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§ 86.080–12 Alternative certification procedures.

(a)(1) The Administrator will determine which of the following certification procedures (paragraph (a)(3) or (a)(4) of this section) may be used to demonstrate compliance for each heavy-duty engine, light-duty vehicle, and light-duty truck engine family for which certification is sought.

(2) The families selected for the procedure described in paragraph (a)(3) of this section will be subject to this procedure at the option of the manufacturer.

(3) The following provisions apply to those heavy-duty engine, light-duty vehicle, and light-duty truck engine families which the Administrator has specified may be subject to the abbreviated certification review procedure.

(i) The manufacturer shall satisfy all applicable requirements of part 86 necessary to demonstrate compliance with the applicable standards for each class of new motor vehicles or new motor vehicle engines for which certification is sought.

(ii) As specifically allowed by the Administrator, the manufacturer shall assume the responsibility for part or all of the decisions applicable to the family for which certification is sought and which are within the jurisdiction of the Administrator, with the exception that the Administrator will determine whether a test vehicle, or test engine, has met the applicable emission standards.

(iii) The manufacturer shall maintain, update, and correct all records and information required.

(iv) The Administrator may review a manufacturer's records at any time. At the Administrator's discretion, this review may take place either at the manufacturer's facility or at another facility designated by the Administrator.

(v) At the Administrator's request, the manufacturer shall notify the Administrator of the status of the certification program including projected schedules of those significant accomplishments specified by the Administrator.

(vi) The manufacturer shall permit the Administrator to inspect any facilities, records, and vehicles from which data are obtained under the abbreviated certification review procedure.

(vii) Upon completing all applicable requirements of part 86, the manufacturer shall submit a separate application for a certificate of conformity for each set of standards and each class of new motor vehicles or new motor vehicle engines for which certification is sought. Such application shall be made in writing to the Administrator by the manufacturer.

(A) The Administrator may approve or disapprove, in whole or in part, an application for certification according to the procedures specified in § 86.080–22(b).

(B) If, after a review of the application for certification, test reports and data submitted by the manufacturer, data obtained during an inspection, and any other pertinent data or information, the Administrator determines that a test vehicle(s) or test engine(s) has not met the requirements of the Act and the applicable subpart, he will notify the manufacturer in writing and set forth the reason(s) for the determination as specified in § 86.080–22(c).

(4) Those families which are to be subjected to the complete EPA review procedure will follow the procedures specified in this subpart with the exception of § 86.080–12(a)(3).

(b) The manufacturer may request that an engine family be subject to the abbreviated certification review procedure.

(c) The Administrator may require that an engine family previously allowed to be subject to the abbreviated certification review procedure be transferred to the complete review procedure.

[45 FR 26045, Apr. 17, 1980]

§ 86.082–2 Definitions.

(a) The definitions of this section apply to this subpart and also to subparts B, D, I, and R of this part.

(b) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act:

Accuracy means the difference between a measurement and true value.

Act means part A of title II of the Clean Air Act, 42 U.S.C. as amended, 7521, *et seq*.

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Auxiliary Emission Control Device (AECD) means any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.

Basic engine means a unique combination of manufacturer, engine displacement, number of cylinders, fuel system (as distinguished by number of carburetor barrels or use of fuel injection), catalyst usage, and other engine and emission control system characteristics specified by the Administrator.

Basic vehicle frontal area means the area enclosed by the geometric projection of the basic vehicle along the longitudinal axis, which includes tires but excludes mirrors and air deflectors, onto a plane perpendicular to the longitudinal axis of the vehicle.

Body style means a level of commonality in vehicle construction as defined by number of doors and roof treatment (e.g., sedan, convertible, fastback, hatchback).

Body type means a name denoting a group of vehicles that are either in the same car line or in different car lines provided the only reason the vehicles qualify to be considered in different car lines is that they are produced by a separate division of a single manufacturer.

Calibrating gas means a gas of known concentration which is used to establish the response curve of an analyzer.

Calibration means the set of specifications, including tolerances, unique to a particular design, version, or application of a component or components assembly capable of functionally describing its operation over its working range.

Car line means a name denoting a group of vehicles within a make or car division which has a degree of commonality in construction (e.g., body, chassis). Car line does not consider any level of decor or opulence and is not generally distinguished by characteristics as roofline, number of doors, seats, or windows except for station wagons or light-duty trucks. Station wagons and light-duty trucks are considered to be different car lines than passenger cars.

Configuration means a subclassification of an engine-system combination on the basis of engine code, inertia weight class, transmission type and gear ratios, final drive ratio, and other parameters which may be designated by the Administrator.

Crankcase emissions means airborne substances emitted to the atmosphere from any portion of the engine crankcase ventilation or lubrication systems.

Curb-idle for manual transmission code heavy-duty engines means the manufacturer's recommended engine speed with the transmission in neutral or with the clutch disengaged. For automatic transmission code heavy-duty engines, curb-idle means the manufacturer's recommended engine speed with the automatic transmission in gear and the output shaft stalled.

