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(1) Designed, built, and equipped so it conforms at the time of sale to the ultimate purchaser with the requirements of this subpart.

(2) Is free from defects in materials and workmanship that may keep it from meeting these requirements.

(b) *Warranty notice and period.* Your emission-related warranty must be valid for a minimum of one year from the date of sale to the ultimate purchaser.

(c) *Notice.* You must provide a warranty notice with each container.

§ 59.613 What operation and maintenance instructions must I give to buyers?

You must provide the ultimate purchaser of the new portable fuel container written instructions for properly maintaining and using the emission-control system.

§ 59.615 How must I label and identify the portable fuel containers I produce?

This section describes how you must label your portable fuel containers.

(a) At the time of manufacture, indelibly mark the month and year of manufacture on each container.

(b) Mold into or affix a legible label identifying each portable fuel container. The label must be:

(1) Attached so it is not easily removable.

(2) Secured to a part of the container that can be easily viewed when the can is in use, not on the bottom of the container.

(3) Written in English.

(c) The label must include:

(1) The heading ''EMISSION CONTROL INFORMATION''.

(2) Your full corporate name, trademark and warranty contact information.

(3) A standardized identifier such as EPA's standardized designation for the emission families, the model number, or the part number.

(4) This statement: ''THIS CONTAINER COMPLIES WITH U.S. EPA EMISSION REGULATIONS FOR PORTABLE FUEL CONTAINERS (40 CFR Part 59).''.

(5) This statement: ''THE EMISSIONS WARRANTY IS VALID FOR A MINIMUM OF ONE YEAR FROM DATE OF PURCHASE.''.

(d) You may add information to the emission control information label to identify other emission standards that the container meets or does not meet (such as California standards). You may also add other information to ensure that the portable fuel container will be properly maintained and used.

(e) You may request that we approve modified labeling requirements in this subpart F if you show that it is necessary or appropriate. We will approve your request if your alternate label is consistent with the requirements of this subpart.

(f) You may identify the name and trademark of another company instead of their own on your emission control information label, subject to the following provisions:

(1) You must have a contractual agreement with the other company that obligates that company to take the following steps:

(i) Meet the emission warranty requirements that apply under § 59.612. This may involve a separate agreement involving reimbursement of warranty-related expenses.

(ii) Report all warranty-related information to the certificate holder.

(2) In your application for certification, identify the company whose trademark you will use and describe the arrangements you have made to meet your requirements under this section.

(3) You remain responsible for meeting all the requirements of this subpart.

Certifying Emission Families

§ 59.621 Who may apply for a certificate of conformity?

A certificate of conformity may be issued only to the manufacturer that completes the construction of the portable fuel container. In unusual circumstances, upon a petition by a manufacturer, we may allow another manufacturer of the container to hold the certificate of conformity. However, in order to hold the certificate, the manufacturer must demonstrate day-to-day

ability to ensure that containers produced under the certificate will comply with the requirements of this subpart.

§ 59.622 What are the general requirements for obtaining a certificate of conformity and producing portable fuel containers under it?

(a) You must send us a separate application for a certificate of conformity for each emission family. A certificate of conformity for containers is valid from the indicated effective date until the end of the production period for which it is issued. We may require new certification prior to the end of the production period if we finds that containers are not meeting the standards in use during their useful life.

(b) The application must be written in English and contain all the information required by this subpart and must not include false or incomplete statements or information (see §§ 59.607 and 59.629).

(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 § 59.628.

(d) You must use good engineering judgment for all decisions related to your application (see § 59.603).

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

(f) See § 59.629 for provisions describing how we will process your application.

(g) If we approve your application, we will issue a certificate that will allow you to produce the containers that you described in your application for a specified production period. Certificates do not allow you to produce containers that were not described in your application, unless we approve the additional containers under § 59.624.

§ 59.623 What must I include in my application?

This section specifies the information that must be in your application, unless we ask you to include less information under § 59.622(c). We may require you to provide additional information to evaluate your application.

(a) Describe the emission family's specifications and other basic parameters of the emission controls. List each distinguishable configuration in the emission family. Include descriptions and part numbers for all detachable components such as spouts and caps.

(b) Describe and explain the method of emission control.

(c) Describe the products you selected for testing and the reasons for selecting them.

(d) Describe the test equipment and procedures that you used, including any special or alternate test procedures you used (see § 59.650).

(e) List the specifications of the test fuel to show that it falls within the required ranges specified in § 59.650.

