required by the Administrator, to the Administrator following the emission data test. For durability data vehicles, this information shall be submitted following the 5,000-mile test.

(8) The data from emission data vehicles and durability data vehicles obtained pursuant to the provisions of this section will be used in the calculations under § 86.094-28.

(9) (i) The Administrator may elect to operate and test any test vehicle during all or any part of the mileage accumulation and testing procedure. In such cases, the manufacturer shall provide the vehicle(s) to the Administrator with all information necessary to conduct this testing.

(ii) The test procedures in §§ 86.106 through 86.145 will be followed by the Administrator. The Administrator will test the vehicles at each test point. Maintenance may be performed by the manufacturer under such conditions as the Administrator may prescribe.

(iii) The data developed by the Administrator for the engine-system combination shall be combined with any applicable data supplied by the manufacturer on other vehicles of that combination to determine the applicable deterioration factors for the combination. In the case of a significant discrepancy between data developed by the Administrator and that submitted by the manufacturer, the Administrator's data shall be used in the determination of deterioration factors.

(10) Emission testing of any type with respect to any certification vehicle other than that specified in this part is not allowed except as such testing may be specifically authorized by the Administrator.

(11) This section does not apply to testing conducted to meet the requirements of § 86.091-23(b)(2).

(b) (1) Paragraph (b) of this section applies to light-duty trucks.

(2) Four types of mileage or service accumulation are applicable to light-duty trucks, as described in paragraphs (b)(2) (i) through (iv) of this section.

(i) Paragraph (b)(2)(i) of this section applies to service accumulation conducted under the Standard Self-Approval Durability Program of § 86.094-13(f). This type of service accumulation is applicable for model years 1994, 1995, and 1996 only. The manufacturer determines the form and extent of this service accumulation, consistent with good engineering practice, and describes it in the application for certification. Service accumulation under the Standard Self-Approval Durability Program is conducted on vehicles, engines, subsystems, or components selected by the manufacturer under § 86.094-24(c)(2)(i).

(ii) Paragraph (b)(2)(ii) of this section applies to service accumulation conducted under the Alternative Service Accumulation Durability Program of § 86.094-13(e). This type of service accumulation is applicable for model years 1994, 1995, and 1996 only. The service accumulation method is developed by the manufacturer to be consistent with good engineering practice and to accurately predict the deterioration of the vehicle's emissions in actual use over its full useful life. The method is subject to advance approval by the Administrator and to verification by an in-use verification program conducted by the manufacturer under § 86.094-13(e)(5).

(iii) Paragraph (b)(2)(iii) of this section applies to mileage accumulation of the duration selected by the manufacturer on emission data vehicles selected under § 86.094-24(b)(1). The procedure

for mileage accumulation will be the Durability Driving Schedule as specified in Appendix IV to this part. A modified procedure may also be used if approved in advance by the Administrator. Except with the advance approval of the Administrator, all vehicles will accumulate mileage at a measured curb weight which is within 100 pounds of the estimated curb weight. If the loaded vehicle weight is within 100 pounds of being included in the next higher inertia weight class as specified in § 86.129, the manufacturer may elect to conduct the respective emission tests at higher loaded vehicle weight.

(iv) Service or mileage accumulation may also be part of the test procedures used by the manufacturer to establish evaporative emission deterioration factors.

(3) Exhaust emission deterioration factors will be determined on the basis of the mileage or service accumulation described in paragraph (b)(2) (i) or (ii) of this section and related testing, according to the manufacturer's procedures.

(4) Each emission data vehicle shall be operated and tested as follows:

(i) *Otto-cycle*. (A) The manufacturer shall determine, for each engine family, the mileage 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 4,000 miles on each test vehicle within an engine family without making a determination. The manufacturer must accumulate a minimum of 2,000 miles (3,219 kilometers) on each test vehicle within an engine family. All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator. Any vehicle used to represent emission data vehicle selections under § 86.094-24(b)(1) shall be equipped with an engine and emission control system that has accumulated the mileage the manufacturer chose to accumulate on the test vehicle. Fuel economy data generated from certification vehicles selected in accordance with § 86.094-24(b)(1) with engine-system combinations that have accumulated more than 10,000 kilometers (6,200 miles) shall be factored in accordance with § 600.006 of this chapter. Complete exhaust emission tests shall be conducted for each emission data vehicle selection under § 86.094-24(b)(1). The Administrator may determine under § 86.094-24(f) that no testing is required.

(B) Emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (v) or (viii) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at 6,436 kilometers (4,000 miles) under high-altitude conditions.

(C) Exhaust and evaporative emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (ii), (iii), (iv)(A), or (vii)(B) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at 6,436 kilometer (4,000 mile) test point under low-altitude conditions.

(D) If the manufacturer recommends adjustments or modifications in order to conform to emission standards at high altitude, such adjustments or modifications shall be made to the test vehicle selected under § 86.094-24(b)(1) (v) and (viii) (in accordance with the instructions to be provided to the ultimate purchaser) before being tested under high-altitude conditions.

(ii) *Diesel-cycle*. (A) The manufacturer shall determine, for each engine family, the mileage 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 4,000 miles on each test vehicle within an engine family without making a determination. The manufacturer must accumulate a minimum of 2,000 miles (3,219 kilometers) on each test vehicle within an engine family. All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator. Any vehicle used to represent emission data vehicle selections under § 86.094-24(b)(1) shall be equipped with an engine and emission control system that has accumulated the mileage the manufacturer chose to accumulate on the test vehicle. Fuel economy data generated from certification vehicles selected in accordance with § 86.094-24(b)(1) with engine-system combinations that have accumulated more than 10,000 kilometers (6,200 miles) shall be factored in accordance with § 600.006(c) of this chapter. Complete exhaust emission tests shall be conducted for each emission data vehicle selection under § 86.094-24(b)(1). The administrator may determine under § 86.094-24(f) that no testing is required.

(B) Emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1)(v) shall be conducted

at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at the 6,436 kilometer (4,000 mile) test point under high-altitude conditions.

(C) Exhaust and evaporative emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (ii), (iii), and (iv) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at the 6,436 kilometer (4,000 mile) test point under low-altitude conditions.

(D) If the manufacturer recommends adjustments or modifications in order to conform to emission standards at high-altitude, such adjustments or modifications shall be made to the test vehicle selected under § 86.094-24(b)(1) (v) and (viii) (in accordance with the instructions to be provided to the ultimate purchaser) before being tested under high-altitude conditions.

(iii) [Reserved]

(iv) All tests required by this subpart on emission data vehicles shall be conducted at a mileage equal to or greater than the mileage the manufacturer determines under paragraph (b)(4) of this section.

(c)(1) Paragraph (c) of this section applies to heavy-duty engines.

(2) Two types of service accumulation are applicable to heavy-duty engines, as described in paragraphs (c)(2) (i) and (ii) of this section.

(i) Service accumulation on engines, subsystems, or components selected by the manufacturer under § 86.094-24(c)(3)(i). The manufacturer determines the form and extent of this service accumulation, consistent with good engineering practice, and describes it in the application for certification.

(ii) Dynamometer service accumulation on emission data engines selected under § 86.094-24(b) (2) or (3). The manufacturer determines the engine operating schedule to be used for dynamometer service accumulation, consistent with good engineering practice. A single engine operating schedule shall be used for all engines in an engine family-control system combination. Operating schedules may be different for different combinations.

(3) Exhaust emission deterioration factors will be determined on the basis of the service accumulation described in paragraph (b)(2)(i) of this section and related testing, according to the manufacturer's procedures.

(4) The manufacturer shall determine, for each engine family, the number of hours at which the engine system combination is stabilized (no less than 62 hours for catalyst equipped) 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 need not be connected provided normal operating conditions are maintained in the engine induction system. The Administrator may determine under § 86.094-24(f) that no testing is required.

(d)(1) Paragraph (d) of this section applies to both light-duty trucks and heavy-duty engines.

(2)(i) The results of all emission testing shall be supplied to the Administrator. The manufacturer shall furnish to the Administrator explanation for voiding any test. The Administrator will determine if voiding the test was appropriate based upon the explanation given by the manufacturer for the voided test. Tests between test points may be conducted as required by the Administrator. Data from all tests (including voided tests) may be submitted weekly to the Administrator, but shall be air posted or delivered to the Administrator within 7 days after completion of the test. In addition, all test data shall be compiled and provided to the Administrator in accordance with § 86.094-23. Where the Administrator conducts a test on a durability data vehicle at a prescribed test point, the results of that test will be used in the calculation of the deterioration factor.

(ii) The results of all emission tests shall be recorded and reported to the Administrator. These test results shall be rounded, in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(6)(iii) of this section), to the number of decimal places contained in the applicable emission standard expressed to one additional significant figure.

(3) Whenever a manufacturer intends to operate and test a vehicle (or engine) which may be used for emission data, the manufacturer shall retain in its records all information concerning all emissions tests and maintenance, including vehicle (or engine) alterations to represent other vehicle (or engine)

selections. This information shall be submitted, including the vehicle (or engine) description and specification information required by the Administrator, to the Administrator following the emission data test.

(4)-(5) [Reserved]

(6) Emission testing of any type with respect to any certification vehicle or engine other than that specified in this subpart is not allowed except as such testing may be specifically authorized by the Administrator.

(Approved by the Office of Management and Budget under control number 2060-0104)

12. A new § 86.094-28 is added to read as follows:

§ 86.094-28 Compliance with emission standards.

(a) (1) Paragraph (a) of this section applies to light-duty vehicles.

(2) Each exhaust and evaporative emission standard (and family particulate emission limit, as appropriate) of § 86.094-8 applies to the emissions of vehicles for the appropriate useful life as defined in §§ 86.094-2 and 86.094-8.

