

Environmental Protection Agency

§ 1037.801

(b) You may apply only surplus credits to your deficit. You may not apply credits to a deficit from an earlier model year if they were generated in a model year for which any of your vehicle families for that averaging set had an end-of-year credit deficit.

(c) If you do not remedy the deficit with surplus credits within three model years, we may void your certificate for that vehicle family. Note that voiding a certificate applies *ab initio*. Where the net deficit is less than the total amount of negative credits originally generated by the family, we will void the certificate only with respect to the number of vehicles needed to reach the amount of the net deficit. For example, if the original vehicle family generated 500 Mg of negative credits, and the manufacturer's net deficit after three years was 250 Mg, we would void the certificate with respect to half of the vehicles in the family.

§ 1037.750 What can happen if I do not comply with the provisions of this subpart?

(a) For each vehicle family participating in the ABT program, the certificate of conformity is conditioned upon full compliance with the provisions of this subpart during and after the model year. You are responsible to establish to our satisfaction that you fully comply with applicable requirements. We may void the certificate of conformity for a vehicle family if you fail to comply with any provisions of this subpart.

(b) You may certify your vehicle family or subfamily to an FEL above an applicable standard based on a projection that you will have enough emission credits to offset the deficit for the vehicle family. See § 1037.745 for provisions specifying what happens if you cannot show in your final report that you have enough actual emission credits to offset a deficit for any pollutant in a vehicle family.

(c) We may void the certificate of conformity for a vehicle family if you fail to keep records, send reports, or give us information we request. Note that failing to keep records, send reports, or give us information we request is also a violation of 42 U.S.C. 7522(a)(2).

(d) You may ask for a hearing if we void your certificate under this section (see § 1037.820).

§ 1037.755 Information provided to the Department of Transportation.

After receipt of each manufacturer's final report as specified in § 1037.730 and completion of any verification testing required to validate the manufacturer's submitted final data, we will issue a report to the Department of Transportation with CO₂ emission information and will verify the accuracy of each manufacturer's equivalent fuel consumption data required by NHTSA under 49 CFR 535.8. We will send a report to DOT for each vehicle manufacturer based on each regulatory category and subcategory, including sufficient information for NHTSA to determine fuel consumption and associated credit values. See 49 CFR 535.8 to determine if NHTSA deems submission of this information to EPA to also be a submission to NHTSA.

Subpart I—Definitions and Other Reference Information

§ 1037.801 Definitions.

The following definitions apply to this part. The definitions apply to all subparts unless we note otherwise. All undefined terms have the meaning the Act gives to them. The definitions follow:

A to B testing means testing performed in pairs to allow comparison of vehicle A to vehicle B.

Act means the Clean Air Act, as amended, 42 U.S.C. 7401-7671q.

Adjustable parameter means any device, system, or element of design that someone can adjust (including those which are difficult to access) and that, if adjusted, may affect measured or modeled emissions (as applicable). You may ask us to exclude a parameter that is difficult to access if it cannot be adjusted to affect emissions without significantly degrading vehicle performance, or if you otherwise show us that it will not be adjusted in a way that affects emissions during in-use operation.

Adjusted Loaded Vehicle Weight means the numerical average of vehicle curb weight and GVWR.

Advanced technology means vehicle technology certified under §1037.615, §1037.104(d)(7), or 40 CFR 1036.615.

Aftertreatment means relating to a catalytic converter, particulate filter, or any other system, component, or technology mounted downstream of the exhaust valve (or exhaust port) whose design function is to decrease emissions in the vehicle exhaust before it is exhausted to the environment. Exhaust-gas recirculation (EGR) and turbochargers are not aftertreatment.

Alcohol-fueled vehicle means a vehicle that is designed to run using an alcohol fuel. For purposes of this definition, alcohol fuels do not include fuels with a nominal alcohol content below 25 percent by volume.

Auxiliary emission control device means any element of design that senses temperature, motive speed, engine RPM, transmission gear, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system.

Averaging set has the meaning given in §1037.701.

