

engine speed. Note that maximum engine power is based on engines and installed engine governors; equipment designs that further limit engine operation do not change maximum engine power.

(b) An engine configuration's displacement is the intended swept volume of all the engine's cylinders. The swept volume of the engine is the product of the internal cross-section area of the cylinders, the stroke length, and the number of cylinders. Calculate the engine's intended swept volume from the design specifications for the cylinders using enough significant figures to allow determination of the displacement to the nearest 0.1 cc. Determine the final value by rounding to the nearest cubic centimeter. For example, for a one-cylinder engine with circular cylinders having an internal diameter of 6.00 cm and a 6.25 cm stroke length, the rounded displacement would be:  $(1) \times (6.00/2)^2 \times (\pi) \times (6.25) = 177$  cc.

(c) The nominal power curve and intended swept volume must be within the range of the actual power curves and swept volumes of production engines considering normal production variability. If after production begins it is determined that either your nominal power curve or your intended swept volume does not represent production engines, we may require you to amend your application for certification under § 1054.225.

**§ 1054.145 Are there interim provisions that apply only for a limited time?**

The provisions in this section apply instead of other provisions in this part. This section describes how and when these interim provisions apply.

(a) *Delayed Phase 3 implementation for engine manufacturers.* Small-volume engine manufacturers may delay complying with the Phase 3 exhaust emission standards and requirements that would otherwise apply, subject to the following conditions:

(1) You may delay meeting the Phase 3 exhaust emission standards until 2013 for Class II engines and until 2014 for Class I engines. The running loss standards in § 1054.112 also do not apply to engines exempted under this paragraph (a), or to equipment using these engines.

(2) You must certify your engines exempted under this section to the Phase 2 standards and requirements specified in 40 CFR 90.103 and summarized in Appendix I of this part. You must meet the labeling requirements in 40 CFR 90.114, but use the following compliance statement instead of the compliance statement in 40 CFR 90.114(c)(7): "THIS ENGINE COMPLIES WITH U.S. EPA REGULATIONS FOR [CURRENT MODEL YEAR] NONROAD ENGINES UNDER 40 CFR 1054.145(a)."

(3) After the delays indicated in paragraph (a)(1) of this section, you must comply with the same standards and requirements as all other manufacturers except as noted elsewhere in this section.

(4) The provisions of this paragraph (a) may not be used to circumvent the requirements of this part.

(5) You may continue to generate early credits during this two-year period as described under § 1054.740 as if the Phase 3 emission standards applied starting in the 2013 model year for Class II engines and in the 2014 model year for Class I engines.

(b) *Delayed Phase 3 implementation for equipment manufacturers.* The provisions of § 1054.625 describe how manufacturers may produce certain numbers of equipment using Class II engines that meet Phase 2 standards during the first four years that the Phase 3 standards apply.

(c) *Special provisions for handheld engines.* The following provisions apply for handheld engines:

(1) You may use the provisions in 40 CFR 90.104(g) to rely on assigned deterioration factors for small-volume engine manufacturers and for small-volume engine families.

(2) You may perform maintenance on emission-data engines during service accumulation as described in 40 CFR part 90. If your scheduled emission-related maintenance falls within 10 hours of a test point, delay the maintenance until the engine reaches the test point. Measure emissions before and after performing the maintenance. Use the average values from these two measurements to calculate deterioration factors. The emission-data engine must

meet applicable emission standards before and after maintenance to be considered in compliance, as described in § 1054.240(a) and (b).

(3) Engines subject to Phase 3 emission standards must meet the standards at or above barometric pressures of 96.0 kPa in the standard configuration and are not required to meet emission standards at lower barometric pressures. This is intended to allow testing under most weather conditions at all altitudes up to 1,100 feet above sea level. In your application for certification, identify the altitude above which you rely on an altitude kit to meet emission standards and describe your plan for making information and parts available such that you would reasonably expect that altitude kits would be widely used at all such altitudes.