(3) Since it is expected that emission control efficiency will change with mileage accumulation on the vehicle, the emission level of a vehicle which has accumulated mileage equal to the specified useful life will be used as the basis for determining compliance with the standard (or family particulate emission limit, as appropriate).

(4) The procedure for determining compliance of a new motor vehicle with exhaust and evaporative emission standards (or family particulate emission limit, as appropriate) is as described in paragraphs (a)(4) (i) through (v) of this section, except where specified by paragraph (a)(7) of this section for the Production AMA Durability Program.

(i) Separate emission deterioration factors shall be determined from the exhaust emission results of the durability data vehicle(s) for each engine-system combination. A separate evaporative emission deterioration factor shall be determined for each evaporative emission family-evaporative emission control system combination from the testing conducted by the manufacturer (gasoline-fueled and methanol-fueled vehicles only).

(A) The applicable results to be used, unless excluded by paragraph (a)(4)(i)(A)(4) of this section, in determining the exhaust emission deterioration factors for each engine-system combination shall be those described in paragraphs (a)(4)(i)(A) (1) through (3) of this section.

(1) All valid exhaust emission data from the tests required under § 86.094-26(a)(4) except the zero-mile tests. This shall include the official test results, as determined in § 86.094-29 for all tests conducted on all durability data vehicles of the combination selected under § 86.094-24(c) (including all vehicles elected to be operated by the manufacturer under § 86.094-24(c)(1)(ii)).

(2) All exhaust emission data from the tests conducted before and after the scheduled maintenance provided in § 86.094-25.

(3) All exhaust emission data from tests required by maintenance approved under § 86.094-25, in those cases where the Administrator conditioned his approval for the performance of such maintenance on the inclusion of such data in the deterioration factor calculation.

(4) The manufacturer has the option of applying an outlier test point procedure to completed durability data within its certification testing program for a given model year. The outlier procedure will be specified by the Administrator. For any pollutant, durability data test points that are identified as outliers shall not be included in the determination of deterioration factors if the manufacturer has elected this option. The manufacturer shall specify to the Administrator before the certification of the first engine family for that model year, if it intends to use the outlier procedure. The manufacturer may not change procedures after the first engine family of the model year is certified. Where the manufacturer chooses to apply both the outlier procedure and averaging (as allowed under § 86.094-26(a)(6)(i)) to the same data set, the outlier procedure shall be completed prior to applying the averaging procedure.

(B)(1) *Line crossing.* For each exhaust constituent to which a standard in § 86.094-8 applies, all applicable exhaust emission results shall be rounded to the nearest mile and plotted as a function of the mileage on the system. The best fit straight line, fitted by the method of least squares, shall be drawn through all these data points. The data for a given exhaust constituent will be acceptable for use in the calculation of deterioration factors only if the first official test point as determined in § 86.094-26(a)(4)(i)(C), the interpolated intermediate useful life mile point, and the interpolated full useful life mile point on this line, as applicable, are each less than or equal to the respective low-altitude standards provided in § 86.094-8. An exception to this where

data are still acceptable is when a best fit straight line crosses an applicable standard but no data points exceeded the standard. This exception shall not apply when mileage accumulation has been curtailed before the durability useful life has been reached, under the provisions of § 86.094-26(a)(4)(i)(B).

(2) *Exhaust deterioration factor determination.* Multiplicative exhaust emission deterioration factors shall be calculated for each standard and for each engine-system combination from points on the regression line derived in paragraph (a)(4)(i)(B)(1) of this section, and in accordance with paragraphs (a)(4)(i)(B)(2) (i) and (ii) of this section.

(i) Factor=Exhaust emissions at the useful life mileage for that standard divided by exhaust emissions at 4,000 miles.

(ii) These interpolated values shall be carried out to a minimum of four places to the right of the decimal point before dividing one by the other to determine the deterioration factor. The results shall be rounded to three places to the right of the decimal point in accordance with ASTM E 29-67 (reapproved 1980) ("Standard recommended practice for indicating which places of figures are to be considered significant in specified limiting values," American Society for Testing and Materials). 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 American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103. Copies may be inspected at the U.S. Environmental Protection Agency, Air Docket Section, room M-1500, 401 M Street SW., Washington, DC 20460 or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(iii) When calculating intermediate and full useful life deterioration factors all data points should be included in the calculations, except that total hydrocarbon (THC) test points beyond the 50,000-mile (useful life) test point shall not be included in the calculations.

(iv) The calculation specified in paragraph (a)(4)(i)(B)(2) of this section may be modified with advance approval of the Administrator for engine-system combinations which are certified under the Alternative Service Accumulation Durability Program specified in § 86.094-13(e).

(C) *Evaporative deterioration factor determination.* An evaporative emissions deterioration factor (gasoline-fueled and methanol-fueled vehicles only) shall be determined from the

testing conducted as described in § 86.094-21(b)(4)(i) and in accordance with paragraphs (a)(4)(i)(C) (1) and (2) of this section, for each evaporative emission family-evaporative emission control system combination to indicate the evaporative emission level at the applicable useful life relative to the evaporative emission level at 4,000 miles.

(1) Factor=Evaporative emission level at the useful life mileage for that standard minus the evaporative emission level at 4,000 miles.

(2) The factor shall be established to a minimum of two places to the right of the decimal.

(ii)(A)(1) The official exhaust emission test results for each applicable exhaust emission standard for each emission data vehicle at the selected test point shall be multiplied by the appropriate deterioration factor: *Provided*, that if a deterioration factor as computed in paragraph (a)(4)(i)(B) of this section is less than one, that deterioration factor shall be one for the purposes of this paragraph.

(2) The calculation specified in paragraph (a)(4)(ii)(A)(1) of this section may be modified with advance approval of the Administrator for engine-system combinations which are certified under the Alternative Service Accumulation Durability Program specified in § 86.094-13(e).

(B) The official evaporative emission test results (gasoline-fueled and methanol-fueled vehicles only) for each evaporative emission data vehicle at the selected test point shall be adjusted by addition of the appropriate deterioration factor, provided that if a deterioration factor as computed in paragraph (a)(4)(i)(C) of this section is less than zero, that deterioration factor shall be zero for the purposes of this paragraph.

(iii) The emissions to compare with the standard (or the family particulate emission limit, as appropriate) shall be the adjusted emissions of paragraphs (a)(4)(ii)(A) and (B) of this section for each emission data vehicle. Before any emission value is compared with the standard (or the family particulate emission limit, as appropriate) it shall be rounded, in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section), to two significant figures. The rounded emission values may not exceed the standard (or the family particulate emission limit, as appropriate).

(iv) Every test vehicle of an engine family must comply with the exhaust emission standards (or the family particulate emission limit, as appropriate), as determined in

paragraph (a)(4)(iii) of this section, before any vehicle in that family may be certified.

(v) Every test vehicle of an evaporative emission family must comply with the evaporative emission standard, as determined in paragraph (a)(4)(iii) of this section, before any vehicle in that family may be certified.

(5) If a manufacturer chooses to change the level of any family particulate emission limit(s) in the particulate averaging program, compliance with the new limit(s) must be based upon existing certification data.

(6) If a manufacturer chooses to participate in the diesel particulate averaging program, the production-weighted average of the family particulate emission limits of all affected engine families must comply with the particulate standards in § 86.094-8(a)(1)(iv), or the composite particulate standard defined in § 86.094-2, as appropriate, at the end of the production year.

(7) The procedure to determine the compliance of new motor vehicles in the Production AMA Durability Program described in § 86.094-13 is the same as described in paragraphs (a)(4) (iii) through (v) of this section. For the engine families that are included in the Production AMA Durability Program, the exhaust emission deterioration factors used to determine compliance shall be those that the Administrator has approved under § 86.094-13. The evaporative emission deterioration factor for each evaporative emission family shall be determined and applied according to paragraph (a)(4) of this section. The procedures to determine the minimum exhaust emission deterioration factors required under § 86.094-13(d) are as described in paragraphs (a)(7) (i) and (ii) of this section.

(i) Separate deterioration factors shall be determined from the exhaust emission results of the durability data vehicles for each emission standard applicable under § 86.094-8, for each engine family group. The evaporative emission deterioration factor for each evaporative family will be determined and applied in accordance with paragraph (a)(4) of this section.

(ii) The deterioration factors for each engine family group shall be determined by the Administrator using historical durability data from as many as three previous model years. These data will consist of deterioration factors generated by durability data vehicles representing certified engine families and of deterioration factors from vehicles selected under § 86.094-24(h). The

Administrator shall determine how these data will be combined for each engine family group.

(A) The test result to be used in the calculation of each deterioration factor to be combined for each engine family group shall be those test results specified in paragraph (a)(4)(i)(A) of this section.

(B) For each durability data vehicle selected under § 86.094-24(h), all applicable exhaust emission results shall be plotted as a function of the mileage on the system rounded to the nearest mile, and the best fit straight lines, fitted by method of least squares, shall be drawn through all these data points. The exhaust deterioration factor for each durability data vehicle shall be calculated as specified in paragraph (a)(4)(i)(B) of this section.

(C) Line-crossing. The line-crossing criteria of § 86.094-28 (a)(4)(i)(B) apply.

(1) The Administrator will not accept for certification line-crossing data from preproduction durability data vehicles selected under § 86.094-24(c).

(2) The Administrator will not accept for certification line-crossing data from production durability data vehicles selected under § 86.094-24(h)(1) unless the 4,000-mile test result multiplied by the engine family group deterioration factor does not exceed the applicable emission standards. The deterioration factors used for this purpose shall be those that were used in the certification of the production vehicle.

