

GVWP 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) *Alternative Durability Program.* For 1985 and later model year light-duty vehicles and light-duty trucks, a manufacturer may elect to participate in the Alternative Durability Program. This optional program provides an alternative method of determining exhaust emission control system durability. The general procedures and a description of the programs are contained in § 86.085-13 and specific provisions on test vehicles and compliance procedures are contained in §§ 86.085-24 and 86.085-28 respectively.

(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, and heavy-duty engines in its product line are fewer than 10,000 units for the model year in which the manufacturer seeks certification. In order to certify its product line under these optional procedures, the small-volume manufacturer must first obtain the Administrator's approval. Vehicles produced at facilities leased, operated, controlled, supervised, or in 10 percent or greater part owned by the manufacturer shall be counted in calculating the total sales of the manufacturer. The small-volume manufacturer's certification procedures are described in § 86.084-14.

(f) *Optional Procedures for Determining Exhaust Opacity.* (1) The provisions of subpart I apply to tests which are performed by the Administrator, and optionally, by the manufacturer.

(2) Measurement procedures, other than that described in subpart I, may be used by the manufacturer provided the manufacturer satisfies the requirements of § 86.085-23(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. 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 of subpart I.

(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 subpart I data, EPA may require that all certificates of conformity not already issued be based on data from subpart I procedures.

(Secs. 202, 203, 206, 207, 208, 301a, Clean Air Act as amended; 42 U.S.C. 7521, 7522, 7525, 7541, 7542, 7601(a))

[48 FR 22548, May 19, 1983, as amended at 50 FR 10648, Mar. 15, 1985; 51 FR 24608, July 7, 1986]

§ 86.085-2 Definitions.

The definitions of § 86.084-2 remain effective. The definitions listed in this section apply beginning with the 1985 model year.

Abnormally treated vehicle, any diesel light-duty vehicle or diesel light-duty truck that is operated for less than five miles in a 30 day period immediately prior to conducting a particulate emissions test.

Composite particulate standard, for a manufacturer which elects to average diesel light-duty vehicles and diesel light-duty trucks together in the particulate averaging program, means that standard calculated according to the following equation and rounded to the nearest hundredth gram-per-mile:

$$\frac{(\text{PROD}_{\text{LDV}})(\text{STD}_{\text{LDV}}) + (\text{PROD}_{\text{LDT}})(\text{STD}_{\text{LDT}})}{(\text{PROD}_{\text{LDV}}) + (\text{PROD}_{\text{LDT}})} = \text{Manufacturer composite particulate standard}$$

Where:

PROD_{LDV} represents the manufacturer's total diesel light-duty vehicle production for those engine families being included in the average for a given model year.

STD_{LDV} represents the light-duty vehicle particulate standard.

PROD_{LDT} represents the manufacturer's total diesel light-duty truck production for those engine families being included in the average for a given model year.

STD_{LDT} represents the light-duty truck particulate standard.

Family particulate emission limit means the diesel particulate emission level to which an engine family is certified in the particulate averaging program, expressed to an accuracy of one hundredth gram-per-mile.

Incomplete gasoline-fueled heavy-duty vehicle means any gasoline-fueled heavy-duty vehicle which does not have the primary load-carrying device, or passenger compartment, or engine compartment or fuel system attached.

Production-weighted average means the manufacturer's production-weighted average particulate emission level, for certification purposes, of all of its diesel engine families included in the particulate averaging program. It is calculated at the end of the model year by multiplying each family particulate emission limit by its respective production, summing these terms, and dividing the sum by the total production of the effected families. Those vehicles produced for sale in California or at high altitude shall each be averaged separately from those produced for sale in any other area.

Primary intended service class means:

(a) The primary service application group for which a heavy-duty diesel engine is designed and marketed, as determined by the manufacturer. The primary intended service classes are designated as light, medium, and heavy heavy-duty diesel engines. The determination is based on factors such as vehicle GVW, vehicle usage and operating patterns, other vehicle design characteristics, engine horsepower, and other engine design and operating characteristics.

