

**§ 86.1721-99**

**40 CFR Ch. I (7-1-00 Edition)**

with emission standards for formaldehyde.

(2) [Reserved]

(e) Manufacturers shall submit the standard phase-in compliance information required in § 86.1844-01 (d)(13) and (e)(4) with respect to the applicable standards of the subpart.

(f) For each engine family certified to TLEV, LEV, or ULEV standards, manufacturers shall submit with the certification application, an engineering evaluation demonstrating that a discontinuity in emissions of non-methane organic gases, carbon monoxide, oxides of nitrogen and formaldehyde measured on the Federal Test Procedure (subpart B of this part) does not occur in the temperature range of 20 to 86 deg F. For diesel vehicles, the engineering evaluation shall also include particulate emissions.

[64 FR 23923, May 4, 1999]

**§ 86.1721-99 Application for certification.**

The provisions of § 86.096-21 and subsequent model year provisions apply to this subpart, with the following exceptions and additions:

(a) The provisions of § 86.096-21(b)(2) and subsequent model year provisions do not apply to this subpart. The following shall instead apply to this subpart:

(1) For TLEVs, LEVs, and ULEVs not certified exclusively on gasoline, projected U.S. sales data and fuel economy data 19 months prior to January 1 of the calendar year with the same numerical designation as the model year for which the vehicles are certified, and projected U.S. sales data for all vehicles, regardless of operating fuel or vehicle emission category, sufficient to enable the Administrator to select a test fleet representative of the vehicles (or engines) for which certification is requested at the time of certification.

(2) [Reserved]

(b) For ZEVs and hybrid electric vehicles, the certification application shall include the following:

(1) Identification and description of the vehicle(s) covered by the application.

(2) Identification of the vehicle weight category to which the vehicle is certifying: LDV, LDT 0-3750 lbs LVW,

LDT 3751-5750 lbs LVW (state test weight range), and the curb weight and gross vehicle weight rating of the vehicle.

(3) Identification and description of the propulsion system for the vehicle.

(4) Identification and description of the climate control system used on the vehicle.

(5) Projected number of vehicles sold in the U.S., and projected U.S. sales.

(6) For electric and hybrid electric vehicles, identification of the energy usage in kilowatt-hours per mile from the point when electricity is introduced from the electrical outlet and the operating range in miles of the vehicle when tested in accordance with the All-Electric Range Test provisions in § 86.1770.

(7) If the vehicle is equipped with a fuel fired heater, a description of the control system logic of the fuel fired heater, including an evaluation of the conditions under which the fuel fired heater can be operated and an evaluation of the possible operational modes and conditions under which evaporative emissions can exist. Vehicles which utilize fuel fired heaters which can be operated at ambient temperatures above 40 °F or which cannot be demonstrated to have zero evaporative emissions under any and all possible operation modes and conditions shall not be certified as ZEVs.

(8) For ZEVs and HEVs which use fuel fired heaters, the manufacturer shall provide the exhaust emissions value per mile produced by the auxiliary fuel fired heater. This shall be accomplished by determining heater emissions in grams per minute when operating at a maximum heating capacity for a period of 20 minutes, and multiplying that number by 3.6 minutes per mile. At the time of certification, manufacturers shall submit their test plan which describes the procedure used to determine the mass emissions of the fuel fired heater.

(9) All information necessary for proper and safe operation of the vehicle, including information on the safe handling of the battery system, emergency procedures to follow in the event of battery leakage or other malfunctions that may affect the safety of the

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vehicle operator or laboratory personnel, method for determining battery state-of-charge, battery charging capacity and recharging procedures, and any other relevant information as determined by the Administrator.

(c) For all vehicles subject to the provisions of § 86.1717, with its application for certification a description of the malfunction and diagnostic system to be installed on the vehicles. (The vehicles shall not be certified unless the Administrator finds that the malfunction and diagnostic system complies with the requirements of § 86.1717.).

[62 FR 31242, June 6, 1997. Redesignated and amended at 63 FR 986, Jan. 7, 1998]

**§ 86.1722-01 [Reserved]**

**§ 86.1722-99 [Reserved]**

**§ 86.1723-01 [Reserved]**

**§ 86.1723-99 Required data.**

The provisions of § 86.096-23 and subsequent model year provisions apply to this subpart, with the following exceptions and additions:

(a) The provisions of § 86.096-23(c)(1) and subsequent model year provisions apply to this subpart, with the following addition:

(1) For all TLEVs, LEVs, and ULEVs certifying on a fuel other than conventional gasoline, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adjustment factor listed in § 86.1777(d)(2)(i) or established by the Administrator pursuant to Appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. For all TLEVs, LEVs, and ULEVs certifying on natural gas, manufacturers shall multiply the NMOG exhaust certification level for each emission-data vehicle by the appropriate reactivity adjustment factor listed in § 86.1777(d)(2)(i) or established by the Administrator pursuant to Appendix XVII of this part and add that value to the product of the methane exhaust certification level for each emission-data vehicle and the appropriate methane reactivity adjustment factor listed in § 86.1777(d)(2)(ii) or established by the Administrator pursu-

ant to Appendix XVII of this part to demonstrate compliance with the applicable NMOG emission standard. Manufacturers requesting to certify to existing standards utilizing an adjustment factor unique to its vehicle/fuel system must follow the data requirements described in Appendix XVII of this part. A separate formaldehyde exhaust certification level shall also be provided for demonstrating compliance with emission standards for formaldehyde.

(2) [Reserved]

(b) The provisions of § 86.096-23(l) introductory text and subsequent model year provisions do not apply to this subpart. The following shall instead apply to this subpart:

(1) Additionally, manufacturers certifying vehicles shall submit for each model year 2001 through 2004 light-duty vehicle and light light-duty truck engine family, the information listed in § 86.096-23(l)(1) and (2). If applicable, manufacturers shall also submit "Alternative or Equivalent Phase-in Schedules" before or during calendar year 2001 for light-duty vehicles and light light-duty trucks.

(2) [Reserved]

(c) In addition to the provisions of § 86.096-23 and subsequent model year provisions, the following requirements shall apply to this subpart:

(1) For each engine family certified to TLEV, LEV, or ULEV standards, manufacturers shall submit with the certification application, an engineering evaluation demonstrating that a discontinuity in emissions of non-methane organic gases, carbon monoxide, oxides of nitrogen and formaldehyde measured on the Federal Test Procedure (subpart B of this part) does not occur in the temperature range of 20 to 86 deg F. For diesel vehicles, the engineering evaluation shall also include particulate emissions.

(2) [Reserved]

[63 FR 986, Jan. 7, 1998]

**§ 86.1724-01 Emission data vehicle selection.**

(a) [Reserved]

(b) The provisions of § 86.1828-01 and subsequent model year provisions apply to this subpart with the following additions: