

control system (i.e., feedback or non-feedback), secondary air system (i.e., equipped or not equipped) and EGR (i.e., equipped or not equipped).

(d) *Conveniently available* service facility and spare parts for small-volume manufacturers means that the vehicle manufacturer has a qualified service facility at or near the authorized point of sale or delivery of its vehicles and maintains an inventory of all emission-related spare parts or has made arrangements for the part manufacturers to supply the parts by expedited shipment (e.g., utilizing overnight express delivery service, UPS, etc.).

[55 FR 7187, Feb. 28, 1990]

§ 86.092-14 Small-volume manufacturers certification procedures.

(a) The small-volume manufacturers certification procedures described in paragraphs (b) and (c) of this section are optional. Small-volume manufacturers may use these optional procedures to demonstrate compliance with the general standards and specific emission requirements contained in this subpart.

(b)(1) The optional small-volume manufacturers certification procedures apply to light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines produced by manufacturers with U.S. sales, including all vehicles and engines imported under the provisions of 40 CFR 85.1505 and 40 CFR 85.1509 (for the model year in which certification is sought) of fewer than 10,000 units (Light-Duty Vehicles, Light-Duty Trucks, Heavy-Duty Vehicles and Heavy-Duty Engines combined).

(2) For the purpose of determining the applicability of paragraph (b)(1) of this section, the sales the Administrator shall use shall be the aggregate of the projected or actual sales of those vehicles and/or engines in any of the groupings identified below in this subparagraph.

(i) Vehicles and/or engines produced by two or more firms, one of which is 10 percent or greater part owned by another;

(ii) Vehicles and/or engines produced by any two or more firms if a third party has equity ownership of 10 percent or more in each of the firms;

(iii) Vehicles and/or engines produced by two or more firms having a common corporate officer(s) who is(are) responsible for the overall direction of the companies;

(iv) Vehicles and/or engines imported or distributed by all firms where the vehicles and/or engines are manufactured by the same entity and the importer or distributor is an authorized agent of the entity.

(3) If the aggregated sales, as determined in paragraph (b)(2) of this section are less than 301 units, the manufacturers in the aggregated relationship may certify under the provisions in this section that apply to manufacturers with sales of less than 301 units.

(4) If the aggregated sales, as determined in paragraph (b)(2) of this section are greater than 300 but fewer than 10,000 units, the manufacturers in the aggregated relationship may certify under the provisions in this section that apply to manufacturers with sales from and including 301 through 9,999 motor vehicles and motor vehicles engines per year.

(5) If the aggregated sales, as determined in paragraph (b)(2) of this section are equal to or greater than 10,000 units, then the manufacturers involved in the aggregated relationship will be allowed to certify a number of units under the small-volume engine family certification procedures (40 CFR 86.092-24(e)) in accordance with the criteria identified below in this subparagraph.

(i) If a manufacturer purchases less than 50 percent of another manufacturer, each manufacturer retains its right to certify 9,999 units using the small-volume engine family certification procedures.

(ii) If a manufacturer purchases 50 percent or more of another manufacturer, the manufacturer with the over 50 percent interest must share, with the manufacturer it purchased, its 9,999 units under the small-volume engine family certification procedures.

(iii) In a joint venture arrangement (50/50 ownership) between two manufacturers, each manufacturer retains its eligibility for 9,999 units under the small-volume engine family certification procedures, but the joint venture must draw its maximum 9,999

units from the units allocated to its parent manufacturers.

(c) Small-volume manufacturers shall demonstrate compliance with the applicable sections of this subpart. The appropriate model year of the following applicable sections shall be determined in accordance with § 86.084-4:

(1) Sections 86.092-1, 86.092-2, 86.090-3, 86.084-4, 86.090-5, 86.078-6, 86.078-7, and 86.090-8 through 86.090-11 of this subpart are applicable.

(2) Section 86.080-12 of this subpart is not applicable.

(3) Section 86.085-13, 86.092-14, 86.084-15, and 86.085-20 of this subpart are applicable.