(f) Include the maintenance and use instructions and warranty information you will give to the ultimate purchaser of each new portable fuel container (see § 59.613).

(g) Describe your emission control information label (see § 59.615).

(h) State that your product was tested as described in the application (including the test procedures, test parameters, and test fuels) to show you meet the requirements of this subpart.

(i) Present emission data to show your products meet the applicable emission standards. Where applicable, §§ 59.626 and 59.627 may allow you to submit an application in certain cases without new emission data.

(j) Report all test results, including those from invalid tests or from any other tests, whether or not they were conducted according to the test procedures of §§ 59.650 through 59.653. We may ask you to send other information to confirm that your tests were valid under the requirements of this subpart.

(k) Unconditionally certify that all the products in the emission family comply with the requirements of this subpart, other referenced parts of the CFR, and the Clean Air Act.

(l) Include estimates of U.S.-directed production volumes.

(m) Include the information required by other sections of this subpart.

(n) Include other relevant information, including any additional information requested by EPA.

(o) Name an agent for service located in the United States. Service on this agent constitutes service on you or any

of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this subpart.

§ 59.624 How do I amend my application for certification?

Before we issue you a certificate of conformity, you may amend your application to include new or modified configurations, subject to the provisions of this section. After we have issued your certificate of conformity, you may send us an amended application requesting that we include new or modified configurations within the scope of the certificate, subject to the provisions of this section. You must amend your application if any changes occur with respect to any information included in your application.

(a) You must amend your application before you take either of the following actions:

(1) Add a configuration to an emission family. In this case, the configuration added must be consistent with other configurations in the emission family with respect to the criteria listed in § 59.625.

(2) Change a configuration already included in an emission family in a way that may affect emissions, or change any of the components you described in your application for certification. This includes production and design changes that may affect emissions any time during the portable fuel containers' lifetime.

(b) To amend your application for certification, send the Designated Compliance Officer the following information:

(1) Describe in detail the addition or change in the configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended emission family complies with all applicable requirements. You may do this by showing that the original emission data are still appropriate with respect to showing compliance of the amended family with all applicable requirements.

(3) If the original emission data for the emission family are not appropriate to show compliance for the new or modified configuration, include new test data showing that the new or modified configuration meets the requirements of this subpart.

(c) We may ask for more test data or engineering evaluations. You must give us these within 30 days after we request them.

(d) For emission families already covered by a certificate of conformity, we will determine whether the existing certificate of conformity covers your new or modified configuration. You may ask for a hearing if we deny your request (see § 59.699).

(e) For emission families already covered by a certificate of conformity and you send us a request to amend your application, you may sell and distribute the new or modified configuration before we make a decision under paragraph (d) of this section, subject to the provisions of this paragraph. If we determine that the affected configurations do not meet applicable requirements, we will notify you to cease production of the configurations and any containers from the new or modified configuration will not be considered covered by the certificate. In addition, we may require you to recall any affected containers that you have already distributed, including those sold to the ultimate purchasers. Choosing to produce containers under this paragraph (e) is deemed to be consent to recall all containers that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days, you must stop producing the new or modified containers.

§ 59.625 How do I select emission families?

(a) Divide your product line into families of portable fuel containers that are expected to have similar emission characteristics throughout the useful life.

(b) Group containers in the same emission family if they are the same in all the following aspects:

(1) Type of material (including pigments, plasticizers, UV inhibitors, or other additives that may affect control of emissions).

(2) Production method.

(3) Spout and cap design.

(4) Gasket material and design.

(5) Emission control strategy.

(c) You may subdivide a group of containers that is identical under paragraph (b) of this section into different emission families if you show the expected emission characteristics are different.

(d) You may group containers that are not identical with respect to the things listed in paragraph (b) of this section in the same emission family if you show that their emission characteristics will be similar throughout their useful life.

§ 59.626 What emission testing must I perform for my application for a certificate of conformity?

This section describes the emission testing you must perform to show compliance with the emission standards in § 59.611.

(a) Test your products using the procedures and equipment specified in §§ 59.650 through 59.653.

(b) Select an emission-data unit from each emission family for testing. You must test a production sample or a preproduction product that will represent actual production. Select the configuration that is most likely to exceed (or have emissions nearest to) the applicable emission standard. For example, for a family of multilayer portable fuel containers, test the container with the thinnest barrier layer. Test three identical containers.

(c) We may measure emissions from any of your products from the emission family. You must supply your products to us if we choose to perform confirmatory testing.

