

## Environmental Protection Agency

## § 1042.901

### § 1042.850 Exemptions and hardship relief.

This section describes exemption and hardship provisions that are available for owner/operators of engine subject to the provisions of this subpart.

(a) Vessels owned and operated by entities that meet the size criterion of this paragraph (a) are exempt from the requirements of this subpart I. To be exempt, your gross annual revenue for the calendar year before the remanufacture must be less than \$5,000,000 in 2008 dollars or the equivalent value for future years based on the Bureau of Labor Statistics' Producer Price Index (see [www.bls.gov](http://www.bls.gov)). Include all revenues from any parent company and its subsidiaries. The exemption applies only for years in which you meet this criterion.

(b) In unusual circumstances, we may exempt you from an otherwise applicable requirement that you apply a certified remanufacturing system when remanufacturing your marine engine.

(1) To be eligible, you must demonstrate that all of the following are true:

(i) Unusual circumstances prevent you from meeting requirements from this chapter.

(ii) You have taken all reasonable steps to minimize the extent of the nonconformity.

(iii) Not having the exemption will jeopardize the solvency of your company.

(iv) No other allowances are available under the regulations in this chapter to avoid the impending violation.

(2) Send the Designated Compliance Officer a written request for an exemption before you are in violation.

(3) We may impose other conditions, including provisions to use an engine meeting less stringent emission standards or to recover the lost environmental benefit.

(4) In determining whether to grant the exemptions, we will consider all relevant factors, including the following:

(i) The number of engines to be exempted.

(ii) The size of your company and your ability to endure the hardship.

(iii) The length of time a vessel is expected to remain in service.

(c) If you believe that a remanufacturing system that we identified as being available cannot be installed without significant modification of your vessel, you may ask us to determine that a remanufacturing system is not considered available for your vessel because the cost would be excessive.

### Subpart J—Definitions and Other Reference Information

#### § 1042.901 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 Clean Air Act gives to them. The definitions follow:

*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 emissions or engine performance during emission testing or normal in-use operation. This includes, but is not limited to, parameters related to injection timing and fueling rate. You may ask us to exclude a parameter that is difficult to access if it cannot be adjusted to affect emissions without significantly degrading engine performance, or if you otherwise show us that it will not be adjusted in a way that affects emissions during in-use operation.

*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 engine exhaust before it is exhausted to the environment. Exhaust-gas recirculation and turbochargers are not aftertreatment.

*Amphibious vehicle* means a vehicle with wheels or tracks that is designed primarily for operation on land and secondarily for operation in water.

*Annex VI Technical Code* means the "Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 1997," adopted by the International Maritime Organization (incorporated by reference in § 1042.910).

*Applicable emission standard* or *applicable standard* means an emission standard to which an engine is subject;

or, where an engine has been or is being certified to another standard or FEL, applicable emission standards means the FEL and other standards to which the engine has been or is being certified. This definition does not apply to subpart H of this part.

*Auxiliary emission control device* means any element of design that senses temperature, vessel 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.

*Base engine* means a land-based engine to be marinized, as configured prior to marinization.

*Baseline emissions* has the meaning given in §1042.825.

*Brake power* means the usable power output of the engine, not including power required to fuel, lubricate, or heat the engine, circulate coolant to the engine, or to operate aftertreatment devices.

*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.

*Carryover* means the process of obtaining a certificate for one model year using the same test data from the preceding model year, as described in §1042.235(d). This generally requires that the locomotives in the engine family do not differ in any aspect related to emissions.

*Category 1* means relating to a marine engine with specific engine displacement below 7.0 liters per cylinder.

*Category 2* means relating to a marine engine with a specific engine displacement at or above 7.0 liters per cylinder but less than 30.0 liters per cylinder.

*Category 3* means relating to a marine engine with a specific engine displacement at or above 30.0 liters per cylinder.

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

*Certified emission level* means the highest deteriorated emission level in an engine family for a given pollutant

from either transient or steady-state testing.

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

*Commercial* means relating to an engine or vessel that is not a recreational marine engine or a recreational vessel.

*Compression-ignition* means relating to a type of reciprocating, internal-combustion engine that is not a spark-ignition engine. Note that marine engines powered by natural gas with maximum engine power at or above 250 kW are deemed to be compression-ignition engines in §1042.1.