Cab-complete vehicle means a vehicle that is first sold as an incomplete vehicle that substantially includes its cab. Vehicles known commercially as chassis-cabs, cab-chassis, box-deletes, bed-deletes, cut-away vans are considered cab-complete vehicles. For purposes of this definition, a cab includes a steering column and passenger compartment. Note a vehicle lacking some components of the cab is a cab-complete vehicle if it substantially includes the cab.

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

Carbon-related exhaust emissions (CREE) has the meaning given in 40 CFR 600.002. Note that CREE represents the combined mass of carbon emitted as HC, CO, and CO₂, expressed as having a molecular weight equal to that of CO₂.

Carryover means relating to certification based on emission data generated from an earlier model year.

Certification means relating to the process of obtaining a certificate of conformity for a vehicle family that complies with the emission standards and requirements in this part.

Certified emission level means the highest deteriorated emission level in a vehicle family for a given pollutant from either transient or steady-state testing.

Class means relating to GVWR classes, as follows:

(1) *Class 2b* means heavy-duty motor vehicles at or below 10,000 pounds GVWR.

(2) *Class 3* means heavy-duty motor vehicles above 10,000 pounds GVWR but at or below 14,000 pounds GVWR.

(3) *Class 4* means heavy-duty motor vehicles above 14,000 pounds GVWR but at or below 16,000 pounds GVWR.

(4) *Class 5* means heavy-duty motor vehicles above 16,000 pounds GVWR but at or below 19,500 pounds GVWR.

(5) *Class 6* means heavy-duty motor vehicles above 19,500 pounds GVWR but at or below 26,000 pounds GVWR.

(6) *Class 7* means heavy-duty motor vehicles above 26,000 pounds GVWR but at or below 33,000 pounds GVWR.

(7) *Class 8* means heavy-duty motor vehicles above 33,000 pounds GVWR.

Complete vehicle has the meaning given in the definition of *vehicle* in this section.

Compression-ignition means relating to a type of reciprocating, internal-combustion engine that is not a spark-ignition engine.

Curb weight has the meaning given in 40 CFR 86.1803, consistent with the provisions of §1037.140.

Date of manufacture means the date on which the certifying vehicle manufacturer completes its manufacturing operations, except as follows:

(1) Where the certificate holder is an engine manufacturer that does not manufacture the chassis, the date of manufacture of the vehicle is based on the date assembly of the vehicle is completed.

(2) We may approve an alternate date of manufacture based on the date on which the certifying (or primary) manufacturer completes assembly at the place of main assembly, consistent with the provisions of §1037.601 and 49 CFR 567.4.

Day cab means a type of tractor cab that is not a sleeper cab.

Designated Compliance Officer means the Manager, Heavy-Duty and Nonroad Engine Group (6405-J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Designated Enforcement Officer means the Director, Air Enforcement Division (2242A), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460.

Deteriorated emission level means the emission level that results from applying the appropriate deterioration factor to the official emission result of the emission-data vehicle. Note that where no deterioration factor applies, references in this part to the *deteriorated emission level* mean the official emission result.

Deterioration factor means the relationship between emissions at the end of useful life and emissions at the low-hour test point, expressed in one of the following ways:

(1) For multiplicative deterioration factors, the ratio of emissions at the end of useful life to emissions at the low-hour test point.

(2) For additive deterioration factors, the difference between emissions at the end of useful life and emissions at the low-hour test point.

Driver model means an automated controller that simulates a person driving a vehicle.

Electric vehicle means a vehicle that does not include an engine, and is powered solely by an external source of electricity and/or solar power. Note that this does not include electric hybrid or fuel-cell vehicles that use a chemical fuel such as gasoline, diesel fuel, or hydrogen. Electric vehicles may also be referred to as all-electric vehicles to distinguish them from hybrid vehicles.

Emission control system means any device, system, or element of design that controls or reduces the emissions of regulated pollutants from a vehicle.

Emission-data vehicle means a vehicle that is tested for certification. This includes vehicle tested to establish deterioration factors.

Emission-related maintenance means maintenance that substantially affects

emissions or is likely to substantially affect emission deterioration.

