

are comprised of second-by-second specifications for torque and speed. Both torque and speed are normalized in these cycles.

(1) Torque is normalized to the maximum torque at the speed listed with it. Therefore, to denormalize the torque values in the cycle, use the maximum torque curve for the engine in question. The generation of the maximum torque curve is described in § 1065.510.

(2) To denormalize speed, use the following equation:

$$\text{Actual rpm} = (0.01)(\% \text{rpm})(\text{Maximum test speed} - \text{warm idle speed}) + \text{warm idle speed.}$$

(3) Paragraph (d) of this section describes the method of calculating maximum test speed.

(b) *Example of the denormalization procedure.* For an engine with maximum test speed of 3800 rpm and warm idle speed of 600 rpm, denormalize the following test point: percent rpm = 43, percent torque = 82.

(1) *Calculate actual rpm.* Use the following equation:

$$\text{Actual rpm} = (0.01)(43)(3800 - 600) + 600 = 1976.$$

(2) *Determine actual torque.*

Determine the maximum observed torque at 1976 rpm from the maximum torque curve. Then multiply this value (for example, 358 ft-lbs) by 0.82. This results in an actual torque of 294 ft-lbs.

(c) *Cold-start enhancement devices.* Proper operation of the engine's automatic cold-start enhancement device supersedes the zero-percent speed specified in the test cycles.

(d) *Maximum test speed.* Maximum test speed is used for all the emission testing we require. It occurs on the lug curve at the point farthest from the origin on a plot of power vs. speed. To find this speed, follow these steps:

(1) *Generate the lug curve.* Before testing an engine for emissions, generate data points for maximum measured brake power with varying engine speed (see § 1065.510). These data points form the lug curve.

(2) *Normalize the lug curve.* To normalize the lug curve, do three things:

(i) Identify the point (power and speed) on the lug curve where maximum power occurs.

(ii) Normalize the power values of the lug curve—divide them by the maximum power and multiply the resulting values by 100.

(iii) Normalize the engine speed values of the lug curve—divide them by the speed at which maximum power occurs and multiply the resulting values by 100.

(3) *Determine maximum test speed.* Calculate the maximum test speed from the following speed-factor analysis:

(i) For a given power-speed point, the speed factor is the normalized distance to the power-speed point from the zero-power, zero-speed point. Compute the speed factor's value:

$$\text{Speed factor} = \sqrt{(\text{power})^2 + (\text{speed})^2}$$

(ii) Determine the maximum value of speed factors for all the power-speed data points on the lug curve. Maximum test speed is the speed at which the speed factor's maximum value occurs. Note that this maximum test speed is the 100-percent speed point for normalized transient duty cycles.

(4) *Constant-speed engines.* For constant-speed engines, maximum test speed is the same as the engine's maximum in-use operating speed.

(e) *Intermediate test speed.* Determine intermediate test speed with the following provisions:

(1) If peak torque speed is between 60 to 75 percent of maximum test speed, the intermediate speed point is at that same speed.

(2) If peak torque speed is less than 60 percent of maximum test speed, the intermediate speed point is at 60 percent of maximum test speed.

(3) If peak torque speed is greater than 75 percent of maximum test speed, the intermediate speed point is at 75 percent of maximum test speed.

§ 1065.520 Engine starting, restarting, and shutdown.

Applicable test cycles may contain requirements to start or shut down the engine. This section specifies how to do that.

(a) *Engine starting.* Start the engine according to the manufacturer's recommended starting procedure in the owner's manual, using either a production starter motor or the dynamometer. The speed at which the engine is cranked (motored) with the dynamometer should be equal to the typical in-use cranking speed (nominal speed ± 10 percent) with a fully charged battery. The time the dynamometer takes to accelerate the engine to cranking speed should be equal (nominal ± 0.5 seconds) to the time required with a starter motor. Terminate motoring by the dynamometer within one second of starting the engine. The free-idle period of the cycle begins when you determine that the engine has started.

(1) If the engine does not start after 15 seconds of cranking, cease cranking and determine the reason for the failure to start. Turn off the gas flow measuring

device (or revolution counter) on the constant-volume sampler (and the hydrocarbon integrator when measuring hydrocarbons continuously) during this diagnostic period. Also, either turn off the CVS or disconnect the exhaust tube from the tailpipe during the diagnostic period. If failure to start is an operational error, reschedule the engine for testing (this may require soaking the engine if a cold-start is required for the test).

(2) If longer cranking times are necessary, you may use them instead of the 15-second limit, as long as the owner's manual and the service repair manual describe the longer cranking times as normal.

(3) If an engine malfunction causes a failure to start, you may take corrective action of less than 30 minutes duration and continue the test. Reactivate the sampling system at the same time cranking begins. When the engine starts, begin the timing sequence. If an engine malfunction causes a failure to start and the engine cannot be restarted, the test is void.

(b) *Engine stalling.* Respond to engine stalling according to the following provisions:

(1) If the engine stalls during the warm-up period, the initial idle period of test, or the steady-state segment, you may restart the engine immediately using the appropriate starting procedure and continue the test.

(2) If the engine stalls anywhere else during the test, the test is void.

(c) *Engine shutdown.* Shut the engine down according to the manufacturer's specifications.

§ 1065.525 Engine dynamometer test run.

Take the following steps for each test:

(a) Prepare the engine, dynamometer, and sampling system. Change filters or other replaceable items and leak check as necessary.

(b) If you are using bag samples, connect evacuated sample collection bags to the dilute exhaust and dilution air sample collection systems.

(c) Attach the CVS to the engine exhaust system any time prior to starting the CVS.

(d) Start the CVS (if not already started), the sample pumps, the engine cooling fan(s), and the data collection system. Preheat the heat exchanger of the constant-volume sampler (if used) and the heated components of any continuous sampling system(s) to their designated operating temperatures before the test begins.

(e) Adjust the sample flow rates to the desired flow rates and set the CVS gas flow measuring devices to zero. CFV—

CVS sample flow rate is fixed by the venturi design.

(f) Start the engine if engine starting is not part of the test cycle specified in the standard-setting part.

(g) Run the test cycle specified in the standard-setting part and collect the test data.

(h) As soon as practical after the test cycle is completed, analyze the bag samples.

§ 1065.530 Test cycle validation criteria.

(a) *Steady-state emission testing.* Engine speeds and/or loads may not deviate from the set point more than ±2 percent of point during the sampling period for a valid test.

(b) *Transient emission testing performed by EPA.* Emission tests not meeting the specifications of this paragraph (b) are not considered to be in accordance with the test cycle requirements of the standard-setting part, except where the cause of the failure to meet these specifications is determined to be related to the engine rather than the test equipment.

(1) *Shifting feedback signals.* To minimize the biasing effect of the time lag between the feedback and reference cycle values, you may advance or delay the entire engine speed and torque feedback signal sequence with respect to the reference speed and torque sequence. If the feedback signals are shifted, you must shift both speed and torque the same amount in the same direction.

(2) *Brake kilowatt-hour calculation.* Calculate the brake kilowatt-hour for each pair of engine feedback speed and torque values recorded. Also calculate the reference brake kilowatt-hour for each pair of engine speed and torque reference values. Calculations must be done to five significant figures.

(3) *Regression line analysis.* Perform regression analysis to calculate validation statistics according to the following:

(i) Perform linear regressions of feedback value on reference value for speed, torque, and brake power on 1 Hz data after the feedback shift has occurred (see paragraph (b)(1) of this section). Use the method of least

squares, with the best fit equation having the form:

$$y = mx + b$$

Where:

y = The feedback (actual) value of speed (rpm), torque (ft-lbs), or brake power.

m = Slope of the regression line.

x = The reference value (speed, torque, or brake power).

b = The y-intercept of the regression line.

(ii) Calculate the standard error of estimate (SE) of y on x and the coefficient of determination (r²) for each regression line.

(iii) For the test to be considered valid, the slope, intercept, standard error, and coefficient of determination must meet the criteria in Table 1 of § 1065.530 and the integrated brake kilowatt-hour of the feedback cycle does must be within 5 percent of the integrated brake kilowatt-hour of the reference cycle. Individual points may be deleted from the regression analyses consistent with good engineering judgment. Table 1 follows:

TABLE 1 OF § 1065.530.—STATISTICAL CRITERIA FOR TEST CYCLE VALIDATION

	Speed	Torque	Power
1. Standard error of the estimate of Y on X (SE).	100 rpm	15 percent of maximum torque from power map.	10 percent of maximum power from power map.
2. Slope of the regression line (m)	0.980 to 1.020	0.880 to 1.030	0.880 to 1.030.
3. Coefficient of determination (r ²)	r ² ≥0.970	r ² ≥0.900	r ² ≥0.900.
4. Y intercept of the regression line (b)	|b|≤40 rpm .....	|b|≤5.0 percent of maximum torque from power map.	|b|≤3.0 percent of maximum torque from power map.

(c) *Transient testing performed by manufacturers.* Emission tests meeting the specifications of paragraph (b) of this section are considered to be in accordance with the test cycle requirements of the standard-setting part. A manufacturer may choose to use a dynamometer not capable of meeting the specifications of paragraph (b) of this section.

Subpart G—Data Analysis and Calculations

§ 1065.601 Overview.

This subpart describes how to use the responses on the analyzers and other meters to calculate final gram per kilowatt-hour emission rates.

§ 1065.605 Required records.

Retain the following information for each test:

(a) Test number.

(b) System or device tested (brief description).

(c) Date and time of day for each part of the test schedule.

(d) Test results.

(e) Operator's name.

(f) Engine: ID number, manufacturer, model year, emission standards, engine family, basic engine description, fuel system, engine code, and idle rpm, as applicable.

(g) Dynamometer: Dynamometer identification, records to verify compliance with the duty cycle requirements of the test.

(h) Gas analyzers: Analyzer bench identification, analyzer ranges, recordings of analyzer output during zero, span, and sample readings.

(i) Recorder charts: Test number, date, identification, operator's name, and identification of the measurements recorded.

(j) Test cell barometric pressure, ambient temperature, and humidity as

required. (Some test systems may require continuous measurements, others may require a single measurement, or measurements before and after the test.)

(k) Temperatures: Records to verify compliance with the ambient temperature requirements throughout the test procedure.

(l) CFV-CVS: Total dilute exhaust volume (V_{mix}) for each phase of the exhaust test.

(m) PDP-CVS: Test measurements for calculating the total dilute exhaust volume (V_{mix}), and the V_{mix} for each phase of the exhaust test.

(n) The humidity of the dilution air. (Note: If you do not use conditioning columns, this measurement is not necessary. If you use conditioning columns and take the dilution air from the test cell, you may use the ambient humidity for this measurement.)

§ 1065.610 Bag sample analysis.

(a) Zero the analyzers and obtain a stable zero reading. Recheck after tests.

(b) Introduce span gases and set instrument gains. To avoid errors, span and calibrate at the same flow rates used to analyze the test sample. Span gases should have concentrations equal to 75 to 100 percent of full scale. If gain has shifted significantly on the analyzers, check the calibrations. Show actual concentrations on the chart.

(c) Check zeroes; repeat the procedure in paragraphs (a) and (b) of this section if necessary.

(d) Check flow rates and pressures.

(e) Measure HC, CO, and NO_x concentrations of samples.

(f) Check zero and span points. If the difference is greater than 2 percent of full scale, repeat the procedure in paragraphs (a) through (e) of this section.

§ 1065.615 Bag sample calculations.

(a) Calculate the dilution factor. The dilution factor is the ratio of the total volume of the raw exhaust to the total volume of the diluted exhaust. It is calculated as 134,000 divided by the sum of the diluted ppmC concentrations of carbon-containing compounds in the exhaust; that is:

$$DF = 134,000 / (CO_{2\text{sample}} + THC_{\text{sample}} + CO_{\text{sample}}),$$

Where:

CO_{2sample} and CO_{sample} are expressed as ppm, and THC_{sample} is expressed as ppmC.

(b) Calculate mass emission rates (g/test) for the transient segment using the general equation in paragraph (b)(1) of this section:

(1) The general equation follows:
emission rate = (total dilute exhaust volumetric flow)(ppm)(density factor)/10⁶ M_x = (V_{mix})(C_i)(f_{di})/10⁶

Where:

M_x = Mass emission rate in g/test segment.

V_{mix} = Total dilute exhaust volumetric flow in m³ per test segment.

C_i = The concentration of species i, in ppm or ppmC, corrected for background contribution according to the equation in paragraph (b)(2) of this section.

f_{di} = The density factor for species i. The density factors are 576.8 g/m³ for THC, 1913 g/m³ for NO_x, and 1164 g/m³ for CO.

(2) The equation for calculating C_i follows:

$$C_i = C_{\text{sample}} - C_{\text{background}} [1 - (1/DF)]$$

Where:

C_{sample} = Concentration of species i in the diluted exhaust sample, in ppm or ppmC.

C_{background} = Concentration of species i in the dilution air background sample, in ppm or ppmC.

DF = Dilution factor, as calculated in paragraph (a) of this section.

(c) Calculate total brake work done during the emissions sampling period of each segment or mode.

(d) Determine the time duration of the emission sampling period.

(e) Calculate emissions in g/kW-hr by dividing the mass emission rate by the total brake work and the duration of the emission sampling period.

Subpart H—Particulate Measurements [Reserved]**Subpart I—Testing With Oxygenated Fuels [Reserved]****Subpart J—Field Testing****§ 1065.901 Applicability.**

(a) The test procedures in this subpart measure brake-specific emissions from engines while they remain installed in vehicles or equipment in the field.

(b) These test procedures apply to your engines as specified in the standard-setting part.

§ 1065.905 General provisions.

(a) Unless the standard-setting part specifies deviations from the provisions of this subpart, testing conducted under this subpart must conform to all of the provisions of this subpart.

(b) Testing conducted under this subpart may include any or all normal in-use operation of the engine.

§ 1065.910 Measurement accuracy and precision.

(a) Measurement systems used for in-use testing must be accurate to within ±5 percent compared to engine dynamometer testing conducted according to the test procedures of this part that are applicable for your engine. These systems must also have a precision of ±5 percent or better. Determine accuracy and precision of an in-use system by simultaneously measuring emissions using the engine-dynamometer test procedures of this part and the in-use system. To have a statistically valid sample, measure emissions during at least 3 tests each for at least 3 different engines. You must conduct these verification tests using the test cycle specified in the standard-setting part, unless we approve a different test cycle.

(1) A system must meet the following conditions to be considered sufficiently accurate:

(i) The correlation coefficient (r) for a least-squares linear fit that includes the origin must be 0.95 or higher.

(ii) The average ratio (for all tests) of the emission rate from the in-use system divided by the emission rate from the dynamometer procedure must be between 0.97 and 1.05.

(2) For a system to be considered sufficiently precise, the average coefficient of variance for all engines must be 5 percent or less for each pollutant. (Note: Increasing the length of the sampling period may be an effective way to improve precision.)

(b) Measurement systems that conform to the provisions of §§ 1065.915 through 1065.950 are considered to be in compliance with the accuracy and precision requirements of paragraph (a) of this section.

§ 1065.915 Equipment specifications for SI engines.

This section describes equipment you may use to measure in-use emissions. You may use other equipment and measurement systems that conform to the requirements of §§ 1065.905 and 1065.910.