(d) You may ask to use emission data from a previous production period (carryover) instead of doing new tests, but only if the emission-data from the previous production period remains the appropriate emission-data unit under paragraph (b) of this section. For example, you may not carryover emission data for your family of containers if you have added a thinner-walled container than was tested previously.

(e) We may require you to test a second unit of the same or different configuration in addition to the unit tested under paragraph (b) of this section.

(f) If you use an alternate test procedure under § 59.652 and later testing shows that such testing does not produce results that are equivalent to the procedures specified in this subpart, we may reject data you generated using the alternate procedure and base our compliance determination on the later testing.

§ 59.627 How do I demonstrate that my emission family complies with evaporative emission standards?

(a) For purposes of certification, your emission family is considered in compliance with an evaporative emission standard in § 59.611(a) if the test results from all portable fuel containers in the family that have been tested show measured emissions levels that are at or below the applicable standard.

(b) Your emissions family is deemed not to comply if any container representing that family has test results showing an official emission level above the standard.

(c) Round the measured emission level to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard.

§ 59.628 What records must I keep and what reports must I send to EPA?

(a) Organize and maintain the following records:

(1) A copy of all applications and any other information you send us.

(2) Any of the information we specify in § 59.623 that you were not required to include in your application.

(3) A detailed history of each emission-data unit. For each emission-data unit, include all of the following:

(i) The emission-data unit's construction, including its origin and buildup, steps you took to ensure that it represents production containers, any components you built specially for it, and all the components you include in your application for certification.

(ii) All your emission tests, including documentation on routine and standard tests, as specified in §§ 59.650 through 59.653, and the date and purpose of each test.

(iii) All tests to diagnose emission-control performance, giving the date and time of each and the reasons for the test.

(iv) Any other relevant events or information.

(4) Production figures for each emission family divided by assembly plant.

(5) If you identify your portable fuel containers by lot number or other identification numbers, keep a record of these numbers for all the containers you produce under each certificate of conformity.

(b) Keep data from routine emission tests (such as test cell temperatures and relative humidity readings) for one year after we issue the associated certificate of conformity. Keep all other information specified in paragraph (a) of this section for five years after we issue your certificate.

(c) Store these records in any format and on any media, as long as you can promptly send us organized, written records in English if we ask for them. You must keep these records readily available. We may review them at any time.

(d) Send us copies of any maintenance instructions or explanations if we ask for them.

(e) Send us an annual warranty report summarizing successful warranty claims by emission family under § 59.612, including the reason for the claim. You must submit the report by July 1 for the preceding calendar year.

§ 59.629 What decisions may EPA make regarding my certificate of conformity?

(a) If we determine your application is complete and shows that the emission family meets all the requirements of this subpart and the Act, we will issue a certificate of conformity for your emission family for the specified production period. We may make the approval subject to additional conditions.

(b) We may deny your application for certification if we determine that your emission family fails to comply with emission standards or other requirements of this subpart or the Act. Our decision may be based on a review of all information available to us. If we deny your application, we will explain why in writing.

(c) In addition, we may deny your application or suspend, revoke, or void your certificate if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information.

(3) Render inaccurate any test data.

(4) Deny us from completing authorized activities (see § 59.698). This includes a failure to provide reasonable assistance.

(5) Produce portable fuel containers for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend your application to include all portable fuel containers being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this subpart.

(d) If we deny your application or suspend, revoke, or void your certificate, you may ask for a hearing (see § 59.699).

§ 59.630 EPA testing.

We may test any portable fuel container subject to the standards of this subpart.

(a) *Certification and production sample testing.* Upon our request, a manufacturer must supply a prototype container or a reasonable number of production samples to us for verification testing. These samples will generally be tested using the full test procedure of § 59.653.

(b) *In-use testing.* We may test in-use containers using the test procedure of § 59.653 without preconditioning.

§ 59.650 General testing provisions.

(a) The test procedures of this subpart are addressed to you as a manufacturer, but they apply equally to anyone who does testing for you.

(b) Unless we specify otherwise, the terms ''procedures'' and ''test procedures'' in this subpart include all aspects of testing, including the equipment specifications, calibrations, calculations, and other protocols and procedural specifications needed to measure emissions.

(c) The specification for gasoline to be used for testing is given in 40 CFR 1065.710. Use the grade of gasoline specified for general testing. Blend this grade of gasoline with reagent grade ethanol in a volumetric ratio of 90.0 percent gasoline to 10.0 percent ethanol. You may use ethanol that is less pure if you can demonstrate that it will not affect your ability to demonstrate compliance with the applicable emission standards.