Manufacturers may calculate this product immediately after the 4,000-mile test of the vehicle. If the product exceeds the applicable standards, the manufacturer may, with the approval of the Administrator, discontinue the vehicle and substitute a new vehicle. The manufacturer may continue the original vehicle, but the data will not be acceptable if line crossing occurs.

(b)(1) Paragraph (b) of this section applies to light-duty trucks.

(2) Each exhaust and evaporative emission standard (and family particulate emission limit, as appropriate) of § 86.094-9 applies to the emissions of vehicles for the appropriate useful life as defined in §§ 86.094-2 and 86.094-9.

(3) Since emission control efficiency generally decreases with the accumulation of mileage on the vehicle, deterioration factors will be used in combination with emission data vehicle test results as the basis for determining compliance with the standards (or family emission limits, as appropriate).

(4)(i) Paragraph (b)(4) of this section describes the procedure for determining compliance of a new vehicle with exhaust emission standards (or family

emission limits, as appropriate), based on deterioration factors. If the manufacturer certifies under the Standard Self-Approval Program as specified in § 86.094-13(f), the manufacturer supplies the deterioration factors. If the manufacturer certifies under the Alternative Service Accumulation Durability Program as specified in § 86.094-13(e), the applicable procedure for the determination of deterioration factors for light-duty trucks is the same as that described in paragraph (a)(4) of this section for light-duty vehicles.

(ii) Separate exhaust emission deterioration factors, determined from tests of vehicles, engines, subsystems, or components conducted by the manufacturer, shall be supplied for each standard and for each engine-system combination.

(iii) The official exhaust emission results for each applicable exhaust emission standard for each emission data vehicle at the selected test point shall be adjusted by multiplication by the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than one, it shall be one for the purposes of this paragraph.

(iv) The emission values to compare with the standards (or family emission limits, as appropriate) shall be the adjusted emission values of paragraph (b)(4)(iii) of this section rounded to two significant figures in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section) for each emission data engine.

(5)(i) Paragraphs (b)(5)(i) (A) and (B) of this section apply only to manufacturers electing to participate in the particulate averaging program.

(A) If a manufacturer chooses to change the level of any family particulate emission limit(s), compliance with the new limit(s) must be based upon existing certification data.

(B) The production-weighted average of the family particulate emission limits of all applicable engine families, rounded to two significant figures in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section), must comply with the particulate standards in § 86.094-9(a)(1)(iv) or (d)(1)(iv), or the composite particulate standard as defined in § 86.094-2, as appropriate, at the end of the product year.

(ii) Paragraphs (b)(5)(ii) (A) and (B) of this section apply only to manufacturers electing to participate in the NO_x averaging program.

(A) If a manufacturer chooses to change the level of any family NO_x emission limit(s), compliance with the new limit(s) must be based upon existing certification data.

(B) The production-weighted average of the family NO_x emission limits of all applicable engine families, rounded to two significant figures in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section), must comply with the NO_x emission standards of § 86.094-9(a)(1)(iii) (A) or (B) of § 86.094-9(d)(1)(iii) (A) or (B), or the composite NO_x standard as defined in § 86.094-2, at the end of the product year.

(6) [Reserved].

(7)(i) Paragraph (b)(7) of this section describes the procedure for determining compliance of a new vehicle with evaporative emission standards. The procedure described here shall be used for all vehicles in all model years.

(ii) The manufacturer shall determine, based on testing described in § 86.091-21(b)(4)(i), and supply an evaporative emission deterioration factor for each evaporative emission family-evaporative emission control system combination. The factor shall be calculated by subtracting the emission level at the selected test point from the emission level at the useful life point.

(iii) The official evaporative emission test results for each evaporative emission data vehicle at the selected test point shall be adjusted by the addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(iv) The emission value to compare with the standards shall be the adjusted emission value of paragraph (b)(7)(iii) of this section rounded to two significant figures in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section) for each evaporative emission data vehicle.

(8) Every test vehicle of an engine family must comply with all applicable standards (and family emission limits, as appropriate), as determined in paragraphs (b)(4)(iv) and (b)(7)(iv) of this section, before any vehicle in that family will be certified.

(c) (1) Paragraph (c) of this section applies to heavy-duty engines.

(2) The exhaust emission standards (or family emission limits, as appropriate) for Otto-cycle engines in § 86.094-10 or for diesel-cycle engines in § 86.094-11 apply to the emissions of engines for their useful life.

(3) Since emission control efficiency generally decreases with the accumulation of service on the engine, deterioration factors will be used in combination with emission data engine test results as the basis for determining compliance with the standards.

(4) (i) Paragraph (c)(4) of this section describes the procedure for determining compliance of an engine with emission standards (or family emission limits, as appropriate), based on deterioration factors supplied by the manufacturer.

(ii) Separate exhaust emission deterioration factors, determined from tests of engines, subsystems, or components conducted by the manufacturer, shall be supplied for each engine-system combination. For Otto-cycle engines, separate factors shall be established for transient HC (OMHCE), CO, and NO_x; and idle CO, for those engines utilizing aftertreatment technology (e.g., catalytic converters). For diesel-cycle engines, separate factors shall be established for transient HC (OMHCE), CO, NO_x, and exhaust particulate. For diesel-cycle smoke testing, separate factors shall also be established for the acceleration mode (designated as "A"), the lugging mode (designated as "B"), and peak opacity (designated as "C").

(iii)(A) Paragraphs (c)(4)(iii)(A) (1) and (2) of this section apply to Otto-cycle heavy-duty engines.

(1) *Otto-cycle heavy-duty engines not utilizing aftertreatment technology (e.g., catalytic converters).* For transient HC (OMHCE), CO, and NO_x, the official exhaust emission results for each emission data engine at the selected test point shall be adjusted by the addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(2) *Otto-cycle heavy-duty engines utilizing aftertreatment technology (e.g., catalytic converters).* For transient HC (OMHCE), CO, and NO_x, and for idle CO, the official exhaust emission results for each emission data engine at the selected test point shall be adjusted by multiplication by the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than one, it shall be one for the purposes of this paragraph.

(B) Paragraph (c)(4)(iii)(B) of this section applies to diesel-cycle heavy-duty engines.

(1) *Diesel-cycle heavy-duty engines not utilizing aftertreatment technology (e.g., particulate traps).* For transient HC (OMHCE), CO, NO_x, and exhaust particulate, the official exhaust emission results for each emission data engine at

the selected test point shall be adjusted by the addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(2) *Diesel-cycle heavy-duty engines utilizing aftertreatment technology (e.g., particulate traps).* For transient HC (OMHCE), CO, NO_x, and exhaust particulate, the official exhaust emission results for each emission data engine at the selected test point shall be adjusted by multiplication by the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than one, it shall be one for the purposes of this paragraph.

(3) *Diesel-cycle heavy-duty engines only.* For acceleration smoke ("A"), lugging smoke ("B"), and peak smoke ("C"), the official exhaust emission results for each emission data engine at the selected test point shall be adjusted by the addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(iv) The emission values to compare with the standards (or family emission limits, as appropriate) shall be the adjusted emission values of paragraph (c)(4)(iii) of this section, rounded to the same number of significant figures as contained in the applicable standard in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section), for each emission data engine.

(5)-(6) [Reserved]

(7) Every test engine of an engine family must comply with all applicable standards (or family emission limits, as appropriate), as determined in paragraph (c)(4)(iv) of this section, before any engine in that family will be certified.

(d) (1) Paragraph (d) of this section applies to heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines.

(2) The applicable evaporative emission standard in § 86.091-10 or § 86.094-11 applies to the emissions of vehicles for their useful life.

(3)(i) For vehicles with a GVWR of up to 26,000 pounds, because it is expected that emission control efficiency will change during the useful life of the vehicle, an evaporative emission deterioration factor shall be determined from the testing described in § 86.088-23(b)(3) for each evaporative emission family-evaporative emission control system combination to indicate the evaporative emission control system

deterioration during the useful life of the vehicle (minimum 50,000 miles). The factor shall be established to a minimum of two places to the right of the decimal.

(ii) For vehicles with a GVWR of greater than 26,000 pounds, because it is expected that emission control efficiency will change during the useful life of the vehicle, each manufacturer's statement as required in § 86.094-23(b) (4) (ii) shall include, in accordance with good engineering practice, consideration of control system deterioration.

(4) The evaporative emission test results, if any, shall be adjusted by the addition of the appropriate deterioration factor, provided that if the deterioration factor as computed in paragraph (d)(3) of this section is less than zero, that deterioration factor shall be zero for the purposes of this paragraph.

(5) The emission level to compare with the standard shall be the adjusted emission level of paragraph (d)(4) of this section. Before any emission value is compared with the standard, it shall be rounded, in accordance with ASTM E 29-67 (reapproved 1980) (as referenced in paragraph (a)(4)(i)(B)(2)(ii) of this section), to two significant figures. The rounded emission values may not exceed the standard.

(6) Every test vehicle of an evaporative emission family must comply with the evaporative emission standard, as determined in paragraph (d)(5) of this section, before any vehicle in that family may be certified.

(Approved by the Office of Management and Budget under control number 2060-0104)

13. Section 86.094-30 is revised to read as follows:

§ 86.094-30 Certification.

(a)(1)(i) If, after a review of the test reports and data submitted by the manufacturer, data derived from any inspection carried out under § 86.091-7(c) and any other pertinent data or information, the Administrator determines that a test vehicle(s) (or test engine(s)) meets the requirements of the Act and of this subpart, he will issue a certificate of conformity with respect to such vehicle(s) (or engine(s)) except in cases covered by paragraphs (a) (1) (ii) and (c) of this section.