(a) The primary components of the in-use measurement system are a mass air flow sensor, a portable FID, a zirconia-based NO_x sensor, a zirconia-based air/fuel ratio sensor, and a portable NDIR analyzer.

(1) The mass air flow sensor must meet the requirements of § 1065.930.

(2) The portable FID must meet the requirements of § 1065.935.

(3) The NO_x and air/fuel sensors must meet the requirements of § 1065.940.

(4) The NDIR analyzer must meet the requirements of § 1065.941.

(b) You must measure the following parameters continuously at a rate of 3 Hz or higher and store the data electronically:

(1) THC, NO_x, CO concentrations.

(2) Air/fuel ratio.

(3) Intake air flow rate.

(4) Engine speed.

(5) Parameters used to calculate torque.

(c) You must minimize sample line length for any analyzers that require a physical sample be drawn from the exhaust to the analyzer (i.e., THC and CO analyzers). You must draw these samples at a constant flow rate. In no case may you use any combination of sample line length and sample flow rate that would result in the length of time necessary for the analyzer to reach 90 percent of its final response after a step change to the input concentration at the opening of the sample probe being greater than 10 seconds. For residence time delays between 1 and 10 seconds, you must correct the measurements to be consistent with the engine speed, torque, and air intake data. You may

also correct other measurements with less than 1 second lags.

(d) The sample probes and sensors can be inserted into the exhaust pipe, or mounted in an exhaust extension that is connected to the exhaust pipe with negligible leaking. The sample probes and sensors must be located sufficiently close to the center line of the exhaust pipe to minimize boundary layer effects from the wall.

§ 1065.920 Equipment setup and test run for SI engines.

This section describes how to set up the equipment specified in § 1065.915, and how to use it to measure in-use emissions from SI engines.

(a) Inspect the vehicle or equipment to determine whether it meets any applicable requirements of the standard-setting part. This may include requirements related to model year, accumulated hours of operation, fuel specifications, maintenance history, engine temperatures, etc.

(b) Perform calibrations as specified in this subpart. In the field, this generally will require only zeroing and spanning the instruments. However, each instrument must have been fully calibrated according to the instrument manufacturer's specifications. Nonlinear calibrations generated previously from the full calibration may be used after zeroing and spanning the instruments. Spanning can be performed using a single gas bottle, consistent with good engineering practice, and provided that stability of the span mixture has been demonstrated.

(c) Connect the data recorder (with any necessary signal interpreters or converters) to the engine's electronic control module (ECM).

(d) Disconnect the air intake system as necessary to attach the mass air flow sensor. Reconnect the system after attaching the mass air flow sensor.

(e) Attach the sample extension to the exhaust outlet.

(f) Turn on instruments and allow them to warm up as necessary.

(g) Begin sampling. You do not need to begin recording the data at this point.

(h) Begin operating the vehicle or equipment in a normal manner. (Note: We may require you to operate the vehicle or equipment in a specific manner.)

(i) Begin recording engine speed, engine torque (or surrogate), intake air flow, emissions data (THC, NO_x, CO, air/fuel ratio), and time. This is the beginning of the sampling period.

(j) Continue recording data and operating the vehicle or equipment in a normal manner until the end of the sampling period. The length of the

sampling period is based on good engineering practice, the precision requirements of § 1065.910, and applicable limits in the standard-setting part.

(k) You may measure background concentrations and correct measured emission values accordingly. However, if any background corrections are equivalent to 5 percent or more of the maximum emissions allowed by the applicable standard, the test shall be voided and repeated in an environment with lower background concentrations.

§ 1065.925 Calculations.

(a) [Reserved]

(b) Convert emission analyzer data to instantaneous concentrations in ppm (ppmC for the FID).

(c) Calculate instantaneous exhaust volumetric flow rates in m³/hr:

$$\text{exhaust flow rate} = (\text{intake air flow rate})(1 - f/a)$$

(d) Calculate instantaneous emission rates (g/hr) using the following general equation:

$$\text{emission rate} = (\text{exhaust volumetric flow rate})(\text{ppm})(\text{density factor})/10^6$$

Where:

density factors are 576.8 g/m³ for THC, 1913 g/m³ for NO_x, 1164 g/m³ for CO.

(e) Integrate instantaneous emission rates for the entire specified sample period.

(f) Determine instantaneous brake torque and speed.

(g) Calculate instantaneous brake power.

(h) Integrate instantaneous brake power for the entire specified sample period.

(i) Divide the integrated emission rates by the integrated brake power. These are your final brake-specific emission rates.

§ 1065.930 Specifications for mass air flow sensors.

(a) Measure the intake air flow using the engine's mass air flow sensor. If the engine is not equipped with a mass air flow sensor, you need to install one.

(b) The sensor design must have an accuracy and precision of ±5 percent under steady-state laboratory conditions.

(c) The sensor must reach at least 90 percent of its final response within 0.3 seconds after any step change to the flow rate greater than or equal 80 percent of full scale.

(d) Calibrate the sensor according to good engineering practice. Prior to testing verify for each engine that the sensor accurately reads the idle intake air flow rate based on measured

manifold temperature (T_M) and pressure (P_M). Use the following equation:

$$\text{Intake air flow} = (\text{displacement})(\text{rpm})(\text{volumetric efficiency})(P_M/101.3 \text{ kPa})(293.15/T_M)$$

§ 1065.935 Specifications for THC analyzers.

(a) Use a flame ionization detector (FID).

(b) The analyzer must have an accuracy and precision of ±2 percent of point or better under steady-state laboratory conditions.

(c) The analyzer must reach at least 90 percent of its final response within 1.0 second after any step change to the input concentration greater than or equal 80 percent of full scale.

(d) Zero and span the analyzer daily during testing. Calibrate it according to the analyzer manufacturer's specifications.

§ 1065.940 Specifications for NO_x and air/fuel sensors.

(a) Use stabilized zirconia-based sensors.

(b) The sensors must have an accuracy and precision of ±2 percent of point or better under steady-state laboratory conditions.

(c) The sensors must reach at least 90 percent of its final response within 1.0 second after any step change to the input concentration greater than or equal 80 percent of full scale.

(d) The sensors must be zeroed and spanned daily during testing, and must be calibrated according to the sensor manufacturer's specifications.

§ 1065.945 Specifications for CO analyzers.

(a) Use a non-dispersive infrared (NDIR) detector that is compensated for CO₂ and water interference.

(b) The analyzer must have an accuracy and precision of ±2 percent of point or better under steady-state laboratory conditions.

(c) The analyzer must reach at least 90 percent of its final response within 5.0 second after any step change to the input concentration greater than or equal 80 percent of full scale.

(d) The analyzer must be zeroed and spanned daily during testing, and must be calibrated according to the analyzer manufacturer's specifications.

§ 1065.950 Specifications for speed and torque measurement.

(a) Determine torque from a previously determined relationship of torque and engine speed, throttle position, and/or manifold absolute pressure. Torque estimates must be between 85 percent and 105 percent of

the true value. You can demonstrate compliance with this accuracy requirement using steady-state laboratory data.

(b) Measure speed from the engine's electronic control module. Speed estimates must be within ± 5 rpm of the true value.

Subpart K—Definitions and Other Reference Information

§ 1065.1000 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:

Accuracy means the maximum difference between a measured or calculated value and the true value, where the true value is determined by NIST.

Act means the Clean Air Act, as amended, 42 U.S.C. 7401 et seq.

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.

Aftertreatment means relating to any system, component, or technology mounted downstream of the exhaust valve or exhaust port whose design function is to reduce exhaust emissions.

Auxiliary emission-control device means any element of design that senses temperature, engine rpm, motive speed, transmission gear, atmospheric pressure, manifold pressure or vacuum, or any other parameter to activate, modulate, delay, or deactivate the operation of any part of the emission-control system. This also includes any other feature that causes in-use emissions to be higher than those measured under test conditions, except as we allow under this part.

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.

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

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

Constant-speed engine means an engine governed to operate only at its rated speed.

Designated Officer means the Manager, Engine Compliance Programs

Group (6403-J), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., Washington, DC 20460.

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

Emission-data engine means an engine that is tested for certification.

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

Engine means an engine to which this part applies. For equipment subject to this part and regulated under equipment-based standards, the term engine in this part shall be interpreted to include equipment.

Engine-based means having emission standards related to measurements using an engine dynamometer, in units of grams of pollutant per kilowatt-hour.

Engine family means a group of engines with similar emission characteristics, as specified in the standard-setting part.

Engine manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures an engine for sale in the United States or otherwise introduces a new engine into commerce in the United States. This includes importers. For equipment subject to this part and regulated under equipment-based standards, the term engine manufacturer in this part shall be interpreted to include equipment manufacturers.

Equipment-based means having emission standards related to measurements from an engine installed in a vehicle using a chassis dynamometer, in units of grams of pollutant per kilometer.

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.

Good engineering judgment has the meaning we give it in § 1068.5 of this chapter.

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

Maximum test torque means the torque output observed with the maximum fueling rate possible at a given speed.

Nonmethane hydrocarbons means the sum of all hydrocarbon species

measured by a FID except methane, expressed with an assumed mass 13.876 grams per mole of carbon atoms.

Nonroad means relating to nonroad engines.

Nonroad engine has the meaning given in § 89.2 of this chapter. In general this means all internal combustion engines except motor vehicle engines, stationary engines, or engines used solely for competition.

Oxides of nitrogen means the oxides of nitrogen measured by the specified test equipment. Specifically, this means nitric oxide (NO) and nitrogen dioxide (NO₂). Oxides of nitrogen are expressed quantitatively as if the NO were in the form of NO₂ (assume a molecular weight for oxides of nitrogen equivalent to that of NO₂).

Precision means two times the coefficient of variance of multiple measurements, except where specified otherwise.

Revoking a certificate of conformity means discontinuing the certificate for an engine family. If we revoke a certificate, you must apply for a new certificate before continuing to produce the affected engines. This does not apply to engines you no longer possess.

Round means to round numbers according to ASTM E29-93a, which is incorporated by reference (see § 1065.1010), unless otherwise specified.

Scheduled maintenance means adjusting, repairing, removing, disassembling, cleaning, or replacing components or systems that is periodically needed to keep a part from failing or malfunctioning. 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.

Spark-ignition means relating to a 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-setting part means the part in the Code of Federal Regulations that defines emission standards for a particular engine (see § 1065.1(a)).

Stoichiometry means the proportion of a mixture of air and fuel such that the fuel is fully oxidized with no remaining oxygen. For example, stoichiometric combustion in gasoline engines typically occurs at an air-fuel mass ratio of about 14.7.

Suspending a certificate of conformity means temporarily discontinuing the certificate for an engine family. If we

suspend a certificate, you may not sell engines from that engine family unless we reinstate the certificate or approve a new one.

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.

Total Hydrocarbon (THC) means the sum of all hydrocarbon species measured by a FID, expressed with an assumed mass 13.876 grams per mole of carbon atoms.

Total Hydrocarbon Equivalent 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 petroleum-fueled engine hydrocarbons. The hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Trust Territory of the Pacific Islands.

Voiding a certificate of conformity means invalidating a certificate, so all the engines produced under that engine family for that model year are considered noncompliant. If we void a certificate, you are liable for each engine produced under the certificate and may face civil or criminal penalties or both.

Voiding an exemption means invalidating an exemption, so all the engines produced under that exemption are considered uncertified (or nonconforming). If we void an exemption, you are liable for each engine produced under the exemption and may face civil or criminal penalties or both. You may not produce any additional engines using the exemption.

§ 1065.1005 Symbols, acronyms, and abbreviations.

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

°C degrees Celsius.
 " inches.
 ASTM American Society for Testing and Materials.
 cc cubic centimeters.
 CFV critical-flow venturi.
 CI compression-ignition.
 CLD chemiluminescent detector.
 CO carbon monoxide.
 CO₂ carbon dioxide.
 CVS constant-volume sampler.
 EFC electronic flow control.
 EPA Environmental Protection Agency.
 FID flame ionization detector.
 g/kW-hr grams per kilowatt-hour.
 IBP initial boiling point.

ISO International Organization for Standardization.
 kPa kilopascal.
 LPG liquefied petroleum gas.
 m meters.
 mm Hg millimeters of mercury.
 NDIR nondispersive infrared.
 NIST National Institute for Standards and Testing.
 NMHC nonmethane hydrocarbons.
 NO nitric oxide.
 NO₂ nitrogen dioxide.
 NO_x oxides of nitrogen (NO and NO₂).
 O₂ oxygen.
 PDP positive-displacement pump.
 ppm parts per million.
 rpm revolutions per minute.
 SAE Society of Automotive Engineers.
 SI spark-ignition.
 THC total hydrocarbon.
 THCE total hydrocarbon equivalent.
 U.S.C. United States Code.

§ 1065.1010 Reference materials.

We have incorporated by reference the documents listed in this section. 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 U.S. EPA, OAR, Air and Radiation Docket and Information Center, 401 M Street, SW., Washington, DC 20460 or Office of the Federal Register, 800 N. Capitol St., NW., 7th Floor, Suite 700, Washington, DC.

(a) *ASTM material*. [Reserved]

(b) *ISO material*. Table 2 of § 1065.1010 lists material from the International Organization for Standardization that we have incorporated by reference. The first column lists the number and name of the material. The second column lists the section of this part where we reference it. The second column is for information only and may not be all-inclusive. Anyone may receive copies of these materials from International Organization for Standardization, Case Postale 56, CH-1211 Geneva 20, Switzerland. Table 2 follows:

TABLE 2 OF § 1065.1010.—ISO MATERIALS

Document No. and name	Part 1065 reference
ISO 8178, Reciprocating internal combustion engines—Exhaust emission measurement.	1065.125, 1065.130, 1065.135.

(c) *SAE material*. [Reserved]

§ 1065.1015 Confidential information.

(a) Clearly show what you consider confidential by marking, circling, bracketing, stamping, or some other method. We will store your confidential

information as described in 40 CFR part 2. Also, we will disclose it only as specified in 40 CFR part 2.

(b) If you send us a second copy without the confidential information, we will assume it contains nothing confidential whenever we need to release information from it.

(c) If you send us information without claiming it is confidential, we may make it available to the public without further notice to you, as described in § 2.204 of this chapter.

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR NONROAD PROGRAMS

Subpart A—Applicability and Miscellaneous Provisions

Sec.

- 1068.1 Does this part apply to me?
 1068.5 How must engine manufacturers apply good engineering judgment?
 1068.10 How do I request EPA to keep my information confidential?
 1068.15 Who is authorized to represent the Agency?
 1068.20 May EPA enter my facilities for inspections?
 1068.25 What definitions apply to this part?

Subpart B—Prohibited Acts and Related Requirements

- 1068.101 What general actions does this regulation prohibit?
 1068.105 What other provisions apply to me specifically if I manufacture equipment needing certified engines?
 1068.110 What other provisions apply to engines in service?
 1068.115 When must engine manufacturers honor emission-related warranty claims?
 1068.120 What requirements must I follow to rebuild engines?
 1068.125 What happens if I violate the regulations?