*Constant-speed engine* means an engine whose certification is limited to constant-speed operation. Engines whose constant-speed governor function is removed or disabled are no longer constant-speed engines.

*Constant-speed operation* has the meaning given in 40 CFR 1065.1001.

*Crankcase emissions* means airborne substances emitted to the atmosphere from any part of the engine crankcase's ventilation or lubrication systems. The crankcase is the housing for the crankshaft and other related internal parts.

*Critical emission-related component* means any of the following components:

(1) Electronic control units, aftertreatment devices, fuel-metering components, EGR-system components, crankcase-ventilation valves, all components related to charge-air compression and cooling, and all sensors and actuators associated with any of these components.

(2) Any other component whose primary purpose is to reduce emissions.

*Days* means calendar days, unless otherwise specified. For example, where we specify working days, we mean calendar days excluding weekends and U.S. national holidays.

*Designated Compliance Officer* means the Manager, Heavy-Duty and Nonroad Engine Group (6403-J), 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 engine.

*Deterioration factor* means the relationship between emissions at the end of useful life and emissions at the low-hour test point (or between highest and lowest emission levels, if applicable), 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.

*Diesel fuel* has the meaning given in 40 CFR 80.2. This generally includes No. 1 and No. 2 petroleum diesel fuels and biodiesel fuels.

*Discrete-mode* means relating to the discrete-mode type of steady-state test described in § 1042.505.

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

*Emission-data engine* means an engine that is tested for certification. This includes engines tested to establish deterioration factors.

*Emission-related maintenance* means maintenance that substantially affects emissions or is likely to substantially affect emission deterioration.

*Engine* has the meaning given in 40 CFR 1068.30. This includes complete and partially complete engines.

*Engine configuration* means a unique combination of engine hardware and calibration within an engine family. Engines within a single engine configuration differ only with respect to normal production variability.

*Engine family* has the meaning given in § 1042.230.

*Engine manufacturer* means a manufacturer of an engine. See the definition of "manufacturer" in this section.

*Engineering analysis* means a summary of scientific and/or engineering principles and facts that support a conclusion made by a manufacturer, with respect to compliance with the provisions of this part.

*Excluded* means relating to an engine that either:

(1) Has been determined not to be a nonroad engine, as specified in 40 CFR 1068.30; or

(2) Is a nonroad engine that, according to § 1042.5, is not subject to this part 1042.

*Exempted* has the meaning given in 40 CFR 1068.30.

*Exhaust-gas recirculation* means a technology that reduces emissions by routing exhaust gases that had been exhausted from the combustion chamber(s) back into the engine to be mixed with incoming air before or during combustion. The use of valve timing to increase the amount of residual exhaust gas in the combustion chamber(s) that is mixed with incoming air before or during combustion is not considered exhaust-gas recirculation for the purposes of this part.

*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. The family emission limit serves as the emission standard for the engine family with respect to all required testing.

*Freshly manufactured marine engine* means a new marine engine that has not been remanufactured. An engine becomes freshly manufactured when it is originally manufactured.

*Foreign vessel* means a vessel of foreign registry or a vessel operated under the authority of a country other than the United States.

*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 tank cap, fuel pump, fuel filters, fuel lines, carburetor or fuel-injection components, and all fuel-system vents.

*Fuel type* means a general category of fuels such as gasoline, diesel fuel, residual 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.

*Green Engine Factor* means a factor that is applied to emission measurements from a Category 2 engine that has had little or no service accumulation. The Green Engine Factor adjusts emission measurements to be equivalent to emission measurements from an engine that has had approximately 300 hours of use.

*High-sulfur diesel fuel* means one of the following:

(1) For in-use fuels, *high-sulfur diesel fuel* means a diesel fuel with a maximum sulfur concentration above 500 parts per million.

(2) For testing, *high-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

*Hydrocarbon (HC)* means the hydrocarbon group on which the emission standards are based for each fuel type, as described in § 1042.101(d).

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

*Low-hour* means relating to an engine that has stabilized emissions and represents the undeteriorated emission level. This would generally involve less than 125 hours of operation for engines below 560 kW and less than 300 hours for engines at or above 560 kW.