Defeat Device means an AECD that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal urban vehicle operation and use, unless (1) such conditions are substantially included in the Federal emission test procedure, (2) the need for the AECD is justified in terms of protecting the vehicle against damage or accident, or (3) the AECD does not go beyond the requirements of engine starting.

Diurnal breathing losses means evaporative emissions as a result of the daily range in temperature.

Drive train configuration means a unique combination of engine code, transmission configuration, and axle ratio.

Dynamometer-idle for automatic transmission code heavy-duty engines means the manufacturer's recommended engine speed without a transmission that simulates the recommended engine speed with a transmission and with the transmission in neutral.

Engine code means a unique combination, within an engine-system combination, of displacement, carburetor (or fuel injection) calibration, choke

calibration, distributor calibration, auxiliary emission control devices, and other engine and emission control system components specified by the Administrator.

Engine family means the basic classification unit of a manufacturer's product line used for the purpose of test fleet selection and determined in accordance with § 86.082–24.

Engine family group means a combination of engine families for the purpose of determining a minimum deterioration factor under the Alternative Durability Program.

Engine-system combination means an engine family-exhaust emission control system combination.

EPA Enforcement Officer means any officer or employee of the Environmental Protection Agency so designated in writing by the Administrator (or by his designee).

Evaporative emission code means a unique combination, in an evaporative emission family-evaporative emission control system combination, of purge system calibrations, fuel tank and carburetor bowl vent calibrations and other fuel system and evaporative emission control system components and calibrations specified by the Administrator.

Evaporative emissions means hydrocarbons emitted into the atmosphere from a motor vehicle, other than exhaust and crankcase emissions.

Evaporative vehicle configuration means a unique combination of basic engine, engine code, body type, and evaporative emission code.

Exhaust emissions means substances emitted to the atmosphere from any opening downstream from the exhaust port of a motor vehicle engine.

Fuel evaporative emissions means vaporized fuel emitted into the atmosphere from the fuel system of a motor vehicle.

Fuel system means the combination of fuel tank(s), fuel pump, fuel lines, and carburetor or fuel injection components, and includes all fuel system vents and fuel evaporative emission control system components.

Gross vehicle weight means the manufacturer's gross weight rating for the individual vehicle.

Gross vehicle weight rating (GVWR) means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

Hang-up refers to the process of hydrocarbon molecules being adsorbed, condensed, or by any other method removed from the sample flow prior to reaching the instrument detector. It also refers to any subsequent desorption of the molecules into the sample flow when they are assumed to be absent.

Heavy-duty engine means any engine which the engine manufacturer could reasonably expect to be used for motive power in a heavy-duty vehicle.

Heavy-duty vehicle means any motor vehicle rated at more than 8,500 pounds GVWR or that has a vehicle curb weight of more than 6,000 pounds or that has a basic vehicle frontal area in excess of 45 square feet.

High altitude means any elevation over 1,219 meters (4,000 feet).

High-altitude conditions means a test altitude of 1,620 meters (5,315 feet), plus or minus 100 meters (328 feet), or equivalent observed barometric test conditions of 83.3 ±1 kilopascals.

High-altitude reference point means an elevation of 1,620 meters (5,315 feet) plus or minus 100 meters (328 feet), or equivalent observed barometric test conditions of 83.3 kPa (24.2 inches Hg), plus or minus 1 kPa (0.30 Hg).

Hot-soak losses means evaporative emissions after termination of engine operation.

Incomplete truck means any truck which does not have the primary load carrying device or container attached.

Inertia weight class means the class, which is a group of test weights, into which a vehicle is grouped based on its loaded vehicle weight in accordance with the provisions of part 86.

Intermediate speed means peak torque speed if peak torque speed occurs between 60 and 75 percent of rated speed. If the peak torque speed is less than 60 percent of rated speed, intermediate speed means 60 percent of rated speed. If the peak torque speed is greater than 75 percent of rated speed, intermediate speed means 75 percent of rated speed.

Light-duty truck means any motor vehicle rated at 8,500 pounds GVWR or less which as a vehicle curb weight of

6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less, which is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle, or

(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons, or

(3) Available with special features enabling off-street or off-highway operation and use.

Light-duty vehicle means a passenger car or passenger car derivative capable of seating 12 passengers or less.

Loaded vehicle weight means the vehicle curb weight plus 300 pounds.

Low altitude means any elevation equal to or less than 1,219 meters (4,000 feet).

Low altitude conditions means a test altitude less than 549 meters (1,800 feet).

Malfunction means not operating according to specifications (e.g., those specifications listed in the application for certification).

Maximum rated horsepower means the maximum brake horsepower output of an engine as stated by the manufacturer in his sales and service literature and his application for certification under § 86.082–21.

Maximum rated torque means the maximum torque produced by an engine as stated by the manufacturer in his sales and service literature and his application for certification under § 86.082–21.

Military engine means any engine manufactured solely for the Department of Defense to meet military specifications.

Model means a specific combination of car line, body style, and drivetrain configuration.

Model type means a unique combination of car line, basic engine, and transmission class.

Model year means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year: *Provided,* That if the manufacturer has no annual production period, the term *model year* shall mean the calendar year.