Subpart C—Exemptions

- 1068.201 Does EPA exempt any engines from the prohibited acts?
 1068.205 What are the provisions for exempting test engines?
 1068.210 What are the provisions for exempting manufacturer-owned engines?
 1068.215 What are the provisions for exempting display engines?
 1068.220 What are the provisions for exempting engines for national security?
 1068.225 What are the provisions for exempting engines for export?
 1068.230 What are the provisions for exempting engines used solely for competition?
 1068.235 What are the provisions for exempting new replacement engines?
 1068.240 What temporary provisions address hardship due to unusual circumstances?
 1068.241 What are the provisions for extending compliance deadlines for small-volume manufacturers under hardship?

1068.245 What are the provisions for exempting engines for hardship for equipment manufacturers?

Subpart D—Imports

1068.301 Does this subpart apply to me?
 1068.305 How do I get an exemption or exclusion for imported engines?
 1068.310 What are the exclusions for imported engines?
 1068.315 What are the permanent exemptions for imported engines?
 1068.320 How must I label an imported engine with a permanent exemption?
 1068.325 What are the temporary exemptions for imported engines?
 1068.330 What are the penalties for violations?

Subpart E—Selective Enforcement Auditing

1068.401 What is a selective enforcement audit?
 1068.405 What is in a test order?
 1068.410 How must I select and prepare my engines?
 1068.415 How do I test my engines?
 1068.420 How do I know when my engine family does not comply?
 1068.425 What happens if one of my production-line engines exceeds the emission standards?
 1068.430 What happens if an engine family does not comply?
 1068.435 May I sell engines from an engine family with a suspended certificate of conformity?
 1068.440 How do I ask EPA to reinstate my suspended certificate?
 1068.445 When may EPA revoke my certificate under this subpart and how may I sell these engines again?
 1068.450 What records must I send to EPA?
 1068.455 What records must I keep?
 Appendix A to Subpart E of Part 1068—Plans for Selective Enforcement Auditing

Subpart F—Defect Reporting and Recall

1068.501 How do I report engine defects?
 1068.505 How does the recall program work?
 1068.510 How do I prepare and apply my remedial plan?
 1068.515 How do I mark or label repaired engines?
 1068.520 How do I notify affected owners?
 1068.525 What records must I send to EPA?
 1068.530 What records must I keep?
 1068.535 How can I do a voluntary recall for emission-related problems?
 1068.540 What terms do I need to know for this subpart?

Subpart G—Public Hearings

1068.601 How do I request a public hearing?
 1068.605 How will EPA set up a public hearing?
 1068.610 What are the procedures for a public hearing?
 1068.615 How do I appeal a hearing decision?
 1068.620 How does a hearing conclude?
 Appendix I to Part 1068—Emission Related Components, Parameters, and Specifications

Authority: 42 U.S.C. 7401–7671(q).

Subpart A—Applicability and Miscellaneous Provisions

§ 1068.1 Does this part apply to me?

(a) The provisions of this part apply to everyone with respect to the following engines or to equipment using the following engines:

(1) Large nonroad spark-ignition engines we regulate under 40 CFR part 1048.

(2) Snowmobiles, all-terrain vehicles, and off-highway motorcycles we regulate under 40 CFR part 1051.

(b) This part does not apply to any of the following engine or vehicle categories:

(1) Light-duty motor vehicles (see 40 CFR part 86).

(2) Heavy-duty motor vehicles and motor vehicle engines (see 40 CFR part 86).

(3) Aircraft engines (see 40 CFR part 87).

(4) Locomotive engines (see 40 CFR part 92).

(5) Land-based nonroad diesel engines (see 40 CFR part 89).

(6) Marine diesel engines (see 40 CFR parts 89 and 94).

(7) Marine outboard and personal watercraft engines (see 40 CFR part 91).

(8) Small nonroad spark-ignition engines (see 40 CFR part 90).

(c) For equipment subject to this part and regulated under equipment-based standards, interpret the term “engine” in this part to include equipment (see § 1068.25).

(d) Follow the provisions of the standard-setting part if they are different than any of the provisions in this part.

§ 1068.5 How must engine manufacturers apply good engineering judgment?

(a) You must use good engineering judgment for decisions related to any requirements under this chapter. This includes your applications for certification, any testing you do to show that your production-line or in-use engines comply with requirements that apply to them, and how you select, categorize, determine, and apply these requirements.

(b) If we send you a written request, you must give us a written description of the engineering judgment in question. Respond within 15 working days of receiving our request unless we allow more time.

(c) We may reject your decision if it is not based on good engineering judgment or is otherwise inconsistent with the requirements that apply, based on the following provisions:

(1) We may suspend, revoke, or void a certificate of conformity if we determine you deliberately used

incorrect information or overlooked important information, that you did not decide in good faith, or that your decision was not rational.

(2) If we believe a different decision would better reflect good engineering judgment, but none of the provisions of paragraph (c)(1) of this section apply, we will tell you of our concern (and its basis). You will have 30 days to respond to our concerns, or more time if we agree that you need it to generate more information. After considering your information, we will give you a final ruling. If we conclude that you did not use good engineering judgment, we may reject your decision and apply the new ruling to similar situations as soon as possible.

(d) We will tell you in writing of the conclusions we reach under paragraph (c) of this section and explain our reasons for them.

(e) If you disagree with our conclusions, you may file a request for a public hearing with the Designated Officer as described in subpart F of this part. In your request, specify your objections, include data or supporting analysis, and get your authorized representative's signature. If we agree that your request raises a substantial factual issue, we will hold the hearing according to subpart F of this part.

§ 1068.10 How do I request EPA to keep my information confidential?

(a) Clearly identify any information you consider confidential by marking, circling, bracketing, stamping, or some other method. We will store your confidential information as described in 40 CFR part 2. Also, we will disclose it only as specified in 40 CFR part 2. This procedure applies equally to the Environmental Appeals Board.

(b) If you send us a second copy without the confidential information, we will assume it contains nothing confidential whenever we need to release information from it.

(c) If you send us information without claiming it is confidential, we may make it available to the public without further notice to you, as described in § 2.204 of this chapter.

§ 1068.15 Who is authorized to represent the Agency?

The Administrator of the Environmental Protection Agency or any official to whom the Administrator has delegated specific authority may represent the Agency. For more information, ask for a copy of the relevant sections of the EPA Delegation Manual from the Designated Officer.

§ 1068.20 May EPA enter my facilities for inspections?

(a) If you are a certificate holder, we may inspect your engines, testing, manufacturing processes, engine storage facilities (including port facilities for imported engines), or records to enforce the provisions of this chapter. Inspectors will have authorizing credentials and will limit inspections to reasonable times—usually, normal operating hours.

(b) If we come to inspect, we may or may not have a warrant or court order.

(1) If we do not have a warrant or court order, you may deny us entry.

(2) If we have a warrant or court order, you must allow us to enter the facility and carry out the activities it describes.

(c) We may seek a warrant or court order authorizing an inspection described in this section, whether or not we first tried to get your permission to inspect.

(d) We may select any facility to do any of the following:

(1) Inspect and monitor any aspect of engine manufacturing, assembly, storage, or other procedures, and any facilities where you do them.

(2) Inspect and monitor any aspect of engine test procedures or test-related activities, including test engine selection, preparation, service accumulation, emission duty cycles, and maintenance and verification of your test equipment's calibration.

(3) Inspect and copy records or documents related to assembling, storing, selecting, and testing an engine.

(4) Inspect and photograph any part or aspect of engines and components you use for assembly.

(e) You must give us reasonable help without charge during an inspection. For example, you may need to help us arrange an inspection with the facility's managers, including clerical support, copying, and translation. You may also need to show us how the facility operates and answer other questions. If we ask in writing to see a particular employee at the inspection, you must ensure that he or she is present (legal counsel may accompany the employee).

(f) If you have facilities in other countries, we expect you to locate them in places where local law does not keep us from inspecting as described in this section. We will not try to inspect if we learn that local law prohibits it, but we may suspend your certificate if we are not allowed to inspect.

§ 1068.25 What definitions apply to this part?

The following definitions apply to this part:

Act means the Clean Air Act, as amended, 42 U.S.C. 7401 et seq.

Aircraft means any vehicle capable of sustained air travel above treetop heights.

Certificate holder means an engine manufacturer (including importers) with a valid certificate of conformity for at least one engine family in a given calendar year.

Designated Officer means the Manager of the Engine Programs Group (6403-), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., Washington, DC 20460.

Engine means an engine to which this part applies. For equipment subject to this part and regulated under equipment-based standards, the term engine in this part shall be interpreted to include equipment.

Engine-based means having emission standards related to measurements using an engine dynamometer, in units of grams of pollutant per kilowatt-hour.

Engine manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures an engine for sale in the United States or otherwise introduces a new engine into commerce in the United States. This includes importers. For equipment subject to this part and regulated under equipment-based standards, the term engine manufacturer in this part shall be interpreted to include equipment manufacturers.

Equipment-based means having emission standards related to measurements from an engine installed in a vehicle using a chassis dynamometer, in units of grams of pollutant per kilometer.

Equipment manufacturer means any company producing a piece of equipment for sale or use in the United States.

New has the meaning we give it in the standard-setting part.

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. *Indicia* of

transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or

(ii) The engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. This paragraph (2)(iii) of this definition does not apply to an engine after the engine is removed from the location.

Operating hours means:

(1) For engine storage areas or facilities, times during which people other than custodians are at work near, and can access, a storage area or facility.

(2) For other areas or facilities, times during which an assembly line operates or any of the following activities occurs:

(i) Testing, maintenance, or service accumulation.

(ii) Production or compilation of records.

(iii) Certification testing.

(iv) Translation of designs from the test stage to the production stage.

(v) Engine manufacture or assembly.

Piece of equipment means any vehicle, vessel, locomotive, aircraft, or other type of equipment using engines to which this part applies.

Placed into service means used for its intended purpose.

Standard-setting part means the part in the Code of Federal Regulations that defines emission standards for a particular engine (see § 1068.1(a)).

Ultimate purchaser means the first person who in good faith buys a new engine without intending to resell it.

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Trust Territory of the Pacific Islands.

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

Subpart B—Prohibited Acts and Related Requirements

§ 1068.101 What general actions does this regulation prohibit?

(a) The following prohibitions apply to manufacturers of new engines and manufacturers of equipment containing these engines, except as described in subparts C and D of this part:

(1) You may not sell, offer for sale, or introduce or deliver into commerce in the United States or import into the United States any new engine or equipment after emission standards take effect for that engine or equipment, unless it has a valid certificate of conformity for its model year and the required label or tag. You also may not take any of the actions listed in the previous sentence with respect to any equipment containing an engine subject to this part's provisions, unless the engine has a valid certificate of conformity for its model year and the required engine label or tag. This requirement also covers new engines you produce to replace an older engine in a piece of equipment, unless the engine qualifies for the replacement-engine exemption in § 1068.235. The maximum civil penalty is \$27,500 for each engine in violation.

(2) This chapter requires you to record certain types of information to show that you meet our standards. You may not omit these requirements to make and maintain required records (including those described in § 1068.501). You may not deny us access to or copying of your records if we have the authority to see or copy them. Also, you may not delay or omit giving us required reports or information. The maximum civil penalty is \$27,500 for each day in violation.

(3) You may not keep us from entering your facility to test engines or inspect if we are authorized to do so. Also, you may not omit tests we require (or omit having the tests done for you). The maximum civil penalty is \$27,500 for each day in violation.

(b) The following prohibitions apply to everyone with respect to the engines to which this part applies:

(1) You may not remove or disable a device or element of design that may affect an engine's emission levels. This restriction applies before and after the engine is placed in service. Section 1068.120 describes how this applies to rebuilding engines. For a manufacturer or dealer, the maximum civil penalty is \$27,500 for each engine in violation. For anyone else, the maximum civil penalty is \$2,500 for each engine in violation. This does not apply in any of the following situations:

(i) You need to repair an engine and you restore it to proper functioning when the repair is complete.

(ii) You need to modify an engine to respond to a temporary emergency and you restore it to proper functioning as soon as possible.

(iii) You modify a new engine that another manufacturer has already certified to meet emission standards, intending to recertify it under your own engine family. In this case you must tell the original manufacturer not to include the modified engines in the original engine family.

(2) You may not knowingly manufacture, sell, offer to sell, or install, an engine part if one of its main effects is to bypass, impair, defeat, or disable the engine's control of emissions. The maximum civil penalty is \$2,500 for each part in violation.

(3) For an engine that is excluded from any requirements of this chapter because it is a stationary engine, you may not move it or install it in any mobile equipment, except as allowed by the provisions of this chapter. You may not circumvent or attempt to circumvent the residence-time requirements of paragraph (2)(iii) of the nonroad engine definition in § 1068.25. The maximum civil penalty is \$27,500 for each day in violation.

(4) For an engine or piece of equipment that is excluded from any requirements of this chapter because it is to be used solely for competition, you may not use it in a manner that is inconsistent with use solely for competition. The maximum civil penalty is \$27,500 for each day in violation.

(c) Exemptions from these prohibitions are described in subparts C and D of this part.

(d) The standard-setting parts describe more requirements and prohibitions that apply to engine manufacturers (including importers) and others under this chapter.

(e) The maximum penalties in paragraphs (a) and (b) of this section and in § 1068.125(b) are in 1970 dollars. The Federal Civil Penalties Inflation Adjustment Act of 1990 (Public Law

101–410, 104 Stat. 890 and 28 U.S.C. 2461) and associated regulations describe how to adjust these figures based on the date of the violation.

§ 1068.105 What other provisions apply to me specifically if I manufacture equipment needing certified engines?

(a) *Transitioning to new standards.* You may use up your normal inventory of engines not certified to new emission standards if they were built before the date of the new standards. However, stockpiling these engines violates § 1068.101(a)(1).

(b) *Installing engines.* You must follow the engine manufacturer's emission-related installation instructions. For example, you may need to constrain where you place an exhaust aftertreatment device or integrate into your equipment models a device for sending visual or audible signals to the operator. Not meeting the manufacturer's emission-related installation instructions is a violation of § 1068.101(b)(1).

(c) *Attaching a duplicate label.* If you obscure the engine's label, you must do three things to avoid violating § 1068.101(a)(1):

(1) Permanently attach to your equipment a duplicate label. Secure it to a part needed for normal operation and not normally requiring replacement.

(2) Make sure your label is identical to the engine label. You may make the label yourself or get it from the engine manufacturer.

(3) Make sure an average person can easily read it.

(d) *Producing nonroad equipment certified to highway emission standards.* You may produce nonroad equipment from complete or incomplete motor vehicles with the motor vehicle engine if you meet three criteria:

(1) The engine or vehicle is certified to 40 CFR part 86.

(2) The engine is not adjusted outside the manufacturer's specifications.

(3) The engine or vehicle is not modified in any way that may affect its emission control. This applies to evaporative emission controls, but not refueling emission controls.

§ 1068.110 What other provisions apply to engines in service?

(a) *Aftermarket parts and service.* As the engine manufacturer, you may not require anyone to use your parts or service to maintain or repair an engine, unless we approve this in your application for certification.

(b) *Certifying aftermarket parts.* As the manufacturer or rebuilder of an aftermarket engine part, you may—but are not required to—certify according to

§ 85.2114 of this chapter that using the part will not cause engines to fail to meet emission standards.

(c) *Defeat devices.* We may test equipment or engines to investigate potential defeat devices. We may also require the engine manufacturer to do this testing. If we choose to investigate one of your designs, we may require you to show us that it does not have a defeat device. To do this, you may have to share with us information regarding test programs, engineering evaluations, design specifications, calibrations, on-board computer algorithms, and design strategies.