*Low-sulfur diesel fuel* means one of the following:

(1) For in-use fuels, *low-sulfur diesel fuel* means a diesel fuel market as low-sulfur diesel fuel having a maximum sulfur concentration of 500 parts per million.

(2) For testing, *low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

*Manufacture* means the physical and engineering process of designing, constructing, and assembling an engine or a vessel.

*Manufacturer* has the meaning given in section 216(1) of the Clean Air Act (42 U.S.C. 7550(1)). In general, this term includes any person who manufactures an engine or vessel for sale in the United States or otherwise introduces a new marine engine into U.S. commerce. This includes importers who import engines or vessels for resale. It also includes post-manufacture

marinizers, but not dealers. All manufacturing entities under the control of the same person are considered to be a single manufacturer.

*Marine engine* means a nonroad engine that is installed or intended to be installed on a marine vessel. This includes a portable auxiliary marine engine only if its fueling, cooling, or exhaust system is an integral part of the vessel. A fueling system is considered integral to the vessel only if one or more essential elements are permanently affixed to the vessel. There are two kinds of marine engines:

(1) Propulsion marine engine means a marine engine that moves a vessel through the water or directs the vessel's movement.

(2) Auxiliary marine engine means a marine engine not used for propulsion.

*Marine vessel* has the meaning given in 1 U.S.C. 3, except that it does not include amphibious vehicles. The definition in 1 U.S.C. 3 very broadly includes every craft capable of being used as a means of transportation on water.

*Maximum engine power* has the meaning given in § 1042.140.

*Maximum test power* means the power output observed at the maximum test speed with the maximum fueling rate possible.

*Maximum test speed* has the meaning given in 40 CFR 1065.1001.

*Maximum test torque* has the meaning given in 40 CFR 1065.1001.

*Model year* means one of the following things:

(1) For freshly manufactured marine engines (see definition of "new marine engine," paragraph (1)), model year means one of the following:

(i) Calendar year.

(ii) Your annual new model production period if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For an engine that is converted to a marine engine after originally being placed into service as a motor-vehicle engine, a nonroad engine that is not a marine engine, or a stationary engine, model year means the calendar year in which the engine was converted (see

definition of "new marine engine," paragraph (2)).

(3) For a marine engine excluded under §1042.5 that is later converted to operate in an application that is not excluded, model year means the calendar year in which the engine was converted (see definition of "new marine engine," paragraph (3)).

(4) For engines that are not freshly manufactured but are installed in new vessels, model year means the calendar year in which the engine is installed in the new vessel (see definition of "new marine engine," paragraph (4)).

(5) For imported engines:

(i) For imported engines described in paragraph (5)(i) of the definition of "new marine engine," *model year* has the meaning given in paragraphs (1) through (4) of this definition.

(ii) For imported engines described in paragraph (5)(ii) of the definition of "new marine engine," *model year* means the calendar year in which the engine is modified.

(iii) For imported engines described in paragraph (5)(iii) of the definition of "new marine engine," *model year* means the calendar year in which the importation occurs.

(6) For freshly manufactured vessels, model year means the calendar year in which the keel is laid or the vessel is at a similar stage of construction. For vessels that become new as a result of substantial modifications, model year means the calendar year in which the modifications physically begin.

(7) For remanufactured engines, model year means the calendar year in which the remanufacture takes place.

*Motor vehicle* has the meaning given in 40 CFR 85.1703(a).

*New marine engine* means any of the following things:

(1) A freshly manufactured marine engine for which the ultimate purchaser has never received the equitable or legal title. This kind of engine might commonly be thought of as "brand new." In the case of this paragraph (1), the engine is new from the time it is produced until the ultimate purchaser receives the title or the product is placed into service, whichever comes first.

(2) An engine intended to be installed in a vessel that was originally manu-

factured as a motor-vehicle engine, a nonroad engine that is not a marine engine, or a stationary engine. In this case, the engine is no longer a motor-vehicle, nonmarine, or stationary engine and becomes a "new marine engine." The engine is no longer new when it is placed into marine service.