Excluded means relating to vehicles that are not subject to some or all of the requirements of this part as follows:

(1) A vehicle that has been determined not to be a motor vehicle is excluded from this part.

(2) Certain vehicles are excluded from the requirements of this part under § 1037.5.

(3) Specific regulatory provisions of this part may exclude a vehicle generally subject to this part from one or more specific standards or requirements of this part.

Exempted has the meaning given in 40 CFR 1068.30.

Family emission limit (FEL) means an emission level declared by the manufacturer to serve in place of an otherwise applicable emission standard under the ABT program in subpart H of this part. The family emission limit must be expressed to the same number of decimal places as the emission standard it replaces. Note that an FEL may apply as a “subfamily” emission limit.

Fuel system means all components involved in transporting, metering, and mixing the fuel from the fuel tank to the combustion chamber(s), including the fuel tank, fuel pump, fuel filters, fuel lines, carburetor or fuel-injection components, and all fuel-system vents. It also includes components for controlling evaporative emissions, such as fuel caps, purge valves, and carbon canisters.

Fuel type means a general category of fuels such as diesel fuel or natural gas. There can be multiple grades within a single fuel type, such as high-sulfur or low-sulfur diesel fuel.

Good engineering judgment has the meaning given in 40 CFR 1068.30. See 40 CFR 1068.5 for the administrative process we use to evaluate good engineering judgment.

Gross combination weight rating (GCWR) means the value specified by the vehicle manufacturer as the maximum weight of a loaded vehicle and trailer, consistent with good engineering judgment. For example, compliance with SAE J2807 is generally considered to be consistent with good engineering

judgment, especially for Class 3 and smaller vehicles.

Gross vehicle weight rating (GVWR) means the value specified by the vehicle manufacturer as the maximum design loaded weight of a single vehicle, consistent with good engineering judgment.

Heavy-duty engine means any engine used for (or for 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 above 8,500 pounds GVWR or that has a vehicle curb weight above 6,000 pounds or that has a basic vehicle frontal area greater than 45 square feet.

Hybrid engine or *hybrid powertrain* means an engine or powertrain that includes energy storage features other than a conventional battery system or conventional flywheel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Note that certain provisions in this part treat hybrid engines and powertrains intended for vehicles that include regenerative braking different than those intended for vehicles that do not include regenerative braking.

Hybrid vehicle means a vehicle that includes energy storage features (other than a conventional battery system or conventional flywheel) in addition to an internal combustion engine or other engine using consumable chemical fuel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Note that certain provisions in this part treat hybrid vehicles that include regenerative braking different than those that do not include regenerative braking.

Hydrocarbon (HC) means the hydrocarbon group on which the emission standards are based for each fuel type. For alcohol-fueled vehicles, HC means nonmethane hydrocarbon equivalent (NMHCE) for exhaust emissions and total hydrocarbon equivalent (THCE) for evaporative emissions. For all other vehicles, HC means nonmethane hydrocarbon (NMHC) for exhaust emissions and total hydrocarbon (THC) for evaporative emissions.

Identification number means a unique specification (for example, a model number/serial number combination) that allows someone to distinguish a particular vehicle from other similar vehicles.

Incomplete vehicle has the meaning given in the definition of *vehicle* in this section.

Innovative technology means technology certified under §1037.610.

Light-duty truck means any motor vehicle rated at or below 8,500 pounds GVWR with a curb weight at or below 6,000 pounds and basic vehicle frontal area at or below 45 square feet, 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 or fewer passengers.

Low-mileage means relating to a vehicle with stabilized emissions and represents the undeteriorated emission level. This would generally involve approximately 4000 miles of operation.

Low rolling resistance tire means a tire on a vocational vehicle with a TRRL at or below of 7.7 kg/metric ton, a steer tire on a tractor with a TRRL at or below 7.7 kg/metric ton, or a drive tire on a tractor with a TRRL at or below 8.1 kg/metric ton.

Manufacture means the physical and engineering process of designing, constructing, and/or assembling a vehicle.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a vehicle or vehicle for sale in the United States or otherwise introduces a new motor vehicle into commerce in the United States. This includes importers who import vehicles or vehicles for resale.