(ii) *Gasoline-fueled and methanol-fueled heavy-duty vehicles.* If, after a review of the statement(s) of compliance submitted by the manufacturer under § 86.094-23(b)(4) and any other pertinent data or information, the Administrator determines that the requirements of the Act and this subpart have been met, he will issue one certificate of conformity per

manufacturer with respect to the evaporative emission family(ies) covered by paragraph (c) of this section.

(2) Such certificate will be issued for such period not to exceed one model year as the Administrator may determine and upon such terms as he may deem necessary or appropriate to assure that any new motor vehicle (or new motor vehicle engine) covered by the certificate will meet the requirements of the Act and of this part.

(3)(i) One such certificate will be issued for each engine family. For gasoline-fueled and methanol-fueled light-duty vehicles and light-duty trucks, one such certificate will be issued for each engine family evaporative emission family combination.

(A) *Light-duty vehicles.* Each certificate will certify compliance with no more than one set of in-use and certification standards (or family emission limits, as appropriate).

(B) *Light-duty trucks.* Each certificate will certify compliance with no more than one set of in-use and certification standards (or family emission limits, as appropriate), except where there are both low-altitude standards and high altitude standards applicable. The certificate shall state that it covers vehicles sold or delivered to an ultimate purchaser for principal use at a designated high-altitude location only if the vehicle conforms in all material respects to the design specifications that apply to those vehicles described in the application for certification at high altitude.

(ii) For gasoline-fueled and methanol-fueled heavy-duty vehicles, one such certificate will be issued for each manufacturer and will certify compliance for those vehicles previously identified in that manufacturer's statement(s) of compliance as required in § 86.094-23(b) (4) (i) and (ii).

(iii) For diesel-cycle light-duty vehicles and light-duty trucks, or diesel-cycle heavy-duty engines, included in the applicable particulate averaging program, the manufacturer may at any time during production elect to change the level of any family particulate emission limit by demonstrating compliance with the new limit as described in §§ 86.094-28(a)(6) and 86.094-28(b)(5)(i). New certificates issued under this paragraph will be applicable only for vehicles (or engines) produced subsequent to the date of issuance.

(iv) For light-duty trucks or heavy-duty engines included in the applicable NO_x averaging program, the manufacturer may at any time during

production elect to change the level of any family NO_x emission limit by demonstrating compliance with the new limit as described in § 86.094-28(b)(5)(ii). New certificates issued under this paragraph will be applicable only for vehicles (or engines) produced subsequent to the day of issue.

(4)(i) The adjustment or modification of any light-duty truck in accordance with instructions provided by the manufacturer for the altitude where the vehicle is principally used will not be considered a violation of section 203(a)(3) of the Clean Air Act (42 U.S.C. 7522 (a)(3)).

(ii) A violation of section 203(a)(1) of the Clean Air Act (42 U.S.C. 7522(a)(1)) occurs when a manufacturer sells or delivers to an ultimate purchaser any light-duty vehicle or light-duty truck, subject to the regulations under the Act, under any of the conditions specified in the remainder of this paragraph.

(A) When a light-duty vehicle or light-duty truck is not configured to meet high-altitude requirements:

(1) At a designated high-altitude location, unless such manufacturer has reason to believe that such vehicle will not be sold to an ultimate purchaser for principal use at a designated high-altitude location; or

(2) At a location other than a designated high-altitude location, when such manufacturer has reason to believe that such motor vehicle will be sold to an ultimate purchaser for principal use at a designated high-altitude location.

(B) When a light-duty vehicle is not configured to meet low-altitude requirements, as provided in § 86.094-8(i):

(1) At a designated low-altitude location, unless such manufacturer has reason to believe that such vehicle will not be sold to an ultimate purchaser for principal use at a designated low-altitude location; or

(2) At a location other than a designated low-altitude location, when such manufacturer has reason to believe that such motor vehicle will be sold to an ultimate purchaser for principal use at a designated low-altitude location.

(iii) A manufacturer shall be deemed to have reason to believe that a light-duty vehicle that has been exempted from compliance with emission standards at high-altitude, or a light-duty truck which is not configured to meet high-altitude requirements, will not be sold to an ultimate purchaser for principal use at a designated high-altitude location if the manufacturer has informed its dealers and field representatives about the terms of these high-altitude regulations, has not caused the improper sale itself, and has taken

reasonable action which shall include, but not be limited to, either paragraph (a)(4)(iii) (A) or (B), and paragraph (a)(4)(iii)(C) of this section:

(A) Requiring dealers in designated high-altitude locations to submit written statements to the manufacturer signed by the ultimate purchaser that a vehicle which is not configured to meet high-altitude requirements will not be used principally at a designated high-altitude location; requiring dealers in counties contiguous to designated high-altitude locations to submit written statements to the manufacturer, signed by the ultimate purchaser who represents to the dealer in the normal course of business that he or she resides in a designated high-altitude location, that a vehicle which is not configured to meet high-altitude requirements will not be used principally at a designated high-altitude location; and for each sale or delivery of fleets of ten or more such vehicles in a high-altitude location or in counties contiguous to high-altitude locations, requiring either the selling dealer or the delivering dealer to submit written statements to the manufacturer, signed by the ultimate purchaser who represents to the dealer in the normal course of business that he or she resides in a designated high-altitude location, that a vehicle which is not configured to meet high-altitude requirements will not be used principally at a designated high-altitude location. In addition, the manufacturer will make available to EPA, upon reasonable written request (but not more frequently than quarterly, unless EPA has demonstrated that it has substantial reason to believe that an improperly configured vehicle has been sold), sales, warranty, or other information pertaining to sales of vehicles by the dealers described above maintained by the manufacturer in the normal course of business relating to the altitude configuration of vehicles and the locations of ultimate purchasers; or

(B) Implementing a system which monitors factory orders of low-altitude vehicles by high-altitude dealers, or through other means, identifies dealers that may have sold or delivered a vehicle not configured to meet the high-altitude requirements to an ultimate purchaser for principal use at a designated high-altitude location; and making such information available to EPA upon reasonable written request (but not more frequently than quarterly, unless EPA has demonstrated that it has substantial reason to believe that an improperly configured vehicle has been sold); and

(C) Within a reasonable time after receiving written notice from EPA or a State or local government agency that a

dealer may have improperly sold or delivered a vehicle not configured to meet the high-altitude requirements to an ultimate purchaser residing in a designated high-altitude location, or based on information obtained pursuant to paragraph (a)(4)(iii) of this section that a dealer may have improperly sold or delivered a significant number of such vehicles to ultimate purchasers so residing, reminding the dealer in writing of the requirements of these regulations, and, where appropriate, warning the dealer that sale by the dealer of vehicles not configured to meet high-altitude requirements may be contrary to the terms of its franchise agreement with the manufacturer and the dealer certification requirements of § 85.2108 of this chapter.

(iv) A manufacturer shall be deemed to have reason to believe that a light-duty vehicle which has been exempted from compliance with emission standards at low-altitude, as provided in § 86.094-8(i), will not be sold to an ultimate purchaser for principal use at a designated low-altitude location if the manufacturer has informed its dealers and field representatives about the terms of the high-altitude regulations, has not caused the improper sale itself, and has taken reasonable action which shall include, but not be limited to, either paragraph (a)(4)(iv) (A) or (B), and (a)(4)(iv)(C) of this section:

(A) Requiring dealers in designated low-altitude locations to submit written statements to the manufacturer signed by the ultimate purchaser that a vehicle which is not configured to meet low-altitude requirements will not be used principally at a designated low-altitude location; requiring dealers in counties contiguous to designated low-altitude locations to submit written statements to the manufacturer, signed by the ultimate purchaser who represents to the dealer in the normal course of business that he or she resides in a designated low-altitude location, that a vehicle which is not configured to meet low-altitude requirements will not be used principally at a designated low-altitude location; and for each sale or delivery of fleets of ten or more such vehicles in a low-altitude location or in counties contiguous to low-altitude locations, requiring either the selling dealer or the delivering dealer to submit written statements to the manufacturer, signed by the ultimate purchaser who represents to the dealer in the normal course of business that he or she resides in a designated low-altitude location, that a vehicle which is not configured to meet low-altitude requirements will not be used principally at a designated high-altitude location. In addition, the

manufacturer will make available to EPA, upon reasonable written request (but not more frequently than quarterly, unless EPA has demonstrated that it has substantial reason to believe that an improperly configured vehicle has been sold), sales, warranty, or other information pertaining to sales of vehicles by the dealers described above maintained by the manufacturer in the normal course of business relating to the altitude configuration of vehicles and the locations of ultimate purchasers; or

(B) Implementing a system which monitors factory orders of high-altitude vehicles by low-altitude dealers, or through other means, identifies dealers that may have sold or delivered a vehicle not configured to meet the low-altitude requirements to an ultimate purchaser for principal use at a designated low-altitude location; and making such information available to EPA upon reasonable written request (but not more frequently than quarterly, unless EPA has demonstrated that it has substantial reason to believe that an improperly configured vehicle has been sold); and

(C) Within a reasonable time after receiving written notice from EPA or a state or local government agency that a dealer may have improperly sold or delivered a vehicle not configured to meet the low-altitude requirements to an ultimate purchaser residing in a designated low-altitude location, or based on information obtained pursuant to paragraph (a)(4)(iv) of this section that a dealer may have improperly sold or delivered a significant number of such vehicles to ultimate purchasers so residing, reminding the dealer in writing of the requirements of these regulations, and, where appropriate, warning the dealer that sale by the dealer of vehicles not configured to meet low-altitude requirements may be contrary to the terms of its franchise agreement with the manufacturer and the dealer certification requirements of § 85.2108 of this chapter.