(3) A marine engine that has been previously placed into service in an application we exclude under §1042.5, where that engine is installed in a vessel that is covered by this part 1042. The engine is no longer new when it is placed into marine service covered by this part 1042. For example, this would apply to an engine that is no longer used in a foreign vessel.

(4) An engine not covered by paragraphs (1) through (3) of this definition that is intended to be installed in a new vessel. The engine is no longer new when the ultimate purchaser receives a title for the vessel or it is placed into service, whichever comes first. This generally includes installation of used engines in new vessels.

(5) A remanufactured marine engine. An engine becomes new when it is remanufactured (as defined in this section) and ceases to be new when placed back into service.

(6) An imported marine engine, subject to the following provisions:

(i) An imported marine engine covered by a certificate of conformity issued under this part that meets the criteria of one or more of paragraphs (1) through (4) of this definition, where the original engine manufacturer holds the certificate, is new as defined by those applicable paragraphs.

(ii) An imported remanufactured engine that would have been required to be certified if it had been remanufactured in the United States.

(iii) An imported engine that will be covered by a certificate of conformity issued under this part, where someone other than the original engine manufacturer holds the certificate (such as when the engine is modified after its initial assembly), is a new marine engine when it is imported. It is no longer new when the ultimate purchaser receives a title for the engine or it is placed into service, whichever comes first.

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(iv) An imported marine engine that is not covered by a certificate of conformity issued under this part at the time of importation is new, but only if it was produced on or after the dates shown in the following table. This addresses uncertified engines and vessels

initially placed into service that someone seeks to import into the United States. Importation of this kind of engine (or vessel containing such an engine) is generally prohibited by 40 CFR part 1068.

APPLICABILITY OF EMISSION STANDARDS FOR COMPRESSION-IGNITION MARINE ENGINES

Engine category and type	Power (kW)	Per-cylinder displacement (L/cyl)	Initial model year of emission standards
Category 1 .....	P < 19 .....	All .....	2000
Category 1 .....	19 ≤ P < 37 .....	All .....	1999
Category 1, Recreational .....	P ≥ 37 .....	disp. < 0.9 .....	2007
Category 1, Recreational .....	All .....	0.9 ≤ disp. < 2.5 .....	2006
Category 1, Recreational .....	All .....	disp. ≥ 2.5 .....	2004
Category 1, Commercial .....	P ≥ 37 .....	disp. < 0.9 .....	2005
Category 1, Commercial .....	All .....	disp. ≥ 0.9 .....	2004
Category 2 and 3 .....	All .....	disp. ≥ 5.0 .....	2004

*New vessel* means any of the following:

(1) A vessel for which the ultimate purchaser has never received the equitable or legal title. The vessel is no longer new when the ultimate purchaser receives this title or it is placed into service, whichever comes first.

(2) For vessels with no Category 3 engines, a vessel that has been modified such that the value of the modifications exceeds 50 percent of the value of the modified vessel, excluding temporary modifications (as defined in this section). The value of the modification is the difference in the assessed value of the vessel before the modification and the assessed value of the vessel after the modification. The vessel is no longer new when it is placed into service. Use the following equation to determine if the fractional value of the modification exceeds 50 percent:

$$\text{Percent of value} = \frac{[(\text{Value after modification}) - (\text{Value before modification})] \times 100\%}{(\text{Value after modification})}$$

(3) For vessels with Category 3 engines, a vessel that has undergone a modification that substantially alters the dimensions or carrying capacity of the vessel, changes the type of vessel, or substantially prolongs the vessel's life.

(4) An imported vessel that has already been placed into service, where it has an engine not covered by a certificate of conformity issued under this

part at the time of importation that was manufactured after the requirements of this part start to apply (see § 1042.1).

*Noncompliant engine* means an engine 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 engine* means an engine not covered by a certificate of conformity that would otherwise be subject to emission standards.

*Nonmethane hydrocarbon* has the meaning given in 40 CFR 1065.1001. This generally means the difference between the emitted mass of total hydrocarbons and the emitted mass of methane.

*Nonroad* means relating to nonroad engines, or vessels, or equipment that include nonroad engines.

*Nonroad engine* has the meaning given in 40 CFR 1068.30. In general, this means all internal-combustion engines except motor vehicle engines, stationary engines, engines used solely for competition, or engines used in aircraft.