(d) Accuracy and precision of all temperature measurements must be ±2.2 °C or better.

(e) Accuracy and precision of mass balances must be sufficient to ensure accuracy and precision of two percent or better for emission measurements for products at the maximum level allowed by the standard. The readability of the display may not be coarser than half of the required accuracy and precision.

§ 59.652 Other procedures.

(a) *Your testing.* The procedures in this subpart apply for all testing you do to show compliance with emission standards, with certain exceptions listed in this section.

(b) *Our testing.* These procedures generally apply for testing that we do to determine if your portable fuel containers complies with applicable emission standards. We may perform other testing as allowed by the Act.

(c) *Exceptions.* We may allow or require you to use procedures other than those specified in this subpart as follows:

(1) You may request to use special procedures if your portable fuel containers cannot be tested using the specified procedures. We will approve your request if we determine that it would produce emission measurements that represent in-use operation and we determine that it can be used to show compliance with the requirements of § 59.611.

(2) You may ask to use emission data collected using other procedures, such as those of the California Air Resources Board. We will approve this only if you show us that using these other procedures do not affect your ability to show compliance with the applicable emission standards. This generally requires emission levels to be far enough below the applicable emission standards so that any test differences do not affect your ability to state unconditionally that your containers will meet all applicable emission standards when tested using the specified test procedures.

(3) You may request to use alternate procedures that are equivalent to allowed procedures, or more accurate or more precise than allowed procedures.

(4) You may not use other procedures under this paragraph (c) until we approve your request.

§ 59.653 How do I test portable fuel containers?

You must test the portable fuel container as described in your application, with the applicable spout attached except as otherwise noted. Tighten fittings in a manner representative of how they would be tightened by a typical user.

(a) *Preconditioning for durability.* Complete the following steps before an emissions test, in any order, unless we determine that omission of one or more of these durability steps will not affect the emissions from your container.

(1) *Pressure cycling.* Perform a pressure test by sealing the container and cycling it between +13.8 and −1.7 kPa (+2.0 and −0.5 psig) for 10,000 cycles at a rate of 60 seconds per cycle. For this test, the spout may be removed and the pressure applied through the opening where the spout attaches. The purpose of this test is to represent environmental wall stresses caused by pressure changes and other factors (such as vibration or thermal expansion). If your container cannot be tested using the pressure cycles specified by this paragraph (a)(1), you may ask to use special test procedures under § 59.652(c).

(2) *UV exposure.* Perform a sunlight-exposure test by exposing the container to an ultraviolet light of at least

24 W/m^2 (0.40 W-hr/m^2/min) on the container surface for at least 450 hours. Alternatively, the container may be exposed to direct natural sunlight for an equivalent period of time, as long as you ensure that the container is exposed to at least 450 daylight hours.

(3) *Slosh testing.* Perform a slosh test by filling the portable fuel container to 40 percent of its capacity with the fuel specified in paragraph (e) of this section and rocking it at a rate of 15 cycles per minute until you reach one million total cycles. Use an angle deviation of +15° to −15° from level.

(4) *Spout actuation.* Perform the following spout actuation and inversion steps at the end on the slosh testing, and at the end of the preconditioning soak.

(i) Perform one complete actuation/inversion cycle per day for ten days.

(ii) One actuation/inversion cycle consists of the following steps:

(A) Remove and replace the spout to simulate filling the container.

(B) Slowly invert the container and keep it inverted for at least 5 seconds to ensure that the spout and mechanisms become saturated with fuel. Any fuel leaking from any part of the container will denote a leak and must be reported as part of certification. Once completed, place the container on a flat surface in the upright position.

(C) Actuate the spout by fully opening and closing without dispensing fuel. The spout must return to the closed position without the aid of the operator (e.g., pushing or pulling the spout closed). Repeat for a total of 10 actuations. If at any point the spout fails to return to the closed position, the container fails the test.

(D) Repeat the step contained in paragraph (a)(4)(ii)(B) of this section (i.e., the inversion step).

(E) Repeat the steps contained in paragraph (a)(4)(ii)(C) of this section (i.e., ten actuations).

(b) *Preconditioning fuel soak.* Complete the following steps before a diurnal emission test:

(1) Fill the portable fuel container with the specified fuel to its nominal capacity, seal it using the spout, and allow it to soak at 28 ±5 °C for 20 weeks. Alternatively, the container may be soaked for 10 weeks at 43 ±5 °C. You may count the time of the preconditioning steps in paragraph (a) of this section as part of the preconditioning fuel soak, as long as the ambient temperature remains within the specified temperature range and the fuel tank is at least 40 percent full; you may add or replace fuel as needed to conduct the specified durability procedures.