(d) *Alignment of model years for exhaust and evaporative standards.* Evaporative emission standards generally apply based on the model year of the equipment, which is determined by the equipment's date of final assembly. However, in the first year of new emission standards, equipment manufacturers may apply evaporative emission standards based on the model year of the engine as shown on the engine's emission control information label. For example, for the fuel line permeation standards starting in 2012, equipment manufacturers may order a batch of 2011 model year engines for installation in 2012 model year equipment, subject to the anti-stockpiling provisions of 40 CFR 1068.105(a). The equipment with the 2011 model year engines would not need to meet fuel line permeation standards, as long as the equipment is fully assembled by December 31, 2012.

(e) *Early compliance with evaporative emission standards—nonhandheld equipment manufacturers.* You may produce nonhandheld equipment that does not meet the otherwise applicable evaporative emission standards without violating the prohibition in 40 CFR 1068.101(a)(1) if you earn evaporative emission allowances, as follows:

(1) You may earn an evaporative emission allowance from each piece of equipment certified to California's evaporative emission standards by producing it before the requirements of

this part start to apply and selling it outside of California. You may use an evaporative emission allowance by selling one piece of equipment that does not meet any EPA evaporative emission standards even though it is subject to the EPA standards. The early-compliant equipment must be covered by an EPA certificate of conformity (see 40 CFR 1060.105(e)).

(2) You may earn an evaporative emission allowance with respect to fuel tank permeation from each piece of equipment certified to EPA's evaporative emission standards by selling it outside of California or in an application that is preempted from California's standards before EPA's fuel tank permeation standards start to apply. The early-compliant fuel tanks must be covered by an EPA certificate of conformity, though you may demonstrate compliance based on the specifications and procedures adopted by the California Air Resources Board. You may use an evaporative emission allowance by selling one piece of equipment with a fuel tank that does not meet the EPA emission standards that would otherwise apply. For example, you can earn an evaporative emission allowance by selling a low-permeation fuel tank for Class II equipment before the 2011 model year, in which case you could sell a piece of Class II equipment in 2011 with a high-permeation fuel tank. You may not generate allowances under this paragraph (e)(2) based on your sales of metal fuel tanks.

(3) Evaporative emission allowances you earn under this paragraph (e) from equipment with Class I engines may be used only for other equipment with Class I engines. Similarly, evaporative emission allowances you earn under this paragraph (e) from equipment with Class II engines may be used only for other equipment with Class II engines.

(4) You must label any equipment using allowances under this paragraph (e) with the following statement: "EXEMPT FROM EVAPORATIVE STANDARDS UNDER 40 CFR 1054.145(e)".

(5) You may not use the allowances you generate under this paragraph (e) for 2014 and later model year equipment with Class II engines or for 2015 and later model year equipment with Class I engines.

(6) Send the Designated Compliance Officer the following information for each year in which you use the provisions of this paragraph (e):

(i) Send us a report within 45 days after the end of the model year describing how many pieces of equipment you produced in the preceding model year that generate allowances. You may combine this with the reports specified in §1054.250(a) if applicable.

(ii) Describe the number of equipment using allowances under this paragraph (e) in your end-of-year reports and final reports after the end of the model year as described in §1054.730(a). If you do not participate in the averaging, banking, and trading program, send this information separately within 90 days after the end of the model year.

(f) *Early banking for evaporative emission standards—handheld equipment manufacturers.* You may earn emission credits for handheld equipment you produce before the evaporative emission standards of §1054.110 apply. To do this, your equipment must use fuel tanks with a family emission limit below 1.5 g/m<sup>2</sup>/day (or 2.5 g/m<sup>2</sup>/day for testing at 40 °C). Calculate your credits as described in §1054.706 based on the difference between the family emission limit and 1.5 g/m<sup>2</sup>/day (or 2.5 g/m<sup>2</sup>/day for testing at 40 °C).

(g) *Useful life for evaporative emission standards.* (1) A useful life period of two years applies for fuel tanks or fuel caps certified to meet permeation emission standards in 2013 and earlier model years. However, for fuel tanks with a family emission limit above or below the specified emission standard, calculate emission credits under §1054.706 based on a useful life of five years.

(2) A useful life period of two years applies for cold-weather fuel lines certified to meet permeation emission standards in 2012 and 2013. However, for fuel lines with a family emission limit above or below the specified emission standard, calculate emission credits under §1054.706 based on a useful life of five years.