(4) Small-volume manufacturers shall include in their records all of the information that EPA requires in § 86.090-21 of this subpart. This information will be considered part of the manufacturer's application for certification. However, the manufacturer is not required to submit the information to the Administrator unless the Administrator requests it.

(5) Section 86.085-22 of this subpart is applicable except as noted below.

(i) Small-volume light-duty vehicle and light-duty truck manufacturers may satisfy the requirements of paragraph (e) of § 86.085-22 by including a statement of compliance on adjustable parameters in the application for certification. In the statement of compliance the manufacturer shall state that the limits, stops, seals, or other means used to inhibit adjustment have been designed to accomplish their intended purpose based on good engineering practice and past experience. If the vehicle parameter is adjustable the vehicle must meet emission standards with the parameter set any place within the adjustable range (Reference § 86.090-21 of this subpart).

(6) Section 86.090-23 of this subpart is applicable.

(7) Section 86.092-24 of this subpart is applicable except as noted below.

(i) Small-volume manufacturers may satisfy the requirements of paragraph (b) and (c) of § 86.092-24 of this subpart by:

(A) *Emission-data*—Selecting one emission-data test vehicle (engine) per engine family by the worst-case emissions criteria as follows:

(1) *Light-duty vehicles and light-duty trucks*. The manufacturer shall select the vehicle with the heaviest equivalent test weight (including options) within the engine family. Then within that vehicle the manufacturer shall select, in the order listed, the highest road load power, largest displacement, the transmission with the highest numerical final gear ratio (including overdrive), the highest numerical axle ratio offered in the engine family, and the maximum fuel flow calibration.

(2) *Heavy-duty Otto-cycle engines*. The manufacturer shall select one emission-data engine first based on the largest displacement within the engine family. Then within the largest displacement the manufacturer shall select, in the order listed, highest fuel flow at the speed of maximum rated torque, the engine with the most advanced spark timing, no EGR or lowest EGR flow, and no air pump or lowest actual flow air pump.

(3) *Heavy-duty diesel engines*. The manufacturer shall select one emission-data engine based on the highest fuel feed per stroke, primarily at the speed of maximum rated torque and secondarily at rated speed.

(B) Testing light-duty vehicles or light-duty truck emission-data vehicles at any service accumulation distance of at least 2,000 miles (3,219 kilometers) or, catalyst equipped heavy-duty emission-data engines at any service accumulation time of at least 62 hours, or non-catalyst equipped heavy-duty engine emission-data engines at any service accumulation time determined by the manufacturer to result in stabilized emissions. The emission performance of the emission-data vehicle or engine must be stabilized prior to emission testing.

(C) *Durability data*—Satisfying the durability-data requirements by complying with the applicable procedures below:

(1) Manufacturers with aggregated sales of less than 301 motor vehicles and motor vehicle engines per year may use assigned deterioration factors that the Administrator determines and prescribes. The factors will be the Administrator's estimate, periodically updated and published in an advisory letter or advisory circular, of the 70th

percentile deterioration factors calculated using the industrywide data base of previously completed durability-data vehicles or engines used for certification. However, the manufacturer may, at its option, accumulate miles (hours) on a durability-data vehicle (engine) and complete emission tests for the purpose of establishing its own deterioration factors.

(2) Manufacturers with aggregated sales from and including 301 through 9,999 motor vehicles and motor vehicle engines per year certifying light-duty vehicle exhaust emissions from vehicles equipped with proven emission control systems shall use assigned deterioration factors that the manufacturer determines based on its good engineering judgment. However, the manufacturer may not use deterioration factors less than either the average or 70th percentile of all of that manufacturer's deterioration factor data, whichever is less. These minimum deterioration factors shall be calculated according to procedures in paragraph (c)(7)(i)(C)(2)(i), of this section. If the manufacturer does not have at least two data points to calculate these manufacturer specific average deterioration factors, then the deterioration factors shall be no less than the EPA supplied industrywide deterioration factors. However, the manufacturer may, at its option, accumulate miles on a durability-data vehicle and complete emission tests for the purpose of establishing its own deterioration factors.

