

Environmental Protection Agency

§ 86.098-23

(10) For each light-duty vehicle, light-duty truck, or heavy-duty vehicle evaporative/refueling 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) and (l) [Reserved]. For guidance see § 86.096-21.

[59 FR 16290, Apr. 6, 1994, as amended at 60 FR 34335, June 30, 1995]

§ 86.098-22 Approval of application for certification; test fleet selections; determinations of parameters subject to adjustment for certification and Selective Enforcement Audit, adequacy of limits, and physically adjustable ranges.

Section 86.098-22 includes text that specifies requirements that differ from § 86.094-22. Where a paragraph in § 86.094-22 is identical and applicable to § 86.098-22, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.094-22.”

(a)-(c) [Reserved]. For guidance see § 86.094-22.

(d) Approval of test procedures. (1) The Administrator does not approve the test procedures for establishing the evaporative and/or refueling emission deterioration factors for light-duty vehicles and light-duty trucks. The manufacturer shall submit the procedures as required in § 86.098-21(b)(4)(i) prior to the Administrator's selection of the test fleet under § 86.098-24(b) (1), and if such procedures will involve testing of durability data vehicles selected by the Administrator or elected by the manufacturer under § 86.098-24(c)(1), prior to initiation of such testing.

(d)(2)-(g) [Reserved]. For guidance see § 86.094-22.

[59 FR 16290, Apr. 6, 1994]

§ 86.098-23 Required data.

Section 86.098-23 includes text that specifies requirements that differ from § 86.095-23. Where a paragraph in § 86.095-23 is identical and applicable to § 86.098-23, this may be indicated by

specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.095-23.”

(a) The manufacturer shall perform the tests required by the applicable test procedures and submit to the Administrator the information described in paragraphs (b) through (m) of this section, provided, however, that if requested by the manufacturer, the Administrator may waive any requirement of this section for testing of a vehicle (or engine) for which emission data are available or will be made available under the provisions of § 86.091-29.

(b) *Durability data.* (1)(i) The manufacturer shall submit exhaust emission durability data on such light-duty vehicles tested in accordance with applicable test procedures and in such numbers as specified, which will show the performance of the systems installed on or incorporated in the vehicle for extended mileage, as well as a record of all pertinent maintenance performed on the test vehicles.

(ii) The manufacturer shall submit exhaust emission deterioration factors for light-duty trucks and HDEs and all test data that are derived from the testing described under § 86.094-21(b)(5)(i)(A), as well as a record of all pertinent maintenance. Such testing shall be designed and conducted in accordance with good engineering practice to assure that the engines covered by a certificate issued under § 86.098-30 will meet each emission standard (or family emission limit, as appropriate) in § 86.094-9, § 86.098-10, § 86.098-11 or superseding emissions standards sections as appropriate, in actual use for the useful life applicable to that standard.

(b)(2) For light-duty vehicles and light-duty trucks, the manufacturer shall submit evaporative emission and/or refueling emission deterioration factors for each evaporative/refueling emission family-emission control system combination and all test data that are derived from testing described under § 86.098-21(b)(4)(i) designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued

under § 86.098-30 will meet the evaporative and/or refueling emission standards in § 86.098-8 or § 86.098-9, as appropriate, for the useful life of the vehicle.

(3) For heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit evaporative emission deterioration factors for each evaporative emission family-evaporative emission control system combination identified in accordance with § 86.094-21(b)(4)(ii). Furthermore, a statement that the test procedure(s) used to derive the deterioration factors includes, but need not be limited to, a consideration of the ambient effects of ozone and temperature fluctuations, and the service accumulation effects of vibration, time, and vapor saturation and purge cycling. The deterioration factor test procedure shall be designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under § 86.098-30 will meet the evaporative emission standards in §§ 86.096-10 and 86.098-11 or superseding emissions standards sections as applicable in actual use for the useful life of the engine. Furthermore, a statement that a description of the test procedure, as well as all data, analyses, and evaluations, is available to the Administrator upon request.

(4)(i) For heavy-duty vehicles with a Gross Vehicle Weight Rating of up to 26,000 lbs and equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit a written statement to the Administrator certifying that the manufacturer's vehicles meet the standards of § 86.098-10 or § 86.098-11 or superseding emissions standards sections as applicable as determined by the provisions of § 86.098-28. Furthermore, the manufacturer shall submit a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the requested statement is based, are available to the Administrator upon request.

(ii) For heavy-duty vehicles with a Gross Vehicle Weight Rating of greater than 26,000 lbs and equipped with gasoline-fueled or methanol-fueled engines, the manufacturer shall submit a written statement to the Administrator

certifying that the manufacturer's evaporative emission control systems are designed, using good engineering practice, to meet the standards of § 86.096-10 or § 86.098-11 or superseding emissions standards sections as applicable as determined by the provisions of § 86.098-28. Furthermore, the manufacturer shall submit a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the requested statement is based, are available to the Administrator upon request.