Medium-duty passenger vehicle (MDPV) has the meaning given in 40 CFR 86.1803.

Model year means the manufacturer's annual new model production period,

except as restricted under this definition and 40 CFR part 85, subpart X. It must include January 1 of the calendar year for which the model year is named, may not begin before January 2 of the previous calendar year, and it must end by December 31 of the named calendar year.

(1) The manufacturer who holds the certificate of conformity for the vehicle must assign the model year based on the date when its manufacturing operations are completed relative to its annual model year period. In unusual circumstances where completion of your assembly is delayed, we may allow you to assign a model year one year earlier, provided it does not affect which regulatory requirements will apply.

(2) Unless a vehicle is being shipped to a secondary manufacturer that will hold the certificate of conformity, the model year must be assigned prior to introduction of the vehicle into U.S. commerce. The certifying manufacturer must redesignate the model year if it does not complete its manufacturing operations within the originally identified model year. A vehicle introduced into U.S. commerce without a model year is deemed to have a model year equal to the calendar year of its introduction into U.S. commerce unless the certifying manufacturer assigns a later date.

Motor vehicle has the meaning given in 40 CFR 85.1703.

New motor vehicle means a motor vehicle meeting the criteria of either paragraph (1) or (2) of this definition. New motor vehicles may be complete or incomplete.

(1) A motor vehicle for which the ultimate purchaser has never received the equitable or legal title is a *new motor vehicle*. This kind of vehicle might commonly be thought of as "brand new" although a *new motor vehicle* may include previously used parts. Under this definition, the vehicle is new from the time it is produced until the ultimate purchaser receives the title or places it into service, whichever comes first.

(2) An imported heavy-duty motor vehicle originally produced after the 1969 model year is a *new motor vehicle*.

Noncompliant vehicle means a vehicle that was originally covered by a certificate of conformity, but is not in the certified configuration or otherwise does not comply with the conditions of the certificate.

Nonconforming vehicle means a vehicle not covered by a certificate of conformity that would otherwise be subject to emission standards.

Nonmethane hydrocarbons (NMHC) means the sum of all hydrocarbon species except methane, as measured according to 40 CFR part 1065.

Official emission result means the measured emission rate for an emission-data vehicle on a given duty cycle before the application of any required deterioration factor, but after the applicability of regeneration adjustment factors.

Owners manual means a document or collection of documents prepared by the vehicle manufacturer for the owners or operators to describe appropriate vehicle maintenance, applicable warranties, and any other information related to operating or keeping the vehicle. The owners manual is typically provided to the ultimate purchaser at the time of sale.

Oxides of nitrogen has the meaning given in 40 CFR 1065.1001.

Particulate trap means a filtering device that is designed to physically trap all particulate matter above a certain size.

Percent has the meaning given in 40 CFR 1065.1001. Note that this means percentages identified in this part are assumed to be infinitely precise without regard to the number of significant figures. For example, one percent of 1,493 is 14.93.

Placed into service means put into initial use for its intended purpose.

Power take-off (PTO) means a secondary engine shaft (or equivalent) that provides substantial auxiliary power for purposes unrelated to vehicle propulsion or normal vehicle accessories such as air conditioning, power steering, and basic electrical accessories. A typical PTO uses a secondary shaft on the engine to transmit power to a hydraulic pump that powers auxiliary equipment, such as a boom on a bucket truck. You may ask us to consider other equivalent auxiliary power

configurations (such as those with hybrid vehicles) as power take-off systems.

Rechargeable Energy Storage System (RESS) means the component(s) of a hybrid engine or vehicle that store recovered energy for later use, such as the battery system in an electric hybrid vehicle.

Regulatory sub-category means one of following groups:

(1) Spark-ignition vehicles subject to the standards of §1037.104. Note that this category includes most gasoline-fueled heavy-duty pickup trucks and vans.

(2) All other vehicles subject to the standards of §1037.104. Note that this category includes most diesel-fueled heavy-duty pickup trucks and van.

(3) Vocational vehicles at or below 19,500 pounds GVWR.

(4) Vocational vehicles at or above 19,500 pounds GVWR but below 33,000 pounds GVWR.

(5) Vocational vehicles over 33,000 pounds GVWR.

(6) Low-roof tractors at or above 26,000 pounds GVWR but below 33,000 pounds GVWR.

(7) Mid-roof tractors at or above 26,000 pounds GVWR but below 33,000 pounds GVWR.

(8) High-roof tractors at or above 26,000 pounds GVWR but below 33,000 pounds GVWR.

(9) Low-roof day cab tractors at or above 33,000 pounds GVWR.

(10) Low-roof sleeper cab tractors at or above 33,000 pounds GVWR.

(11) Mid-roof day cab tractors at or above 33,000 pounds GVWR.

(12) Mid-roof sleeper cab tractors at or above 33,000 pounds GVWR.

(13) High-roof day cab tractors at or above 33,000 pounds GVWR.

(14) High-roof sleeper cab tractors at or above 33,000 pounds GVWR.

Relating to as used in this section means relating to something in a specific, direct manner. This expression is used in this section only to define terms as adjectives and not to broaden the meaning of the terms.

Revoke has the meaning given in 40 CFR 1068.30.

Roof height means the maximum height of a vehicle (rounded to the nearest inch), excluding narrow acces-

sories such as exhaust pipes and antennas, but including any wide accessories such as roof fairings. Measure roof height of the vehicle configured to have its maximum height that will occur during actual use, with properly inflated tires and no driver, passengers, or cargo onboard. *Roof height* may also refer to the following categories:

(1) Low-roof means relating to a vehicle with a roof height of 120 inches or less.

(2) Mid-roof means relating to a vehicle with a roof height of 121 to 147 inches.

(3) High-roof means relating to a vehicle with a roof height of 148 inches or more.

Round has the meaning given in 40 CFR 1065.1001.

Scheduled maintenance means adjusting, repairing, removing, disassembling, cleaning, or replacing components or systems periodically to keep a part or system from failing, malfunctioning, or wearing prematurely. It also may mean actions you expect are necessary to correct an overt indication of failure or malfunction for which periodic maintenance is not appropriate.

Sleeper cab means a type of tractor cab that has a compartment behind the driver's seat intended to be used by the driver for sleeping. This includes cabs accessible from the driver's compartment and those accessible from outside the vehicle.

Small manufacturer means a manufacturer meeting the criteria specified in 13 CFR 121.201. For manufacturers owned by a parent company, the employee and revenue limits apply to the total number employees and total revenue of the parent company and all its subsidiaries.

Spark-ignition means relating to a gasoline-fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark-ignition engines usually use a throttle to regulate intake air flow to control power during normal operation.

Standard payload means the vehicle payload assumed for each class in tons for modeling and calculating emission

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credits. There are three standard payloads:

(1) 2.85 tons for light heavy-duty vehicles.

(2) 5.6 tons for medium heavy-duty vehicles.

(3) 7.5 tons for heavy heavy-duty vehicles.

Standard trailer has the meaning given in §1037.501.

Suspend has the meaning given in 40 CFR 1068.30.

Test sample means the collection of vehicles selected from the population of a vehicle family for emission testing. This may include testing for certification, production-line testing, or in-use testing.

Test vehicle means a vehicle in a test sample.

Test weight means the vehicle weight used or represented during testing.

Tire rolling resistance level (TRRL) means a value with units of kg/metric ton that represents that rolling resistance of a tire configuration. TRRLs are used as inputs to the GEM model under §1037.520. Note that a manufacturer may assign a value higher than the measured rolling resistance of a tire configuration.

Total hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the combined mass of organic compounds measured by the specified procedure for measuring total hydrocarbon, expressed as a hydrocarbon with an atomic hydrogen-to-carbon ratio of 1.85:1.