(5)(i) For the purpose of paragraph (a) of this section, a "designated high-altitude location" is any county which has substantially all of its area located above 1,219 meters (4,000 feet) and:

(A) Requested and extension past the attainment date of December 31, 1982, for compliance with either the National Ambient Air Quality Standards for carbon monoxide or ozone, as indicated in part 52 (Approval and Promulgation of Implementation Plans) of this title; or

(B) Is in the same state as a county designated as a high-altitude location according to paragraph (a)(5)(i)(A) of this section.

(ii) The designated high-altitude locations defined in paragraph (a)(5)(i) of this section are listed below:

State of Colorado

Adams
Alamosa
Arapahoe
Archuleta
Boulder
Chaffee
Cheyenne
Clear Creek
Conejos
Costilla
Crowley
Custer
Delta
Denver
Dolores
Douglas
Eagle
Elbert
El Paso
Fremont
Garfield
Gilpin
Grand
Gunnison
Hinsdale
Huerfano
Jackson
Jefferson
Kit Carson
Lake
La Plata
Larimer
Las Animas
Lincoln
Mesa
Mineral
Moffat
Montezuma
Montrose
Morgan
Otero
Ouray
Park
Pitkin
Pueblo
Rio Blanco
Rio Grande
Routt
Saguache
San Juan
San Miguel
Summit
Teller
Washington
Weld

State of Nevada

Carson City
Douglas
Elko
Esmeralda
Eureka
Humboldt
Lander
Lincoln
Lyon
Mineral
Nye
Pershing
Storey
Washoe
White Pine

State of New Mexico

Bernalillo
 Catron
 Colfax
 Curry
 De Baca
 Grant
 Guadalupe
 Harding
 Hidalgo
 Lincoln
 Los Alamos
 Luna
 McKinley
 Mora
 Otero
 Rio Arriba
 Roosevelt
 Sandoval
 San Juan
 San Miguel
 Santa Fe
 Sierra
 Socorro
 Taos
 Torrance
 Union
 Valencia
 State of Utah
 Beaver
 Box Elder
 Cache
 Carbon
 Daggett
 Davis
 Duchesne
 Emery
 Garfield
 Grand
 Iron
 Juab
 Kane
 Millard
 Morgan
 Piute
 Rich
 Salt Lake
 San Juan
 Sanpete
 Sevier
 Summit
 Tooele
 Uintah
 Utah
 Wasatch
 Wayne
 Weber

(iii) For the purpose of paragraph (a) of this section, a "designated low-altitude location" is any county which has substantially all of its area located below 1,219 meters (4,000 feet).

(iv) The designated low-altitude locations so defined include all counties in the United States which are not listed in either paragraph (a)(5)(ii) of this section or in the list below:

State of Arizona

Apache
 Cochise
 Coconino
 Navajo
 Yavapai

State of Idaho

Bannock
 Bear Lake
 Bingham
 Blaine
 Bonneville
 Butte
 Camas
 Caribou
 Cassia
 Clark
 Custer
 Franklin
 Fremont
 Jefferson
 Lemhi
 Madison
 Minidoka
 Oneida
 Power
 Treton
 Valley

State of Montana

Beaverhead
 Deer Lodge
 Gallatin
 Jefferson
 Judith Basin
 Madison
 Meagher
 Park
 Powell
 Silver Bow
 Wheatland

State of Nebraska

Banner
 Cheyenne
 Kimball
 Sioux

State of Oregon

Harney
 Klamath
 Lake

State of Texas

Jeff Davis
 Hudspeth
 Parmer

State of Wyoming

Albany
 Campbell
 Carbon
 Converse
 Fremont
 Goshen
 Hot Springs
 Johnson
 Laramie
 Lincoln
 Natrona
 Niobrara
 Park
 Platte
 Sublette
 Sweetwater
 Teton
 Uinta
 Washakie
 Weston

(6) Catalyst-equipped vehicles, otherwise covered by a certificate, which are driven outside the United States, Canada, and Mexico will be

presumed to have been operated on leaded gasoline resulting in deactivation of the catalysts. If these vehicles are imported or offered for importation without retrofit of the catalyst, they will be considered not to be within the coverage of the certificate unless included in a catalyst control program operated by a manufacturer or a United States Government agency and approved by the Administrator.

(7) For incomplete light-duty trucks, a certificate covers only those new motor vehicles which, when completed by having the primary load-carrying device or container attached, conform to the maximum curb weight and frontal area limitations described in the application for certification as required in § 86.094-21(d).

(8) For heavy-duty engines, a certificate covers only those new motor vehicle engines installed in heavy-duty vehicles which conform to the minimum gross vehicle weight rating, curb weight, or frontal area limitations for heavy-duty vehicles described in § 86.082-2.

(9) For incomplete gasoline-fueled and methanol-fueled heavy-duty vehicles a certificate covers only those new motor vehicles which, when completed, conform to the nominal maximum fuel tank capacity limitations as described in the application for certification as required in § 86.094-21(e).

(10)(i) For diesel-cycle light-duty vehicle and diesel-cycle light-duty truck families which are included in a particulate averaging program, the manufacturer's production-weighted average of the particulate emission limits of all engine families in a participating class or classes shall not exceed the applicable diesel-cycle particulate standard, or the composite particulate standard defined in § 86.090-2 as appropriate, at the end of the model year, as determined in accordance with this part. The certificate shall be void ab initio for those vehicles causing the production-weighted FEL to exceed the particulate standard.

(ii) For all heavy-duty diesel-cycle engines which are included in the particulate averaging, trading, or banking programs under § 86.094-15, the provisions of paragraphs (a)(10)(ii) (A) through (C) of this section apply.

(A) All certificates issued are conditional upon the manufacturer complying with the provisions of § 86.094-15 and the averaging, trading, and banking related provision of other applicable sections, both during and after the model year production.

(B) Failure to comply with all provisions of § 86.094-15 will be considered to be a failure to satisfy the conditions upon which the certificate was issued, and the certificate may be deemed void ab initio.

(C) 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 or excused.

(11) (i) For light-duty truck families which are included in a NO_x averaging program, the manufacturer's production-weighted average of the NO_x emission limits of all such engine families shall not exceed the applicable NO_x emission standard, or the composite NO_x emission standard defined in § 86.088-2, as appropriate, at the end of the model year, as determined in accordance with this part. The certificate shall be void ab initio for those vehicles causing the production-weighted FEL to exceed the NO_x standard.

(ii) For all heavy duty engines which are included in the NO_x averaging, trading, or banking programs under § 86.091-15, the provisions of paragraphs (a)(11)(ii) (A) through (C) of this section apply.

(A) All certificates issued are conditional upon the manufacturer complying with the provisions of § 86.094-15 and the averaging, trading, and banking related provision of other applicable sections, both during and after the model year production.

(B) Failure to comply with all provisions of § 86.094-15 will be considered to be a failure to satisfy the conditions upon which the certificate was issued, and the certificate may be deemed void ab initio.

(C) 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 or excused."

(12) For all light-duty vehicles certified to standards under § 86.094-8 or to which standards under § 86.708-94 are applicable, the provisions of paragraphs (a)(12) (i) through (iii) of this section apply.

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of §§ 86.094-8 and 86.708-94 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in §§ 86.094-8 and § 86.708-94 will be considered to be a failure to satisfy the conditions upon which the certificate(s) 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.

(13) For all light-duty trucks certified to standards under § 86.094-9 and to which standards under § 86.709-94 are applicable, the provisions of paragraphs (a)(13) (i) through (iii) this section apply.

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of §§ 86.094-9 and 86.709-94 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in §§ 86.094-9 and 86.709-94 will be considered to be a failure to satisfy the conditions upon which the certificate(s) was issued and the individual 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.

(14) For all light-duty vehicles and light-duty trucks certified with an Alternative Service Accumulation Durability Program under § 86.094-13(e), paragraphs (a)(14) (i) through (iii) of this section apply.

(i) All certificates issued are conditional upon the manufacturer performing the in-use verification program pursuant to the agreement described in § 86.094-13(e)(8).

(ii) Failure to fully comply with all the terms of the in-use verification program pursuant to the agreement described in § 86.094-13(e)(8) will be considered a failure to satisfy the conditions upon which the certificate was issued. A vehicle or truck will be considered to be covered by the certificate only if the manufacturer fulfills the conditions upon which the certificate is issued.

(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)(1) The Administrator will determine whether a vehicle (or engine) covered by the application complies with applicable standards (or family emission limits, as appropriate) by observing the following relationships: in paragraphs (b)(1) (i) through (iv) of this section:

(i) *Light-duty vehicles.* (A) The durability data vehicle(s) selected under

§ 86.094-24(c)(1)(i) shall represent all vehicles of the same engine system combination.

(B) The emission data vehicle(s) selected under § 86.094-24(b)(1) (ii) through (iv) shall represent all vehicles of the same engine-system combination as applicable.

(C) The emission data vehicle(s) selected under § 86.094-24(b)(1)(vii) (A) and (B) shall represent all vehicles of the same evaporative control system within the evaporative family.

(ii) *Light-duty trucks.* (A) The emission data vehicle(s) selected under § 86.094-24(b)(1)(ii), shall represent all vehicles of the same engine-system combination as applicable.

(B) The emission data vehicle(s) selected under § 86.094-24 (b)(1)(vii) (A) and (B) shall represent all vehicles of the same evaporative control system within the evaporative family.

(C) The emission data vehicle(s) selected under § 86.094-24 (b) (1) (v) shall represent all vehicles of the same enginesystem combination as applicable.

(D) The emission data vehicle(s) selected under § 86.094-24(b)(1)(viii) shall represent all vehicles of the same evaporative control system within the evaporative emission family, as applicable.

(iii) *Heavy-duty engines.* (A) An Otto-cycle emission data test engine selected under § 86.094-24(b)(2)(iv) shall represent all engines in the same family of the same engine displacement-exhaust emission control system combination.

(8) An Otto-cycle emission data test engine selected under § 86.094-24(b)(2)(iii) shall represent all engines in the same engine family of the same engine displacement-exhaust emission control system combination.

(C) A diesel emission data test engine selected under § 86.094-24(b)(3)(ii) shall represent all engines in the same engine-system combination.

(D) A diesel emission data test engine selected under § 86.094-24(b)(3)(iii) shall represent all engines of that emission control system at the rated fuel delivery of the test engine.

(iv) Gasoline-fueled and methanol-fueled heavy-duty vehicles. A statement of compliance submitted under § 86.094-23(b)(4) (i) or (ii) shall represent all vehicles in the same evaporative emission family-evaporative emission control system combination.

(2) The Administrator will proceed as in paragraph (a) of this section with respect to the vehicles (or engines) belonging to an engine family or engine family-evaporative emission family combination (as applicable), all of

which comply with all applicable standards (or family emission limits, as appropriate).

(3) If after a review of the test reports and data submitted by the manufacturer, data derived from any additional testing conducted pursuant to § 86.091-29, data or information derived from any inspection carried out under § 86.094-7(d) or any other pertinent data or information, the Administrator determines that one or more test vehicles (or test engines) of the certification test fleet do not meet applicable standards (or family emission limits, as appropriate), he will notify the manufacturer in writing, setting forth the basis for his determination. Within 30 days following receipt of the notification, the manufacturer may request a hearing on the Administrator's determination. The request shall be in writing, signed by an authorized representative of the manufacturer and shall include a statement specifying the manufacturer's objections to the Administrator's determination and data in support of such objections. If, after a review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, he shall provide the manufacturer a hearing in accordance with § 86.078-6 with respect to such issue.

(4) For light-duty vehicles and light-duty trucks the manufacturer may, at its option, proceed with any of the following alternatives with respect to an emission data vehicle determined not in compliance with all applicable standards (or family emission limits, as appropriate) for which it was tested:

(i) Request a hearing under § 86.078-6; or
(ii) Remove the vehicle configuration (or evaporative vehicle configuration, as applicable) which failed, from his application:

(A) If the failed vehicle was tested for compliance with exhaust emission standards (or family emission limits, as appropriate) only: The Administrator may select, in place of the failed vehicle, in accordance with the selection criteria employed in selecting the failed vehicle, a new emission data vehicle to be tested for exhaust emission compliance only; or

(B) If the failed vehicle was tested for compliance with both exhaust and evaporative emission standards: The Administrator may select, in place of the failed vehicle, in accordance with the selection criteria employed in selecting the failed vehicle, a new emission data vehicle which will be tested for compliance with both exhaust and evaporative emission standards. If one vehicle cannot be selected in

accordance with the selection criteria employed in selecting the failed vehicle, then two vehicles may be selected (i.e., one vehicle to satisfy the exhaust emission vehicle selection criteria and one vehicle to satisfy the evaporative emission vehicle selection criteria). The vehicle selected to satisfy the exhaust emission vehicle selection criteria will be tested for compliance with exhaust emission standards (or family emission limits, as appropriate) only. The vehicle selected to satisfy the evaporative emission vehicle selection criteria will be tested for compliance with both exhaust and evaporative emission standards; or

(iii) Remove the vehicle configuration (or evaporative vehicle configuration, as applicable) which failed from the application and add a vehicle configuration(s) (or evaporative vehicle configuration(s), as applicable) not previously listed. The Administrator may require, if applicable, that the failed vehicle be modified to the new engine code (or evaporative emission code, as applicable) and demonstrate by testing that it meets applicable standards (or family emission limits, as appropriate) for which it was originally tested. In addition, the Administrator may select, in accordance with the vehicle selection criteria given in § 86.094-24(b), a new emission data vehicle or vehicles. The vehicles selected to satisfy the exhaust emission vehicle selection criteria will be tested for compliance with exhaust emission standards (or family emission limits, as appropriate) only. The vehicles selected to satisfy the evaporative emission vehicle selection criteria will be tested for compliance with both exhaust and evaporative emission standards (or family emission limits, as appropriate); or

(iv) Correct a component or system malfunction and show that with a correctly functioning system or component the failed vehicle meets applicable standards (or family emission limits, as appropriate) for which it was originally tested. The Administrator may require a new emission data vehicle, of identical vehicle configuration (or evaporative vehicle configuration, as applicable) to the failed vehicle, to be operated and tested for compliance with the applicable standards (or family emission limits, as appropriate) for which the failed vehicle was originally tested.

(5) For heavy-duty engines the manufacturer may, at his option, proceed with any of the following alternatives with respect to any engine family represented by a test engine (s) determined not in compliance with

applicable standards (or family emission limit, as appropriate):

(i) Request a hearing under § 86.078-6; or

(ii) Delete from the application for certification the engines represented by the failing test engine. (Engines so deleted may be included in a later request for certification under § 86.079-32.) The Administrator may then select in place of each failing engine an alternate engine chosen in accordance with selection criteria employed in selecting the engine that failed; or

(iii) Modify the test engine and demonstrate by testing that it meets applicable standards. Another engine which is in all material respect the same as the first engine, as modified, may then be operated and tested in accordance with applicable test procedures.

(6) If the manufacturer does not request a hearing or present the required data under paragraphs (b) (4) or (5) of this section (as applicable) of this section, the Administrator will deny certification.

(c)(1) Notwithstanding the fact that any certification vehicle(s) (or certification engine(s)) may comply with other provisions of this subpart, the Administrator may withhold or deny the issuance of a certificate of conformity (or suspend or revoke any such certificate which has been issued) with respect to any such vehicle(s) (or engine(s)) if:

(i) The manufacturer submits false or incomplete information in his application for certification thereof;

(ii) The manufacturer renders inaccurate any test data which he submits pertaining thereto or otherwise circumvents the intent of the Act, or of this part with respect to such vehicle (or engine);

(iii) Any EPA Enforcement Officer is denied access on the terms specified in § 86.091-7(d) to any facility or portion thereof which contains any of the following:

(A) The vehicle (or engine);

(B) Any components used or considered for use in its modification or buildup into a certification vehicle (or certification engine);

(C) Any production vehicle (or production engine) which is or will be claimed by the manufacturer to be covered by the certificate;

(D) Any step in the construction of a vehicle (or engine) described in paragraph (c)(iii)(C) of this section;

(E) Any records, documents, reports, or histories required by this part to be kept concerning any of the above; or

(iv) Any EPA Enforcement Officer is denied "reasonable assistance" (as

defined in § 86.091-7(d) in examining any of the items listed in paragraph (c)(1)(iii) of this section.

(2) The sanctions of withholding, denying, revoking, or suspending of a certificate may be imposed for the reasons in paragraphs (c)(1) (i), (ii), (iii), or (iv) of this section only when the infraction is substantial.

(3) In any case in which a manufacturer knowingly submits false or inaccurate information or knowingly renders inaccurate or invalid any test data or commits any other fraudulent acts and such acts contribute substantially to the Administrator's decision to issue a certificate of conformity, the Administrator may deem such certificate void ab initio.

(4) In any case in which certification of a vehicle (or engine) is proposed to be withheld, denied, revoked, or suspended under paragraph (c)(1) (iii) or (iv) of this section, and in which the Administrator has presented to the manufacturer involved reasonable evidence that a violation of § 86.091-7(d) in fact occurred, the manufacturer, if he wishes to contend that, even though the violation occurred, the vehicle (or engine) in question was not involved in the violation to a degree that would warrant withholding, denial, revocation, or suspension of certification under either paragraph (c)(1) (iii) or (iv) of this section, shall have the burden of establishing that contention to the satisfaction of the Administrator.

(5) Any revocation or suspension of certification under paragraph (c)(1) of this section shall:

(i) Be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.078-6 hereof; and

(ii) Extend no further than to forbid the introduction into commerce of vehicles (or engines) previously covered by the certification which are still in the hands of the manufacturer, except in cases of such fraud or other misconduct as makes the certification invalid ab initio.

(6) The manufacturer may request in the form and manner specified in paragraph (b)(3) of this section that any determination made by the Administrator under paragraph (c)(1) of this section to withhold or deny certification be reviewed in a hearing conducted in accordance with § 86.078-6. If the Administrator finds, after a review of the request and supporting data, that the request raises a substantial factual issue, he will grant the request with respect to such issue.

(d)(1) For light-duty vehicles. Notwithstanding the fact that any vehicle configuration or engine family may be covered by a valid outstanding certificate of conformity, the Administrator may suspend such outstanding certificate of conformity in whole or in part with respect to such vehicle configuration or engine family if:

(i) The manufacturer refuses to comply with the provisions of a test order issued by the Administrator pursuant to § 86.603; or

(ii) The manufacturer refuses to comply with any of the requirements of § 86.603; or

(iii) The manufacturer submits false or incomplete information in any report or information provided pursuant to the requirements of § 86.609; or

(iv) The manufacturer renders inaccurate any test data which he submits pursuant to § 86.609; or

(v) Any EPA Enforcement Officer is denied the opportunity to conduct activities related to entry and access as authorized in § 86.606 of this part and in a warrant or court order presented to the manufacturer or the party in charge of a facility in question; or

(vi) EPA Enforcement Officers are unable to conduct activities related to entry and access or to obtain "reasonable assistance" as authorized in § 86.606 of this part because a manufacturer has located its facility in a foreign jurisdiction where local law prohibits those activities; or

(vii) The manufacturer refuses to or in fact does not comply with § 86.604(a), § 86.605, § 86.607, § 86.608, or § 86.610.

