## §86.096-21

(20) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family:

(*i*) Canister working capacity, according to the procedures specified in §86.132-96(h)(1)(iv);

(ii) Canister bed volume; and

(*iii*) Fuel temperature profile for the running loss test, according to the procedures specified in §86.129-94(d).

(c)(11)(ii)(C)-(c)(11)(ii)(D)(5) [Reserved]. For guidance see §86.095-14.

(c)(11)(ii)(D)(6) [Reserved]

(c)(11)(ii)(D)(7)-(c)(15) [Reserved]. For guidance see §86.094-14.

[58 FR 16023, Mar. 24, 1993]

# §86.096-21 Application for certification.

Section 86.096-21 includes text that specifies requirements that differ from \$86.094-21. Where a paragraph in \$86.094-21 is identical and applicable to \$86.096-21, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.094-21."

(a)-(b)(8) [Reserved]. For guidance see § 86.094-21.

(b)(9) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family, a description of any unique procedures required to perform evaporative emission tests (including canister working capacity, canister bed volume, and fuel temperature profile for the running loss test) for all vehicles in that evaporative emission family, and a description of the method used to develop those unique procedures.

(10) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative emission family:

(i) Canister working capacity, according to the procedures specified in §86.132-96(h)(1)(iv);

(ii) Canister bed volume; and

(iii) Fuel temperature profile for the running loss test, according to the procedures specified in §86.129-94(d).

(c)-(j) [Reserved]. For guidance see \$86.094-21.

(k) For light-duty vehicles and lightduty trucks, a manufacturer with an engine family that cannot be appropriately tested on all Certification Short Test emission test procedures described in §86.1439 of this part may request an exemption, as described in §86.1427 (d), from the inappropriate test(s) for purposes of demonstrating compliance with the Certification Short Test as described in subpart O of this part.

(l) For light-duty vehicles and light-duty trucks, a manufacturer with an engine family that can be appropriately tested on none of the Certification Short Test emission test procedures described in §86.1439 of this part may request an alternative procedure as described in §86.1427 (d).

[58 FR 16023, Mar. 24, 1993, as amended at 58 FR 34536, June 28, 1993; 58 FR 58417, Nov. 1, 1993; 59 FR 33913, July 1, 1994; 60 FR 34335, June 30, 1995]

#### §86.096-23 Required data.

Section 86.096-23 includes text that specifies requirements that differ from those specified in §86.095-23. Where a paragraph in §86.095-23 is identical and applicable to §86.096-23, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]". For guidance see §86.095-23.

(a)-(l) [Reserved]. For guidance see  $\S 86.095-23$ .

(m) Additionally, except for small-volume manufacturers, manufacturers certifying vehicles shall submit for each model year 1996 through 1998 light-duty vehicle, light-duty truck, and gasoline-fueled heavy-duty vehicle evaporative family:

(1) In the application for certification the projected sales volume of evaporative families certifying to the respective evaporative test procedure and accompanying standards as set forth or otherwise referenced in §§ 86.090-8, 86.090-9, and 86.091-10 or those set forth or otherwise referenced in §§ 86.096-8, 86.096-9, and 86.096-10. Volume projected to be produced for U.S. sale may be used in lieu of projected U.S. sales.

(2) End-of-year reports for each evaporative family.

(i) These end-of-year reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (6405J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

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- (ii) These reports shall indicate the model year, evaporative family and the actual U.S. sales volume. The manufacturer may petition the Administrator to allow volume produced for U.S. sale to be used in lieu of U.S. sales. Such petition shall be submitted within 30 days of the end of the model year to the Manufacturers Operations Division. For the petition to be granted, the manufacturer must establish to the satisfaction of the Administrator that production volume is functionally equivalent to sales volume.
- (iii) The U.S. sales volume for end-ofyear reports shall be based on the location of the point of sale to a dealer, distributor, fleet operator, broker, or any other entity that comprises the point of first sale.
- (iv) Failure by a manufacturer to submit the end-of-year report within the specified time may result in certificate(s) for the evaporative family(ies) certified to the certification standards set forth in §\$86.090-8, 86.090-9, and 86.091-10 being voided ab initio plus any applicable civil penalties for failure to submit the required information to the Agency.
- (v) The information shall be organized in such a way as to allow the Administrator to determine compliance with the Evaporative Emission Testing implementation schedules of §§ 86.096–8, 86.096–9, and 86.096–10.

 $[58\ FR\ 16023,\ Mar.\ 24,\ 1993,\ as\ amended\ at\ 58\ FR\ 66297,\ Dec.\ 20,\ 1993]$ 

### §86.096-24 Test vehicles and engines.

- (a) *General*. This paragraph applies to the grouping of vehicles or engines into families.
- (1) The vehicles or engines covered by an application for certification will be divided into groupings of engines which are expected to have similar emission characteristics throughout their useful life. Each group of engines with similar emission characteristics is defined as a separate engine family.
- (2) To be classed in the same engine family, engines must be identical in all the respects listed in paragraphs (a)(2) (i) through (x) of this section.
- (i) The cylinder bore center-to-center dimensions.
  - (ii)-(iii) [Reserved]

- (iv) The cylinder block configuration (air-cooled or water-cooled: L-6, 90 deg., V-8, and so forth).
- (v) The location of the intake and exhaust valves (or ports).
  - (vi) The method of air aspiration.
  - (vii) The combustion cycle.
- (viii) Catalytic converter characteristics.
- (ix) Thermal reactor characteristics.
- (x) Type of air inlet cooler (for example, intercoolers and after-coolers) for diesel heavy-duty engines.
- (3)(i) Engines identical in all the respects listed in paragraph (a)(2) of this section may be further divided into different engine families if the Administrator determines that they may be expected to have different emission characteristics. This determination will be based upon a consideration of the features of each engine listed in paragraphs (a)(3)(i) (A) through (G) of this section.
  - (A) The bore and stroke.
- (B) The surface-to-volume ratio of the nominally dimensioned cylinder at the top dead center positions.
- (C) The intake manifold induction port sizes and configuration.
- (D) The exhaust manifold port size and configuration.
- (E) The intake and exhaust valve sizes.
  - (F) The fuel system.
- (G) The camshaft timing and ignition or injection timing characteristics.
- (ii) Light-duty trucks and heavyduty engines produced in different model years and distinguishable in the respects listed in paragraph (a)(2) of this section are treated as belonging to a single engine family if the Administrator requires it, after determining that the engines may be expected to have similar emission deterioration characteristics.
- (4) Where engines are of a type which cannot be divided into engine families based upon the criteria listed in paragraphs (a)(2) and (3) of this section, the Administrator establishes families for those engines based upon those features most related to their emission characteristics. Engines that are eligible to be included in the same engine family based on the criteria in paragraphs (a)(2) and (a)(3)(i) of this section may be further divided into different