(d) *Warranty and maintenance.* Owners may make warranty claims against the engine manufacturer for emission-related parts, as described in § 1068.115. This generally includes any emission-related engine parts that were not in common use before we have adopted emission standards. In general, we consider replacement or repair of any other components to be the owner's responsibility. The warranty period begins when the engine is first placed into service.

§ 1068.115 When must engine manufacturers honor emission-related warranty claims?

(a) As an engine manufacturer, you may not deny emission-related warranty claims based on any of the following:

- (1) Maintenance or other service you or your authorized facilities performed.
- (2) Engine repair work that an operator performed to correct an unsafe, emergency condition attributable to you, as long as the operator tries to restore the engine to its proper configuration as soon as possible.
- (3) Any action or inaction by the operator unrelated to the warranty claim.
- (4) Maintenance that was performed more frequently than you specify.
- (5) Anything that is your fault or responsibility.
- (6) The use of any fuel that is commonly available where the engine operates, unless your written maintenance instructions state that this fuel would harm the engine's emission control system and operators can readily find the proper fuel.

(b) As long as none of the restrictions of paragraph (a) of this section apply, you may deny an emission-related warranty claim if either of the following occurs:

- (1) Owners are not able to show they followed your written maintenance instructions, as described in paragraph (c) of this section.
- (2) You prove that the warranty claim was caused by any of the following:

(i) The operator abused the engine by using it for purposes for which it was not designed.

(ii) Someone improperly installed an engine part or set engine parameters outside your specified adjustable ranges during any scheduled maintenance related to the affected part or system.

(iii) Someone permanently removed or disabled the engine's emission control system or any of its components during unscheduled maintenance related to the affected part or system.

(c) You may ask owners to show they followed your written maintenance instructions only if you have an objective reason to believe they did not follow these instructions and that this would have caused the defect that is the subject of their warranty claim.

(1) If owners do their own maintenance, they may state that they performed the prescribed maintenance at the approximate intervals (in months or operating hours) and show they bought and used proper parts. You may ask them to show they are able to perform the maintenance properly.

(2) If owners hire others to maintain their engines, they may rely on service receipts or a maintenance log book validated at the approximate intervals (in months or operating hours) by those who performed the maintenance.

§ 1068.120 What requirements must I follow to rebuild engines?

(a) This section describes the steps to take when rebuilding engines to avoid violating the tampering prohibition in § 1068.101(b)(1). These requirements apply to anyone rebuilding an engine subject to this part, but the reporting requirements in paragraphs (i) and (j) of this section apply only to businesses.

(b) The term "rebuilding" refers to a partial or complete rebuild of an engine or engine system, including a major overhaul in which you replace the engine's power assemblies or make other changes that significantly increase the service life of the engine. It also includes replacing or rebuilding an engine's turbocharger or aftercooler or its systems for fuel metering or electronic control. For these provisions, rebuilding may or may not involve removing the engine from the equipment. For other maintenance or service that is not rebuilding, you must still not make changes that might increase emissions, but you do not need to keep any records.

(c) If you rebuild an engine, you must have a reasonable technical basis for knowing that the rebuilt engine has the same emissions performance as the engine in its certified configuration. Identify the model year of the resulting

engine configuration. You have a reasonable basis if you meet two main conditions:

(1) Install parts—new, used, or rebuilt—so a person familiar with engine design and function would reasonably believe that the engine with those parts will control emissions to the same degree as with the original parts.

(2) Adjust parameters or change design elements only according to the original engine manufacturer's instructions. Or, if you differ from these instructions, you must have data or some other technical basis to show you should not expect in-use emissions to increase.

(d) If the rebuilt engine remains installed or is reinstalled in the same piece of equipment, you must rebuild it to the original configuration or another certified configuration of the same or later model year.

(e) If the rebuilt engine replaces another engine in a piece of equipment, you must rebuild it to a certified configuration that equals the emissions performance of the engine you are replacing.

(f) Do not erase or reset emission-related codes or signals from onboard monitoring systems without diagnosing and responding appropriately to any diagnostic codes. This requirement applies regardless of the manufacturer's reason for installing the monitoring system and regardless of its form or interface. Clear any codes from diagnostic systems when you return the rebuilt engine to service. Do not disable a diagnostic signal without addressing its cause.

(g) When you rebuild an engine, check, clean, adjust, repair, or replace all emission-related components (listed in Appendix I of this part) as needed according to the original manufacturer's recommended practice. In particular, replace oxygen sensors, replace the catalyst if there is evidence of malfunction, clean gaseous fuel system components, and replace fuel injectors (if applicable).

(h) If you are installing an engine that someone else has rebuilt, check all emission-related components listed in Appendix I of this part as needed according to the original manufacturer's recommended practice.

(i) Keep at least the following records:

- (1) Identify the hours of operation (or mileage, as appropriate) at time of rebuild.

- (2) Identify the work done on the engine or any emission-related control components, including a listing of parts and components you used.

- (3) Describe any engine parameter adjustments.

(4) Identify any emission-related codes or signals you responded to and reset.

(j) You must show us or send us your records if we ask for them. Keep records for at least two years after rebuilding an engine. Keep them in any format that allows us to readily review them.

(1) You do not need to keep information that is not reasonably available through normal business practices. We do not expect you to have information that you cannot reasonably access.

(2) You do not need to keep records of what other companies do.

(3) You may keep records based on engine families rather than individual engines if that is the way you normally do business.

§ 1068.125 What happens if I violate the regulations?

(a) *Civil penalties and injunctions.* We may bring a civil action to assess and recover civil penalties and/or enjoin and restrain violations in the United States District Court for the district where you allegedly violated a requirement, or the district where you live or have your main place of business. Actions to assess civil penalties or restrain violations of § 1068.101 must be brought by and in the name of the United States. The selected court has jurisdiction to restrain violations and assess civil penalties.

(1) To determine the amount of a civil penalty and reach a just conclusion, the court considers six main factors:

- (i) The seriousness of your violation.
- (ii) How much you benefitted or saved because of the violation.
- (iii) The size of your business.
- (iv) Your history of compliance with Title II of the Act.
- (v) What you did to remedy the violation.

(vi) How the penalty will affect your ability to continue in business.

(2) Subpoenas for witnesses who must attend a district court in any district may apply to any other district.

(b) *Administrative penalties.* Instead of bringing a civil action, we may assess administrative penalties if the total is less than \$200,000 against you individually. This maximum penalty may be greater if the Administrator and the Attorney General jointly determine that is appropriate for administrative penalty assessment. No court may review such a determination. Before we assess an administrative penalty, you may ask for a hearing (subject to 40 CFR part 22).

(1) To determine the amount of an administrative penalty, we will consider the factors described in paragraph (a)(1) of this section.

(2) An administrative order we issue under this paragraph (b) becomes final 30 days after we issue it, unless you ask for judicial review by that time (see paragraph (c) of this section). You may ask for review by any of the district courts listed in paragraph (a) of this section. Send the Administrator a copy of the filing by certified mail.

(3) We will not pursue an administrative action for a violation if either of the following two conditions is true:

(i) We are separately prosecuting the violation under this part.

(ii) We have issued a final order for a violation, no longer subject to judicial review, for which you have already paid a penalty.

(c) *Judicial review.* If you ask a court to review a civil or administrative penalty, we will file in the appropriate court within 30 days of your request a certified copy or certified index of the record on which the court or the Administrator issued the order.

(1) The judge may set aside or remand any order issued under this section only if he or she believes one of the following is true:

(i) Substantial evidence does not exist in the record, taken as a whole, to support finding a violation.

(ii) The Administrator's assessment of the penalty is an abuse of discretion.

(2) The judge may add civil penalties if he or she believes our penalty is an abuse of discretion that favors you.

(d) *Effect of enforcement actions on other requirements.* Our pursuit of civil or administrative penalties does not affect or limit our authority to enforce any provisions of this chapter.

(e) *Penalties.* In any proceedings, the United States government may seek to collect civil penalties assessed under this section.

(1) Once a penalty assessment is final, if you do not pay it, the Administrator will ask the Attorney General to bring a civil action in an appropriate district court to recover the money. We may collect interest from the date of the final order or final judgment at rates established by the Internal Revenue Code of 1986 (26 U.S.C. 6621(a)(2)). In this action to collect overdue penalties, the court will not review the validity, amount, and appropriateness of the penalty.

(2) In addition, if you do not pay the full amount of a penalty on time, you must then pay more to cover interest, enforcement expenses (including attorney's fees and costs for collection), and a quarterly nonpayment penalty for each quarter you do not pay. The nonpayment penalty is 10 percent of your total penalties plus any unpaid

nonpayment penalties from previous quarters.

Subpart C—Exemptions

§ 1068.201 Does EPA exempt any engines from the prohibited acts?

We may exempt new engines from the prohibited acts in subpart B of this part under requirements described in this subpart. We may exempt an engine already placed in service in the United States from the prohibition in § 1068.101(b)(1) if the exemption for engines used solely for competition applies (see § 1068.230).

(a) This subpart identifies which engines qualify for exemptions and what information we need. We may ask for more information.

(b) If you violate any of the terms, conditions, instructions, or requirements to qualify for an exemption, we may void the exemption.

(c) If you use an exemption under this subpart, we may require you to add a permanent label to your exempted engines.

(d) If you produce engines we exempt under this subpart, we may require you to make and keep records, perform tests, make reports and provide information as needed to reasonably evaluate the validity of the exemption.

(e) If you own or operate engines we exempt under this subpart, we may require you to provide information as needed to reasonably evaluate the validity of the exemption.

(f) Subpart D of this part describes how we apply these exemptions to engines you import (or intend to import).

(g) If you want to ask for an exemption or need more information, write to the Designated Officer.

§ 1068.205 What are the provisions for exempting test engines?

(a) We may exempt engines you use for research, investigations, studies, demonstrations, or training.

(b) Anyone may ask for a testing exemption.

(c) If you are a certificate holder, you may request an exemption for engines you intend to include in test programs over a two-year period.

(1) In your request, tell us the maximum number of engines involved and describe how you will make sure exempted engines are used only for this testing.

(2) Give us the information described in paragraph (d) of this section if we ask for it.

(d) If you are not a certificate holder do all of the following:

(1) Show that the proposed test program has a valid purpose under paragraph (a) of this section.

(2) Show you need an exemption to achieve the purpose of the test program (time constraints may be a basis for needing an exemption, but the cost of certification alone is not).

(3) Estimate the duration of the proposed test program and the number of engines involved.

(4) Allow us to monitor the testing.

(5) Describe how you will ensure that you stay within this exemption's purposes. Address at least the following things:

(i) The technical nature of the test.

(ii) The test site.

(iii) The duration and accumulated engine operation associated with the test.

(iv) Ownership of the engines involved in the test.

(v) The intended final disposition of the engines.

(vi) How you will identify, record, and make available the engine identification numbers.

(vii) The means or procedure for recording test results.

(e) If we approve your request for a testing exemption, we will send you a letter or a memorandum for your signature describing the basis and scope of the exemption. It will also include any necessary terms and conditions, which normally require you to do the following:

(1) Stay within the scope of the exemption.

(2) Create and maintain adequate records that we may inspect.

(3) Add a permanent, legible label, written in block letters in English, to a readily visible part of each exempted engine. This label must include at least the following items:

(i) The label heading "EMISSION CONTROL INFORMATION."

(ii) Your corporate name and trademark.

(iii) Engine displacement, engine family identification, and model year of the engine or whom to contact for further information.

(iv) The statement "THIS ENGINE IS EXEMPT UNDER 40 CFR 1068.205 FROM EMISSION STANDARDS AND RELATED REQUIREMENTS."

(4) Tell us when the test program is finished.

(5) Tell us the final disposition of the engines.

(6) Send us a written confirmation that you meet the terms and conditions of this exemption.

§ 1068.210 What are the provisions for exempting manufacturer-owned engines?

(a) You are only eligible for the exemption for manufacturer-owned engines if you are a certificate holder.

(b) An engine may be exempt without a request if it is a nonconforming engine under your ownership and control and you operate it to develop products, assess production methods, or promote your engines in the marketplace. You may not lease, sell, or use the engine to generate revenue, either by itself or in a piece of equipment.

(c) To use this exemption, you must do three things:

(1) Establish, maintain, and keep adequately organized and indexed information on each exempted engine, including the engine identification number, the use of the engine on exempt status, and the final disposition of any engine removed from exempt status.

(2) Let us access these records, as described in § 1068.20.

(3) Add a permanent, legible label, written in block letters in English, to a readily visible part of each exempted engine. This label must include at least the following items:

(i) The label heading "EMISSION CONTROL INFORMATION."

(ii) Your corporate name and trademark.

(iii) Engine displacement, engine family identification, and model year of the engine or whom to contact for further information.

(iv) The statement "THIS ENGINE IS EXEMPT UNDER 40 CFR 1068.210 FROM EMISSION STANDARDS AND RELATED REQUIREMENTS."

§ 1068.215 What are the provisions for exempting display engines?

(a) You are only eligible for the exemption for display engines if you are a certificate holder.

(b) A display engine is exempt without a request if it is a nonconforming engine you use only for displays in the interest of a business or the general public. This exemption does not apply to engines displayed for any of the following:

(1) For private use.

(2) For other purposes that are not available to the public daily.

(3) For any other purpose we determine is inappropriate for a display exemption.

(c) You may operate the exempted engine, but only if the operation is part of the display. You may not sell or lease a display engine or use it to generate revenue without a certificate of conformity and an engine label.

(d) To use this exemption, you must add a permanent, legible label, written

in block letters in English, to a readily visible part of each exempted engine. This label must include at least the following items:

(1) The label heading "EMISSION CONTROL INFORMATION."

(2) Your corporate name and trademark.

(3) Engine displacement, engine family identification, and model year of the engine or whom to contact for further information.

(4) The statement "THIS ENGINE IS EXEMPT UNDER 40 CFR 1068.215 FROM EMISSION STANDARDS AND RELATED REQUIREMENTS."

§ 1068.220 What are the provisions for exempting engines for national security?

(a) You are only eligible for the exemption for national security if you are an engine manufacturer.

(b) Your engine is exempt without a request if you produce it for a piece of equipment owned or used by an agency of the federal government responsible for national defense, where the equipment has armor, permanently attached weaponry, or other substantial features typical of military combat.

(c) You may request a national security exemption for engines not meeting the conditions of paragraph (b) of this section, as long as your request is endorsed by an agency of the federal government responsible for national defense. In your request, explain why you need the exemption.

§ 1068.225 What are the provisions for exempting engines for export?

(a) If you export a new engine to a country with emission standards identical to ours, we will not exempt it. These engines must comply with our certification requirements.

(b) If you export an engine to a country with different emission standards or no emission standards, it is exempt from the prohibited acts in this part without a request. If you produce an exempt engine for export and it is sold or offered for sale to someone in the United States (except for export), we will void the exemption.

(c) Label each exempted engine and shipping container with a label or tag showing the engine is not certified for sale or use in the United States. The label must include at least the statement "THIS ENGINE IS SOLELY FOR EXPORT AND IS THEREFORE IS EXEMPT UNDER 40 CFR 1068.225 FROM U.S. EMISSION STANDARDS AND RELATED REQUIREMENTS."

§ 1068.230 What are the provisions for exempting engines used solely for competition?