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

*Operator demand* has the meaning given in 40 CFR 1065.1001.

*Owners manual* means a document or collection of documents prepared by the engine manufacturer for the owner or operator to describe appropriate engine maintenance, applicable warranties, and any other information related to operating or keeping the engine. The owners manual is typically provided to the ultimate purchaser at the time of sale. The owners manual may be in paper or electronic format.

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

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

*Passenger* means a person that provides payment as a condition of boarding a vessel. This does not include the owner or any paid crew members.

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

*Point of first retail sale* means the location at which the initial retail sale occurs. This generally means a vessel dealership or manufacturing facility, but may also include an engine seller or distributor in cases where loose engines are sold to the general public for uses such as replacement engines.

*Post-manufacture marinizer* means an entity that produces a marine engine by modifying a non-marine engine, whether certified or uncertified, complete or partially complete, where the entity is not controlled by the manufacturer of the base engine or by an entity that also controls the manufacturer of the base engine. In addition, vessel manufacturers that substantially modify marine engines are post-manufacture marinizers. For the purpose of this definition, "substantially modify" means changing an engine in a way that could change engine emission characteristics.

*Power density* has the meaning given in § 1042.140.

*Ramped-modal* means relating to the ramped-modal type of steady-state test described in § 1042.505.

*Rated speed* means the maximum full-load governed speed for governed engines and the speed of maximum power for ungoverned engines.

*Recreational marine engine* means a Category 1 propulsion marine engine that is intended by the manufacturer to be installed on a recreational vessel.

*Recreational vessel* means a vessel that is intended by the vessel manufacturer to be operated primarily for pleasure or leased, rented or chartered to another for the latter's pleasure. However, this does not include the following vessels:

(1) Vessels below 100 gross tons that carry more than 6 passengers.

(2) Vessels at or above 100 gross tons that carry one or more passengers.

(3) Vessels used solely for competition (see § 1042.620).

*Remanufacture* means to replace every cylinder liner in a commercial engine with maximum engine power at or above 600 kW, whether during a single maintenance event or cumulatively within a five-year period. For the purpose of this definition, "replace" includes removing, inspecting, and re-qualifying a liner. Rebuilding a recreational engine or an engine with maximum engine power below 600 kW is not remanufacturing.

*Remanufacture system* or *remanufacturing system* means all components (or specifications for components) and instructions necessary to remanufacture an engine in accordance with applicable requirements of this part 1042.

*Remanufacturer* has the meaning given to "manufacturer" in section 216(1) of the Clean Air Act (42 U.S.C. 7550(1)) with respect to remanufactured marine engines. This term includes any person that is engaged in the manufacture or assembly of remanufactured engines, such as persons who:

(1) Design or produce the emission-related parts used in remanufacturing.

(2) Install parts in or on an existing engine to remanufacture it.

(3) Own or operate the engine and provide specifications as to how an engine is to be remanufactured (i.e., specifying who will perform the work, when the work is to be performed, what parts are to be used, or how to calibrate the adjustable parameters of the engine).

*Residual fuel* has the meaning given in 40 CFR 80.2. This generally includes all RM grades of marine fuel without regard to whether they are known commercially as residual fuel. For example, fuel marketed as intermediate fuel may be residual fuel.

*Revoke* has the meaning given in 40 CFR 1068.30. In general this means to terminate the certificate or an exemption for an engine family.

*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.

*Small volume boat builder* means a boat manufacturer with fewer than 500 employees and with annual worldwide production of fewer than 100 boats. For manufacturers owned by a parent company, these limits apply to the combined production and number of employees of the parent company and all its subsidiaries.

*Small-volume engine manufacturer* means a manufacturer with annual worldwide production of fewer than 1,000 internal combustion engines (marine and nonmarine). For manufacturers owned by a parent company, the limit applies to the production 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.

*Specified adjustable range* means a range of adjustment for an adjustable parameter that is approved as part of certification. Note that Category 1 engines must comply with emission standards over the full physically adjustable range for any adjustable parameters.

*Steady-state* has the meaning given in 40 CFR 1065.1001.

