(g)(2)(i) through (g)(2)(iv) of this section have been complied with.

(3) If applicable, the Administrator will send a return letter verifying the receipt of the written statement required in paragraph (g)(2)(v) of this section.

(h)(1) Light-duty trucks and heavy-duty vehicles and engines for which nonconformance penalties are to be paid in accordance with §86.1113–87(b) shall have the following information printed on the label required in paragraph (a) of this section. The manufacturer shall begin labeling production engines or vehicles within 10 days after the completion of the PCA.

(i) The statement: "The manufacturer of this engine/vehicle will pay a nonconformance penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is _____." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with §86.1112–87(a).)

(2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of §86.1112–87(a), it shall provide the engine or vehicle owner with a label as described above to be affixed in a location in proximity to the label required in paragraph (a) of this section within 30 days of the completion of the PCA.

[55 FR 7197, Feb. 28, 1990, as amended at 55 FR 30627, July 26, 1990]

§86.093–2 Definitions.

The definitions of §86.092–2 continue to apply. The definitions listed in this section apply beginning with the 1993 model year.

Bus means a heavy heavy-duty diesel-powered passenger-carrying vehicle with a load capacity of fifteen or more passengers that is centrally fueled, and all urban buses. This definition only applies in the context of §§86.093–11 and 86.093–35.

Centrally fueled bus means a bus that is refueled at least 75 percent of the time at one refueling facility that is owned, operated, or controlled by the bus operator.

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

[58 FR 15795, Mar. 24, 1993]

§86.093–11 Emission standards for 1993 and later model year diesel heavy-duty engines.

(a)(1) Exhaust emissions from new 1993 and later model year diesel heavy-duty engines shall not exceed the following:

(i)(A) *Hydrocarbons (for petroleum-fueled diesel engines).* 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(B) *Total Hydrocarbon Equivalent (for methanol-fueled diesel engines).* 1.3 grams per brake horsepower-hour (0.48 gram per megajoule), as measured under transient operating conditions.

(ii) *Carbon monoxide.* (A) 15.5 grams per brake horsepower-hour (5.77 grams per megajoule), as measured under transient operating conditions.

(B) 0.50 percent of exhaust gas flow at curb idle (methanol-fueled diesel only).

(iii) *Oxides of nitrogen.* (A) 5.0 grams per brake horsepower-hour (1.9 grams per megajoule), as measured under transient operating conditions.

(B) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the NO_X

averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.091–15. If the manufacturer elects to include engine families in any of the programs, the NO_X FELs may not exceed 6.0 grams per brake horsepower-hour (2.2 grams per megajoule). This ceiling value applies whether credits for the family are derived from averaging, trading or banking programs.

(iv) *Particulate.* (A) For diesel engines to be used in buses, 0.10 grams per brake horsepower-hour (0.037 gram per megajoule), as measured under transient operating conditions.

(B) For all other diesel engines only, 0.25 grams per brake horsepower-hour (0.093 gram per megajoule), as measured under transient operating conditions.

(C) A manufacturer may elect to include any or all of its diesel heavy-duty engine families in any or all of the particulate averaging, trading, or banking programs for heavy-duty engines, within the restrictions described in § 86.094.15. If the manufacturer elects to include engine families in any of these programs, the particulate FEL may not exceed:

(*1*) 0.25 gram per brake horsepower-hour (0.093 gram per megajoule) for diesel engines intended for use in urban buses.

(*2*) 0.60 gram per brake horsepower-hour (0.22 gram per megajoule) for diesel engines *not* intended for use in urban buses.

(*3*) The ceiling values in paragraphs (a)(1)(iv)(C) (*1*) and (*2*) of this section apply whether credits for the family are derived from averaging, trading or banking programs.

(2) The standards set forth in paragraph (a)(1) of this section refer to the exhaust emitted over operating schedules as set forth in paragraph (f)(2) of appendix I of this part, and measured and calculated in accordance with the procedures set forth in subpart N of this part, except as noted in § 86.091–23(c)(2) (i) and (ii).