Total hydrocarbon equivalent has the meaning given in 40 CFR 1065.1001. This generally means the sum of the carbon mass contributions of non-oxygenated hydrocarbons, alcohols and aldehydes, or other organic compounds that are measured separately as contained in a gas sample, expressed as exhaust hydrocarbon from petroleum-fueled vehicles. The atomic hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

Tractor has the meaning given for "truck tractor" in 49 CFR 571.3. This includes most heavy-duty vehicles specifically designed for the primary purpose of pulling trailers, but does not include vehicles designed to carry other loads. For purposes of this definition "other loads" would not include loads

carried in the cab, sleeper compartment, or toolboxes. Examples of vehicles that are similar to tractors but that are not *tractors* under this part include dromedary tractors, automobile haulers, straight trucks with trailers hitches, and tow trucks. Note that the provisions of this part that apply for tractors do not apply for tractors that are classified as vocational tractors under §1037.630.

Ultimate purchaser means, with respect to any new vehicle, the first person who in good faith purchases such new vehicle for purposes other than resale.

United States has the meaning given in 40 CFR 1068.30.

Upcoming model year means for a vehicle family the model year after the one currently in production.

U.S.-directed production volume means the number of vehicle units, subject to the requirements of this part, produced by a manufacturer for which the manufacturer has a reasonable assurance that sale was or will be made to ultimate purchasers in the United States. This does not include vehicles certified to state emission standards that are different than the emission standards in this part.

Useful life means the period during which a vehicle is required to comply with all applicable emission standards.

Vehicle means equipment intended for use on highways that meets the criteria of paragraph (1)(i) or (1)(ii) of this definition, as follows:

(1) The following equipment are vehicles:

(i) A piece of equipment that is intended for self-propelled use on highways becomes a vehicle when it includes at least an engine, a transmission, and a frame. (Note: For purposes of this definition, any electrical, mechanical, and/or hydraulic devices attached to engines for the purpose of powering wheels are considered to be transmissions.)

(ii) A piece of equipment that is intended for self-propelled use on highways becomes a vehicle when it includes a passenger compartment attached to a frame with axles.

(2) Vehicles may be complete or incomplete vehicles as follows:

(i) A *complete vehicle* is a functioning vehicle that has the primary load carrying device or container (or equivalent equipment) attached. Examples of equivalent equipment would include fifth wheel trailer hitches, firefighting equipment, and utility booms.

(ii) An *incomplete vehicle* is a vehicle that is not a complete vehicle. Incomplete vehicles may also be cab-complete vehicles. This may include vehicles sold to secondary vehicle manufacturers.

(iii) The primary use of the terms “complete vehicle” and “incomplete vehicle” are to distinguish whether a vehicle is complete when it is first sold as a vehicle.

(iv) You may ask us to allow you to certify a vehicle as incomplete if you manufacture the engines and sell the unassembled chassis components, as long as you do not produce and sell the body components necessary to complete the vehicle.

(3) Equipment such as trailers that are not self-propelled are not “vehicles” under this part 1037.

Vehicle configuration means a unique combination of vehicle hardware and calibration (related to measured or modeled emissions) within a vehicle family. Vehicles with hardware or software differences, but that have no hardware or software differences related to measured or modeled emissions may be included in the same vehicle configuration. Note that vehicles with hardware or software differences related to measured or modeled emissions are considered to be different configurations even if they have the same GEM inputs and FEL. Vehicles within a vehicle configuration differ only with respect to normal production variability or factors unrelated to measured or modeled emissions.

Vehicle family has the meaning given in § 1037.230.

Vehicle service class means a vehicle’s weight class as specified in this definition. Note that, while *vehicle service class* is similar to primary intended service class for engines, they are not necessarily the same. For example, a medium heavy-duty vehicle may include a light heavy-duty engine. Note also that while spark-ignition engines do not have a primary intended service

class, vehicles using spark-ignition engines have a vehicle service class.

(1) Light heavy-duty vehicles are those vehicles with GVWR below 19,500 pounds.

Vehicles in this class include heavy-duty pickup trucks and vans, motor homes and other recreational vehicles, and some straight trucks with a single rear axle. Typical applications would include personal transportation, light-load commercial delivery, passenger service, agriculture, and construction.