(2) The sanction of suspending a certificate may not be imposed for the reasons in paragraph (d)(1) (i), (ii), or (vii) of this section where the refusal is caused by conditions and circumstances outside the control of the manufacturer which render it impossible to comply with those requirements.

(3) The sanction of suspending a certificate may be imposed for the reasons in paragraph (d)(1) (iii), (iv), or (v) of this section only when the infraction is substantial.

(4) In any case in which a manufacturer knowingly submitted false or inaccurate information or knowingly rendered inaccurate any test data or committed any other fraudulent acts, and such acts contributed substantially to the Administrator's original decision not to suspend or revoke a certificate of conformity in whole or in part, the Administrator may deem such certificate void from the date of such fraudulent act.

(5) In any case in which certification of a vehicle is proposed to be suspended

under paragraph (d)(1)(v) of this section and in which the Administrator has presented to the manufacturer involved reasonable evidence that a violation of § 86.606 in fact occurred, if the manufacturer wishes to contend that, although the violation occurred, the vehicle configuration or engine family in question was not involved in the violation to a degree that would warrant suspension of certification under paragraph (d)(1)(v) of this section, the manufacturer shall have the burden of establishing the contention to the satisfaction of the Administrator.

(6) Any suspension of certification under paragraph (d)(1) of this section shall:

(i) Be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.614; and

(ii) Not apply to vehicles no longer in the hands of the manufacturer.

(7) Any voiding of a certificate of conformity under paragraph (d)(4) 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.

(8) Any voiding of the certificate under § 86.091-30(a)(10) will be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.614.

(e) For light-duty trucks and heavy-duty engines. (1) Notwithstanding the fact that any vehicle configuration or engine family may be covered by a valid outstanding certificate of conformity, the Administrator may suspend such outstanding certificate of conformity in whole or in part with respect to such vehicle or engine configuration or engine family if:

(i) The manufacturer refuses to comply with the provisions of a test order issued by the Administrator pursuant to § 86.1003; or

(ii) The manufacturer refuses to comply with any of the requirements of § 86.1003; or

(iii) The manufacturer submits false or incomplete information in any report or information provided pursuant to the requirements of § 86.1009; or

(iv) The manufacturer renders inaccurate any test data submitted pursuant to § 86.1009; or

(v) Any EPA Enforcement Officer is denied the opportunity to conduct activities related to entry and access as authorized in § 86.1006 of this part and in a warrant or court order presented to the manufacturer or the party in charge of a facility in question; or

(vi) EPA Enforcement Officers are unable to conduct activities related to entry and access as authorized in § 86.1006 of this part because a manufacturer has located a facility in a foreign jurisdiction where local law prohibits those activities; or

(vii) The manufacturer refuses to or in fact does not comply with the requirements of §§ 86.1004(a), 86.1005, 86.1007, 86.1008, 86.1010, 86.1011, or 86.1013.

(2) The sanction of suspending a certificate may not be imposed for the reasons in paragraph (e)(1) (i), (ii), or (vii) of this section where such refusal or denial is caused by conditions and circumstances outside the control of the manufacturer which renders it impossible to comply with those requirements. Such conditions and circumstances shall include, but are not limited to, any uncontrollable factors which result in the temporary unavailability of equipment and personnel needed to conduct the required tests, such as equipment breakdown or failure or illness of personnel, but shall not include failure of the manufacturers to adequately plan for and provide the equipment and personnel needed to conduct the tests. The manufacturer will bear the burden of establishing the presence of the conditions and circumstances required by this paragraph.

(3) The sanction of suspending a certificate may be imposed for the reasons outlined in paragraph (e)(1) (iii), (iv), or (v) of this section only when the infraction is substantial.

(4) In any case in which a manufacturer knowingly submitted false or inaccurate information or knowingly rendered inaccurate any test data or committed any other fraudulent acts, and such acts contributed substantially to the Administrator's original decision not to suspend or revoke a certificate of conformity in whole or in part, the Administrator may deem such certificate void from the date of such fraudulent act.

(5) In any case in which certification of a light-duty truck or heavy-duty engine is proposed to be suspended under paragraph (e)(1)(v) of this section and in which the Administrator has presented to the manufacturer involved reasonable evidence that a violation of § 86.1006 in fact occurred, if the manufacturer wishes to contend that, although the violation occurred, the vehicle or engine configuration or engine family in question was not involved in the violation to a degree that would warrant suspension of certification under paragraph (e)(1)(v) of this section, he shall have the burden of

establishing that contention to the satisfaction of the Administrator.

(6) Any suspension of certification under paragraph (e)(1) of this section shall:

(i) Be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.1014; and

(ii) Not apply to vehicles or engines no longer in the hands of the manufacturer.

(7) Any voiding of a certificate of conformity under paragraph (e)(4) of this section shall be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.1014.

(8) Any voiding of the certificate under paragraph (a) (10) or (11) of this section will be made only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with § 86.1014.

(Approved by the Office of Management and Budget under control number 2060-0104)

14. Section 86.094-35 is amended by removing and reserving paragraphs (a)(2)(iii)(F) and (c)(1)(ii)(B)(2).

15. Section 86.095-14 is revised to read as follows:

§ 86.095-14 Small-volume manufacturers certification procedures.

Section 86.095-14 includes text that specifies requirements that differ from § 86.094-14. Where a paragraph in § 86.094-14 is identical and applicable to § 86.095-14, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-14." Where a corresponding paragraph of § 86.094-14 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) A description of vehicle adjustments or modifications required by §§ 86.094-8(j) and 86.094-9(j), if any, to assure that light-duty vehicles and light-duty trucks covered by a certificate of conformity conform to the regulations while being operated at any altitude locations, and a statement of the altitude at which the adjustments or modifications apply.

(17) A description of the light-duty vehicles and light-duty trucks which are exempted from the high altitude emission standards.

(18) Proof that the manufacturer has obtained or entered an agreement to purchase, when applicable, the

insurance policy required by the § 85.1510(b) of this chapter. The manufacturer may submit a copy of the insurance policy or purchase agreement as proof that the manufacturer has obtained or entered an agreement to purchase the insurance policy.

(C) The results of all emission tests the manufacturer performs to demonstrate compliance with the applicable standards.

(D)(1) The following statement signed by the authorized representative of the manufacturer: "The vehicles (or engines) described herein have been tested in accordance with (list of the applicable subparts A, B, D, I, M, N, or P) of part 86, title 40, Code of Federal Regulations, and on the basis of those tests are in conformance with that subpart. All of the data and records required by that subpart are on file and are available for inspection by the EPA Administrator. We project the total U.S. sales of vehicles (engines) subject to this subpart (including all vehicles and engines imported under the provisions of 40 CFR 85.1505 and 40 CFR 85.1509) to be fewer than 10,000 units."

(2) A statement as required by and contained in § 86.094-14(c)(5) signed by the authorized representative of the manufacturer.

(3) A statement that the vehicles or engines described in the manufacturer's application for certification are not equipped with auxiliary emission control devices which can be classified as a defeat device as defined in § 86.092-2.

(4) A statement of compliance with section 206(a)(3) of the Clean Air Act (42 U.S.C. 7525(a)(3)).

(5) A statement that, based on the manufacturer's engineering evaluation and/or emission testing, the light-duty vehicles and light-duty trucks comply with emission standards at high altitude unless exempt under § 86.094-8(h) or § 86.094-9(h).

(6) [Reserved]

(c)(11)(ii) (D)(7) through (c)(15) [Reserved]. For guidance see § 86.094-14.

(Approved by the Office of Management and Budget under control number 2060-0104)

16. Section 86.095-24 is revised to read as follows:

§ 86.095-24 Test vehicles and engines.

Section 86.095-24 includes text that specifies requirements that differ from § 86.094-24. Where a paragraph in § 86.094-24 is identical and applicable to § 86.095-24, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-24." Where a

corresponding paragraph of § 86.094-24 is not applicable, this is indicated by the statement "[Reserved]."

(a) through (b)(1)(v) introductory text [Reserved]. For guidance see § 86.094-24.

(b)(1)(v)(A) The manufacturer will select for testing under high-altitude conditions the vehicle expected to exhibit the highest emissions from the nonexempt vehicles selected in accordance with § 86.094-24(b)(1) (ii), (iii), and (iv); or

(B) In lieu of testing vehicles according to paragraph (b)(1)(v)(A) of this section, a manufacturer may provide a statement in its application for certification that, based on the manufacturer's engineering evaluation of such high-altitude emission testing as the manufacturer deems appropriate that all light-duty vehicles and light-duty trucks not exempt under § 86.090-8(h) or § 86.094-9(h) comply with the emission standards at high altitude.

(vi) If 90 percent or more of the engine family sales will be in California, a manufacturer may substitute emission data vehicles selected by the California Air Resources Board criteria for the selections specified in § 86.094-24(b)(1) (i), (ii), and (iv).

(vii)(A) Vehicles of each evaporative emission family will be divided into evaporative emission control systems.

(B) The Administrator will select the vehicle expected to exhibit the highest evaporative emissions, from within each evaporative family to be certified, from among the vehicles represented by the exhaust emission data selections for the engine family, unless evaporative testing has already been completed on the vehicle expected to exhibit the highest evaporative emissions for the evaporative family as part of another engine family's testing.

(C) If the vehicles selected in accordance with paragraph (b)(1)(vii)(B) of this section do not represent each evaporative emission control system then the Administrator will select the highest expected evaporative emission vehicle from within the unrepresented evaporative system.