*Sulfur-sensitive technology* means an emission control technology that experiences a significant drop in emission control performance or emission-sys-

tem durability when an engine is operated on low-sulfur fuel (i.e., fuel with a sulfur concentration of 300 to 500 ppm) as compared to when it is operated on ultra low-sulfur fuel (i.e., fuel with a sulfur concentration less than 15 ppm). Exhaust-gas recirculation is not a sulfur-sensitive technology.

*Suspend* has the meaning given in 40 CFR 1068.30. In general this means to temporarily discontinue the certificate or an exemption for an engine family.

*Temporary modification* means a modification to a vessel based on a written contract for marine services such that the modifications will be removed from the vessel when the contract expires. This provision is intended to address short-term contracts that would generally be less than 12 months in duration. You may ask us to consider modifications that will be in place longer than 12 months as temporary modifications.

*Test engine* means an engine in a test sample.

*Test sample* means the collection of engines selected from the population of an engine family for emission testing. This may include testing for certification, production-line testing, or in-use testing.

*Tier 1* means relating to the Tier 1 emission standards, as shown in Appendix I.

*Tier 2* means relating to the Tier 2 emission standards, as shown in Appendix I.

*Tier 3* means relating to the Tier 3 emission standards, as shown in § 1042.101.

*Tier 4* means relating to the Tier 4 emission standards, as shown in § 1042.101.

*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

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gas sample, expressed as exhaust hydrocarbon from petroleum-fueled locomotives. The hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

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

*Ultra low-sulfur diesel fuel* means one of the following:

(1) For in-use fuels, *ultra low-sulfur diesel fuel* means a diesel fuel marketed as ultra low-sulfur diesel fuel having a maximum sulfur concentration of 15 parts per million.

(2) For testing, *ultra low-sulfur diesel fuel* has the meaning given in 40 CFR part 1065.

*United States* has the meaning given in 40 CFR 1068.30.

*Upcoming model year* means for an engine family the model year after the one currently in production.

*U.S.-directed production volume* means the number of engine 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.

*Useful life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. It is the period during which a new engine is required to comply with all applicable emission standards. See § 1042.101(e).

*Variable-speed engine* means an engine that is not a constant-speed engine.

*Vessel* means a marine vessel.

*Vessel operator* means any individual that physically operates or maintains a vessel or exercises managerial control over the operation of the vessel.

*Vessel owner* means the individual or company that holds legal title to a vessel.

*Void* has the meaning given in 40 CFR 1068.30. In general this means to invalidate a certificate or an exemption both retroactively and prospectively.

*Volatile liquid fuel* means any fuel other than diesel fuel 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.

### § 1042.905 Symbols, acronyms, and abbreviations.

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

ABT Averaging, banking, and trading.  
AECD auxiliary-emission control device.  
CFR Code of Federal Regulations.  
CO carbon monoxide.  
CO<sub>2</sub> carbon dioxide.  
cyl cylinder.  
disp. displacement.  
EPA Environmental Protection Agency.  
FEL Family Emission Limit.  
g grams.  
HC hydrocarbon.  
hr hours.  
kPa kilopascals.  
kW kilowatts.  
L liters.  
LTR Limited Testing Region.  
NARA National Archives and Records Administration.  
NMHC nonmethane hydrocarbons.  
NO<sub>x</sub> oxides of nitrogen (NO and NO<sub>2</sub>).  
NTE not-to-exceed.  
PM particulate matter.  
RPM revolutions per minute.  
SAE Society of Automotive Engineers.  
SCR selective catalytic reduction.  
THC total hydrocarbon.  
THCE total hydrocarbon equivalent.  
ULSD ultra low-sulfur diesel fuel.  
U.S.C. United States Code.

### § 1042.910 Reference materials.

Documents listed in this section have been incorporated by reference into this part. The Director of the Federal Register approved the incorporation by reference as prescribed in 5 U.S.C. 552(a) and 1 CFR part 51. Anyone may inspect copies at the U.S. EPA, Air and Radiation Docket and Information Center, 1301 Constitution Ave., NW., Room B102, EPA West Building, Washington, DC 20460 or 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(a) *SAE material*. Table 1 to this section lists material from the Society of