

**Environmental Protection Agency**

**§ 86.087-2**

(i) Total production volume expressed in terms of units produced;

(ii) Model type production volume, expressed for each model type in terms of units produced and as a percentage of total production;

(iii) Base level production volume, expressed for each base level in terms of units produced and as percentage of:

(A) Total production of its respective model type(s), and

(B) Total production; and

(iv) Vehicle configuration production volume, expressed for each vehicle configuration in terms of units produced, and as a percentage of the total production of its respective base level. In addition, each vehicle configuration shall be identified by its appropriate engine-system combination.

(2) All light-duty vehicles and light-duty trucks covered by a certificate of conformity under § 86.082-30(a) shall be adjusted by the manufacturer to the ignition or injection timing specification detailed in § 86.079-36(a)(1)(iii)(D).

(c) Any heavy-duty engine or gasoline-fueled heavy-duty vehicle manufacturer obtaining certification under this part shall notify the Administrator, on a yearly basis, of the number of engines or vehicles of such engine family-evaporative emission family-engine displacement-exhaust emission control system-fuel system combination produced for sale in the United States during the preceding year.

(d) The following definitions apply to this section:

(1) *Model type* means a unique combination of car line, basic engine, and transmission class.

(2) *Base level* means a unique combination of basic engine, inertia weight, and transmission class.

(3) *Vehicle configuration* means a unique combination of basic engine, engine code, inertia weight, transmission configuration, and axle ratio within a base level.

[48 FR 1455, Jan. 12, 1983, as amended at 59 FR 50073, Sept. 30, 1994; 62 FR 31233, June 6, 1997]

EFFECTIVE DATE NOTE: At 62 FR 31233, June 6, 1997, § 86.085-37 was amended by revising paragraph (b)(1) introductory text. That text contains information collection and record-keeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

**§ 86.087-2 Definitions.**

*Composite particulate standard* for a manufacturer which elects to average diesel light-duty vehicles and diesel light-duty trucks with a loaded vehicle weight equal to or less than 3,750 lbs (LDDT<sup>1</sup>s) together in the particulate averaging program, means that standard calculated according to the following equation and rounded to the nearest hundredth gram per mile:

$$\frac{(\text{PROD}_{\text{LDV}})(\text{STD}_{\text{LDV}}) + (\text{PROD}_{\text{LDDT}^1})(\text{STD}_{\text{LDDT}^1})}{(\text{PROD}_{\text{LDV}}) + (\text{PROD}_{\text{LDDT}^1})} = \text{Manufacturer composite particulate standard}$$

Where:

PROD<sub>LDV</sub> represents the manufacturer's total light-duty vehicle production for those engine families being included in the average for a given model year.

STD<sub>LDV</sub> represents the light-duty vehicle particulate standard.

PROD<sub>LDDT<sup>1</sup></sub> represents the manufacturer's total diesel light-duty truck production for those engine families with a loaded vehicle weight equal to or less than 3,750 lbs which are being included in the average for a given model year.

STD<sub>LDDT<sup>1</sup></sub> represents the light-duty truck particulate standard for diesel light-duty

trucks with a loaded vehicle weight equal to or less than 3,750 lbs.

*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 affected 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. Diesel light-duty trucks with a loaded vehicle weight equal to or greater than 3,751 lbs (LDDT2s) shall only be averaged with other diesel light-duty trucks with a loaded vehicle weight equal to or greater than 3,751 lbs produced by that manufacturer.

[53 FR 43875, Oct. 31, 1988]

**§ 86.087-38 Maintenance instructions.**

(a) The manufacturer shall furnish or cause to be furnished to the purchaser of each new motor vehicle (or motor vehicle engine) subject to the standards prescribed in § 86.087-8, § 86.087-9, § 86.087-10, or § 86.087-11, as applicable, written instructions for the proper maintenance and use of the vehicle (or engine), by the purchaser consistent with the provisions of § 86.087-25, which establishes what scheduled maintenance the Administrator approves as being reasonable and necessary. For light-duty vehicle manufacturers optionally complying with § 86.087-25(a) for the 1987 model year, the Administrator approves any scheduled maintenance allowed by § 86.087-25(a) as being reasonable and necessary.

(1) The maintenance instructions required by this section shall be in clear, and to the extent practicable, nontechnical language.

(2) The maintenance instructions required by this section shall contain a general description of the documentation which the manufacturer will require from the ultimate purchaser or any subsequent purchaser as evidence of compliance with the instructions.

(b) Instructions provided to purchasers under paragraph (a) of this section shall specify the performance of all scheduled maintenance performed by the manufacturer on certification durability vehicles and, in cases where the manufacturer performs less maintenance on certification durability vehicles than the allowed limit, may specify the performance of any scheduled maintenance allowed under § 86.087-25 (or under § 86.085-25(a), for light-duty vehicle families optionally

complying with that section for the 1987 model year).

(c) Scheduled emission-related maintenance in addition to that performed under § 86.087-25(b) may only be recommended to offset the effects of abnormal in-use operating conditions, except as provided in paragraph (d) of this section. The manufacturer shall be required to demonstrate, subject to the approval of the Administrator, that such maintenance is reasonable and technologically necessary to assure the proper functioning of the emission control system. Such additional recommended maintenance shall be clearly differentiated, in a form approved by the Administrator, from that approved under § 86.087-25(b).

(d) Inspections of emission-related parts or systems with instructions to replace, repair, clean, or adjust the parts or systems if necessary, are not considered to be items of scheduled maintenance which insure the proper functioning of the emission control system. Such inspections, and any recommended maintenance beyond that approved by the Administrator as reasonable and necessary under paragraphs (a), (b), and (c) of this section, may be included in the written instructions furnished to vehicle owners under paragraph (a) of this section: *Provided*, That such instructions clearly state, in a form approved by the Administrator, that the owner need not perform such inspections or recommended maintenance in order to maintain the emission warranty or manufacturer recall liability.

(e) If the vehicle has been granted an alternative useful life period under the provisions of § 86.087-21(f), the manufacturer may choose to include in such instructions an explanation of the distinction between the alternative useful life specified on the label, and the emissions defect and emissions performance warranty period. The explanation must clearly state that the useful life period specified on the label represents the average period of use up to retirement or rebuild for the engine family represented by the engine used in the vehicle. An explanation of how the actual useful lives of engines used in various applications are expected to differ from the average useful life may