

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

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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 be included. The explanation(s) shall be in clear, non-technical language that is understandable to the ultimate purchaser.

(f) If approved by the Administrator, the instructions provided to purchasers under paragraph (a) of this section shall indicate what adjustments or modifications, if any, are necessary to allow the vehicle to meet applicable emission standards at elevations above

4,000 feet, or at elevations of 4,000 feet or less.

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

[50 FR 10693, Mar. 15, 1985, as amended at 51 FR 24610, July 7, 1986]

§ 86.088-2 Definitions.

The definitions in § 86.085-2 remain effective. The definitions in this section apply beginning with the 1988 model year.

Composite NO_x standard, for a manufacturer which elects to average light-duty trucks subject to the NO_x standard of § 86.088-9(a)(iii)(A) together with those subject to the NO_x standard of § 86.088-9(a)(iii)(B) in the light-duty truck NO_x averaging program, means that standard calculated according to the following equation and rounded to the nearest one-tenth gram per mile:

$$\frac{[(\text{PROD}_A)(\text{STD}_A) + (\text{PROD}_B)(\text{STD}_B)]}{[(\text{PROD}_A) + (\text{PROD}_B)]} = \text{Manufacturer's Composite NO}_x \text{ Standard,}$$

Where:

PROD_A = The manufacturer's total light-duty truck production for those engine families subject to the standard of § 86.088-9(a)(iii)(A) and included in the average for a given model year.

STD_A = The NO_x standard of § 86.088-9(a)(iii)(A).

PROD_B = The manufacturer's total light-duty truck production for those engine families subject to the standard of § 86.088-9(a)(iii)(B) and included in the average for a given model year, and

STD_B = The NO_x standard of § 86.088-9(a)(iii)(B).

Critical emission-related components are those components which are designed primarily for emission control, or whose failure may result in a significant increase in emissions accompanied by no significant impairment (or perhaps even an improvement) in performance, driveability, and/or fuel economy as determined by the Administrator.

Critical emission-related maintenance means that maintenance to be per-

formed on critical emission-related components.

Emission-related maintenance means that maintenance which does substantially affect emissions or which is likely to affect the emissions deterioration of the vehicle or engine during normal in-use operation, even if the maintenance is performed at some time other than that which is recommended.

Family NO_x emission limit means the NO_x emission level to which an engine family is certified in the light-duty truck NO_x averaging program, expressed to one-tenth of a gram per mile accuracy.

Non-emission-related maintenance means that maintenance which does not substantially affect emissions and which does not have a lasting effect on the emissions deterioration of the vehicle or engine during normal in-use operation once the maintenance is performed.

Production-weighted NO_x average means the manufacturer's production-weighted average NO_x emission level,