(a) If you modify an engine after it has been placed into service in the United States so it will be used solely for competition, it is exempt without request. This exemption applies only to the prohibition in § 1068.101(b)(1) and is valid only as long as the engine is used solely for competition.

(b) If you modify an engine under this exemption, you must destroy the original emissions label. If you sell or give one of these engines to someone else, you must tell the new owner in writing that it may be used only for competition.

(c) New engines you produce that are used solely for competition are generally excluded from emission standards. See the standard-setting parts for specific provisions.

§ 1068.235 What are the provisions for exempting new replacement engines?

(a) You are only eligible for the exemption for new replacement engines if you are a certificate holder.

(b) The prohibitions in § 1068.101(a)(1) do not apply to an engine if all the following conditions apply:

(1) You produce a new engine to replace an engine already placed in service in a piece of equipment.

(2) The engine being replaced was manufactured before the emission standards that would otherwise apply to the new engine took effect.

(3) No engine certified to current emission requirements is available with the appropriate physical or performance characteristics for the piece of equipment.

(4) You or your agent takes possession of the old engine.

(5) You clearly label the replacement engine with the following language, or similar alternate language that we approve:

THIS ENGINE DOES NOT COMPLY WITH FEDERAL NONROAD OR HIGHWAY EMISSION REQUIREMENTS. SELLING OR INSTALLING THIS ENGINE FOR ANY PURPOSE OTHER THAN AS A REPLACEMENT ENGINE IN A VEHICLE OR PIECE OF EQUIPMENT BUILT BEFORE JANUARY 1, [INSERT APPROPRIATE YEAR] IS A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

(6) You make the replacement engine in a configuration identical in all material respects to the engine being replaced (or that of another certified engine of the same or later model year). This requirement applies only if the old engine was certified to emission standards less stringent than those in

effect when you produce the replacement engine.

§ 1068.240 What temporary provisions address hardship due to unusual circumstances?

(a) After considering the circumstances, we may permit you to introduce into commerce engines or equipment that do not comply with emission standards if all the following conditions and requirements apply:

(1) Unusual circumstances that are clearly outside your control and that could not have been avoided with reasonable discretion prevent you from meeting requirements from this chapter.

(2) You exercised prudent planning and were not able to avoid the violation; you have taken all reasonable steps to minimize the extent of the nonconformity.

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

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

(b) To apply for an exemption, you must send the Designated Officer a written request as soon as possible before you are in violation. In your request, show that you meet all the conditions and requirements in paragraph (a) of this section.

(c) Include in your request a plan showing how you will meet all the applicable requirements as quickly as possible.

(d) You must give us other relevant information if we ask for it.

(e) We may include reasonable additional conditions on an approval granted under this section, including provisions to recover or otherwise address the lost environmental benefit or paying fees to offset any economic gain resulting from the exemption. For example, in the case of multiple tiers of emission standards, we may require that you meet the less stringent standards.

§ 1068.241 What are the provisions for extending compliance deadlines for small-volume manufacturers under hardship?

(a) After considering the circumstances, we may extend the compliance deadline for you to meet new or revised emission standards, as long as you meet all the conditions and requirements in this section.

(b) To be eligible for this exemption, you must qualify under the standard-setting part for special provisions for small businesses or small-volume manufacturers.

(c) To apply for an extension, you must send the Designated Officer a written request. In your request, show

that all the following conditions and requirements apply:

(1) You have taken all possible business, technical, and economic steps to comply.

(i) In the case of importers, show that you are unable to find a manufacturer capable of supplying complying products.

(ii) For all other manufacturers, show that the burden of compliance costs prevents you from meeting the requirements of this chapter.

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

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

(d) In describing the steps you have taken to comply under paragraph (c)(1) of this section, include at least the following information:

(1) Describe your business plan, showing the range of projects active or under consideration.

(2) Describe your current and projected financial standing, with and without the burden of complying with regulations.

(3) Describe your efforts to raise capital to comply with regulations.

(4) Identify the engineering and technical steps you have taken or plan to take to comply with regulations.

(5) Identify the level of compliance you can achieve. For example, you may be able to produce engines that meet a somewhat less stringent emission standard than the regulations in this chapter require.

(e) Include in your request a plan showing how you will meet all the applicable requirements as quickly as possible.

(f) You must give us other relevant information if we ask for it.

(g) An authorized representative of your company must sign the request and include the statement: "All the information in this request is true and accurate, to the best of my knowledge."

(h) Send your request for this extension at least nine months before the relevant deadline. If different deadlines apply to companies that are not small-volume manufacturers, do not send your request before the regulations in question apply to the other manufacturers. Otherwise, do not send your request more than three years before the relevant deadline.

(i) We may include reasonable requirements on an approval granted under this section, including provisions to recover or otherwise address the lost environmental benefit. For example, we may require that you meet a less stringent emission standard or buy and use available emission credits.

(j) We will approve extensions of up to one year. We may review and revise an extension as reasonable under the circumstances.

§ 1068.245 What are the provisions for exempting engines for hardship for equipment manufacturers?

(a) *Equipment exemption.* As an equipment manufacturer in the case of an engine-based standard, you may ask for approval to produce exempted equipment for up to one year. Send the Designated Officer a written request for an exemption before you are in violation. In your request, show you are not at fault for the impending violation and that you would face serious economic hardship if we do not grant the exemption. This exemption is not available if you manufacture the engine you need for your own equipment, unless we allow it elsewhere in this chapter. We may impose other conditions, including provisions to recover the lost environmental benefit.

(b) *Engine exemption.* As an engine manufacturer, you may produce nonconforming engines for the equipment we exempt in paragraph (a) of this section. You do not have to request this exemption for your engines, but you must have written assurance from equipment manufacturers that they need a certain number of exempted engines under this section. Add a permanent, legible label, written in block letters in English, to a readily visible part of each exempted engine. This label must include at least the following items:

(1) The label heading "EMISSION CONTROL INFORMATION."

(2) Your corporate name and trademark.

(3) Engine displacement (in liters), rated power, and model year of the engine or whom to contact for further information.

(4) The statement "THIS ENGINE IS EXEMPT UNDER 40 CFR 1068.245 FROM EMISSION STANDARDS AND RELATED REQUIREMENTS."

Subpart D—Imports

§ 1068.301 Does this subpart apply to me?

(a) This subpart applies to you if you import into the United States engines or equipment subject to our emission standards or equipment containing engines subject to our emission standards.

(b) In general, engines that you import must be covered by a certificate of conformity unless they were built before emission standards started to apply. This subpart describes the limited cases where we allow importation of exempt or excluded engines.

(c) The U.S. Customs Service may prevent you from importing an engine if you do not meet the requirements of this subpart. In addition, U.S. Customs Service regulations may contain other requirements for engines imported into the United States (see 19 CFR Chapter I).

§ 1068.305 How do I get an exemption or exclusion for imported engines?

(a) Prepare a written request in which you do the following:

(1) Give your name, address, telephone number, and taxpayer identification number.

(2) Give the engine owner's name, address, telephone number, and taxpayer identification number.

(3) Identify the make, model, identification number, and original production year of each engine.

(4) Identify which exemption or exclusion in this subpart allows you to import a nonconforming engine and describe how your engine qualifies.

(5) Tell us where you will keep your engines if you might need to store them until we approve your request.

(6) Authorize us to inspect or test your engines as the Act allows.

(b) We may ask for more information.

(c) You may import the nonconforming engines you identify in your request if you get prior written approval from us. The U.S. Customs Service may require you to show them the approval letter. We may temporarily or permanently approve the exemptions or exclusions, as described in this subpart.

(d) Make sure the engine meets any labeling requirements that apply, as described in this subpart.

§ 1068.310 What are the exclusions for imported engines?

The emission standards of this part do not apply to excluded engines that you import. If you show us that your engines qualify under one of the following provisions, we will approve your request to exclude engines:

(a) *Engines used solely for competition.* See the standard-setting part for any special provisions that apply to engines used solely for competition. Section 1068.101(b)(4) prohibits using these engines for other purposes.

(b) *Stationary engines.* This includes engines that will be used in a permanently fixed location and engines meeting the criteria for the exclusion in paragraph (2)(iii) of the nonroad engine definition in § 1068.25. Section 1068.101(b)(3) prohibits using these engines for other purposes.

(c) *Hobby engines.* See 40 CFR 90.1.

(d) *Engines used in aircraft.* See 40 CFR part 87.

(e) *Engines used in underground mining.* See 40 CFR 89.1.

§ 1068.315 What are the permanent exemptions for imported engines?

We may approve a permanent exemption for an imported engine under the following conditions:

(a) *National security exemption.* You may import an engine under the national security exemption in § 1068.220.

(b) *Manufacturer-owned engine exemption.* You may import a manufacturer-owned engine, as described in § 1068.210.

(c) *Replacement engine exemption.* You may import a nonconforming replacement engine as described in § 1068.235. To use this exemption, you must be a certificate holder for an engine family we regulate under the same part as the replacement engine.

(d) *Extraordinary circumstances exemption.* You may import a nonconforming engine if we grant hardship relief as described in § 1068.240.

(e) *Hardship exemption.* You may import a nonconforming engine if we grant an exemption for the transition to new or revised emission standards, as described in § 1068.245.

(f) *Identical configuration exemption.* You may import a nonconforming engine if it is identical to certified engines, subject to the following provisions:

(1) You may import only the following engines under this exemption:

(i) Large nonroad spark-ignition engines (see part 1048 of this chapter).

(ii) Recreational nonroad spark-ignition engines and equipment (see part 1051 of this chapter).

(2) You must meet all the following criteria:

(i) You have owned the engine for at least one year.

(ii) You agree not to sell, lease, donate, trade, or otherwise transfer ownership of the engine for at least five years, or until the engine is eligible for the exemption in paragraph (h) of this section. The only acceptable way to dispose of the engine is to destroy or export it.

(iii) You use data or evidence sufficient to show that the engine is in a configuration that is the same as an engine the original manufacturer has certified to meet emission standards that apply at the time the manufacturer finished assembling or modifying the engine in question. If you modify the engine to make it identical, you must follow the original manufacturer's complete written instructions.

(3) We will tell you in writing if we find the information insufficient to show that the engine is eligible for this exemption. In this case, we will not consider your request further until you address our concerns.

(g) *Personal-use exemption.* You may import a nonconforming engine for your personal use.

(1) You may import only the number of engines shown in the following Table 1 during your lifetime:

TABLE 1 OF § 1068.315.—NUMBER OF ENGINES ALLOWED UNDER THE PERSONAL-USE EXEMPTION

Type of engine or equipment	Standard-setting part	Maximum number of engines
Large nonroad spark-ignition engines	1048	1
Recreational nonroad spark-ignition engines and equipment	1051	3

(2) To use this exemption, you must meet both the following criteria:

(i) You have owned the engine for at least one year.

(ii) You agree not to sell, lease, donate, trade, or otherwise transfer ownership of the engine for at least five years, or until the engine is eligible for the exemption in paragraph (h) of this section. The only acceptable way to dispose of the engine is to destroy or export it.

(3) You do not need our approval, but you must send the Designated Officer a form in which you do the following:

(i) Identify the engine importer's name, address, telephone number, and taxpayer identification number.

(ii) Identify your name, address, telephone number, and taxpayer identification number.

(iii) State the number of each type of engine that you have ever imported under this exemption.

(iv) State that you agree not to sell or lease the engine in the United States.

(v) Identify the engine's make, model, and identification number as well as the year the manufacturer finished assembling the engine.

(vi) Authorize us to inspect as the Act and the regulations permit.

(4) Respond promptly if we ask for more information.

(h) *Ancient engine exemption.* If you are not the original engine manufacturer, you may import a nonconforming engine that was first manufactured at least 21 years earlier, as

long as it is still in its original configuration.

§ 1068.320 How must I label an imported engine with a permanent exemption?

(a) For engines imported under § 1068.315 (a), (b), (c), (d), or

(e), you must place a permanent label or tag on each engine. If no specific label requirements from subpart C of this part apply, you must meet the following requirements:

(1) Attach the label or tag in one piece so no one can remove it without destroying or defacing it.

(2) Make sure it is durable and readable for the engine's entire life.

(3) Secure it to a part of the engine needed for normal operation and not normally requiring replacement.

(4) Write it in block letters in English.

(5) Make it readily visible to the average person after the engine is installed in the equipment.

(b) On the engine label or tag, do the following:

(1) Include the heading "Emission Control Information."

(2) Include your full corporate name and trademark.

(3) State the engine displacement (in liters) and rated power.

(4) State: "THIS ENGINE IS EXEMPT FROM THE REQUIREMENTS OF [identify the part referenced in 40 CFR 1068.1(a) that would otherwise apply], AS PROVIDED IN [identify the paragraph authorizing the exemption (for example, "40 CFR 1068.315(a)"]]. INSTALLING THIS ENGINE IN ANY DIFFERENT APPLICATION IS A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY."

(c) Get us to approve alternate label language if it is more accurate for your engine.

§ 1068.325 What are the temporary exemptions for imported engines?

If we approve a temporary exemption for an engine, you may import it under the conditions in this section. We may ask the U.S. Customs Service to require a specific bond amount to make sure you comply with the requirements of this subpart. You may not sell or lease one of these engines while it is in the United States. You must eventually export the engine as we describe in this section unless you get a certificate of conformity for it or it qualifies for one of the permanent exemptions in § 1068.315.

(a) *Exemption for repairs or alterations.* You may temporarily import a nonconforming engine under bond solely to repair or alter it. You may operate the engine in the United States only to repair or alter it or to ship it to

or from the service location. Export the engine directly after the engine servicing is complete.

(b) *Testing exemption.* You may temporarily import a nonconforming engine under bond for testing if you follow the requirements of § 1068.205. You may operate the engine in the United States only to allow testing. This exemption expires one year after you import the engine, unless we approve a one-time request for an extension of up to one more year. The engine must be exported before the exemption expires.

(c) *Display exemption.* You may temporarily import a nonconforming engine under bond for display, as described in § 1068.215. This exemption expires one year after you import the engine, unless we approve your request for an extension. We may approve an extension of up to one more year for each request, but no more than three years in total. The engine must be exported by the time the exemption expires or directly after the display concludes, whichever comes first.

(d) *Export exemption.* You may temporarily import a nonconforming engine to export it, as described in § 1068.225. You may operate the engine in the United States only as needed to prepare it for export. Label the engine as described in § 1068.225.

(e) *Diplomatic or military exemption.* You may temporarily import nonconforming engines without bond if you represent a foreign government in a diplomatic or military capacity. In your request to the Designated Officer (see § 1068.305), include either written confirmation from the U.S. State Department that you qualify for this exemption or a copy of your orders for military duty in the United States. We will rely on the State Department or your military orders to determine when your diplomatic or military status expires, at which time you must export your exempt engines.

§ 1068.330 What are the penalties for violations?

(a) *All imported engines.* Unless you comply with the provisions of this subpart, importation of nonconforming engines is violation of sections 203 and 213(d) of the Act. You may then have to export the engines, or pay civil penalties, or both. The U.S. Customs Service may seize unlawfully imported engines.

