

Environmental Protection Agency

§ 86.091-23

§ 86.091-10, represent no more than 5 percent of model year sales of the manufacturer of all Otto-cycle heavy-duty engines for use in vehicles with Gross Vehicle Weight Ratings of up to 14,000 pounds.

(c) Complete copies of the application and of any amendments thereto, and all notifications under § 86.079-32, § 86.079-33, and § 86.082-34 shall be submitted in such multiple copies as the Administrator may require.

(d) Incomplete light-duty trucks shall have a maximum completed curb weight and maximum completed frontal area specified by the manufacturer.

(e) For vehicles equipped with gasoline-fueled or methanol-fueled heavy-duty engines, the manufacturer shall specify a maximum nominal fuel tank capacity for each evaporative emission family-evaporative emission control system combination.

(f) Light-duty truck and heavy-duty engine manufacturers who believe that the useful life periods of § 86.090-2 are significantly unrepresentative for one or more engine families (either too long or too short), may petition the Administrator to provide an alternative useful-life period. This petition must include the full rationale behind the request together with any supporting data and other evidence. Based on this or other information the Administrator may assign an alternative useful-life period. Any petition should be submitted in a timely manner, to allow adequate time for a thorough evaluation.

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

[50 FR 10655, Mar. 15, 1985, as amended at 52 FR 47867, Dec. 16, 1987; 54 FR 14469, Apr. 11, 1989; 55 FR 30625, July 26, 1990]

§ 86.091-23 Required data.

(a) The manufacturer shall perform the tests required by the applicable test procedures, and submit to the Administrator the following information: *Provided, however,* That if requested by the manufacturer, the Administrator may waive any requirement of this section for testing of vehicle (or engine) for which emission data are available or will be made available under the provisions of § 86.091-29.

(b)(1)(i) 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) Exhaust emission deterioration factors for light-duty trucks and heavy-duty engines, and all test data that are derived from the testing described under § 86.091-21(b)(4)(iii)(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 § 86.091-30 will meet the emission standards (or family emission limits, as appropriate) in § 86.091-9, § 86.091-10, or § 86.091-11 as appropriate, in actual use for the useful life of the engine.

(2) For light-duty vehicles and light-duty trucks, evaporative emission deterioration factors for each evaporative emission family-evaporative emission control system combination and all test data that are derived from testing described under § 86.091-21(b)(4)(i) designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under § 86.091-30 will meet the evaporative emission standards in § 86.091-8 or § 86.091-9, as appropriate, for the useful life of the vehicle.

(3) For heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines, evaporative emission deterioration factors for each evaporative emission family-evaporative emission control system combination identified in accordance with § 86.091-21(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 § 86.091-30 will meet the evaporative emission standards in § 86.091-10 and § 86.091-11 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, a written statement to the Administrator certifying that the manufacturer's vehicles meet the standards of § 86.091-10 or § 86.091-11 (as applicable) as determined by the provisions of § 86.091-28. 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.

(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, 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 § 86.091-10 or § 86.091-11 (as applicable) as determined by the provisions of § 86.091-28. 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.

(c) *Emission data.* (1) Emission data, including in the case of methanol fuel, methanol, formaldehyde and total hydrocarbon equivalent on such vehicles tested in accordance with applicable test procedures and in such numbers as specified. These data shall include zero-mile data, if generated and emission data generated for certification as required under § 86.090-26(a)(3)(i) or § 86.090-26(a)(3)(ii). In lieu of providing emission data on idle CO emissions, smoke emissions or particulate emissions from methanol-fueled diesel certification vehicles 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 § 86.090-8 or § 86.090-9.

(2) Certification engines. (i) 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 § 86.090-26(c)(4). In lieu of providing emission data on idle CO emissions or particulate emissions from methanol-fueled diesel 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 § 86.091-11.

(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 conformity SEA 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) A statement that the vehicles (or engines) for which certification is requested conform to the requirements in § 86.084-5(b), and that the descriptions of tests performed to ascertain compliance with the general standards in § 86.084-5(b), and the data derived from such tests, are available to the Administrator upon request.

(e)(1) A statement that the test vehicles (or test engines) with respect to 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, 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) was not as described in the application for certification or was 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 § 86.091-30(b) shall then be followed.