(b)(4)(iii) For petroleum-fueled diesel-cycle vehicles certifying under the waiver provisions of § 86.098-28, the certifications and representations specified in § 86.098-28.

(c)(1) [Reserved]. For guidance see § 86.095-23.

(c)(2) Certification engines. (i) The manufacturer shall submit emission data on such engines tested in accordance with applicable emission test procedures of this subpart and in such numbers as specified. These data shall include zero-hour data, if generated, and emission data generated for certification as required under § 86.098-26(c)(4). These data shall also include, where there is a combined standard (e.g., NMHC + NO_x), emissions data for the individual pollutants as well as for the pollutants when combined. In lieu of providing emission data on idle CO emissions or particulate emissions from methanol-fueled diesel-cycle certification engines, or on CO emissions from petroleum-fueled or methanol-fueled diesel certification engines the Administrator may, on request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other information) that the engine will conform with the applicable emission standards of § 86.094-11 or superseding emissions standards sections as applicable. In lieu of providing emission data on smoke emissions from methanol-fueled or petroleum-fueled diesel certification engines, the Administrator may, on the request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other information) that the

engine will conform with the applicable emissions standards of § 86.098-11 or superseding emissions standards sections as applicable, except for engines with a particulate matter certification level exceeding 0.25 grams per brake horsepower-hour. In lieu of providing emissions data on smoke emissions from petroleum-fueled or methanol-fueled diesel engines when conducting Selective Enforcement Audit testing under 40 CFR part 86, subpart K, the Administrator may, on separate request of the manufacturer, allow the manufacturer to demonstrate (on the basis of previous emission tests, development tests, or other information) that the engine will conform with the applicable smoke emissions standards of § 86.098-11 or superseding emissions standards sections as applicable, except for engines with a particulate matter certification level exceeding 0.25 grams per brake horsepower-hour.

(ii) For heavy-duty diesel engines, a manufacturer may submit hot-start data only, in accordance with subpart N of this part, when making application for certification. However, for confirmatory, Selective Enforcement Audit, and recall testing by the Agency, both the cold-start and hot-start test data, as specified in subpart N of this part, will be included in the official results.

(d) The manufacturer shall submit a statement that the vehicles (or engines) for which certification is requested conform to the requirements in § 86.090-5(b), and that the descriptions of tests performed to ascertain compliance with the general standards in § 86.090-5(b), and that the data derived from such tests, are available to the Administrator upon request.

(e)(1) The manufacturer shall submit a statement that the test vehicles (or test engines) for which data are submitted to demonstrate compliance with the applicable standards (or family emission limits, as appropriate) of this subpart are in all material respects as described in the manufacturer's application for certification, that they have been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification, and that on the basis of such

tests the vehicles (or engines) conform to the requirements of this part. If such statements cannot be made with respect to any vehicle (or engine) tested, the vehicle (or engine) shall be identified, and all pertinent data relating thereto shall be supplied to the Administrator. If, on the basis of the data supplied and any additional data as required by the Administrator, the Administrator determines that the test vehicles (or test engine) were not as described in the application for certification or were not tested in accordance with the applicable test procedures utilizing the fuels and equipment as described in the application for certification, the Administrator may make the determination that the vehicle (or engine) does not meet the applicable standards (or family emission limits, as appropriate). The provisions of § 86.098-30(b) shall then be followed.

(2) For evaporative and refueling emission durability, or light-duty truck or HDE exhaust emission durability, the manufacturer shall submit a statement of compliance with paragraph (b)(1)(ii), (b)(2), (b)(3) or (b)(4) of this section, as applicable.

(3) For certification of vehicles with non-integrated refueling systems, a statement that the drivedown used to purge the refueling canister was the same as described in the manufacturers' application for certification. Furthermore, a description of the procedures used to determine the number of equivalent UDDS miles required to purge the refueling canisters, as determined by the provisions of § 86.098-21(b)(5)(v) and subpart B of this part. Furthermore, a written statement to the Administrator that all data, analyses, test procedures, evaluations and other documents, on which the above statement is based, are available to the Administrator upon request.

(f)-(g) [Reserved]. For guidance see § 86.095-23.

(h) Additionally, manufacturers participating in any of the emissions ABT programs under § 86.098-15 or superseding ABT sections for HDEs shall submit for each participating family the items listed in paragraphs (h) (1) through (3) of this section.

(1) *Application for certification.* (i) The application for certification will include a statement that the engines for which certification is requested will not, to the best of the manufacturer's belief, when included in any of the ABT programs, cause the applicable emissions standard(s) to be exceeded.