(b) *Temporarily imported engines.* If you do not comply with the provisions of this subpart for a temporary exemption, you may forfeit the total amount of the bond in addition to the sanctions we identify in paragraph (a) of this section. We will consider an engine

to be exported if it has been destroyed or delivered to the U.S. Customs Service for export or other disposition under applicable Customs laws and regulations. EPA or the U.S. Customs Service may offer you a grace period to allow you to export a temporarily exempted engine without penalty after the exemption expires.

Subpart E—Selective Enforcement Auditing

§ 1068.401 What is a selective enforcement audit?

(a) We may conduct or require you to conduct emission tests on your production engines in a selective enforcement audit. This requirement is independent of any requirement for you to routinely test production-line engines.

(b) If we send you a signed test order, you must follow its directions and the provisions of this subpart. We will tell you where to test the engines. This may be where you produce the engines or any other emission testing facility.

(c) If we select one or more of your engine families for a selective enforcement audit, we will send the test order to the person who signed the application for certification or we will deliver it in person.

(d) Within one working day of receiving the test order, notify the Designated Officer which test facility you have selected for emission testing.

(e) You must do everything we require in the audit without delay.

§ 1068.405 What is in a test order?

(a) In the test order, we will specify the following things:

(1) The engine family and configuration (if any) we have identified for testing.

(2) The engine assembly plant, storage facility, or (if you import the engines) port facility from which you must select engines.

(3) The procedure for selecting engines for testing, including a selection rate.

(4) The test procedures, duty cycles, and test points, as appropriate, for testing the engines to show that they meet emission standards.

(b) We may state that we will select the test engines.

(c) We may identify alternate engine families or configurations for testing in case we determine the intended engines are not available for testing or if you do not produce enough engines to meet the minimum rate for selecting test engines.

(d) We may include other directions or information in the test order.

(e) We may ask you to show us that you meet any additional requirements

that apply to your engines (closed crankcases, for example).

(f) In anticipation of a potential audit, you may give us a list of your preferred engine families and the corresponding assembly plants, storage facilities, or (if you import the engines) port facilities from which we should select engines for testing. The information would only apply for a single model year, so it would be best to include this information in your application for certification. If you give us this list before we issue a test order, we will consider your recommendations, but we may select engines differently.

(g) If you also do routine production-line testing with the selected engine family in the same time period, the test order will tell you what changes you might need to make in your production-line testing schedule.

§ 1068.410 How must I select and prepare my engines?

(a) *Selecting engines.* Select engines as described in the test order. If you are unable to select test engines this way, you may ask us to approve an alternate plan, as long as you make the request before you start selecting engines.

(b) *Assembling engines.* Produce and assemble test engines using your normal production and assembly process for that engine family.

(1) Notify us directly if you make any change in your production, assembly, or quality control processes that might affect emissions between the time you receive the test order and the time you finish selecting test engines.

(2) If you do not fully assemble engines at the specified location, we will describe in the test order how to select components to finish assembling the engines. Assemble these components onto the test engines using your documented assembly and quality control procedures.

(c) *Modifying engines.* Once an engine is selected for testing, you may adjust, repair, prepare, or modify it or check its emissions only if one of the following is true:

(1) You document the need for doing so in your procedures for assembling and inspecting all your production engines and make the action routine for all the engines in the engine family.

(2) This subpart otherwise allows your action.

(3) We approve your action in advance.

(d) *Engine malfunction.* If an engine malfunction prevents further emission testing, ask us to approve your decision to either repair the engine or delete it from the test sequence.

(e) *Setting adjustable parameters.* Before any test, we may adjust or

require you to adjust any adjustable parameter to any setting within its physically adjustable range.

(1) We may adjust idle speed outside the physically adjustable range as needed until the engine has stabilized emission levels (see paragraph (e) of this section). We may ask you for information needed to establish an alternate minimum idle speed.

(2) We may make or specify adjustments within the physically adjustable range by considering their effect on emission levels, as well as how likely it is someone will make such an adjustment with in-use engines.

(f) *Stabilizing emission levels.* Before you test production-line engines, you may operate the engine to stabilize the emission levels. Using good engineering judgment, operate your engines in a way that represents the way production engines will be used. You may operate each engine for no more than the greater of two periods:

(1) 50 hours.

(2) The number of hours you operated your emission-data engine for certifying the engine family (see 40 CFR part 1065, subpart E).

(g) *Damage during shipment.* If shipping an engine to a remote facility for production-line testing makes necessary an adjustment or repair, you must wait until after the initial emission test to do this work. We may waive this requirement if the test would be impossible or unsafe, or if it would permanently damage the engine. Report to us, in your written report under § 1068.450, all adjustments or repairs you make on test engines before each test.

(h) *Shipping engines.* If you need to ship engines to another facility for testing, make sure the test engines arrive at the test facility within 24 hours after being selected. You may ask that we allow more time if you are unable to do this.

(i) *Retesting after invalid tests.* You may retest an engine if you determine an emission test is invalid. Explain in your written report reasons for invalidating any test and the emission results from all tests. If you retest an engine and, within ten days after testing, ask to substitute results of the new tests for the original ones, we will answer within ten days after we receive your information.

§ 1068.415 How do I test my engines?

(a) Use the test procedures in part 1065 of this chapter that apply to your engines to show they meet emission standards. The test order will give further testing instructions.

(b) If no test cells are available at a given facility, you may make alternate testing arrangements with our approval.

(c) Test at least two engines in each 24-hour period (including void tests). However, if your projected U.S. nonroad engine sales are less than 7,500 for the year, you may test a minimum of one engine per 24-hour period. If you request and justify it, we may approve a lower testing rate.

(d) Accumulate service on test engines at a minimum rate of 6 hours per engine during each 24-hour period. The first 24-hour period for service accumulation begins when you finish preparing an engine for testing. The minimum service accumulation rate does not apply on weekends or holidays. You may ask us to approve a lower service accumulation rate. Plan your service accumulation to allow testing at the rate specified in § 1068.415. Select engine operation for accumulating operating hours on your test engines to represent normal in-use engine operation for the engine family.

(e) Test engines in the same order you select them.

§ 1068.420 How do I know when my engine family does not comply?

(a) A failed engine is one whose final deteriorated test results exceed an applicable emission standard for any regulated pollutant.

(b) Continue testing engines until you reach a pass decision for all pollutants or a fail decision for one pollutant.

(c) You reach a pass decision when the number of failed engines is less than or equal to the pass decision number in Appendix A to this subpart for the total number of engines tested. You reach a fail decision when the number of failed engines is greater than or equal to the fail decision number in Appendix A to this subpart for the total number of engines you test. An acceptable quality level of 40 percent is the basis for the pass or fail decision.

(d) Consider test results in the same order as the engine testing sequence.

(e) If you reach a pass decision for one pollutant, but need to continue testing for another pollutant, we will disregard these later test results for the pollutant with the pass decision.

(f) Appendix A to this subpart lists multiple sampling plans. Use the sampling plan for the projected sales volume you reported in your application for the audited engine family.

(g) We may choose to stop testing after any number of tests.

(h) If we test some of your engines in addition to your own testing, we may decide not to include your test results

as official data for those engines if there is substantial disagreement between your testing and our testing. We will reinstate your data as valid if you show us that we made an error and your data are correct.

(i) If we rely on our test data instead of yours, we will notify you in writing of our decision and the reasons we believe your facility is not appropriate for doing the tests we require under this subpart. You may request in writing that we consider your test results from the same facility for future testing if you show us that you have made changes to resolve the problem.

§ 1068.425 What happens if one of my production-line engines exceeds the emission standards?

(a) If one of your production-line engines fails to meet one or more emission standards (see § 1068.420), the certificate of conformity is automatically suspended for that engine. You must take the following actions before your certificate of conformity can cover that engine:

(1) Correct the problem and retest the engine to show it complies with all emission standards.

(2) Include in your written report a description of the test results and the remedy for each engine (see § 1068.450).

(b) You may at any time ask for a hearing to determine whether the tests and sampling methods were proper (see § 1068.601).

§ 1068.430 What happens if an engine family does not comply?

(a) We may suspend your certificate of conformity for an engine family if it fails to comply under § 1068.420. The suspension may apply to all facilities producing engines from an engine family, even if you find noncompliant engines only at one facility.

(b) We will tell you in writing if we suspend your certificate in whole or in part. We will not suspend a certificate until at least 15 days after the engine family became noncompliant. The suspension is effective when you receive our notice.

(c) Up to 15 days after we suspend the certificate for an engine family, you may ask for a hearing to determine whether the tests and sampling methods were proper (see § 1068.601). If we agree before a hearing that we used erroneous information in deciding to suspend the certificate, we will reinstate the certificate.

§ 1068.435 May I sell engines from an engine family with a suspended certificate of conformity?

You may sell engines that you produce after we suspend the engine

family's certificate of conformity only if one of the following occurs:

(a) You test each engine you produce and show it complies with emission standards that apply.

(b) We conditionally reinstate the certificate for the engine family. We may do so if you agree to recall all the affected engines and remedy any noncompliance at no expense to the owner if later testing shows that the engine family still does not comply.

§ 1068.440 How do I ask EPA to reinstate my suspended certificate?

(a) Send us a written report asking us to reinstate your suspended certificate. In your report, identify the reason for noncompliance, propose a remedy, and commit to a date for carrying it out. In your proposed remedy include any quality control measures you propose to keep the problem from happening again.

(b) Give us data from production-line testing that shows the remedied engine family complies with all the emission standards that apply.

§ 1068.445 When may EPA revoke my certificate under this subpart and how may I sell these engines again?

(a) We may revoke your certificate for an engine family in the following cases:

(1) You do not meet the reporting requirements.

(2) Your engine family fails to meet emission standards and your proposed remedy to address a suspended certificate is inadequate to solve the problem or requires you to change the engine's design or emission-control system.

(b) To sell engines from an engine family with a revoked certificate of conformity, you must modify the engine family and then show it complies with the applicable requirements.

(1) If we determine your proposed design change may not control emissions for the engine's full useful life, we will tell you within five working days after receiving your report. In this case we will decide whether production-line testing will be enough for us to evaluate the change or whether you need to do more testing.

(2) Unless we require more testing, you may show compliance by testing production-line engines as described in this subpart.

(3) We will issue a new or updated certificate of conformity when you have met these requirements.

§ 1068.450 What records must I send to EPA?

(a) Within 30 calendar days of the end of each audit, send us a report with the following information:

TABLE A-2.—SAMPLING PLANS FOR DIFFERENT ENGINE FAMILY SALES VOLUMES—Continued

Stage ^a	AA		A		B		C		D	
	pass #	fail #	pass #	fail #	pass #	fail #	pass #	fail #	pass #	fail #
3	0	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	0	.....	0	.....	.....	.....	.....	.....	.....	.....
5	1	5	0	.....	0	.....	0	.....	0	.....
6	1	6	1	6	1	6	0	6	0	6
7	2	6	1	7	1	7	1	7	1	7
8	2	7	2	7	2	7	2	7	2	8
9	3	7	2	8	2	8	2	8	2	8
10	3	8	3	8	3	8	3	9	3	9
11	4	8	3	8	3	9	3	9	3	9
12	4	9	4	9	4	9	4	10	4	10
13	5	9	5	10	4	10	4	10	4	10
14	5	10	5	10	5	10	5	11	5	11
15	6	10	6	11	5	11	5	11	5	11
16	6	10	6	11	6	12	6	12	6	12
17	7	10	7	12	6	12	6	12	6	12
18	8	10	7	12	7	13	7	13	7	13
19	8	10	8	13	8	13	7	13	7	13
20	9	10	8	13	8	14	8	14	8	14
21 .....	.....	.....	9	14	9	14	8	14	8	14
22 .....	.....	.....	10	14	9	15	9	15	9	15
23 .....	.....	.....	10	15	10	15	10	15	9	15
24 .....	.....	.....	11	15	10	16	10	16	10	16
25 .....	.....	.....	11	16	11	16	11	16	11	16
26 .....	.....	.....	12	16	11	17	11	17	11	17
27 .....	.....	.....	12	17	12	17	12	17	12	17
28 .....	.....	.....	13	17	12	18	12	18	12	18
29 .....	.....	.....	14	17	13	18	13	18	13	19
30 .....	.....	.....	16	17	13	19	13	19	13	19
31 .....	.....	.....	.....	.....	14	19	14	19	14	20
32 .....	.....	.....	.....	.....	14	20	14	20	14	20
33 .....	.....	.....	.....	.....	15	20	15	20	15	21
34 .....	.....	.....	.....	.....	16	21	15	21	15	21
35 .....	.....	.....	.....	.....	16	21	16	21	16	22
36 .....	.....	.....	.....	.....	17	22	16	22	16	22
37 .....	.....	.....	.....	.....	17	22	17	22	17	23
38 .....	.....	.....	.....	.....	18	22	18	23	17	23
39 .....	.....	.....	.....	.....	18	22	18	23	18	24
40 .....	.....	.....	.....	.....	21	22	19	24	18	24
41 .....	.....	.....	.....	.....	.....	.....	19	24	19	25
42 .....	.....	.....	.....	.....	.....	.....	20	25	19	26
43 .....	.....	.....	.....	.....	.....	.....	20	25	20	26

TABLE A-2.—SAMPLING PLANS FOR DIFFERENT ENGINE FAMILY SALES VOLUMES—Continued

Stage ^a	AA		A		B		C		D	
	pass #	fail #	pass #	fail #	pass #	fail #	pass #	fail #	pass #	fail #
44							21	26	21	27
45							21	27	21	27
46							22	27	22	28
47							22	27	22	28
48							23	27	23	29
49							23	27	23	29
50							26	27	24	30
51									24	30
52									25	31
53									25	31
54									26	32
55									26	32
56									27	33
57									27	33
58									28	33
59									28	33
60									32	33

^a Stage refers to the cumulative number of engines tested.

Subpart F—Defect Reporting and Recall

§ 1068.501 How do I report engine defects?

(a) As an engine manufacturer, if you learn that an emission-related defect exists in the number of engines identified as Number to Submit Defect Report in Table 1 of § 1068.501, you must send the Designated Officer a report within 15 working days and

follow the other instructions in this section. This requirement applies whether you learn of the defects from a method you established to track safety or performance characteristics, from the investigation procedures set forth in paragraph (d) of this section, or from any other information.

(1) Include each occurrence of the defect in the count of engines, rather than limiting it to individual engine families or a single model year.

(2) Include all defects you observe for the following periods:

- (i) For engines with rated power under 225 kW, five years from the end of each engine's model year.
- (ii) For engines with rated power 225 kW or greater, eight years from the end of each engine's model year.

(3) Count an engine even if you correct the defect before it reaches the ultimate buyer.

(4) Table 1 follows:

TABLE 1 OF § 1068.501.—NUMBER OF ENGINES FOR FILING REPORT OR COMMENCING INVESTIGATION

Number of engines in family	If component is anything but a catalyst		If component is a catalyst	
	Number to commence investigation	Number to submit defect report	Number to commence investigation	Number to submit defect report
10,000	400	25	200	13
20,000	800	50	400	25
30,000	1,200	75	600	38
40,000	1,600	100	800	50
50,000	2,000	125	1,000	63
60,000	2,400	150	1,200	75
70,000	2,800	175	1,400	88
80,000	3,200	200	1,600	100
90,000	3,600	225	1,800	113
100,000	4,000	250	2,000	125
200,000 or more	4000	250	2000	125

(b) Include the following information in your report (in this general outline format):

- (1) State your corporate name.
- (2) Describe the defect.
- (3) Describe which engines may have the defect, including engine model, range of production dates, purchaser, and any other information that may be needed to identify the affected engines.
- (4) Estimate the number of each class or category of affected engines that have or may have the defect and explain how you determined this number.
- (5) Identify where you produced each class or category of affected engines.
- (6) Evaluate the emissions impact of the defect
- (7) Describe any operational or performance problems a defective engine might have.
- (8) Include any available emission data related to the defect.
- (9) Describe your plan for addressing the defect.
- (c) If you revise or later obtain information required by paragraph (b) of this section, send it to us as it becomes available.