Nominal fuel tank capacity means the volume of the fuel tank(s), specified by the manufacturer to the nearest tenth of a U.S. gallon, which may be filled with fuel from the fuel tank filler inlet.

Opacity means the fraction of a beam of light, expressed in percent, which fails to penetrate a plume of smoke.

Option means any available equipment or feature not standard equipment on a model.

Oxides of nitrogen means the sum of the nitric oxide and nitrogen dioxide contained in a gas sample as if the nitric oxide were in the form of nitrogen dioxide.

Peak torque speed means the speed at which an engine develops maximum torque.

Percent load means the fraction of the maximum available torque at a specified engine speed.

Precision means the standard deviation of replicated measurements.

Rated speed means the speed at which the manufacturer specifies the maximum rated horsepower of an engine.

Reconfigured emission-data vehicle means an emission-data vehicle obtained by modifying a previously used emission-data vehicle to represent another emission-data vehicle.

Round has the meaning given in 40 CFR 1065.1001, unless otherwise specified.

Running loss means fuel evaporative emissions resulting from an average trip in an urban area or the simulation of such a trip.

Scheduled maintenance means any adjustment, repair, removal, disassembly, cleaning, or replacement of vehicle components or systems which is performed on a periodic basis to prevent part failure or vehicle (if the engine were installed in a vehicle) malfunction.

Smoke means the matter in the exhaust emission which obscures the transmission of light.

Span gas means a gas of known concentration which is used routinely to set the output level of an analyzer.

Standard equipment means those features or equipment which are marketed on a vehicle over which the purchaser can exercise no choice.

System includes any motor vehicle engine modification which controls or causes the reduction of substances emitted from motor vehicles.

Tank fuel volume means the volume of fuel in the fuel tank(s), which is determined by taking the manufacturer's nominal fuel tank(s) capacity and multiplying by 0.40, the result being rounded using ASTM E 29–67 to the nearest tenth of a U.S. gallon.

Test weight means the weight, within an inertia weight class, which is used in the dynamometer testing of a vehicle, and which is based on its loaded vehicle weight in accordance with the provisions of part 86.

Throttle means the mechanical linkage which either directly or indirectly controls the fuel flow to the engine.

Transmission class means the basic type of transmission, e.g., manual, automatic, semiautomatic.

Transmission configuration means a unique combination, within a transmission class, of the number of the forward gears and, if applicable, overdrive. The Administrator may further subdivide a transmission configuration (based on such criteria as gear ratios, torque convertor multiplication ratio, stall speed and shift calibration, etc.), if he determines that significant fuel economy or exhaust emission differences exist within that transmission configuration.

United States has the meaning given in 40 CFR 1068.30.

Unscheduled maintenance means any adjustment, repair, removal, disassembly, cleaning, or replacement of vehicle components or systems which is performed to correct a part failure or vehicle (if the engine were installed in a vehicle) malfunction.

Useful life means:

(1) For light-duty vehicles and light-duty trucks a period of use of 5 years or 50,000 miles, whichever first occurs.

(2) For gasoline-fueled heavy-duty engines a period of use of 5 years or 50,000 miles of vehicle operation or 1,500 hours of engine operation (or an equivalent period of 1,500 hours of dynamometer operation), whichever first occurs.

(3) For diesel heavy-duty engines a period of use of 5 years or 100,000 miles of vehicle operation or 3,000 hours of engine operation (or an equivalent period of 1,000 hours of dynamometer operation), whichever first occurs.

Van means a light-duty truck having an integral enclosure, fully enclosing the driver compartment and load carrying device, and having no body sections protruding more than 30 inches ahead of the leading edge of the windshield.

Vehicle configuration means a unique combination of basic engine, engine code, inertia weight class, transmission configuration, and axle ratio.

Vehicle curb weight means the actual or the manufacturer's estimated weight of the vehicle in operational status with all standard equipment, and weight of fuel at nominal tank capacity, and the weight of optional equipment computed in accordance with § 86.082–24; incomplete light-duty trucks shall have the curb weight specified by the manufacturer.

Zero (0) hours means that point after normal assembly line operations and adjustments are completed and before ten (10) additional operating hours have been accumulated, including emission testing, if performed.

Zero (0) miles means that point after initial engine starting (not to exceed 100 miles of vehicle operation, or three hours of engine operation) at which normal assembly line operations and adjustments are completed, and including emission testing, if performed.

[46 FR 50475, Oct. 13, 1981, as amended at 47 FR 49807, 49808, Nov. 2, 1982; 62 FR 31233, June 6, 1997; 79 FR 23690, Apr. 28, 2014]

§ 86.082–34 Alternative procedure for notification of additions and changes.

(a) A manufacturer may, in lieu of notifying the Administrator in advance of an addition of a vehicle (or engine) under § 86.079–32 or a change in a vehicle (or engine) under § 86.079–33, notify the Administrator concurrently with making an addition of a vehicle or a change in a vehicle, if the manufacturer determines that following the change all vehicles (or engines) effected by the addition or change will still meet the applicable emission standards. Such notification shall include a full description of the addition or change and any supporting documentation the manufacturer may desire to include to support the manufacturer's determination. The manufacturer's determination that the addition