

**§ 86.094-1**

**40 CFR Ch. I (7-1-04 Edition)**

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).)

(ii) [Reserved]

(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 in paragraph (h) of this section 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.

[58 FR 15795, Mar. 24, 1993]

**§ 86.094-1 General applicability.**

(a) The provisions of this subpart generally apply to 1994 and later model year new Otto-cycle and diesel-cycle light-duty vehicles, 1994 and later model year new Otto-cycle and diesel-cycle light-duty trucks, and 1994 and later model year new Otto-cycle and diesel-cycle heavy-duty engines. In cases where a provision applies only to a certain vehicle group based on its model year, vehicle class, motor fuel, engine type, or other distinguishing characteristics, the limited applicability is cited in the appropriate section or paragraph.

(b) *Optional applicability.* A manufacturer may request to certify any heavy-duty vehicle of 10,000 pounds Gross Vehicle Weight Rating or less in accordance with the light-duty truck provisions. Heavy-duty engine or vehicle provisions do not apply to such a vehicle.

(c)-(d) [Reserved]

(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, heavy-duty vehicles, and heavy-duty engines in its product line (including all vehicles and engines imported under the provisions of §§85.1505 and 85.1509 of this chapter are fewer than 10,000 units for the model year in which the manufacturer seeks certification. To certify its product line under these optional procedures, the small-volume

manufacturer must first obtain the Administrator's approval. The manufacturer must meet the eligibility criteria specified in §86.092-14(b) before the Administrator's approval will be granted. The small-volume manufacturer's certification procedures are described in §86.092-14.

(f) *Optional procedures for determining exhaust opacity.* (1) The provisions of subpart I of this part apply to tests which are performed by the Administrator, and optionally, by the manufacturer.

(2) Measurement procedures, other than that described in subpart I of this part, may be used by the manufacturer provided the manufacturer satisfies the requirements of §86.091-23(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 of this part. 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 for subpart I of this part.

(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 data obtained in accordance with the procedures described in subpart I of this part, EPA may require that all certificates of conformity not already issued be based on data obtained from procedures described in subpart I of this part.

[58 FR 4002, Jan. 12, 1993]

**§ 86.094-2 Definitions.**

The definitions of §86.093-2 remain effective. The definitions listed in this section are effective beginning with the 1994 model year.

*Adjusted Loaded Vehicle Weight* means the numerical average of vehicle curb weight and GVWR.

*Bi-directional control* means the capability of a diagnostic tool to send messages on the data bus that temporarily overrides the module's control over a sensor or actuator and gives control to the diagnostic tool operator. Bi-directional controls do not create permanent changes to engine or component calibrations.

*Data stream information* means information (i.e., messages and parameters) originated within the vehicle by a module or intelligent sensors (i.e., a sensor that contains and is controlled by its own module) and transmitted between a network of modules and/or intelligent sensors connected in parallel with either one or two communication wires. The information is broadcast over the communication wires for use by other modules (e.g., chassis, transmission, etc.) to conduct normal vehicle operation or for use by diagnostic tools. Data stream information does not include engine calibration related information.

*Defeat device* means an auxiliary emission control device (AECED) that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use, unless:

(1) Such conditions are substantially included in the Federal emission test procedure;

(2) The need for the AECED is justified in terms of protecting the vehicle against damage or accident; or

(3) The AECED does not go beyond the requirements of engine starting.

*Durability useful life* means the highest useful life mileage out of the set of all useful life mileages that apply to a given vehicle. The durability useful life determines the duration of service accumulation on a durability data vehicle. The determination of durability useful life shall reflect any alternative useful life mileages approved by the Administrator under § 86.094-21(f). The determination of durability useful life shall exclude any standard and related useful life mileage for which the manufacturer has obtained a waiver of emission data submission requirements under § 86.094-23(c).

*Element of design* means any control system (i.e., computer software, elec-

tronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.

*Engine warm-up cycle* means sufficient vehicle operation such that the coolant temperature has risen by at least 40 °F from engine starting and reaches a minimum temperature of 160 °F.

*Enhanced service and repair information* means information which is specific for an original equipment manufacturer's brand of tools and equipment.