(d) As an engine manufacturer, you must conduct an investigation to determine if an emission-related defect exists in the Number to Submit Defect Report or more of your engines as follows:

- (1) If any of the following contingencies occur you must start an investigation to determine if a defect exists in the Number to Submit Defect Report or more of your engines:
 - (i) The number of Federal warranty claims for a specific emission-related component is at the number identified as the Number to Commence an Investigation in Table 1 of this section. Federal warranty claims are warranty claims submitted pursuant to any warranty established under Title II of the Clean Air Act or other warranty applicable to an emission-related device or element of design as specified in Appendix VIII of 40 CFR part 85.
 - (ii) Systems you have for monitoring information from dealers, hot line complaints, or other information systematically submitted, indicates a higher than normal occurrence of potential defects in an emission-related component or element of design.
 - (iii) Any other information indicates that there may be a defect in an emission-related component or element of design.

(2) If any of the contingencies set forth in paragraph (d)(1) of this section occur, then you shall promptly commence and conduct an investigation to determine if a specific emission-related defect exists and if it is present in the Number to

Submit Defect Report or more engines. The investigation shall be performed in a thorough manner, shall include consideration of all relevant information, and shall be conducted in accordance with scientific and engineering principles. Relevant information to be considered shall include information on design, function, rate of failure, use, and any other information available to you.

(3) If an investigation concludes with the determination that there is not an emission-related defect in at least as many engines as the Number to Submit Defect Report, then you shall make a determination whether to commence a continued investigation. A continued investigation should be commenced if there is an indication that there may be new information which would indicate the existence of an emission-related defect in the Number to Submit Defect Report or more engines.

(4) Even if an investigation is being conducted or in any other event, if you have actual knowledge of an emission-related defect in the Number to Submit Defect Report or more of your engines, you must timely submit a report to the Designated Officer, as set forth in paragraph (a) of this section.

§ 1068.505 How does the recall program work?

(a) If we determine that a substantial number of properly maintained and used engines do not meet the requirements of this chapter throughout their useful life, we will tell you in writing. Our notice will identify the class or category of engines affected and describe how we reached our conclusion. If this happens, you must meet the requirements and follow the instructions in this subpart. You must remedy at your expense noncompliant engines that have been properly maintained and used. You may not transfer this expense to a dealer or equipment manufacturer through a franchise or other agreement.

(b) You may ask for a hearing if you disagree with our determination (see § 1068.601)

(c) Unless we withdraw the determination of noncompliance, you must respond to it by sending a remedial plan to the Designated Officer by the later of these two deadlines:

- (1) Within 60 days after we notify you.
- (2) Within 60 days after a public hearing.
- (d) If you learn that your engine family does not meet the requirements of this chapter and we have not ordered you to recall noncomplying engines,

you may voluntarily recall them, as described in § 1068.535.

(e) Once you have sold an engine to the ultimate purchaser, we may inspect or test the engine only if he or she permits it, or if state or local inspection programs separately provide for it.

§ 1068.510 How do I prepare and apply my remedial plan?

(a) In your remedial plan, describe all of the following:

(1) The class or category of engines to be recalled, including the number of engines involved and the model year or other information needed to identify the engines.

(2) The modifications, alterations, repairs, corrections, adjustments, or other changes you will make to correct the affected engines.

(3) A brief description of the studies, tests, and data that support the effectiveness of the remedy you propose to use.

(4) The instructions you will send to those who will repair the engines under the remedial plan.

(5) How you will determine the owners' names and addresses.

(6) How you will notify owners; include copies of any notification letters.

(7) The proper maintenance or use you will specify, if any, as a condition to be eligible for repair under the remedial plan. Describe how owners should show they meet your conditions.

(8) The steps owners must take for you to do the repair. You may set a date or a range of dates, specify the amount of time you need, and designate certain facilities to do the repairs.

(9) Which company (or group) you will assign to do or manage the repairs.

(10) If your employees or authorized warranty agents will not be doing the work, state who will and say they can do it.

(11) How you will ensure an adequate and timely supply of parts.

(12) The effect of proposed changes on fuel consumption, driveability, and safety of the engines you will recall; include a brief summary of the information supporting these conclusions.

(13) How you intend to label the engines you repair and where you will place the label on the engine (see § 1068.515).

(b) We may require you to add information to your remedial plan.

(c) We may require you to test the proposed repair to show it will remedy the noncompliance.

(d) Use all reasonable means to locate owners. We may require you to use government or commercial registration

lists to get owners' names and addresses, so your notice will be effective.

(e) The maintenance or use that you specify as a condition for eligibility under the remedial plan may include only things you can show would cause noncompliance. Do not require use of a component or service identified by brand, trade, or corporate name, unless we approved this approach with your original certificate of conformity. Also, do not place conditions on who maintained the engine.

(f) We may require you to adjust your repair plan if we determine owners would be without their engines or equipment for an unreasonably long time.

(g) We will tell you in writing within 15 days of receiving your remedial plan whether we have approved or disapproved it. We will explain our reasons for any disapproval.

(h) Begin notifying owners within 15 days after we approve your remedial plan. If we hold a public hearing, but do not change our position about the noncompliance, you must begin notifying owners within 60 days after we complete the hearing, unless we specify otherwise.

§ 1068.515 How do I mark or label repaired engines?

(a) Attach a label to each engine you repair under the remedial plan. At your discretion, you may label or mark engines you inspect but do not repair.

(b) Make the label from a durable material suitable for its planned location. Make sure no one can remove the label without destroying it.

(c) On the label, designate the specific recall campaign and state where you repaired or inspected the engine.

(d) We may waive or modify the labeling requirements if we determine they are overly burdensome.

§ 1068.520 How do I notify affected owners?

(a) Notify owners by first class mail, unless we say otherwise. We may require you to use certified mail. Include the following things in your notice:

(1) State: "The U.S. Environmental Protection Agency has determined that your engine may be emitting pollutants in excess of the Federal emission standards, as defined in Title 40 of the Code of Federal Regulations. These emission standards were established to protect the public health or welfare from air pollution."

(2) State that you (or someone you designate) will repair these engines at your expense.

(3) If we approved maintenance and use conditions in your remedial plan, state that you will make these repairs only if owners show their engines meet the conditions for proper maintenance and use. Describe these conditions and how owners should prove their engines are eligible for repair.

(4) Describe the components your repair will affect and say generally how you will repair the engines.

(5) State that the engine, if not repaired, may fail an emission inspection test if state or local law requires one.

(6) Describe how not repairing the engine will harm its performance or driveability.

(7) Describe how not repairing the engine will harm the functions of other engine components.

(8) Specify the date you will start the repairs, the amount of time you will need to do them, and where you will do them. Include any other information owners may need to know.

(9) Include a self-addressed card that owners can mail back if they have sold the engine (or equipment in which the engine is installed); include a space for owners to write the name and address of a buyer.

(10) State that owners should call you at a phone number you give to report any difficulty in obtaining repairs.

(11) State: "To ensure your full protection under the emission warranty on your engine by federal law, and your right to participate in future recalls, we recommend you have your engine serviced as soon as possible. We may consider your not servicing it to be improper maintenance."

(b) We may require you to add information to your notice or to send more notices.

(c) You may not in any communication with owners or dealers say or imply that your noncompliance does not exist or that it will not degrade air quality.

§ 1068.525 What records must I send to EPA?

(a) Send us a copy of all communications related to the remedial plan you sent to dealers and others doing the repairs. Mail or e-mail us the information at the same time you send it to others.

(b) From the time you begin to notify owners, send us a report within 25 days of the end of each calendar quarter. Send reports for six consecutive quarters or until all the engines are inspected, whichever comes first. In these reports, identify the following:

(1) The range of dates you needed to notify owners.

(2) The total number of notices sent.

(3) The number of engines you estimate fall under the remedial plan (explain how you determined this number).

(4) The cumulative number of engines you inspected under the remedial plan.

(5) The cumulative number of these engines you found needed the specified repair.

(6) The cumulative number of these engines you have repaired.

(7) The cumulative number of engines you determined to be unavailable due to exportation, theft, retirement, or other reasons (specify).

(8) The cumulative number of engines you disqualified for not being properly maintained or used.

(c) If your estimated number of engines falling under the remedial plan changes, change the estimate in your next report and add an explanation for the change.

(d) We may ask for more information.

(e) We may waive reporting requirements or adjust the reporting schedule.

(f) If anyone asks to see the information in your reports, we will follow the provisions of § 1068.10 for handling confidential information.

§ 1068.530 What records must I keep?

We may review your records at any time, so it is important that you keep required information readily available. Keep records associated with your recall campaign for three years after you complete your remedial plan. Organize and maintain your records as described in this section.

(a) Keep a paper copy of the written reports described in § 1068.525.

(b) Keep a record of the names and addresses of owners you notified. For each engine, state whether you did any of the following:

(1) Inspected the engine.

(2) Disqualified the engine for not being properly maintained or used.

(3) Completed the prescribed repairs.

(c) You may keep the records in paragraph (b) of this section in any form we can inspect, including computer databases.

§ 1068.535 How can I do a voluntary recall for emission-related problems?

(a) To do a voluntary recall, first send the Designated Officer a plan, following the guidelines in § 1068.510. Within 15 days, we will send you our comments on your plan.

(b) Once we approve your plan, start notifying owners and carrying out the specified repairs.

(c) From the time you start the recall campaign, send us a report within 25

days of the end of each calendar quarter, following the guidelines in § 1068.525(b). Send reports for six consecutive quarters or until all the engines are inspected, whichever comes first.

(d) Keep your reports and the supporting information as described in § 1068.530.

§ 1068.540 What terms do I need to know for this subpart?

The following terms apply to this subpart:

Days means calendar days.

Owner means someone who owns an engine affected by a remedial plan or someone who owns a piece of equipment that has one of these engines.

Subpart G—Public Hearings

§ 1068.601 How do I request a public hearing?

(a) File a request for a hearing with the Designated Officer within 15 days of a decision to suspend, revoke, or void your certificate or within 30 days after we send you our conclusions for rejecting your use of good engineering judgment. If you ask later, we may give you a hearing for good cause, but we do not have to.

(b) Include the following in your request for a public hearing:

(1) State which engine family is involved.

(2) State the issues you intend to raise. We may limit these issues, as described elsewhere in the regulations.

(3) Summarize the evidence supporting your position and state why you believe this evidence justifies reinstating the certificate.

(c) We will hold the hearing as described in this subpart.

§ 1068.605 How will EPA set up a public hearing?

(a) A Presiding Officer and one or more Judicial Officers will hold public hearings.

(b) Presiding Officers must be an administrative law judge appointed according to 5 U.S.C. 3105 (see also 5 CFR part 930, as amended).

(c) The Administrator will appoint EPA employees as Judicial Officers. Judicial Officers must meet the following qualifications and perform the following functions:

(1) *Qualifications.* Judicial Officers may be permanent or temporary employees of EPA who handle other duties for the Agency. Judicial Officers may not be employed by the Office of Enforcement and Compliance Assurance or have any connection with preparing or presenting evidence for any hearing held under this section. Judicial Officers

must be graduates of an accredited law school and members in good standing of a recognized bar association of any state or the District of Columbia.

(2) *Functions.* The Administrator may consult with the Judicial Officers or delegate all or part of the Administrator's authority to act under this section to the Officers. But the Officers must be able to refer any motion or case to the Administrator whenever appropriate.

(d) We may determine that your request for a hearing does not raise a genuine, substantial question of fact or law concerning suspension of your certificate of conformity. If so, we may enter an order denying your request and reaffirm the suspension or revocation. This order has the force and effect of the Administrator's final decision.

(1) In the case of emission levels causing an engine family to be noncompliant, you may question only our decision on whether the tests and sampling methods were proper.

(2) In the case of violations of prohibited acts, you may question only our decision on whether conditions or circumstances outside your control caused your refusal to comply with the requirements of this chapter.

(e) If we determine you have raised a genuine, substantial question of fact or law under paragraphs (d)(1) and (d)(2) of this section, we will grant your request for a hearing. We will tell the public by publishing a notice in the **Federal Register** or by some other appropriate means.

(f) File with our Hearing Clerk an original and two copies of all documents or papers you must (or may) file. Your filing is timely if you deliver or postmark items within the time this section and any other regulations allow. We will give you an address for filing materials with the Hearing Clerk.

(g) Present testimony in writing as much as possible. We will give everyone copies of written testimony as soon as we can before the hearing starts. We will provide a certificate of service for each document or paper filed with the Hearing Clerk. If you need to give something to the Designated Officer, send it by registered mail (see § 1068.25).

(h) In computing any period of time for this section, do not include the day of the act or event. Include Saturdays, Sundays, and federal legal holidays, but when the period expires on one of these days, extend it to include the next business day. If you must or may do something within a prescribed period, compute this period from the time we notify you, unless we notify you by

mail. For notices by mail, add three days to the prescribed period.

(i) The Administrator or Presiding Officers may consolidate two or more proceedings held under this section to speed or simplify resolving one or more issues. You may still raise issues that you could have raised if we did not consolidate proceedings.

(j) As much as possible, we will schedule public hearings to start within 14 days after we receive a request for a hearing.

§ 1068.610 What are the procedures for a public hearing?

(a) *Presiding Officers.* Presiding Officers must hold fair and impartial hearings under the Administrative Procedure Act (5 U.S.C. 554, 556, and 557); dispose of the proceedings as soon as possible; and maintain order. They have power consistent with the Administrative Procedure Act, including the power to do the following:

(1) Administer oaths and affirmations.

(2) Rule on offers of proof and exclude irrelevant or repetitious material.

(3) Regulate the course of the hearing and the conduct of the parties and their counsel.

(4) Hold conferences.

(5) Consider and rule on all procedural and other motions in the hearing.

(6) Require submission of direct written testimony with or without affidavit whenever, in their opinion, oral testimony is not necessary for full and true disclosure of the facts.

(7) Enforce agreements and orders requiring access as authorized by law.

(8) Require the filing of briefs on any matter on which they must rule.

(9) Require any party or witness to state a position on any issue during the hearing.

(10) Depose witnesses or require depositions.

(11) Resolve or recommend resolution for disputed issues on the hearing's record.

(12) Issue protective orders, as described in paragraph (g) of this section, based on good cause.

(b) *Accelerated decision or dismissal.* Presiding Officers may accelerate decisions on all or part of the proceeding, without further hearing or with limited additional evidence (such as affidavits they may require). They may also dismiss any party with prejudice.

(1) Presiding Officers may decide in favor of EPA or you (as manufacturer), based on any party's motion or their own judgment, for any of the following reasons:

(i) Failure to state a claim on which relief can be granted or stating

something that contradicts a previous statement.

(ii) The lack of any genuine, material issue, so a party is entitled to judgment as a matter of law.