(h) *Emission credit program for cold-weather fuel lines.* In the 2012 through 2015 model years, certifying equipment manufacturers may generate or use emission credits for averaging to show

compliance with the permeation standards for cold-weather fuel lines, but not for banking or trading, as follows:

(1) To generate or use emission credits, apply the provisions of subpart H of this part as they apply for fuel tanks except as specified in this paragraph (h). For example, calculate emission credits based on the internal surface area of the fuel lines and a five-year useful life, even if the standards apply temporarily over a shorter useful life.

(2) Establish an FEL for each emission family based on emission measurements as specified in 40 CFR 1060.515. The FEL may not exceed 400 g/m<sup>2</sup>/day for any emission family.

(3) Use an adjustment factor (AF) of 1.0 for calculating credits.

(4) Cold-weather fuel lines are in a separate averaging set, which means you may not exchange emission credits between fuel tanks and fuel lines.

(i) *Use of California data for handheld fuel tank permeation.* If you certified handheld fuel tanks to the permeation standards in 40 CFR 90.129 based on emission measurements for demonstrating compliance with emission standards for California, you may continue to comply with the provisions of 40 CFR 90.129 instead of the provisions of §1054.110(b) for the 2010 and 2011 model years, provided that we allow you to use carryover emission data under 40 CFR 1060.235(e) for your emission family.

(j) *Continued use of 40 CFR part 90 test procedures.* You may use the test procedures for measuring exhaust emissions in 40 CFR part 90 instead of those in subpart F of this part for 2010 through 2012 model years. This applies for certification, production-line, and in-use testing. You may continue to use data based on the test procedures in 40 CFR part 90 for engine families in 2013 and later model years, provided that we allow you to use carryover emission data under 40 CFR 1054.235(d) for your emission family. You may also use the test procedures for measuring exhaust emissions in 40 CFR part 90 for production-line testing with any engine family whose certification is based on testing with those procedures.

(k) *Carryover of exhaust emission data from California ARB procedures.* You may certify your engines through the 2012

model year based on exhaust emission data you previously submitted to California ARB. This applies for certification and production-line testing. This paragraph (k) no longer applies starting with the 2013 model year. Note that other regulatory provisions may allow you to use data from California ARB for EPA certification in certain circumstances.

(1) [Reserved]

(m) *Delayed compliance for rotation-molded fuel tanks.* (1) You may produce limited numbers of 2011 and 2012 model year equipment with rotation-molded fuel tanks that do not meet permeation emission standards specified in §1054.112(b) and 40 CFR 1060.103, subject to the following provisions:

(i) You may use allowances under this paragraph (m) only for Class II equipment models using identical fuel tanks such that the production volumes of the fuel tank design used in such equipment is no more than 5,000 units in the 2011 and 2012 model years, with a total corporate allowance of 10,000 units in 2012. If production volumes are greater than 5,000 for a given fuel tank design (or greater than 10,000 corporate-wide in the 2012 model year), all those tanks must comply with emission standards. Tanks are generally considered identical if they are produced under a single part number to conform to a single design or blueprint. Tanks should be considered identical if they differ only with respect to production variability, post-production changes (such as different fittings or grommets), supplier, color, or other extraneous design variables. The limit of 5,000 units for a given fuel tank design applies together for the total production from any parent or subsidiary companies.

(ii) Include the following statement on the emission label specified in 40 CFR 1060.135: “EXEMPT FROM TANK PERMEATION STANDARDS UNDER 40 CFR 1054.145”.

(iii) You must keep records to demonstrate that you do not exceed the specified production volumes. Identify the number of exempted equipment you produced from each model and from each production facility.

(iv) You may not apply the provisions of this paragraph (m) for fuel

tanks that are not rotation-molded or for equipment that is not powered by a Class II engine.

(2) Fuel tank manufacturers may produce exempted fuel tanks as needed for equipment manufacturers under this paragraph (m) without our prior approval. Fuel tank manufacturers must keep records of the number of exempted fuel tanks sold to each equipment manufacturer.

(3) Equipment you produce under this paragraph (m) are exempt from the prohibitions in 40 CFR 1068.101(a)(1) with respect to fuel tank permeation emissions, subject to the provisions of this paragraph (m). However, producing more exempted equipment than we allow under this paragraph (m) violates the prohibitions in 40 CFR 1068.101(a)(1). Equipment manufacturers and fuel tank manufacturers must keep the records we require under this paragraph (m) until at least December 31, 2016 and give them to us if we ask for them (see 40 CFR 1068.101(a)(2)).