(ii) The application for certification will also include identification of the section of this subpart under which the family is participating in ABT (i.e., § 86.098-15 or superseding ABT sections), the type (NO_x, NO_x+NMHC, or particulate) and the projected number of credits generated/needed for this family, the applicable averaging set, the projected U.S. (49-state or 50 state, as applicable) production volumes, by quarter, NCPs in use on a similar family and the values required to calculate credits as given in the applicable ABT section. Manufacturers shall also submit how and where credit surpluses are to be dispersed and how and through what means credit deficits are to be met, as explained in the applicable ABT section. The application must project that each engine family will be in compliance with the applicable emission standards based on the engine mass emissions and credits from averaging, trading and banking.

(2) [Reserved]

(3) *End-of-year report.* The manufacturer shall submit end-of-year reports for each engine family participating in any of the ABT programs, as described in paragraphs (h)(3)(i) through (iv) of this section.

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

(ii) These reports shall indicate the engine family, the averaging set, the actual U.S. (49-state or 50-state, as applicable) production volume, the values required to calculate credits as given in the applicable ABT section, the resulting type and number of credits generated/required, and the NCPs in use on a similar NCP family. Manufacturers shall also submit how and where credit surpluses were dispersed (or are to be banked) and how and through what

means credit deficits were met. Copies of contracts related to credit trading must also be included or supplied by the broker if applicable. The report shall also include a calculation of credit balances to show that net mass emissions balances are within those allowed by the emission standards (equal to or greater than a zero credit balance). Any credit discount factor described in the applicable ABT section must be included as required.

(iii) The production counts for end-of-year reports shall be based on the location of the first point of retail sale (e.g., customer, dealer, secondary manufacturer) by the manufacturer.

(iv) Errors discovered by EPA or the manufacturer in the end-of-year report, including changes in the production counts, may be corrected up to 180 days subsequent to submission of the end-of-year report. Errors discovered by EPA after 180 days shall be corrected if credits are reduced. Errors in the manufacturer's favor will not be corrected if discovered after the 180 day correction period allowed.

(i) Failure by a manufacturer participating in the ABT programs to submit any quarterly or end-of-year report (as applicable) in the specified time for all vehicles and engines that are part of an averaging set is a violation of section 203(a)(1) of the Clean Air Act (42 U.S.C. 7522(a)(1)) for each such vehicle and engine.

(j) Failure by a manufacturer generating credits for deposit only in the HDE banking programs to submit their end-of-year reports in the applicable specified time period (i.e., 90 days after the end of the model year) shall result in the credits not being available for use until such reports are received and reviewed by EPA. Use of projected credits pending EPA review will not be permitted in these circumstances.

(k) Engine families certified using NCPs are not required to meet the requirements outlined in paragraphs (f) through (j) of this section.

(l) [Reserved]. For guidance see § 86.095-23.

(m) Additionally, except for small-volume manufacturers, manufacturers certifying vehicles shall submit for each model year 1998 light-duty vehicle, light-duty truck, and gasoline-

methanol-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, 86.091–10 and 86.094–11 or as set forth or otherwise referenced in §§ 86.096–8, 86.096–9, 86.096–10 and 86.098–11 or as set forth or otherwise referenced in superseding emissions standards sections. 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: For heavy-duty engines—Director, Engine Programs and Compliance Divisions (6403J), For vehicles—Director, Vehicle Compliance and Programs Division (6405J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

(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-of-year 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) 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, 86.096–10 and 86.098–11.

[58 FR 16025, Mar. 24, 1993, as amended at 58 FR 34536, June 28, 1993; 59 FR 16290, Apr. 6, 1994; 62 FR 54717, Oct. 21, 1997]

§ 86.098–24 Test vehicles and engines.

Section 86.098–24 includes text that specifies requirements that differ from § 86.096–24. Where a paragraph in § 86.096–24 is identical and applicable to § 86.098–24, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.096–24.”

(a) introductory text through (a)(4) [Reserved]. For guidance see § 86.096–24.

(a)(5) The gasoline-fueled and methanol-fueled light-duty vehicles and light-duty trucks covered by an application for certification will be divided into groupings which are expected to have similar evaporative and/or refueling emission characteristics (as applicable) throughout their useful life. Each group of vehicles with similar evaporative and/or refueling emission characteristics shall be defined as a separate evaporative/refueling emission family.

(a)(6) For gasoline-fueled or methanol-fueled light-duty vehicles and light-duty trucks to be classed in the same evaporative/refueling emission family, vehicles must be similar with respect to the items listed in paragraphs (a)(6) (i) through (xii) of this section.

(i) Type of vapor storage device (e.g., canister, air cleaner, crankcase).

(ii) Basic canister design.

(A) Working capacity—grams adsorption within a 10g. range.

(B) System configuration—number of canisters and method of connection (i.e., series, parallel).

(C) Canister geometry, construction and materials.

(iii) Fuel system.

(iv) Type of refueling emission control system—non-integrated or integrated with the evaporative control system. Further, if the system is non-integrated, whether or not any other evaporative emissions, e.g. diurnal or hot soak emissions, are captured in the same storage device as the refueling emissions.