(i) The manufacturer's minimum deterioration factors shall be calculated using the deterioration factors from all engine families, within the same vehicle/engine-fuel usage category (e.g., gasoline-fueled light-duty vehicle, etc.) previously certified to the same emission standards. The manufacturer shall use only deterioration factors engine families previously certified by the manufacturer and the deterioration factors shall not be included in the calculation more than once. The deterioration factors for each pollutant shall be calculated separately. The manufacturer may, at its option, limit the deterioration factors used in the calculation of the manufacturer's minimum deterioration factors to those from all

similar systems to the system being certified if sufficient data (i.e., from at least two certified systems) exists. All data eligible to be grouped as similar system data shall be used in calculating similar system deterioration factors. Any deterioration factors used in calculating similar system deterioration factors shall not be included in calculating the manufacturer's minimum deterioration factors used to certify any of the manufacturer's remaining vehicle systems.

(3) Manufacturers with aggregated sales from 301 through 9,999 motor vehicles and motor vehicle engines and certifying light-duty vehicle exhaust emissions from vehicles equipped with unproven emission control systems shall use deterioration factors that the manufacturer determines from official certification durability data generated by vehicles from engine families representing a minimum of 25 percent of the manufacturer's sales equipped with unproven emission control systems. The sales projections are to be based on total sales projected for each engine/system combination. The durability-data vehicle (engine) mileage accumulation and emission tests are to be conducted according § 86.092-26 of this subpart. The manufacturer must develop deterioration factors by generating durability data in accordance with § 86.092-26 of this subpart on a minimum of 25 percent of the manufacturer's projected sales (by engine/system combination) that is equipped with unproven emission control systems. The manufacturer must complete the 25 percent durability requirement before the remainder of the manufacturer's sales equipped with unproven emission control systems is certified using manufacturer-determined assigned deterioration factors. Alternatively, any of these manufacturers may, at their option, accumulate miles on durability-data vehicles and complete emission tests for the purpose of establishing their own deterioration factors on the remaining sales.

(4) For light-duty vehicle, light-duty truck, and heavy-duty vehicle evaporative emissions and light-duty truck,

and heavy-duty engine exhaust emissions, deterioration factors shall be determined in accordance with § 86.092-24 of this subpart.

(ii) Paragraphs (d) and (e) of § 86.092-24 of this subpart are not applicable.

(8) Section 86.090-25 of this subpart is applicable to maintenance performed on durability-data light-duty vehicles, light-duty trucks, heavy-duty vehicles, and heavy-duty engines when the manufacturer completes durability-data vehicles or engines; section 86.087-38 of this subpart is applicable to the recommended maintenance the manufacturer includes in the maintenance instructions furnished the purchasers of new motor vehicles and new motor vehicle engines under § 86.087-38 of this subpart.

(9)(i) Section 86.092-26 of this subpart is applicable if the manufacturer completes durability-data vehicles or engines.

(ii) Section 86.085-27 of this subpart is applicable.

(10) Sections 86.090-28 and 86.090-29 of this subpart are applicable.

(11)(i) Section 86.090-30 of this subpart is applicable, except for paragraph (a)(2) and (b) of that section. In the place of these paragraphs, small-volume manufacturer shall comply with paragraphs (c)(11)(ii) through (v) of this section, as shown below.

(ii) Small-volume manufacturers shall submit an application for certification containing the following:

(A) The names, addresses, and telephone numbers of the persons the manufacturer authorizes to communicate with us.

(B) A brief description of the vehicles (or engines) covered by the certificate (the manufacturers' sales data book or advertising, including specifications, may satisfy this requirement for most manufacturers). The description shall include, as a minimum, the following items as applicable:

(1) Engine evaporative family names and vehicle (or engine) configurations.

(2) Vehicle carlines or engine models to be listed on the certificate of conformity.

(3) The test weight and horsepower setting for each vehicle or engine configuration.

(4) Projected sales.

(5) Combustion cycle.