(2) For evaporative emission durability, or light-duty truck or heavy-duty engine exhaust emission durability, a statement of compliance with paragraph (b)(1)(ii), (b)(2), or (b)(3) of this section, as applicable.

(f) Additionally, manufacturers participating in the particulate averaging program for diesel light-duty vehicles and diesel light-duty trucks shall submit:

(1) In the application for certification, a statement that the vehicles for which certification is requested will not, to the best of the manufacturer's belief, when included in the manufacturer's production-weighted average emission level, cause the applicable particulate standard(s) to be exceeded.

(2) No longer than 90 days after the end of a given model year of production of engine families included in one of the diesel particulate averaging programs, the number of vehicles produced in each engine family at each certified particulate FEL, along with the resulting production-weighted average particulate emission level.

(g) Additionally, manufacturers participating in the NO_x averaging program for light-duty trucks shall submit:

(1) In the application for certification, a statement that the vehicles for which certification is required will not, to the best of the manufacturer's

belief, when included in the manufacturer's production-weighted average emission level, cause the applicable NO_x standard(s) to be exceeded.

(2) No longer than 90 days after the end of a given model year of production of engine families included in the NO_x averaging program, the number of vehicles produced in each engine family at each certified NO_x emission level.

(h) Additionally, manufacturers participating in any of the NO_x and/or particulate averaging, trading, or banking programs for heavy-duty engines shall submit for each participating family:

(1) In the application for certification:

(i) 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 averaging, trading, or banking programs cause the applicable NO_x or particulate standard(s) to be exceeded.

(ii) The type (NO_x or particulate) and the projected number of credits generated/needed for this family, the applicable averaging set, the projected U.S. (49-state) production volumes, by quarter, NCPs in use on a similar family and the values required to calculate credits as given in § 86.091-15. 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 § 86.091-15. The application must project that each engine family will be in compliance with the applicable NO_x and/or particulate emission standards based on the engine mass emissions, and credits from averaging, trading and banking.

(3) End-of-year reports for each engine family participating in any of the averaging, trading, or banking programs.

(i) These reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (EN-340F), 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) production volume, the values required to calculate

credits as given in § 86.091-15, the resulting type (NO_x or particulate) 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). The credit discount factor described in 86.091-15 must be included as required.

(iii) The 49-state 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 errors in credit calculation, may be corrected up to 90 days subsequent to submission of the end-of-year report. Errors discovered by EPA after 90 days shall be corrected if credits are reduced. Errors in the manufacturer's favor will not be corrected if discovered after the 90 day correction period allowed.

(i) Failure by a manufacturer participating in the averaging, trading, or banking 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 for each such vehicle and engine.

(j) Failure by a manufacturer generating credits for deposit only in either the HDE NO_x or particulate 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 above.

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

[50 FR 10659, Mar. 15, 1985, as amended at 50 FR 29384, July 19, 1985; 54 FR 14473, Apr. 11, 1989; 55 FR 30625, July 26, 1990; 56 FR 64711, Dec. 12, 1991]

§ 86.091-28 Compliance with emission standards.

(a)(1) Paragraph (a) of this section applies to light-duty vehicles.

(2) The applicable exhaust and fuel evaporative emissions standards (and family particulate emission limits, as appropriate) of this subpart apply to the emissions of vehicles for their useful life.

(3) Since it is expected that emission control efficiency will change with mileage accumulation on the vehicle, the emission level of a vehicle which has accumulated 50,000 miles will be used as the basis for determining compliance with the standards (or family particulate emission limit, as appropriate).

(4) The procedure for determining compliance of a new motor vehicle with exhaust emission standards (or family particulate emission limit, as appropriate) is as follows, except where specified by paragraph (a)(7) of this section for the Alternative Durability Program:

(i) Separate emission deterioration factors shall be determined from the exhaust emission results of the durability-data vehicle(s) for each engine-system combination. A separate factor shall be established, as required for compliance with applicable emission standards for exhaust HC, exhaust THCE, exhaust NMHC, exhaust CO, exhaust NO_x and exhaust particulate for each engine-system combination. A separate evaporative emission deterioration factor, as required for compliance with applicable emission standards, shall be determined for each evaporative emission family-evaporative emission control system combination from the testing conducted by the manufacturer.

(A) The applicable results to be used unless excluded by paragraph