(2) Medium heavy-duty vehicles are those vehicles with GVWR from 19,500 to 33,000 pounds. Vehicles in this class include school buses, straight trucks with a single rear axle, city tractors, and a variety of special purpose vehicles such as small dump trucks, and refuse trucks. Typical applications would include commercial short haul and intra-city delivery and pickup.

(3) Heavy heavy-duty vehicles are those vehicles with GVWR above 33,000 pounds. Vehicles in this class include tractors, urban buses, and other heavy trucks.

Vehicle subfamily or *subfamily* means a subset of a vehicle family including vehicles subject to the same FEL(s).

Vocational tractor means a vehicle classified as a vocational tractor under § 1037.630.

Vocational vehicle means relating to a vehicle subject to the standards of § 1037.105 (including vocational tractors).

Void has the meaning given in 40 CFR 1068.30.

Volatile liquid fuel means any fuel other than diesel or biodiesel that is a liquid at atmospheric pressure and has a Reid Vapor Pressure higher than 2.0 pounds per square inch.

We (us, our) means the Administrator of the Environmental Protection Agency and any authorized representatives.

§ 1037.805 Symbols, acronyms, and abbreviations.

The following symbols, acronyms, and abbreviations apply to this part:

ABT Averaging, banking, and trading.
 AECD auxiliary emission control device.
 C_D drag coefficient.
 C_{DA} drag area.
 CFD computational fluid dynamics.
 CFR Code of Federal Regulations.
 CH_4 methane.

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CO carbon monoxide.
CO₂ carbon dioxide.
CREE carbon-related exhaust emissions.
DOT Department of Transportation.
EPA Environmental Protection Agency.
ETW equivalent test weight.
FEL Family Emission Limit.
g grams.
GAWR gross axle weight rating.
GCWR gross combination weight rating.
GVWR gross vehicle weight rating.
GWP global-warming potential.
HC hydrocarbon.
ISO International Organization for Standardization.
kg kilograms.
m meter.
mm millimeter.
mph miles per hour.
N₂O nitrous oxide.
NARA National Archives and Records Administration.
NHTSA National Highway Transportation Safety Administration.
NO_x oxides of nitrogen (NO and NO₂).
PM particulate matter.
PTO power take-off.
RESS rechargeable energy storage system.
RPM revolutions per minute.
SAE Society of Automotive Engineers.
SKU Stock-keeping unit.
TRRL Tire rolling resistance level.
U.S.C. United States Code.
VSL vehicle speed limiter.
WF work factor.

§ 1037.810 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a notice of the change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave., NW., Room B102, EPA West Building, Washington, DC 20460, (202) 202-1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) International Organization for Standardization, Case Postale 56, CH-1211 Geneva 20, Switzerland, (41) 22749 0111, <http://www.iso.org>, or central@iso.org.

(1) ISO 28580:2009(E) “Passenger car, truck and bus tyres—Methods of measuring rolling resistance—Single point test and correlation of measurement results”, First Edition, July 1, 2009; IBR approved for § 1037.520(c).

(2) [Reserved]

(c) U.S. EPA, Office of Air and Radiation, 2565 Plymouth Road, Ann Arbor, MI 48105, <http://www.epa.gov>:

(1) GEM simulation tool, Version 2.0, August 2011; IBR approved for § 1037.520. The computer code for this model is available as noted in paragraph (a) of this section. A working version of this software is also available for download at <http://www.epa.gov/otaq/climate/gem.htm>.

(2) [Reserved]

(d) Society of Automotive Engineers, 400 Commonwealth Dr., Warrendale, PA 15096-0001, (877) 606-7323 (U.S. and Canada) or (724) 776-4970 (outside the U.S. and Canada), <http://www.sae.org>.

(1) SAE J1252, SAE Wind Tunnel Test Procedure for Trucks and Buses, Revised July 1981, IBR approved for § 1037.521(d), (e), and (f).

(2) SAE J1594, Vehicle Aerodynamics Terminology, Revised July 2010, IBR approved for § 1037.521(d).