(viii) For high-altitude evaporative emission compliance for each evaporative emission family, the manufacturer shall follow one of the following procedures:

(A) The manufacturer will select for testing under high-altitude conditions the one nonexempt vehicle previously selected under paragraph (b)(1)(vii) (B) or (C) of this section which is expected to have the highest level of evaporative emissions when operated at high altitude; or

(B) In lieu of testing vehicles according to § 86.094-24(b)(1)(viii)(A), a manufacturer may provide a statement in its application for certification that, based on the manufacturer's engineering evaluation of such high-altitude emission testing as the manufacturer deems appropriate, that all light-duty vehicles and light-duty trucks not exempt under § 86.090-8(h) or § 86.094-9(h) comply with the emission standards at high altitude.

(ix) Vehicles selected under paragraph (b)(1)(v)(A) of this section may be used to satisfy the requirements of paragraph (b)(1)(viii)(A) of this section.

(x) [Reserved].

(b)(2) through (h) [Reserved]. For guidance see § 86.094-24.

(Approved by the Office of Management and Budget under control number 2060-0104)

17. Section 86.095-26 is revised to read as follows:

§ 86.095-26 Mileage and service accumulation; emission measurements.

Section 86.095-26 includes text that specifies requirements that differ from § 86.094-26. Where a paragraph in § 86.094-26 is identical and applicable to § 86.095-26, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-26." Where a corresponding paragraph of § 86.094-26 is not applicable, this is indicated by the statement "[Reserved]."

(a) through (b)(4)(i)(C) [Reserved]. For guidance see § 86.094-26.

(b)(4)(i)(D) For each engine family, the manufacturer will either select one vehicle previously selected under § 86.094-24(b)(1) (i) through (iv) to be tested under high altitude conditions or provide a statement in accordance with § 86.095-24(b)(1)(v). Vehicles shall meet emission standards under both low- and high-altitude conditions without manual adjustments or modifications. In addition, any emission control device used to conform with the emission standards under high-altitude conditions shall initially actuate (automatically) no higher than 4,000 feet above sea level.

(ii) *Diesel.* (A) The manufacturer shall determine, for each engine family, the mileage 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 4,000 miles on each test vehicle within an engine family without making a determination. The manufacturer must accumulate a

minimum of 2,000 miles (3,219 kilometers) on each test vehicle within an engine family. All test vehicle mileage must be accurately determined, recorded, and reported to the Administrator. Any vehicle used to represent emission data vehicle selections under § 86.094-24(b)(1) shall be equipped with an engine and emission control system that has accumulated the mileage the manufacturer chose to accumulate on the test vehicle. Fuel economy data generated from certification vehicles selected in accordance with § 86.094-24(b)(1) with engine-system combinations that have accumulated more than 10,000 kilometers (6,200 miles) shall be factored in accordance with § 600.006-87(c) of this chapter. Complete exhaust emission tests shall be conducted for each emission data vehicle selection under § 86.094-24(b)(1). The Administrator may determine under § 86.094-24(f) that no testing is required.

(B) Emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1)(v) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at the 6,436 kilometer (4,000 mile) test point under high-altitude conditions.

(C) Exhaust and evaporative emission tests for emission data vehicle(s) selected for testing under § 86.094-24(b)(1) (ii), (iii), and (iv) shall be conducted at the mileage (2,000 mile minimum) at which the engine-system combination is stabilized for emission testing or at the 6,436 kilometer (4,000 mile) test point under low-altitude conditions.

(D) For each engine family, the manufacturer will either select one vehicle previously selected under § 86.094-24(b)(1) (i) through (iv) to be tested under high altitude conditions or provide a statement in accordance with § 86.095-24(b)(1)(v). Vehicles shall meet emission standards under both low- and high-altitude conditions without manual adjustments or modifications. In addition, any emission control device used to conform with the emission standards under high-altitude conditions shall initially actuate (automatically) no higher than 4,000 feet above sea level.

(b)(4)(iii) through (d) [Reserved]. For guidance see § 86.094-26.

(Approved by the Office of Management and Budget under control number 2060-0104)

18. Section 86.095-30 is revised to read as follows:

§ 86.095-30 Certification.

Section 86.095-30 includes only text that specifies requirements that differ from § 86.094-30. Where a paragraph in § 86.094-30 is identical and applicable to § 86.095-30, this is indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.094-30." Where a corresponding paragraph of § 86.094-30 is not applicable, this is indicated by the statement "[Reserved]."

(a)(1)(i) through (a)(2) [Reserved]. For guidance see § 86.094-30.

(a)(3)(i) One such certificate will be issued for each engine family. For gasoline-fueled and methanol-fueled light-duty vehicles and light-duty trucks, one such certificate will be issued for each engine family evaporative emission family combination. Each certificate will certify compliance with no more than one set of in-use and certification standards (or family emission limits, as appropriate).

(ii) For gasoline-fueled and methanol-fueled heavy-duty vehicles, one such certificate will be issued for each manufacturer and will certify compliance for those vehicles previously identified in that manufacturer's statement(s) of compliance as required in § 86.094-23(b)(4) (i) and (ii).

(iii) For diesel light-duty vehicles and light-duty trucks, or diesel heavy-duty engines, included in the applicable particulate averaging program, the manufacturer may at any time during production elect to change the level of any family particulate emission limit by demonstrating compliance with the new limit as described in §§ 86.094-28(a)(6) and 86.094-28(b)(5)(i). New certificates issued under this paragraph will be applicable only for vehicles (or engines) produced subsequent to the date of issuance.

(iv) For light-duty trucks or heavy-duty engines included in the applicable NO_x averaging program, the manufacturer may at any time during production elect to change the level of any family NO_x emission limit by demonstrating compliance with the new limit as described in § 86.094-28(b)(5)(ii). New certificates issued under this paragraph will be applicable only for vehicles (or engines) produced subsequent to the day of issue.

(4)(i) For exempt light-duty vehicles and light-duty trucks under the provisions of §§ 86.094-8(j) or 86.094-9(j), an adjustment or modification performed in accordance with instructions provided by the manufacturer for the altitude where the vehicle is principally used will not be considered a violation of section 203(a)(3) of the Clean Air Act (42 U.S.C. 7522(a)(3)).

(ii) A violation of section 203(a)(1) of the Clean Air Act (42 U.S.C. 7522(a)(1)) occurs when a manufacturer sells or delivers to an ultimate purchaser any light-duty vehicle or light-duty truck, subject to the regulations under the Act, under any of the conditions specified in paragraph (a)(4)(ii) of this section.

(A) When a light-duty vehicle or light-duty truck is exempted from meeting high-altitude requirements as provided in § 86.090-8(h) or § 86.094-9(h):

(1) At a designated high-altitude location, unless such manufacturer has reason to believe that such vehicle will not be sold to an ultimate purchaser for principal use at a designated high-altitude location; or

(2) At a location other than a designated high-altitude location, when such manufacturer has reason to believe that such motor vehicle will be sold to an ultimate purchaser for principal use at a designated high-altitude location.

(B) When a light-duty vehicle or light-duty truck is exempted from meeting low-altitude requirements as provided in § 86.094-8(i) or § 86.094-9(i):

(1) At a designated low-altitude location, unless such manufacturer has reason to believe that such vehicle will not be sold to an ultimate purchaser for principal use at a designated low-altitude location; or

(2) At a location other than a designated low-altitude location, when such manufacturer has reason to believe that such motor vehicle will be sold to an ultimate purchaser for principal use at a designated low-altitude location.

(iii) A manufacturer shall be deemed to have reason to believe that a light-duty vehicle or light-duty truck that has been exempted from compliance with emission standards at high altitude, will not be sold to an ultimate purchaser for principal use at a designated high altitude location if the manufacturer has informed its dealers and field representatives about the terms of those high altitude regulations, has not caused

the improper sale itself, and has taken reasonable action which shall include, but shall not be limited to, either § 86.094-30(a)(4)(iii) (A) or (B), and § 86.094-30(a)(4)(iii)(C).

(a)(4)(iii) (A) through (C) [Reserved]. For guidance see § 86.094-30.

(a)(4)(iv) A manufacturer shall be deemed to have reason to believe that a light-duty vehicle or light-duty truck which has been exempted from compliance with emission standards at low altitude, as provided in § 86.094-8(i) or § 86.094-9(i), will not be sold to an ultimate purchaser for principal use at a designated low-altitude location if the manufacturer has informed its dealers and field representatives about the terms of the high-altitude regulations, has not caused the improper sale itself, and has taken reasonable action which shall include, but not be limited to either § 86.094-30(a)(4)(iv) (A) or (B) and § 86.094-30(a)(4)(iv)(C):

(a)(4)(iv)(A) through (a)(12) [Reserved]. For guidance see § 86.094-30.

(a)(13) For all light-duty trucks certified to Tier 0 standards under § 86.094-9 and to which standards under § 86.709-94 are applicable:

(i) All certificates issued are conditional upon the manufacturer complying with all provisions of §§ 86.094-9 and 86.709-94 both during and after model year production.

(ii) Failure to meet the required implementation schedule sales percentages as specified in §§ 86.094-9 and 86.709-94 will be considered to be a failure to satisfy the conditions upon which the certificate(s) was issued and the individual 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.

(a)(14) through (e)(8) [Reserved]. For guidance see § 86.094-30.

(Approved by the Office of Management and Budget under control number 2060-0104)

19. Section 86.095-35 is amended by removing and reserving paragraphs (a)(2)(iii)(F) and (c)(1)(ii)(B)(2).

[FR Doc. 93-72 Filed 1-11-93; 8:45 am]

BILLING CODE 6560-50-M