(2) Pour the fuel out of the container and immediately refill to 50 percent of nominal capacity. Be careful to not spill any fuel on the container. Wipe the outside of the container as needed to remove any liquid fuel that may have spilled on it.

(3) Install the spout assembly that will be used in the production containers. The spout and other openings (such as vents) on the container must be tested in their open condition unless they close automatically and are unlikely to be left open by the user during typical storage. All manual closures such as caps must be left off the container and spout during testing.

(c) *Reference container.* A reference container is required to correct for buoyancy effects that may occur during testing. Prepare the reference tank as follows:

(1) Obtain a second container of the same model as the test tank. You may not use a container that has previously contained fuel or any other contents that might affect the stability of its mass.

(2) Fill the reference container with enough dry sand (or other inert material) so that the mass of the reference container is approximately the same as the test container when filled with fuel. Use good engineering judgment to determine how similar the mass of the reference container needs to be to the mass of the test container considering the performance characteristics of your balance.

(3) Ensure that the sand (or other inert material) is dry. This may require heating the container or applying a vacuum to it.

(4) Seal the container.

(d) *Diurnal test run.* To run the test, take the following steps for a portable fuel container that was preconditioned as specified in paragraph (a) of this section.

(1) Stabilize the fuel temperature within the portable fuel container at 22.2 °C. Vent the container at this point to relieve any positive or negative pressure that may have developed during stabilization.

(2) Weigh the sealed reference container and record the weight. Place the reference on the balance and tare it so that it reads zero. Place the sealed test container on the balance and record the difference between the test container and the reference container. This value is $M_{initial}$ Take this measurement within 8 hours of filling the test container with fuel as specified in paragraph (b)(2) of this section.

(3) Immediately place the portable fuel container within a well ventilated, temperature-controlled room or enclosure. Do not spill or add any fuel.

(4) Close the room or enclosure.

(5) Follow the temperature profile in the following table for all portable fuel containers. Use good engineering judgment to follow this profile as closely as possible. You may use linearly interpolated temperatures or a spline fit for temperatures between the hourly setpoints.

TABLE 1 OF § 59.653—DIURNAL TEMPERATURE PROFILE FOR PORTABLE FUEL CONTAINERS

Time (hours)	Ambient Temperature (°C) Profile
0	22.2
1	22.5
2	24.2
3	26.8
4	29.6
5	31.9
6	33.9
7	35.1
8	35.4
9	35.6
10	35.3
11	34.5
12	33.2
13	31.4
14	29.7
15	28.2
16	27.2
17	26.1
18	25.1
19	24.3
20	23.7
21	23.3
22	22.9
23	22.6
24	22.2

(6) At the end of the diurnal period, retare the balance using the reference container and weigh the portable fuel container. Record the difference in mass between the reference container and the test. This value is M_{final}.

(7) Subtract M_{final} from $M_{initial}$ and divide the difference by the nominal capacity of the container (using at least three significant figures) to calculate the g/gallon/day emission rate as follows:

Emission rate = ($M_{initial}$—M_{final})/(nominal capacity)/(one day)

(8) Round your result to the same number of decimal places as the emission standard.

(9) Instead of determining emissions by weighing the container before and after the diurnal temperature cycle, you may place the container in a SHED meeting the specifications of 40 CFR 86.107–96(a)(1) and measure emissions directly. Immediately following the stabilization in paragraph (d)(1) of this section, purge the SHED and follow the temperature profile from paragraph (d)(4) of this section. Start measuring emissions when you start the temperature profile and stop measuring emissions when the temperature profile concludes.

(e) For metal containers, you may demonstrate for certification that your portable fuel containers comply with the evaporative emission standards without performing the pre-soak or container durability cycles (i.e., the pressure cycling, UV exposure, and slosh testing) specified in this section. For other containers, you may demonstrate compliance without performing the durability cycles specified in this section only if we approve it after you have presented data clearly demonstrating that the cycle or cycles do not negatively impact the permeation rate of the materials used in the containers.

SPECIAL COMPLIANCE PROVISIONS

§ 59.660 Exemption from the standards.

In certain circumstances, we may exempt portable fuel containers from the evaporative emission standards and requirements of § 59.611 and the prohibitions and requirements of § 59.602. You