*Equivalent test weight* means the weight, within an inertia weight class, which is used in the dynamometer testing of a vehicle and which is based on its loaded vehicle weight or adjusted loaded vehicle weight in accordance with the provisions of subparts A and B of this part.

*Gaseous fuel* means natural gas or liquefied petroleum gas.

*Generic service and repair information* means information which is not specific for an original equipment manufacturer's brand of tools and equipment.

*Heavy light-duty truck* means any light-duty truck rated greater than 6000 lbs GVWR.

*Indirect information* means any information that is not specifically contained in the service literature, but is contained in items such as tools or equipment provided to franchised dealers (or others).

*Intermediary* means any individual or entity, other than an original equipment manufacturer, which provides service or equipment to automotive technicians.

*Intermediate Temperature Cold Testing* means testing done pursuant to the driving cycle and testing conditions contained in 40 CFR part 86, subpart C, at temperatures between 25 °F (-4 °C) and 68 °F (20 °C).

*Light-duty truck 1* means any light light-duty truck up through 3750 lbs loaded vehicle weight.

*Light-duty truck 2* means any light light-duty truck greater than 3750 lbs loaded vehicle weight.

*Light-duty truck 3* means any heavy light-duty truck up through 5750 lbs adjusted loaded vehicle weight.

*Light-duty truck 4* means any heavy light-duty truck greater than 5750 lbs adjusted loaded vehicle weight.

*Light light-duty truck* means any light-duty truck rated up through 6000 lbs GVWR.

*Liquefied petroleum gas* means a liquid hydrocarbon fuel that is stored under pressure and is composed primarily of species that are gases at atmospheric conditions (temperature = 25 °C and pressure = 1 atm), excluding natural gas.

*Multi-fuel* means capable of operating on two or more different fuel types, either separately or simultaneously.

*Natural gas* means a fuel whose primary constituent is methane.

*Non-Methane Hydrocarbon Equivalent* means the sum of the carbon mass emissions of non-oxygenated non-methane hydrocarbons, methanol, formaldehyde, or other organic compounds that are separately measured, expressed as gasoline-fueled vehicle hydrocarbons. In the case of exhaust emissions, the hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1. In the case of diurnal and hot soak emissions, the hydrogen-to-carbon ratios of the equivalent hydrocarbons are 2.33:1 and 2.2:1, respectively.

*Petroleum fuel* means liquid fuels normally derived from crude oil, excluding liquefied petroleum gas. Gasoline and diesel fuel are petroleum fuels.

*Test weight basis* means the basis on which equivalent test weight is determined in accordance with § 86.129-94 of subpart B of this part.

*Useful life* means:

(a) For light-duty vehicles, and for model year 1994 and later light light-duty trucks not subject to the Tier 0 standards of paragraph (a) of § 86.094-9, intermediate useful life and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 10 years or 100,000 miles, whichever occurs first, except as otherwise noted in § 86.094-9.

(b) For light light-duty trucks subject to the Tier 0 standards of paragraph (a) of § 86.094-9, and for heavy

light-duty truck engine families, intermediate and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 11 years or 120,000 miles, whichever occurs first.

(c) For an Otto-cycle heavy-duty engine family, 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, 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-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever first occurs, except as provided in paragraph (d)(4) of this definition.

(4) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

(e) As an option for both light-duty trucks under certain conditions and heavy-duty engine families, an alternative useful life period assigned by the Administrator under the provisions of paragraph (f) of § 86.094-21.

(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, Otto-cycle 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.

[56 FR 25739, June 5, 1991, as amended at 57 FR 31897, July 17, 1992; 58 FR 4002, Jan. 12, 1993; 58 FR 9485, Feb. 19, 1993; 58 FR 15799, Mar. 24, 1993; 59 FR 48494, Sept. 21, 1994; 60 FR 34335, June 30, 1995; 60 FR 40496, Aug. 9, 1995]

#### § 86.094-3 Abbreviations.

(a) The abbreviations in § 86.090-3 remain effective. The abbreviations in this section apply beginning with the 1994 model year.