(iii) Failure to obey a procedural order of the Presiding Officer.

(iv) Other just reasons.

(2) A Presiding Officer's accelerated decision on all the issues and claims in the proceeding is equal to the decision described in paragraph (1) of this section.

(3) For accelerated decisions on less than all issues or claims in the proceeding, the Presiding Officers must determine without substantial controversy which material facts exist and which are in good faith controverted. Then, they issue an order specifying the facts that are without substantial controversy, as well as the issues and claims on which the hearing will continue.

(c) *Amicus curiae (friend of the court)*. Participants in the hearing may move that the Presiding Officer allow a brief from a friend of the court—someone who is not a participant. Anyone who asks for an amicus brief must identify his or her interest and state why the brief is desirable. The Presiding Officer may then accept briefs from someone who is not a party to the proceeding.

(d) *Conferences*. Presiding Officers may hold conferences before ordering any hearing. They direct the Hearing Clerk to tell participants the time and location of conferences. At the Presiding Officer's discretion, other people also may attend. They summarize in writing the results of conferences, including all stipulations not transcribed, and summaries part of the record. At a conference, Presiding Officers may do any of the following:

(1) Get stipulations and admissions, receive requests, order depositions to be taken, identify disputed issues of fact and law, and require or allow any witness or party to submit written testimony.

(2) Set a hearing schedule for oral and written statements, submission of written direct testimony, oral direct examination and cross-examination of a witness, or oral argument as they consider necessary.

(3) Identify matters for official notice.

(4) Limit the number of expert and other witnesses.

(5) Establish the procedures for the hearing.

(6) Take any other action that may speed the hearing or help resolve the issue.

(e) *Primary discovery*. At a prehearing conference or at some other time a Presiding Officer sets before the hearing,

all parties must make available to the other parties the names of the expert and other witnesses they expect to call, a brief summary of their expected testimony, and a list of all documents and exhibits they expect to introduce into evidence. After that, a party may move to add exhibits or amend expected testimony. If anyone makes a motion showing good cause, Presiding Officers may restrict or defer disclosure of the name of a witness or a narrative summary of the witness's expected testimony. They also may prescribe other measures to protect a witness. If restricted or deferred disclosure affects a party, they will allow enough time to prepare for presenting that case.

(f) *Other discovery*. Presiding Officers may allow further discovery. If so, they issue orders for taking the discovery, including terms and conditions.

(1) Any party may move for further discovery, as long as the motion includes reasons, the nature of the information discovery will produce, and the proposed time and place for it.

(2) Presiding Officers may approve motions for further discovery if they determine it will not unreasonably delay the proceeding, is the only way to get the information, and is significant to the case. Presiding Officers follow procedures in the Federal Rules of Civil Procedure (28 U.S.C.) and its precedents whenever possible. But no one can take discovery unless a Presiding Officer orders it or all the parties agree to it.

(3) If someone does not comply with an order issued under this paragraph (f), we may infer that the discovery information would harm that person.

(g) *Protective orders for private discovery*. Presiding Officers may enter protective orders to allow a person to testify or disclose information in private, rather than in open hearing.

(1) For this to occur, a party or the person giving discovery information must move for a protective order by showing that some of the discovery information would reveal methods or processes entitled to protection as trade secrets. This information may not include emission data. Any party wanting to use private documents or testimony to present a case must so move to the Presiding Officer with supporting justification.

(2) Presiding Officers may permit anyone seeking a protective order to disclose information in private. They will record the private proceeding. If they enter a protective order following a private session, they will seal and preserve the record and make it available to EPA or the court if anyone appeals. The Presiding Officer may limit attendance at any private proceeding to

himself or herself, EPA, and the person or party seeking the protective order.

(3) If Presiding Officers grant a motion for a protective order, they enter an order that governs treatment of the information to protect the parties' rights and prevent unnecessary disclosure. Procedures also cover presentation of the information and oral testimony and related cross-examination in executive session. The protective order must also state that the material will be filed separately from other evidence and exhibits in the hearing.

(4) Disclosing this information is limited to parties to the hearing, their counsel and relevant technical consultants, and authorized representatives of the United States concerned with carrying out the Act. Disclosure by government employees must follow 18 U.S.C. 1905. For all others, disclosure may be limited to counsel if the parties do not have to know the information. Parties or their counsel must sign a sworn statement that they will not disclose information to persons not entitled to receive it under the protective order's terms.

(5) In the submittal of proposed findings, briefs, or other papers, counsel for all parties must try in good faith not to disclose the specific details of private documents and testimony. But they may refer to the documents or testimony and speak generally about their contents. If lawyers consider specific details necessary to their presentations, they will place the details in separate proposed findings, briefs, or other paper marked "confidential." These confidential papers will become part of the private record.

(h) *Motions*. All motions, except those made orally during the hearing, must be in writing. Parties must state the grounds for the motion, describe the relief or order sought, file the motion with the Hearing Clerk, and serve it on all parties.

(1) Within the time fixed by the Environmental Appeals Board or Presiding Officers, as appropriate, any party may serve and file an answer to the motion. The Environmental Appeals Board or Presiding Officers may then require the person who made the motion to file reply papers within a specified time.

(2) Presiding Officers rule on all motions filed or made before they file their decisions (or accelerated decisions). The Environmental Appeals Board rules on all motions filed before Presiding Officers are appointed and on all motions filed after Presiding Officers issue decisions. Presiding Officers or the Environmental Appeals Board approve

oral arguing of motions only when necessary.

(i) *Evidence.* Evidence consists of official transcripts and exhibits, together with all papers and requests filed in the proceeding. Presiding Officers will separate and exclude immaterial or irrelevant parts of an admissible document whenever possible. They will also separate documents (or parts of documents) subject to a protective order under paragraph (g) of this section. They may allow evidence at the hearing even though it is inadmissible under the rules of evidence for judicial proceedings. The weight of evidence depends on its reliability and how well it proves a case. Presiding Officers allow parties to examine and cross-examine witnesses as much as necessary for a full disclosure of the facts. Their rulings on admissibility of evidence, propriety of examination and cross-examination, and other procedural matters will appear in the record. We automatically assume parties have taken exception to an adverse ruling.

(j) *The record.* The record consists of official transcripts and exhibits, together with all paper and requests filed in the proceeding. Stenographers will report and transcribe hearings; the original transcripts are part of the record and are the sole official transcript. We will file copies of the record with the Hearing Clerk and make them available during our business hours for public inspection. We may charge a reasonable fee for the service, but may deny a request to see information only based on paragraph (g) of this section.

(k) *Proposed findings and conclusions.* Within four days after the proceedings are closed to new evidence, any party may submit for the Presiding Officer's consideration proposed findings of fact, conclusions of law, or a proposed order, with supporting reasons and briefs. The Presiding Officer may allow a longer time for these proposals. Parties must put these proposals in writing, serve them on all parties, and make sure they contain clear references to the record and other authorities. The record shows the Presiding Officer's ruling on the proposed findings and conclusions, except when the disposal order for the proceeding otherwise informs the parties of these actions.

(l) *Presiding Officer's decisions.* Presiding Officers issue and file decisions with the Hearing Clerk within fourteen days after the period for filing proposed findings (see paragraph (k) of this section). For hearings that challenge an initial suspension of a certificate of conformity, decisions are due within seven days after the period for filing

proposed findings. The Environmental Appeals Board may extend the deadline for these decisions.

(1) Decisions must state findings and conclusions on all the material issues of fact or law in the record, with supporting reasons or basis, and an appropriate rule or order. Evidence and consideration of the whole record must support the decision.

(2) Decisions by Presiding Officers become the Environmental Appeals Board's decisions at one of the following times, unless the Board acts to review or stay the effective date of a decision during these periods:

(i) Ten days after the deadlines to appeal, as described in § 1068.615(a) or (b), if no one files a notice of intent to appeal.

(ii) Five days after the deadline to perfect an appeal, as described in § 1068.615(a) or (b), if someone files a notice of intent to appeal but does not perfect the appeal.

(3) At any time before Presiding Officers issue decisions, they may reopen proceedings to receive further evidence.

(4) Except for correcting clerical errors, the Presiding Officers' jurisdiction ends when they issue their decisions.

§ 1068.615 How do I appeal a hearing decision?

(a) *Appeal from the decisions of Presiding Officers.* Any party to a proceeding may appeal these decisions to the Environmental Appeals Board. In all cases except our initial suspension of a certificate of conformity, you must file your notice of intent to appeal within ten days after the Presiding Officer issues a decision. You must perfect your appeal with an appeal brief within twenty days of the decision. Any other party may then file a brief on your appeal within fifteen days of the date you file your brief. All briefs must be 40 pages or less, unless the Environmental Appeals Board approves otherwise. The Board also may allow oral arguments. Your brief must contain the following items in this order:

(1) A subject index of the matter in the brief, with page references, plus a table of cases (alphabetically arranged), textbooks, statutes, and other material cited, with page references.

(2) Specific issues you intend to urge (but see regulations in this chapter defining emission standards for the engines in question, which may limit the range of issues you consider).

(3) Your argument presenting the points of fact and law supporting the position you have taken on each issue, with page references to the record and

legal or other material you are relying on.

(4) A proposed order for the Environmental Appeals Board's consideration, if it is different from the order in the Presiding Officer's decision.

(b) *Appeal of decisions on a suspended certificate of conformity.* In this case, you may appeal the Presiding Officer's decision to the Environmental Appeals Board by filing a notice of appeal within ten days of the decision. Make your notice of appeal a brief that meets the requirements in paragraph (a) of this section. Within ten days after you file a notice of appeal under this paragraph, any other party may file a brief on that appeal. All briefs must be 15 pages or less unless the Environmental Appeals Board approves otherwise.

(c) *Review of the Presiding Officer's decision in the absence of appeal.* The hearing Clerk tells the Environmental Appeals Board if no one has filed a notice of intent to appeal the Presiding Officer's decision by the deadline, or has filed notice but not perfected it. The Environmental Appeals Board may then review the decision on its own motion, within the time limits in § 1068.610(l). The Board must tell all parties that they intend to review the decision, describe the scope of their review, and allow for filing briefs.

(d) *Decision of appeal or review by the Environmental Appeals Board.* The Board considers the record as needed to resolve issues under appeal or review. They also may use all the powers they could have used if they had presided at the hearing. They adopt, modify, or set aside the Presiding Officer's findings, conclusions, and order and state the reasons or basis for their action in the decision. If the Board determines they need more information or the parties' views on the rule or order they are issuing, they may wait until they receive them or send the case back to the Presiding Officer. Any decision under this paragraph (d) that disposes of a case is the Board's final decision.

(e) *Reconsideration of the Environmental Appeals Board's decision.* Within 20 days of the Board's decision, you may file a petition with the Board to reconsider their decision.

(1) Your petition must describe the relief you want and the grounds supporting it. Limit your petition to new questions raised by the decision or final order and only those you did not have the chance to argue before the Presiding Officer or the Board. See the regulations in this chapter defining emission standards for the engines in question, which may further limit the questions the Board will review.

(2) Anyone wanting to oppose this petition may file a response within ten days after you file it.

(3) Your petition for reconsideration does not stay the effective date of the decision or order. It also does not start any statutory time period affecting the decision or order, unless the Environmental Appeals Board orders that it does.

§ 1068.620 How does a hearing conclude?

(a) *Conclusion of hearing.* (1) The hearing ends after all periods allowed for appeal and review if no one appeals the Presiding Officer's decision and the Environmental Appeals Board does not move to review the decision by the specified deadlines.

(2) The hearing ends when the Environmental Appeals Board issues a final decision if someone appeals or the Board decides to review the Presiding Officer's decision.

(b) *Judicial review.* If you want to petition for judicial review, you must serve the petition on EPA's General Counsel. We will then tell you the costs involved. After we receive your payment to cover fees, we will forward your petition to the court where the Environmental Appeals Board filed its order.

Appendix I to Part 1068—Emission Related Components, Parameters, and Specifications

- I. Basic Engine Parameters—Reciprocating Engines.
 1. Compression ratio.
 2. Type of air aspiration (natural, Roots blown, supercharged, turbocharged).
 3. Valves (intake and exhaust).
 - a. Head diameter dimension.
 - b. Valve lifter or actuator type and valve lash dimension.

4. Camshaft timing.
 - a. Valve opening-intake exhaust (degrees from TDC or BDC).
 - b. Valve closing-intake exhaust (degrees from TDC or BDC).
 - c. Valve overlap (degrees).
5. Ports—two stroke engines (intake and/or exhaust).
 - a. Flow area.
 - b. Opening timing (degrees from TDC or BDC).
 - c. Closing timing (degrees from TDC or BDC).
- II. Intake Air System.
 1. Roots blower/supercharger/turbocharger calibration.
 2. Charge air cooling.
 - a. Type (air-to-air; air-to-liquid).
 - b. Type of liquid cooling (engine coolant, dedicated cooling system).
 3. Performance (charge air delivery temperature (°F) at rated power and one other power level under ambient conditions of 80°F and 110°F, and 3 minutes and 15 minutes after selecting rated power, and 3 minutes and 5 minutes after selecting other power level).
 3. Temperature control system calibration.
 4. Maximum allowable inlet air restriction.
- III. Fuel System.
 1. General.
 - a. Engine idle speed.
 2. Carburetion.
 - a. Air-fuel flow calibration.
 - b. Idle mixture.
 - c. Transient enrichment system calibration.
 - d. Starting enrichment system calibration.
 - e. Altitude compensation system calibration.
 - f. Hot idle compensation system calibration.
 3. Fuel injection—spark-ignition engines.
 - a. Control parameters and calibrations.
 - b. Idle mixture.
 - c. Fuel shutoff system calibration.
 - d. Starting enrichment system calibration.
 - e. Transient enrichment system calibration.
 - f. Air-fuel flow calibration.
 - g. Altitude compensation system calibration.

- h. Operating pressure(s).
 - i. Injector timing calibration.
4. Fuel injection—compression ignition engines.
 - a. Control parameters and calibrations.
 - b. Transient enrichment system calibration.
 - c. Air-fuel flow calibration.
 - d. Altitude compensation system calibration.
 - e. Operating pressure(s).
 - f. Injector timing calibration.
- IV. Ignition System—Spark-Ignition Engines.
 1. Control parameters and calibration.
 2. Initial timing setting.
 3. Dwell setting.
 4. Altitude compensation system calibration.
 5. Spark plug voltage.
- V. Engine Cooling System.
 1. Thermostat calibration.
- VI. Exhaust System.
 1. Maximum allowable back pressure.
- VII. Exhaust Emission Control System.
 1. Air injection system.
 - a. Control parameters and calibrations.
 - b. Pump flow rate.
 2. EGR system.
 - a. Control parameters and calibrations.
 - b. EGR valve flow calibration.
 3. Catalytic converter system.
 - a. Active surface area.
 - b. Volume of catalyst.
 - c. Conversion efficiency.
 4. Backpressure.
- VIII. Crankcase Emission Control System.
 1. Control parameters and calibrations.
 2. Valve calibrations.
- IX. Auxiliary Emission Control Devices (AECD).
 1. Control parameters and calibrations.
 2. Component calibration(s).
- X. Evaporative Emission Control System.
 1. Control parameters and calibrations.
 2. Fuel tank.
 - a. Volume.
 - b. Pressure and vacuum relief settings.

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