(6) Cooling mechanism.

(7) Number of cylinders.

(8) Displacement.

(9) Fuel system type.

(10) Number of catalytic converters, type, volume, composition, surface area, and total precious metal loading.

(11) Method of air aspiration.

(12) Thermal reactor characteristics.

(13) Suppliers' and/or manufacturers' name and model number of any emission related items of the above, if purchased from a supplier who uses the items in its own certified vehicles(s) or engine(s).

(14) A list of emission component part numbers.

(15) Drawings, calibration curves, and descriptions of emission related components, including those components regulated under paragraph (e) of § 86.085-22 of this subpart, and schematics of hoses and other devices connecting these components.

(16) Vehicle adjustments or modifications necessary for light-duty trucks to assure that they conform to high-altitude standards.

(17) A description of the light-duty vehicles and light-duty trucks which are exempted from the high-altitude emission standards.

(18) Proof that the manufacturer has obtained or entered an agreement to purchase, when applicable, the insurance policy, required by § 85.1510(b). The manufacturer may submit a copy of the insurance policy or purchase agreement as proof that the manufacturer has obtained or entered an agreement to purchase the insurance policy.

(C) The results of all emission tests the manufacturer performs to demonstrate compliance with the applicable standards.

(D)(1) The following statement signed by the authorized representative of the manufacturer: "The vehicles (or engines) described herein have been tested in accordance with (list of the applicable subparts A, B, D, I, M, N, or P) of part 86, title 40, United States Code of Federal Regulations, and on the basis of those tests are in conformance with that subpart. All of the data and records required by that subpart are on file and are available for inspection by the EPA Administrator. We project the

total U.S. sales of vehicles (engines) subject to this subpart (including all vehicles and engines imported under the provisions of 40 CFR 85.1505 and 40 CFR 85.1509 to be fewer than 10,000 units.”

(2) A statement as required by and contained in paragraph (c)(5) of this section signed by the authorized representative of the manufacturer.

(3) A statement that the vehicles or engines described in the manufacturer's application for certification are not equipped with auxiliary emission control devices which can be classified as a defeat device as defined in § 86.092-2 of this subpart.

(4) A statement of compliance with section 206(a)(3) of the Clean Air Act.

(5) A statement that, based on the manufacturer's engineering evaluation and/or emission testing, the light-duty vehicles comply with emission standards at high altitude unless exempt under paragraph (h) of § 86.090-8 of this subpart.

(6) A statement that, based on the manufacturer's engineering evaluation and/or emission testing, the light-duty trucks sold for principle use at designated high-altitude locations comply with the high-altitude emission requirements and that all other light-duty trucks are at least capable of being modified to meet high-altitude standards unless exempt under paragraph (g)(2) of § 86.090-9 of this subpart.

(7) A statement affirming that the manufacturer will provide a list of emission and emission-related service parts, including part number designations and sources of parts, to the vehicle purchaser for all emission and emission-related parts which might affect vehicle emission performance throughout the useful life of the vehicle. Secondly, it must state that qualified service facilities and emission-related repair parts will be conveniently available to serve its vehicles. In addition, if service facilities are not available at the point of sale or distribution, the manufacturer must indicate that the vehicle purchaser will be provided information identifying the closest authorized service facility to the point of sale, if in the United States, or the closest authorized service facility to the point of distribution to the ultimate purchaser if the vehicle was purchased outside of the United States by the ultimate purchaser. Such information should also be made available to the Administrator upon request.

(E) Manufacturers utilizing deterioration factors determined by the manufacturer based on its good engineering judgment (re: paragraph (c)(7)(i)(C)(2) of this section) shall provide a description of the method(s) used by the manufacturer to determine the deterioration factors.

(iii) If the manufacturer meets requirements of this subpart, the Administrator will issue a certificate of conformity for the vehicles or engines described in the application for certification.

(iv) The certificate will be issued for such a period not to exceed one model year as the Administrator may determine and upon such terms as he may deem necessary to assure that any vehicle or engine covered by the certificate will meet the requirements of the Act and of this subpart.

