

Environmental Protection Agency

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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 performed 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, for certification purposes, of all of its light-duty truck engine families included in the NO_x averaging program. It is calculated at the end of the model year by multiplying each family NO_x emission limit by its respective production, summing those 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

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separately from those produced for sale in any other area.

Production-weighted particulate 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 those 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.

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

[50 FR 10648, Mar. 15, 1985]

§ 86.090-2 Definitions.

The definitions in § 86.088-2 remain effective. The definitions in this section

apply beginning with the 1990 model year.

Averaging for heavy-duty engines means the exchange of NO_x and particulate emission credits among engine families within a given manufacturer's product line.

Averaging set means a subcategory of heavy-duty engines within which engine families can average and trade emission credits with one other.

Banking means the retention of heavy-duty engine NO_x and particulate emission credits, by the manufacturer generating the emission credits, for use in future model year certification programs as permitted by regulation.

Composite particulate standard, for a manufacturer which elects to average light-duty vehicles and light-duty trucks together in either the petroleum-fueled or methanol-fueled light-duty particulate averaging program, means that standards calculated using the following equation and rounded to the nearest one-hundredth (0.01) of a gram per mile:

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

Where:

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

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

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

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

Dedicated vehicle (or engine) means any motor vehicle (or motor vehicle engine) engineered and designed to be operated using a single fuel. Flexible fuel vehicles and multi-fuel vehicles are not dedicated vehicles.

Diesel means type of engine with operating characteristics significantly

similar to the theoretical Diesel combustion cycle. The non-use of a throttle during normal operation is indicative of a diesel engine.

Dual fuel vehicle (or engine) means any motor vehicle (or motor vehicle engine) engineered and designed to be operated on two different fuels, but not on a mixture of fuels.

Emission credits mean the amount of emission reductions or exceedances, by a heavy-duty engine family, below or above the emission standard, respectively. Emission credits below the standard are considered as "positive credits," while emission credits above the standard are considered as "negative credits." In addition, "projected credits" refer to emission credits based on the projected U.S. production volume of the engine family. "Reserved credits" are emission credits generated