

State of California
AIR RESOURCES BOARD

UPDATED INFORMATIVE DIGEST

PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE PORTABLE FUEL CONTAINER REGULATION

Sections Affected: Amendments to California Code of Regulations, title 13, sections 2467, 2467.1, 2467.2, 2467.3, 2467.4, 2467.5, 2467.6, 2467.7, 2467.8, and 2467.9; and to the following documents incorporated by reference therein: CP-501, *Certification Procedure 501 for Portable Fuel Containers and Spill-Proof Spouts*; TP-501, *Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems*; and TP-502, *Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers*.

Background: Air Resources Board (ARB or Board) has adopted amendments to existing ARB regulations for controlling total organic gas (TOG) emissions from portable fuel containers (PFC or gas cans). PFCs are used to store and dispense fuel into on-road and off-road mobile sources and small off-road equipment.

ARB first adopted regulations to reduce uncontrolled TOG emissions from PFCs in September 1999. PFC regulations became effective in October 2000. The regulations reduce TOG emissions from five processes: evaporation of fuel vapors through PFC openings, permeation of fuel through PFC walls, leaks during transport and storage, displaced vapor, and spillage during fueling events.

The 1999 PFC regulations also included performance standards for fill height, flow rate, pressure maintenance, automatic closure, and automatic shutoff. However, diesel and kerosene containers were not subject to the regulations, and became inexpensive PFC substitutes. Additionally, uncontrolled utility jugs were being used to store and transfer gasoline.

In 2005, ARB amended the PFC regulations based on consumer feedback regarding PFC user-friendliness and the growing use of diesel, kerosene, and utility containers as PFC substitutes. Staff established a new certification procedure, expanded the definition of a PFC to include utility jugs and containers used to store diesel and kerosene fuels, modified spout performance standards to improve spillage control, reduced the diurnal emissions standard from 0.4 grams TOG per gallon per day (g/gal/day) to 0.3 g/gal/day beginning in 2009, and adopted new test procedures.

Description of Regulatory Action: The major amendments to the PFC regulations are identified below. In addition, a number of modifications are being made to the PFC certification and test procedures, which are identified in the Staff Report.

- Require PFCs currently sold in California to be recertified to the new procedures;
- Require PFC executive order certification to be renewed every 4 years;

- Streamline, clarify, and increase the robustness of ARB certification and test procedures;
- Change certification fuel formulation from 0 percent ethanol (E-0) to 10 percent ethanol (E-10) to reflect motor vehicle fuel currently available in California; and
- Harmonize, wherever possible, and without compromising ARB PFC standards, with the United States Environmental Protection Agency (U.S. EPA) PFC regulations.

Comparable Federal Regulations: U.S. EPA worked with ARB to adopt federal regulations for PFCs in 2009. Many aspects of U.S. EPA regulations are similar to ARB regulations, except for labeling, diurnal temperature profile, leak checks, certification fuel, preconditioning options, number of PFCs tested, and durability testing. ARB procedures will maintain their more stringent temperature profile, additional leak checks, and continue requiring certification testing using six PFCs rather than the three required by U.S. EPA. ARB will adopt U.S. EPA labeling requirements, accept U.S. EPA's more volatile certification fuel in addition to ARB's specified certification fuel, require filling PFCs to nominal capacity for preconditioning, and incorporate the additional U.S. EPA durability tests. It is the goal of ARB to harmonize regulations and test procedures to the extent possible that PFC manufacturers can submit one set of certification data which satisfies both U.S. EPA and ARB regulations without compromising ARB's stricter standards.

Changes to Underlying Laws: This regulation is not inconsistent or incompatible with existing State regulations.

Changes to the Regulation: Pursuant to Government Code section 11346.8, ARB conducted a 15-day supplemental comment period. The 15-day changes include changes to Cal. Code Regs., title 13, section 2467, and the following certification and test procedures:

- CP-501 - *Certification Procedure for Portable Fuel Container Systems*
- TP-501 - *Test Procedure for Determining Integrity of Portable Fuel Container Systems*
- TP-502 - *Test Procedure for Determining Diurnal Emissions from Portable Fuel Container Systems*

Changes were made that do not change the implementation of the regulations. These changes include modifications to the components as explained below:

1. Regulation Order

Modifications were made in the definitions section to clarify meaning of terms in the regulations. Revised language states that PFC systems shall still be certified to the existing certification procedure until the amendments are finalized and shall be certified to the amended certification procedure after the amendments are finalized.

Recertification dates were extended six months to allow for additional time to comply with the 15-day changes to the certification procedure. The term "reactive organic gas (ROG)" was replaced with "total organic gas (TOG)." Compliance testing will have the

option of being performed without preconditioning. Last, a “Records and Reports” section was added to require manufacturers to submit annual reports which estimate total California sales for each model listed on the executive order.

2. Certification Procedure

ARB Certification Procedure for Portable Fuel Container Systems, CP-501

CP-501 was amended to specify that if more than the required six PFCs are tested for certification, all must pass. Independent test laboratories used for certification testing must be accredited to ISO/IEC 17025 standards. PFC systems shall demonstrate compatibility with section 4 of ASTM F852-08 and section 4 of ASTM F976-08. Manufacturers will be required to send 14 PFCs to ARB as part of the certification application package. ARB will then select 7 of these PFCs and submit them to the laboratory of the manufacturer’s choosing for certification testing. This provision ensures that only PFCs submitted for certification will be tested. The barrier type, minimum barrier thickness, and molding method used to manufacture PFCs are described, allowing comparison of production models of PFCs to what is declared in the certification application. Language was added that requires applicants to notify the Executive Officer of any change in the supplier(s) of PFC system components, and declare that the replacement components will be identical to what was certified. Manufacturers will be required to declare the quality assurance and quality control measures taken to ensure that production versions of PFC systems meet and maintain the certification standard. An authorized representative of the applicant signing the certification application must state that the information submitted is accurate and complete. The expected certification timeline was corrected and language more specific to PFC certification was used.

3. Test Procedures

ARB Test Procedure for Determining Integrity of Portable Fuel Container Systems, TP-501

TP-501 was amended to specify that spouts shall be installed onto PFCs in accordance with the torque specification in ASTM F852-08 section 4 to ensure that there is consistency between test laboratories. The Pressurized Leak Test was removed because some PFCs are not designed to be pressurized through the spout and will need to be drilled into or otherwise modified to conduct this test. A statement was added giving the Executive Officer the right to require applicants of innovative systems to develop an alternative test procedure which demonstrates the intent of each test requirement not achieved due to the innovative design.

ARB Test Procedure for Determining Diurnal Emissions from Portable Fuel Container Systems, TP-502

TP-502 was amended to specify that spouts shall be installed onto PFCs in accordance with the torque specification in ASTM F852-08 section 4 to ensure that there is

consistency between test laboratories. Language was added allowing compliance tests to be performed without conducting durability testing or preconditioning of PFCs. A statement was added giving the Executive Officer the right to require applicants of innovative systems to develop an alternative test procedure which demonstrates the intent of each test requirement not achieved due to the innovative design.

In addition to the modifications described above, additional modifications correcting grammar, punctuation and spelling have been made throughout the proposal. These changes are nonsubstantive.