(1) Light heavy-duty diesel engines usually are non-sleeved and not designed for rebuild; their rated horsepower generally ranges from 70 to 170. Vehicle body types in this group might

include any heavy-duty vehicle built for a light-duty truck chassis, van trucks, multi-stop vans, recreational vehicles, and some single axle straight trucks. Typical applications would include personal transportation, light-load commercial hauling and delivery, passenger service, agriculture, and construction. The GVWR of these vehicles is normally less than 19,500 lbs.

(2) Medium heavy-duty diesel engines may be sleeved or non-sleeved and may be designed for rebuild. Rated horsepower generally ranges from 170 to 250. Vehicle body types in this group would typically include school buses, tandem axle straight trucks, city tractors, and a variety of special purpose vehicles such as small dump trucks, and trash compactor trucks. Typical applications would include commercial short haul and intra-city delivery and pickup. Engines in this group are normally used in vehicles whose GVWR varies from 19,500-33,000 lbs.

(3) Heavy heavy-duty diesel engines are sleeved and designed for multiple rebuilds. Their rated horsepower generally exceeds 250. Vehicles in this group are normally tractors, trucks, and buses used in inter-city, long-haul applications. These vehicles normally exceed 33,000 lbs GVWR.

Useful life means:

(a) For light-duty vehicles a period of use of 5 years or 50,000 miles, whichever first occurs.

(b) For a light-duty truck engine family, a period of use of 11 years or 120,000 miles, whichever occurs first.

(c) For a gasoline-fueled heavy-duty engine family (and in the case of evaporative emission regulations, for gasoline-fueled heavy-duty vehicles), a period of use of 8 years or 110,000 miles, whichever first occurs.

(d) For a diesel heavy-duty engine family:

(1) For light heavy-duty diesel engines, a period of use of 8 years or 110,000 miles, whichever first occurs.

(2) For medium heavy-duty diesel engines, a period of use of 8 years or 185,000 miles, whichever first occurs.

(3) For heavy heavy-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever first occurs.

(e) As an option for both light-duty truck and heavy-duty engine families,

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an alternative useful life period assigned by the Administrator under the provisions of paragraph (f) of § 86.085-21.

(f) The useful-life period for purposes of the emissions defect warranty and emissions performance warranty shall be a period of 5 years/50,000 miles whichever first occurs, for light-duty trucks, gasoline heavy-duty engines, and light heavy-duty diesel engines. For all other heavy-duty diesel engines the aforementioned period is 5 years/100,000 miles, whichever first occurs. However, in no case may this period be less than the manufacturer's basic mechanical warranty period for the engine family.

[48 FR 33462, July 21, 1983, as amended at 48 FR 52184, Nov. 16, 1983; 52 FR 47863, Dec. 16, 1987]

§ 86.085-13 Alternative Durability Program.

(a) The procedures of the Alternative Durability Program are optional. Manufacturers may use these optional procedures to determine deterioration factors instead of using the procedures that this subpart otherwise requires.

(b) The optional procedures of the Alternative Durability Program apply only to light-duty vehicles and light-duty trucks, and are effective for the 1985 and later model years. All manufacturers of these vehicles are eligible to participate in this program.

(c) For engine families subject to the procedures of the Alternative 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:

(1) 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 § 86.084-25(a)), and

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

(d) EPA shall determine minimum deterioration factors for engine families subject to the Alternative Durability Program. This determination

shall be based on a procedure of grouping engine families (see § 86.085-24(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 § 86.085-24(h) and compliance requirements are contained in § 86.085-28 (a)(5) and (b)(5).

(e) *Request Procedures.* (1) A manufacturer wishing to participate in the Alternative 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.

(2) 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 Alternative Durability Program. Furthermore, the Administrator may limit the number of engine families within the manufacturer's product line that are eligible for the Alternative Durability Program.

(3) 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 the following:

(i) The engine families to be included in the program and the engine family groups that have been established by the provisions of § 86.085-24(a) (8) and (9).

(ii) The procedures for the selection of production durability-data vehicles specified under the provisions of § 86.085-24(h).

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

(f) *Withdrawal from Alternative Durability Program.* (1) Subject to the conditions of the following paragraphs, a manufacturer may, at any time, withdraw all of its product line or separate