

## Environmental Protection Agency

## § 86.091-21

is readily available commercially and would be used in customer service.

[55 FR 30622, July 26, 1990, as amended at 55 FR 46628, Nov. 5, 1990]

### § 86.091-21 Application for certification.

(a) A separate application for a certificate of conformity shall be made for each set of standards (or family emission limits, as appropriate) and each class of new motor vehicles or new motor vehicle engines. Such application shall be made to the Administrator by the manufacturer and shall be updated and corrected by amendment.

(b) The application shall be in writing, signed by an authorized representative of the manufacturer, and shall include the following:

(1)(i) Identification and description of the vehicles (or engines) covered by the application and a description of their engine (vehicles only), emission control system and fuel system components. This shall include a detailed description of each auxiliary emission control device (AECD) to be installed in or on any certification test vehicle (or certification test engine).

(ii)(A) The manufacturer shall provide to the Administrator in the application for certification:

(1) A list of those parameters which are physically capable of being adjusted (including those adjustable parameters for which access is difficult) and that, if adjusted to settings other than the manufacturer's recommended setting, may affect emissions;

(2) A specification of the manufacturer's intended physically adjustable range of each such parameter, and the production tolerances of the limits or stops used to establish the physically adjustable range;

(3) A description of the limits or stops used to establish the manufacturer's intended physically adjustable range of each adjustable parameter, or any other means used to inhibit adjustment;

(4) The nominal or recommended setting, and the associated production tolerances, for each such parameter.

(B) The manufacturer may provide, in the application for certification, information relating to why certain pa-

rameters are not expected to be adjusted in actual use and to why the physical limits or stops used to establish the physically adjustable range of each parameter, or any other means used to inhibit adjustment, are effective in preventing adjustment of parameters on in-use vehicles to settings outside the manufacturer's intended physically adjustable ranges. This may include results of any tests to determine the difficulty of gaining access to an adjustment or exceeding a limit as intended or recommended by the manufacturer.

(C) The Administrator may require to be provided detailed drawings and descriptions of the various emission related components, and/or hardware samples of such components, for the purpose of making his determination of which vehicle or engine parameter will be subject to adjustment for new certification and Selective Enforcement Audit testing and of the physically adjustable range for each such vehicle or engine parameter.

(2) Projected U.S. sales data sufficient to enable the Administrator to select a test fleet representative of the vehicles (or engines) for which certification is requested. The sales data shall also include the altitude of intended sale for light-duty trucks.

(3) A description of the test equipment and fuel proposed to be used.

(4)(i) For light-duty vehicles and light-duty trucks, a description of the test procedures to be used to establish the evaporative emission deterioration factors required to be determined and supplied in § 86.091-23(b)(2).

(ii) For heavy-duty vehicles equipped with gasoline-fueled or methanol-fueled engines, the Administrator does not assume that each evaporative emission family-evaporative emission control system combination will deteriorate in a unique manner during the useful life of the vehicle. The manufacturer shall therefore identify those evaporative emission deterioration factors which shall be applied to the various evaporative emission family-evaporative emission control system combinations which are expected to exhibit similar deterioration characteristics during the useful life of the vehicle.

(5)(i)(A) A description of the test procedures to be used to establish the durability data or the exhaust emission deterioration factors required to be determined and supplied in § 86.091-23(b)(1).

(B) A statement of the useful life of each light-duty truck engine family or heavy-duty engine family.

(C) For engine families provided an alternative useful-life period under paragraph (f) of this section, a statement of that alternative period and a brief synopsis of the justification.

(ii) For heavy-duty diesel engine families, a statement of the primary intended service class (light, medium, or heavy) and an explanation as to why that service class was selected. Each diesel engine family shall be certified under one primary intended service class only. After reviewing the guidance in § 86.090-2, the class shall be determined on the basis of which class best represents the majority of the sales of that engine family.

(iii)(A) For each light-duty truck engine family and each heavy-duty engine family, a statement of recommended maintenance and procedures necessary to assure that the vehicles (or engines) covered by a certificate of conformity in operation conform to the regulations, and a description of the program for training of personnel for such maintenance, and the equipment required.

(B) A description of vehicle adjustments or modifications necessary, if any, to assure that light-duty vehicles and light-duty trucks covered by a certificate of conformity conform to the regulations while being operated at any altitude locations, and a statement of the altitude at which the adjustments or modifications apply.

(iv) At the option of the manufacturer, the proposed composition of the emission-data test fleet or (where applicable) the durability-data test fleet.

(6)(i)(A) If the manufacturer elects to participate in the particulate averaging program for diesel light-duty vehicles and/or diesel light-duty trucks, the application must list the particulate FEL and the projected U.S. (49-state) production volume, by quarter, of the family for the model year.

(B) The manufacturer shall choose the level of the family particulate emission limits, accurate to one-hundredth of a gram per mile.

(C) The manufacturer may at any time during production elect to change the level of any family particulate emission limit(s) by submitting the new limit(s) to the Administrator and by demonstrating compliance with the limit(s) as described in § 86.090-2 and § 86.091-28(b)(5)(i).

(ii)(A) If the manufacturer elects to participate in the NO<sub>x</sub> averaging program for light-duty trucks, the application must list the NO<sub>x</sub> FEL and the projected U.S. (49-state) production volume, by quarter, of the family for the model year.

(B) The manufacturer shall choose the level of the family NO<sub>x</sub> emission limits, accurate to one-tenth of a gram per mile.

(C) The manufacturer may at any time during production elect to change the level of any family NO<sub>x</sub> emission limit(s) by submitting the new limits to the Administrator and by demonstrating compliance with the limit(s) as described in § 86.088-2 and § 86.091-28(b)(5)(ii).

(iii) If the manufacturer elects to participate in any of the particulate and/or the NO<sub>x</sub> averaging, trading, or banking programs for heavy-duty engines, the application must list the information required in § 86.091-15 and § 86.091-23.

(7)(i) For Otto-cycle heavy-duty engines, the application must state whether the engine family is being certified for use in all vehicles regardless of their Gross Vehicle Weight Rating (see § 86.091-10 (a)(1)(i) and (a)(3)(i)), or, only for use in vehicles with a Gross Vehicle Weight Rating greater than 14,000 pounds.

(ii) If the engine family is being certified for use in all vehicles and, is being certified to the emission standards applicable to Otto-cycle engines for use only in vehicles with a Gross Vehicle Weight Rating over 14,000 pounds under the provisions of paragraph (a)(3) of § 86.091-10, then the application must also attest that the engine family, together with all other engine families being certified under the provisions of paragraph (a)(3) of

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§ 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