(v)(A) If, after a review of the statements and descriptions submitted by the manufacturer, the Administrator determines that the manufacturer has not met the applicable requirements, the Administrator shall notify the manufacturer in writing of his intention to deny certification, setting forth the basis for his determination. The manufacturer may request a hearing on the Administrator's determination.

(B) If the manufacturer does not request a hearing or present the required information the Administrator will deny certification.

(12) Sections 86.079-31 and 86.079-32 of this subpart are not applicable.

(13) Under § 86.079-33 of this subpart, small-volume manufacturers are covered by the following.

(i) Small-volume manufacturers may make production changes (running changes) without receiving the Administrator's prior approval. The manufacturer shall assure (by conducting emission tests as it deems necessary) that the affected vehicles (engines) remain in compliance with the requirements of this part.

(ii) The manufacturer shall notify the Administrator within seven days

after implementing any production related change (running change) that would affect vehicle emissions. This notification shall include any changes to the information required under paragraph (c)(11)(ii) of this section. The manufacturer shall also amend as necessary its records required under paragraph (c)(4) of this section to confirm with the production design change.

(14) Section 86.082-34 of this subpart is not applicable.

(15) Sections 86.092-35, 86.079-36, 86.082-37, 86.087-38 and 86.084-39 of this subpart are applicable.

[55 FR 7187, Feb. 28, 1990]

§ 86.092-15 NO_x and particulate averaging, trading, and banking for heavy-duty engines.

(a)(1) Heavy-duty engines eligible for the NO_x and particulate averaging, trading, and banking programs are described in the applicable emission standards sections in this subpart. Participation in these programs is voluntary.

(2)(i) Engine families with FELs exceeding the applicable standard shall obtain emission credits in a mass amount sufficient to address the shortfall. Credits may be obtained from averaging, trading, or banking, within the averaging set restrictions described in this section.

(ii) Engine families with FELs below the applicable standard will have emission credits available to average, trade, bank or a combination thereof. Credits may not be used to offset emissions that exceed an FEL. Credits may not be used to remedy an in-use nonconformity determined by a Selective Enforcement Audit or by recall testing. However, credits may be used to allow subsequent production of engines for the family in question if the manufacturer elects to recertify to a higher FEL.

(iii) Credits scheduled to expire in the earliest model year shall be used, prior to using other available credits, to offset emissions of engine families with FELs exceeding the applicable standard.

(b) Participation in the NO_x and/or particulate averaging, trading, and banking programs shall be done as fol-

lows. (1) During certification, the manufacturer shall:

(i) Declare its intent to include specific engine families in the averaging, trading and/or banking programs. Separate declarations are required for each program and for each pollutant (i.e., NO_x and particulate).

(ii) Declare an FEL for each engine family participating in one or more of these three programs.

(A) The FEL must be to the same level of significant digits as the emission standard (one-tenth of a gram per brake horsepower for NO_x emissions and one-hundredth of a gram per brake horsepower-hour for particulate emissions).

(B) In no case may the FEL exceed the upper limit prescribed in the section concerning the applicable heavy-duty engine NO_x and particulate emission standards.

(iii) Calculate the projected emission credits (+/-) based on quarterly production projections for each participating family and for each pollutant (NO_x and particulate), using the equation in paragraph (c) of this section and the applicable factors for the specific engine family.

(iv)(A) Determine and state the source of the needed credits according to quarterly projected production for engine families requiring credits for certification.

(B) State where the quarterly projected credits will be applied for engine families generating credits.

(C) Credits may be obtained from or applied to only engine families within the same averaging set as described in paragraphs (d) and (e) of this section. Credits available for averaging, trading, or banking as defined in § 86.090-2, may be applied to a given engine family(y) (ies), or reserved as defined in § 86.091-2.

(2) Based on this information each manufacturer's certification application must demonstrate:

(i) That at the end of model year production, each engine family has a net emissions credit balance of zero or more using the methodology in paragraph (c) of this section with any credits obtained from averaging, trading or banking.