(n) *Ethanol-blended test fuel for nonhandheld engines.* During the first two years of the Phase 3 standards, if you use an ethanol-blended test fuel for certifying a given engine family as described in §1054.501(b)(2), we will also use the blended fuel for testing engines from that engine family, whether or not you use the blended fuel for certifying all your Class I (or Class II) engine families in that model year.

(o) *Interim bonding provisions.* Through 2012, the maximum value of the bond under §1054.690 is \$10 million. This maximum value applies without adjustment for inflation.

[73 FR 59259, Oct. 8, 2008, as amended at 75 FR 23025, Apr. 30, 2010]

EFFECTIVE DATE NOTE: At 78 FR 36396, June 17, 2013, §1054.145 was amended by revising paragraphs (c)(3) and (n), effective Aug. 16, 2013. For the convenience of the user, the revised text is set forth as follows:

**§ 1054.145 Are there interim provisions that apply only for a limited time?**

\* \* \* \* \*

(c) \* \* \*

(3) Engines subject to Phase 3 emission standards must meet the standards at or above barometric pressures of 96.0 kPa in the standard configuration and are not required

to meet emission standards at lower barometric pressures. This is intended to allow testing under most weather conditions at all altitudes up to 1,100 feet above sea level. In your application for certification, identify the altitude above which you rely on an altitude kit and describe your plan for making information and parts available such that you would reasonably expect that altitude kits would be widely used at all such altitudes.

\* \* \* \* \*

(n) *California test fuel.* Through model year 2019, you may perform testing with a fuel meeting the requirements for certifying the engine in California instead of the fuel specified in §1054.501(b)(2), as follows:

(1) You may certify individual engine families using data from testing conducted with California Phase 2 test fuel. Any EPA testing with such an engine family may use either this same certification fuel or the test fuel specified in §1054.501.

(2) Starting in model year 2013, you may certify individual engine families using data from testing conducted with California Phase 3 test fuel. Any EPA testing with such an engine family may use either this same certification fuel or the test fuel specified in §1054.501, unless you certify to the more stringent CO standards specified in this paragraph (n)(2). If you meet these alternate CO standards, we will also use California Phase 3 test fuel for any testing we perform with engines from that engine family. The following alternate CO standards apply instead of the CO standards specified in §1054.103 or §1054.105:

TABLE 1 TO § 1054.145—ALTERNATE CO STANDARDS FOR TESTING WITH CALIFORNIA PHASE 3 TEST FUEL

Engine type	Alternate CO standard [g/kW-hr]
Class I .....	549
Class II .....	549
Class III .....	536
Class IV .....	536
Class V .....	536
Marine generators .....	4.5

\* \* \* \* \*

**Subpart C—Certifying Emission Families**

**§ 1054.201 What are the general requirements for obtaining a certificate of conformity?**

Engine manufacturers must certify their engines with respect to the exhaust emission standards in this part. Manufacturers of engines, equipment, or fuel-system components may need to certify their products with respect to evaporative emission standards as described in 40 CFR 1060.1 and 1060.601. The following general requirements apply for obtaining a certificate of conformity:

(a) You must send us a separate application for a certificate of conformity for each engine family. A certificate of conformity is valid starting with the indicated effective date but it is not valid for any production after December 31 of the model year for which it is issued. No certificate will be issued after December 31 of the model year. If you certify with respect to both exhaust and evaporative emissions, you must submit separate applications.

(b) The application must contain all the information required by this part and must not include false or incomplete statements or information (see §1054.255).

(c) We may ask you to include less information than we specify in this subpart as long as you maintain all the information required by §1054.250.

(d) You must use good engineering judgment for all decisions related to your application (see 40 CFR 1068.5).

(e) An authorized representative of your company must approve and sign the application.

(f) See §1054.255 for provisions describing how we will process your application.

(g) We may require you to deliver your test engines to a facility we designate for our testing (see §1054.235(c)).

(h) For engines that become new after being placed into service, such as engines converted to run on a different fuel, we may specify alternate certification provisions consistent with the intent of this part. See §1054.645 and the