(b)(1) The opacity of smoke emission from new 1993 and later model year diesel heavy-duty engines shall not exceed:

(i) 20 percent during the engine acceleration mode.

(ii) 15 percent during the engine lugging mode.

(iii) 50 percent during the peaks in either mode.

(2) The standards set forth in paragraph (b)(1) of this section refer to exhaust smoke emissions generated under the conditions set forth in subpart I of this part and measured and calculated in accordance with those procedures.

(3) *Evaporative emissions* (total of non-oxygenated hydrocarbons plus methanol) for 1993 and later model year heavy-duty vehicles equipped with methanol-fueled diesel engines shall not exceed:

(i) For vehicles with Gross Vehicle Weight Rating of up to 14,000 lbs., 3.0 grams per test.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs., 4.0 grams per test.

(4)(i) For vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs., the standards set forth in paragraph (b)(3) of this section refer to a composite sample of evaporative emission collected under the conditions set forth in subpart M of this part and measured in accordance with those procedures.

(ii) For vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs., the standard set forth in paragraph (b)(3)(ii) of this section refers to the manufacturers' engineering design evaluation using good engineering practice (a statement of which is required in § 86.091–23(b)(4)(ii)).

(c) No crankcase emissions shall be discharged into the ambient atmosphere from any new 1993 or later model year methanol-fueled diesel, or any naturally-aspirated diesel heavy-duty engine. For petroleum fueled engines only, this provision does not apply to engines using turbocharters, pumps, blowers or superchargers for air induction.

(d) Every manufacturer of new motor vehicle engines subject to the standard prescribed in this section shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with applicable procedures in subpart I or N of this part to ascertain that such test engines

meet the requirements of paragraphs (a), (b), and (c) and (d) of this section.

[56 FR 64711, Dec. 12, 1991, as amended at 58 FR 15795, Mar. 24, 1993]

§ 86.093–35 Labeling.

(a) The manufacturer of any motor vehicle (or motor vehicle engine) subject to the applicable emission standards (and family emission limits, as appropriate) of this subpart, shall, at the time of manufacture, affix a permanent legible label, of the type and in the manner described in this section, containing the information hereinafter provided, to all production models of such vehicles (or engines) available for sale to the public and covered by a certificate of conformity under §86.091–30(a). Where blanks appear in this section, manufacturers are required to fill in the appropriate information in the blanks.

(1) *Light-duty vehicles.* (i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment.

(ii) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, in such manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from such vehicle.

(iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(A) The label heading: Vehicle Emission Control Information;

(B) Full corporate name and trademark of manufacturer;

(C) Engine displacement (in cubic inches or liters), engine family identification and evaporative family identification;

(D) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards (or family emission limits, as applicable), including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedures and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing and valve lash (as applicable), as well as other parameters deemed necessary by the manufacturer. These specifications should indicate the proper transmission position during tuneup and what accessories (e.g., air conditioner), if any, should be in operation;

(E) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations which apply to light-duty vehicles;

(F) For vehicles which are part of the diesel particulate averaging program, the family particulate emission limit to which the vehicle is certified;

(G) For vehicles that have been exempted from compliance with the emission standards at high altitude, as specified in §86.090–8(h):

(*1*) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at low altitude only;

(*2*) A statement that the vehicle's unsatisfactory performance under high-altitude conditions makes it unsuitable for principal use at high altitude; and

(*3*) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at high altitude;

(H) For vehicles that have been exempted from compliance with the emission standards at low altitude, as specified in §86.090–8(i):

(*1*) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at high altitude only; and

(*2*) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at low altitude;

(I) The vacuum hose routing diagram applicable to the vehicles if the vehicles are equipped with vacuum actuated emission and emission-related components. The manufacturer may, at its option, use a separate label for the vacuum hose routing diagram provided that the vacuum hose diagram is placed in a visible and accessible position as provided in this section; and

(J) Vehicles granted final admission under §85.1505 must comply with the