(3) SAE J2071, Aerodynamic Testing of Road Vehicles—Open Throat Wind Tunnel Adjustment, Revised June 1994, IBR approved for § 1037.521(d).

§ 1037.815 Confidential information.

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

§ 1037.820 Requesting a hearing.

(a) You may request a hearing under certain circumstances, as described elsewhere in this part. To do this, you must file a written request, including a description of your objection and any supporting data, within 30 days after we make a decision.

(b) For a hearing you request under the provisions of this part, we will approve your request if we find that your request raises a substantial factual issue.

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(c) If we agree to hold a hearing, we will use the procedures specified in 40 CFR part 1068, subpart G.

§ 1037.825 Reporting and record-keeping requirements.

(a) This part includes various requirements to submit and record data or other information. Unless we specify otherwise, store required records in any format and on any media and keep them readily available for eight years after you send an associated application for certification, or eight years after you generate the data if they do not support an application for certification. You may not rely on anyone else to meet recordkeeping requirements on your behalf unless we specifically authorize it. We may review these records at any time. You must promptly send us organized, written records in English if we ask for them. We may require you to submit written records in an electronic format.

(b) The regulations in §1037.255 and 40 CFR 1068.25 and 1068.101 describe your obligation to report truthful and complete information. This includes information not related to certification. Failing to properly report information and keep the records we specify violates 40 CFR 1068.101(a)(2), which may involve civil or criminal penalties.

(c) Send all reports and requests for approval to the Designated Compliance Officer (see §1037.801).

(d) Any written information we require you to send to or receive from another company is deemed to be a required record under this section. Such records are also deemed to be submissions to EPA. Keep these records for eight years unless the regulations specify a different period. We may require you to send us these records whether or not you are a certificate holder.

(e) Under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq*), the Office of Management and Budget approves the reporting and recordkeeping specified in the applicable regulations. The following items illustrate the kind of reporting and recordkeeping we require for vehicles regulated under this part:

(1) We specify the following requirements related to vehicle certification in this part 1037:

40 CFR Ch. I (7–1–12 Edition)

(i) In subpart C of this part we identify a wide range of information required to certify vehicles.

(ii) In subpart G of this part we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various special compliance provisions.

(iii) In §1037.725, 1037.730, and 1037.735 we specify certain records related to averaging, banking, and trading.

(2) We specify the following requirements related to testing in 40 CFR part 1066:

(i) In 40 CFR 1065.2 we give an overview of principles for reporting information.

(ii) In 40 CFR 1065.10 and 1065.12 we specify information needs for establishing various changes to published test procedures.

(iii) In 40 CFR 1065.25 we establish basic guidelines for storing test information.

(iv) In 40 CFR 1065.695 we identify data that may be appropriate for collecting during testing of in-use vehicles using portable analyzers.

APPENDIX I TO PART 1037—HEAVY-DUTY TRANSIENT CHASSIS TEST CYCLE

	Time sec.	Speed mph	Speed m/s
1	0.00	0.00	0.00
2	0.00	0.00	0.00
3	0.00	0.00	0.00
4	0.00	0.00	0.00
5	0.00	0.00	0.00
6	0.00	0.00	0.00
7	0.41	0.41	0.18
8	1.18	1.18	0.53
9	2.26	2.26	1.01
10	3.19	3.19	1.43
11	3.97	3.97	1.77
12	4.66	4.66	2.08
13	5.32	5.32	2.38
14	5.94	5.94	2.66
15	6.48	6.48	2.90
16	6.91	6.91	3.09
17	7.28	7.28	3.25
18	7.64	7.64	3.42
19	8.02	8.02	3.59
20	8.36	8.36	3.74
21	8.60	8.60	3.84
22	8.74	8.74	3.91
23	8.82	8.82	3.94
24	8.82	8.82	3.94
25	8.76	8.76	3.92
26	8.66	8.66	3.87
27	8.58	8.58	3.84
28	8.52	8.52	3.81
29	8.46	8.46	3.78
30	8.38	8.38	3.75
31	8.31	8.31	3.71
32	8.21	8.21	3.67
33	8.11	8.11	3.63