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- (ii) Manufacturers may bank credits only after the end of the model year and after EPA has reviewed their end-of-year report. During the model year and before submittal of the end-of-year report, credits originally designated in the certification process for banking will be considered reserved and may be redesignated for trading or averaging.
- (2) Credit withdrawals. (i) After being generated, banked/reserved credits shall be available for use three model years prior to, through three model years immediately after the effective date of the new HDE NO<sub>X</sub> or particulate emission standard, as applicable. However, credits not used within the period specified above shall be forfeited.
- (ii) Manufacturers withdrawing banked emission credits shall indicate so during certification and in their credit reports, as described in §86.091-
- (3) Use of banked emission credits. The use of banked credits shall be within the averaging set and other restrictions described in paragraphs (d) and (e) of this section, and only for the following purposes:
- (i) Banked credits may be used in averaging, trading, or in any combination thereof, during the certification period. Credits declared for banking from the previous model year but unreviewed by EPA may also be used. However, they may be revoked at a later time following EPA review of the end-of-year report or any subsequent audit actions.
- (ii) Banked credits may not be used for  $NO_X$  or particulate averaging and trading to offset emissions that exceed an FEL. Banked credits may not be used to remedy an in-use nonconformity determined by a Selective Enforcement Audit or by recall testing. However, banked credits may be used for subsequent production of the engine family if the manufacturer elects to recertify to a higher FEL.
- (g)(1) For purposes of this paragraph (g), assume  $NO_{\rm X}$  and particulate nonconformance penalties (NCPs) will be available for the 1991 and later model year HDEs.
- (2) Engine families paying an NCP for noncompliance of any emission standard may not:

- (i) Participate in the averaging program,
- (ii) Generate emission credits for any pollutant under banking and trading, and
- (iii) Use emission credits for any pollutant from banking and trading.
- (3) If a manufacturer has any engine family to which application of NCPs and averaging, banking, and trading credits is desired, that family must be separated into two distinct families. One family, whose FEL equals the standard, must use NCPs only, while the other, whose FEL does not equal the standard, must use emission credits only.
- (4) If a manufacturer has any engine family in a given averaging set which is using  $NO_X$  and/or particulate NCPs, none of that manufacturer's engine families in that averaging set may generate credits for banking and trading.
- (h) In the event of a negative credit balance in a trading situation, both the buyer and the seller would be liable.
- (i) Certification fuel used for credit generation must be of a type that is both available in use and expected to be used by the engine purchaser. Therefore, upon request by the Administrator, the engine manufacturer must provide information acceptable to the Administrator that the designated fuel is readily available commercially and would be used in customer service.

[59 FR 14106, Mar. 25, 1994]

#### §86.092-23 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

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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 methanolfueled 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 gasolinefueled 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.

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- Certification engines. 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 § 86.091–11.
- (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 uti-

- lizing 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  $NO_{\rm X}$  and/or particulate averaging, trading, or banking programs for heavy-duty engines shall submit for each participating family:

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- (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 The application § 86.091–15. must project that each engine family will be in compliance with the applicable NO<sub>X</sub> and/or particulate emission standards based on the engine mass emissions, and credits from averaging, trading and banking.
- (2) End-of-year reports for each engine family participating in any of the averaging, trading, or banking pro-

grams.

- (i) These reports shall be submitted within 90 days of the end of the model year to: Director, Manufacturers Operations Division (EN-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) production volume, the values required to calculate credits as given in \$86.091-15, the resulting type (NO<sub>X</sub> 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 changes in the 49 state 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 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  $NO_{\rm X}$  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.

[59 FR 14108, Mar. 25, 1994]

# §86.092-24 Test vehicles and engines.

- (a) (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 shall be defined as a separate engine family.
- (2) To be classed in the same engine family, engines must be identical in all the following respects: