

State of California  
AIR RESOURCES BOARD

Resolution 05-54

September 15, 2005

Agenda Item No: 05-8-7

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board ("ARB" or "Board") to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, section 43013 of the Health and Safety Code authorizes the Board to adopt standards and regulations to control emissions from off-road or non-vehicle engine categories;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emissions reduction possible from vehicular and other mobile sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date;

WHEREAS, on September 23, 1999, the Board adopted title 13, California Code of Regulations, Division 3, Chapter 9, Article 6, Portable Fuel Containers and Spouts, containing section 2467, Applicability, section 2467.1, Definitions, section 2467.2, Performance Standards for Portable Fuel Containers and Spill-Proof Spouts, section 2467.3, Exemptions, section 2467.4, Innovative Products, section 2467.5, Administrative Requirements, section 2467.6, Variances, section 2467.7, Test Procedures, and section 2467.8, Severability, hereinafter referred to cumulatively as "Portable Fuel Container and Spout Regulations" or "Regulations";

WHEREAS, the Regulations were projected to reduce statewide ROG emissions from portable fuel containers by 75 tons per day in 2007;

WHEREAS, the Regulations incorporate performance standards for fill height, flow rate, leaks, automatic closure and automatic shutoff;

WHEREAS, the Regulations took effect on and after January 1, 2001;

WHEREAS, in implementing the Regulations, staff has regularly obtained portable fuel containers from retail stores and tested them for compliance with the Performance Standards for Portable Fuel Containers and Spouts;

WHEREAS, the results from such tests indicate that nearly half of the portable fuel containers tested do not comply with the performance standards, and staff has determined the vast majority of the test failures are due to poor production quality;

WHEREAS, the inability of portable fuel containers to comply with the performance standards in the Regulations adversely impacts the emissions benefit of the Regulation;

WHEREAS, the Regulation does not incorporate a certification program, and by the time staff has identified non-compliant portable fuel containers, many of the non-compliant containers have already been sold or used by consumers;

WHEREAS, measures to recall non-compliant containers that are already in consumer hands have been largely ineffective;

WHEREAS, amending the Regulations to incorporate a certification program will help to ensure that portable fuel containers comply with all applicable requirements before they are sold or used in the State;

WHEREAS, a certification program is estimated to increase the cost of a portable fuel container only \$0.02;

WHEREAS, certification programs are a proven means of ensuring that products comply with applicable standards and other criteria prior to their sale and usage in California;

WHEREAS, the Board routinely adopts certification and test procedures, such as the new certification and test procedures proposed (Certification Procedure 501, Certification Procedure for Portable Fuel Containers and Spill-Proof Spouts, Test Procedure 501, Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, Test Procedure 502, Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers), in tandem with regulations to alert parties of the manner in which ARB will determine compliance with technical requirements;

WHEREAS, staff has become aware of consumer complaints regarding difficulty using spill-proof spouts and portable fuel containers;

WHEREAS, such consumer complaints largely relate to the automatic shutoff requirement in the Regulation, which was included to reduce emissions resulting from spillage of fuel by ensuring that the flow of fuel stops when the fuel in the target fuel tank rises to a prescribed level;

WHEREAS, consumer frustrations relating to the automatic shutoff requirement are that the feature is not intuitive, that non-uniform fuel tank designs and fuel tank openings have rendered the automatic shut-off feature incompatible with some equipment, and that it has caused difficulties in fueling and spillage of fuel;

WHEREAS, although portable fuel containers and spouts comply with the automatic shutoff feature, this feature has led spillage as consumers attempt to fuel equipment by manually holding the spout open to pour fuel, or overfilling tanks that are too small to allow sufficient fuel to be dispensed to achieve a vacuum needed to actuate the shutoff feature;

WHEREAS, the Regulations were estimated to reduce spillage emissions from portable fuel containers by approximately 8 tons per day in 2007;

WHEREAS, staff estimates that the spillage emissions resulting from current compliant portable fuel containers will reduce spillage emissions by approximately only 4 tons per day in 2007;

WHEREAS, in the survey "Analysis of 2004 California Household Portable Fuel Container Survey" (September 2004), 32 percent of respondents expressed frustration with using compliant portable fuel containers and reported problems with spillage or usage;

WHEREAS, most portable fuel container manufacturers and staff concur that eliminating the auto shutoff feature will reduce spillage emissions and improve customer acceptance, as well as provide manufacturers with greater design flexibility to produce designs that are easier to use and more compatible with a wider variety of vehicles and off-road equipment;

WHEREAS, staff expects that eliminating the auto shutoff feature will result in designs allowing consumers greater visibility and control of refueling, which will reduce spillage compared to current compliant designs;

WHEREAS, eliminating the auto shutoff feature will improve consumer acceptance of compliant portable fuel containers;

WHEREAS, eliminating the auto shutoff feature will likely represent a cost savings to manufacturers;

WHEREAS, a large number of consumers have expressed displeasure regarding using compliant portable fuel containers;

WHEREAS, an optional consumer acceptance program would benefit consumers by allowing manufacturers to indicate whether their products have been deemed as "easy to use" by other consumers;

WHEREAS, market competitive forces should lead manufacturers to design consumer-friendly features into their products;

WHEREAS, the Regulations presently incorporate performance standards specifying fill height, flow rate, pressure and permeation criteria;

WHEREAS, the fill height and flow rate standards were proposed to ensure the target fuel tank is sufficiently filled and that a portable fuel container dispenses fuel at a rate acceptable to consumers, respectively;

WHEREAS, the fill height and flow rate standards were identified as consumer acceptance measures in the rulemaking for the Regulations, for which no emissions benefits were identified;

WHEREAS, most consumers have indicated they are not concerned about the fill height and flow rate features, and staff believes such features cause manufacturers difficulty in designing spouts that comply with other emissions related performance standards;

WHEREAS, eliminating the fill height and flow rate standards will have no adverse emissions impact;

WHEREAS, the pressurized leak test incorporated in the current test procedures is designed to reduce emissions occurring from evaporation of fuel from a portable fuel container while it stores fuel;

WHEREAS, while the current pressurized leak test requires a portable fuel container to be pressurized to 10 pounds per square inch gauge (psig), this requirement leads to difficult to operate portable fuel containers;

WHEREAS, consumers have expressed that portable fuel containers complying with a 10 psig pressurized leak test standard require unusually high degrees of physical force to dispense fuel, and can lead to tipping over equipment, which produces spillage;

WHEREAS, reducing the pressurized leak test standard from 10 to 5 psig will not reduce the ability of portable fuel containers to control evaporative emissions and will make it easier for consumers to dispense fuel;

WHEREAS, the Regulations incorporate testing requirements relating to measuring evaporative and permeation emissions, which require separate tests to determine compliance with both standards;

WHEREAS, combining the evaporative and permeation standards and test procedures into a single standard and associated test method will simplify certification and compliance testing, reduce test costs, and conform the testing to more closely align to in-use conditions experienced by portable fuel containers;

WHEREAS, the current test methods require amendments to align them with the substantive amendments previously discussed above;

WHEREAS, the staff, has proposed amendments to the Regulations, which include the amendments to title 13, section 2467(b), Applicability, section 2467.2, Performance

Standards and Test Procedures for Portable Fuel Containers and Spill-Proof Spouts, section 2467.3, Exemptions, section 2467.4, Innovative Products, section 2467.5, Administrative Requirements, section 2467.6, Variances, section 2467.7, Performance Standard Test Procedures, section 2467.8, Certification and Compliance Test Procedures, and section 2467.9, Enforcement as set forth in Attachment A hereto, collectively referred to as the proposed amendments;

WHEREAS, the Board routinely adopts test procedures in tandem with the regulations to alert parties of the manner in which ARB will determine compliance with technical requirements;

WHEREAS, the staff proposes that the Board adopt amendments to Test Method 510, Automatic Shut-Off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts, Test Method 511, Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts, and Test Method 512, Determination of Fuel Flow Rate for Spill-Proof Systems and Spill-Proof Spouts, collectively referred to as the proposed Test Method amendments;

WHEREAS, the staff proposes that the Board adopt CP-501, Certification Procedure 501 for Portable Fuel Containers and Spill-Proof Spouts, Test Procedure 501, Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, and Test Procedure 502, Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers;

WHEREAS, the Board-approved emissions inventory upon which the amendments to the Regulations are based, has been reviewed and will be made available to the public as it is updated;

WHEREAS, the market turnover necessary to reach the full amount of emissions reductions targeted by the Regulations depends on continuing consumer acceptance of the filling and spillage characteristics of containers and spouts meeting the Regulations' performance standards;

WHEREAS, the emissions benefit of the Regulations was based on a statewide inventory of portable fuel containers of approximately 9.9 million portable fuel containers;

WHEREAS, the proposed amendments specify that portable fuel containers produced on or after July 1, 2007 that are manufactured for sale, advertised for sale, sold or offered for sale in California for introduction into commerce must be certified by the Air Resources Board and covered under an Executive Order;

WHEREAS, the California Environmental Quality Act (CEQA) and Board regulations require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, the Board must consider the impact of the proposed standards on the economy of the state;

WHEREAS, the Board must follow state law procedures to adopt regulations;

WHEREAS, the Board finds that:

Despite advances in reducing emissions from mobile sources, stationary sources, and area sources, California still has the most severe air pollution problems in the United States;

To meet Federal and California Clean Air Act emissions reductions requirements, ARB must continue to seek reductions from all sources under its authority, including portable fuel containers and spouts;

The proposed amendments adding a certification program applicable to portable fuel containers will help to ensure that portable fuel containers comply with all applicable requirements before they are sold or used in the State and will reduce emissions caused by portable fuel containers manufactured with poor production quality;

The proposed amendments adding Certification Procedure 501, Certification Procedure for Portable Fuel Containers and Spill-Proof Spouts, Test Procedure 501, Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, and Test Procedure 502, Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers, are necessary and appropriate in that they alert parties of the manner in which ARB will determine compliance with the certification requirements;

The proposed amendments eliminating the auto shutoff requirement would reduce spillage emissions, improve customer acceptance of portable fuel containers, and provide manufacturers greater design flexibility to produce designs that are easier to use and more compatible with a wider variety of vehicles and off-road equipment;

The proposed amendments allowing an optional customer acceptance program would benefit consumers by allowing manufacturers to indicate whether their products have been deemed as “easy to use” by other consumers;

The proposed amendments eliminating the fill height and flow rate performance standards will not adversely impair the emissions benefit of the Regulation;

The proposed amendments reducing the pressurized leak test standard from 10 to 5 psig will not reduce the ability of portable fuel containers to control evaporative emissions and will make it easier for consumers to dispense fuel;

The proposed amendments combining the evaporative and permeation standards and test procedures into a single standard and associated test method will simplify certification and compliance testing, reduce test costs, and conform the testing to more closely align to in-use conditions experienced by portable fuel containers;

The proposed amendments to the current test methods are necessary and appropriate to align them with the proposed amendments previously discussed;

A public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340, Part 1, Division 3, Title 2) of the Government Code;

The proposed regulations would appropriately lessen the economic impacts to portable fuel container and spout manufacturers by exempting several product types serving limited and specific needs;

The regulations incorporate by reference proposed amended test methods to verify compliance with the amended performance standards that will be effective 30 days after filing with the Secretary of State and applicable until July 1, 2007 when certification is required;

The regulations incorporate by reference two proposed test procedures for certification on or after July 1, 2007, each of which can and will be used to verify compliance with the criteria for certifying a portable fuel container or spout;

The economic and cost impacts have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons, as supplemented by Staff's presentation at the hearing on this item; and

The cost of controlling portable fuel containers and spouts under the proposed amendments would be approximately \$.40 to \$.70 per pound of ROG emissions reduced;

WHEREAS, the Board further finds that:

It is necessary and appropriate that the proposed amendments eliminate the fill-height and flow rate performance requirements for portable fuel containers and spouts sold in California beginning 30 days after filing the amendments with the Secretary of State;

It is necessary and appropriate that the proposed amendments incorporate the proposed amended Test Methods and Test Procedures to verify compliance with

the performance standards and to provide affected parties with notice of those methods used to verify compliance with those methods;

It is necessary and appropriate that the proposed amendments would require portable fuel containers and spouts sold in California to adhere to the proposed certification procedures beginning July 1, 2007;

It is necessary and appropriate that the proposed Certification Procedure incorporates the proposed Test Procedures to verify compliance with the performance standards and to provide affected parties with notice of those procedures used to verify compliance with those procedures;

The proposed amendments establish uniform, consistent and reasonable performance standards for portable fuel containers and spouts;

Adoption of the proposed amendments would result in a reduction of approximately 1.9 tons per day of reactive organic gases statewide in 2015;

Adoption of the proposed amendments would significantly reduce diurnal emissions (evaporation and permeation) from portable fuel containers and spouts;

Adoption of the proposed amendments would substantially reduce spillage associated with refueling using portable containers and spouts;

Adoption of the proposed standards will assist ARB's compliance with the commitments it made in settling the 1994 State Implementation Plan suit;

Adoption of the proposed regulations will not have a significant adverse environmental impact and the regulations are projected to positively impact air quality;

Based on the above, the Staff Report/Initial Statement of Reasons, and the information provided during the public hearing of this item, the proposed amendments are necessary, cost-effective, and technologically feasible to carry out the purposes of the state and federal clean air laws; and

No alternative considered by the Board would be more effective in carrying out the purpose for which the amendments are proposed or would be as effective and less burdensome to affected private persons.

NOW, THEREFORE, BE IT RESOLVED that, the Board hereby approves the amendments to title 13, California Code of Regulations, sections 2467(b) through 2467.9, as set forth in Attachment A hereto, and the documents incorporated by reference therein – Test Method 510, Automatic Shut-off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts, Test Method 511, Automatic Closure Test Procedure



for Spill-Proof Systems and Spill-Proof Spouts, Test Method 512, Determination of Fuel Flow Rate for Spill-Proof Systems and Spill-Proof Spouts, Certification Procedure 501 For Portable Fuel Containers and Spill-Proof Spouts, Test Procedure 501, Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems and Test Procedure 502, Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers – as set forth in Attachment B hereto, with the modifications set forth in Attachment C hereto.

BE IT FURTHER RESOLVED that, the Board directs the Executive Officer to adopt the above amendments as set forth in Attachment A hereto, the certification procedure and test procedures incorporated by reference in Attachment A and set forth in Attachment B hereto, the test methods incorporated by reference in Attachment A, and set forth in Attachment B hereto, with the modifications set forth in Attachment C hereto, and with such other conforming modifications and technical amendments as may be appropriate, after making the modified regulatory language and additional supporting documents and information available for public comment for a period of 15 days, as required by Government Code 11346.8, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted after reviewing the comments.

BE IT FURTHER RESOLVED that, following the approval of the amendments by the Office of Administrative Law, the Executive Officer is directed to submit the regulations to United States Environmental Protection Agency (US EPA) for inclusion in the California State Implementation Plan for Ozone (SIP).

BE IT FURTHER RESOLVED that, the Board directs the Executive Officer to include in the SIP revision any additional documentation identified as necessary for enforceability under the federal Clean Air Act and US EPA regulations, and to work with the US EPA to ensure the regulations are approved as a SIP revision.

BE IT FURTHER RESOLVED that the Board directs the Air Resources Board staff to:

Observe and monitor whether, and to what extent, manufacturers are electing to participate in the optional consumer acceptance program for spill-proof systems or spill-proof spouts;

Observe and monitor whether a spill-proof system or spill-proof spout that has been authorized to receive two or three consumer acceptance stars pursuant to the optional consumer acceptance program is being sold at a higher retail price than a spill-proof system or spill-proof spout that has been authorized to receive one consumer acceptance star or that has not been authorized to receive any consumer acceptance star pursuant to the optional consumer acceptance program;

Observe and monitor whether consumer purchases of spill-proof systems or spill-proof spouts are influenced by the number of consumer acceptance stars those products have been authorized to receive pursuant to the optional consumer acceptance program;

Return to the Board no later than September 2010, with a report that contains staff's findings regarding each of the immediately preceding three issues and that also contains staff's determination whether the optional consumer acceptance program could be applied to other ARB regulatory programs.

I hereby certify that the above is a true and correct copy of Resolution 05-54, as adopted by the Air Resources Board.

---

Lori Andreoni, Clerk of the Board

Resolution 05-54

September 16, 2005

**Identification of Attachments to the Resolution**

**Attachment A:** Proposed amendments of sections 2467 to 2467.9, as set forth in Attachment A to the Hearing Notice and Staff Report: Initial Statement of Reasons for Proposed Rule Making Public Hearing to Consider the Adoption of Portable Fuel Container Spillage Control Regulations (released July 29, 2005);

**Attachment B:** Proposed new Certification Procedure 501, Certification Procedure for Portable Fuel Containers and Spill-Proof Spouts, Proposed Test Procedure 501, Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, Proposed Test Procedure 502, Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers, and proposed amendments to Test Method 510, Automatic Shut-Off Test Procedure for Spill-Proof Systems and Spill-proof Spouts, Test Method 511, Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts, Test Method 512, Determination of Fuel Flow Rate for Spill-Proof Systems and Spill-proof Spouts, all as set forth in Appendix A-H to the Hearing Notice and Staff Report: Initial Statement of Reasons for Proposed Rule Making Public Hearing to Consider the Adoption of Portable Fuel Container Spillage Control Regulations (released July 29, 2005).

**Attachment C:** Staff's suggested modifications to the original proposal (distributed at the Board hearing on September 15, 2005).