

State of California
AIR RESOURCES BOARD

Third Notice of Public Availability of Modified Text

**PUBLIC HEARING TO CONSIDER THE ADOPTION OF EXHAUST AND EVAPORATIVE
EMISSION CONTROL REQUIREMENTS FOR SMALL OFF-ROAD ENGINES LESS
THAN OR EQUAL TO 19 KILOWATTS AND EQUIPMENT THAT USE SUCH ENGINES**

Public Hearing Date: September 25, 2003
Public Availability Date: June 30, 2004
Deadline for Public Comment: July 15, 2004

At its September 25, 2003, public hearing, the Air Resources Board (ARB or the Board) approved the adoption of sections 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, and 2773, title 13, California Code of Regulations (CCR), along with the incorporated "Small Off-Road Engine Evaporative Emission Test Procedures, TP-901 and TP-902" and the incorporated "Small Off-Road Engine Evaporative Emissions Control System Certification Procedures, CP-901 and CP-902." The purpose of those regulations and test procedures is to establish evaporative emission standards for small off-road engines, and equipment that use small off-road engines, less than or equal to 19 kilowatts (kW). The Board also approved the adoption of sections 2405.1, 2405.2, and 2405.3 and amendments to sections 2400, 2401, 2403, 2404, 2405, 2407, 2408, and 2409, title 13, CCR, along with amendments to the incorporated "California Exhaust Emission Standards and Test Procedures for 1995 and later Small Off-Road Engines," as last amended January 28, 2000, title 13, CCR. In addition, the Board approved the adoption of the incorporated "California Exhaust Emission Standards and Test Procedures for 2005 and Later Small Off-Road Engines." The purpose of those amendments to the regulations and test procedures is to include more stringent exhaust emission standards for small off-road engines less than or equal to 19 kW. In addition, the purpose of the updated test procedures is to more closely harmonize with the federal small engine test procedures (40 Code of Federal Regulations, part 90, subparts A, B, D, and E and corresponding appendices).

At the hearing, the staff presented, and the Board approved, modifications to the regulations originally proposed in the Staff Report released on August 8, 2003. In response to comments received during the 45-day comment period and at the Board hearing on September 25, 2003, modified text was made publicly available for a 30-day comment period on February 9, 2004. In response to comments received during the 30-day comment period, modified text was made publicly available for a 15-day comment period on May 14, 2004. The modified text described in this document responds to comments received during the 15-day comment period that ended June 1, 2004. The following describes the modifications, by section number:

EXHAUST TEST PROCEDURES

§90.103 – Exhaust emission standards

In the previous Notice of Public Availability of Modified Text and corresponding attachment released on May 14, 2004, staff indicated that the original paragraph (a)(3)(ii) was to be deleted and replaced by new language. However, in the attachment the original language with modifications was incorrectly included. Staff has corrected this error by showing that the original paragraph (a)(3)(ii) is to be deleted in its entirety.

§90.118 – Certification procedure – service accumulation and usage of deterioration factors

Paragraph (f) has been modified to require manufacturers to justify the need for and the use of supplemental cooling in the application for certification in addition to the demonstration that the cooling is representative of in-use operation.

§90.307 – Engine cooling system

Similar to the modification to section 90.118 noted above, this section has been modified to require manufacturers to justify the need for and the use of supplemental cooling in the application for certification in addition to the demonstration that the cooling is representative of in-use operation.

EVAPORATIVE REGULATIONS

§2767(a) – Innovative Products

The subsection has been modified to require that tank vent controls meet all of the requirements of Section 2754.

EVAPORATIVE TEST PROCEDURES

TP-902, Test Procedure for Determining Diurnal Evaporative Emissions from Small Off-Road Engines

Section 6.1, paragraph 1 has been modified to require data documenting a stable permeation rate for preconditioning soak periods less than 140 days.

EVAPORATIVE CERTIFICATION PROCEDURES

CP-902, Certification and Approval Procedure for Evaporative Emission Control Systems

Section 4, paragraph 2 has been modified to clarify the placement of the evaporative code on the label.

Staff has made several other nonsubstantial modifications throughout the regulations and test procedures to correct grammatical and typographical errors, correct references and citations, and improve the clarity of the regulations and test procedures. Because these modifications are nonsubstantial, they are not being made available in connection with this Notice.

A copy of Board Resolution 03-24 approving the regulatory action described above and the regulatory documents for this rulemaking are available online at the following ARB Internet site: <http://www.arb.ca.gov/regact/sore03/sore03.htm>

Printed copies are also available and may be obtained from Ms. Margaret Dawson, Mobile Source Control Division, (626) 575-6632 or fax (626) 459-4480.

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt sections 2400, 2401, 2403, 2404, 2405, 2405.1, 2405.2, 2405.3, 2407, 2408, 2409, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, and 2773, title 13, CCR, after making them available to the public for comment for a period of at least 30 days. The Board further provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if warranted. As noted above, the modified text was made publicly available for a 15-day comment period on May 14, 2004. The modified text described in this document responds to comments received during the 15-day comment period that ended June 1, 2004. These additional modifications are being made available for a third supplemental comment period of 15-days in accordance with section 11346.8 of the Government Code.

Written comments on the modifications approved by the Board may be submitted by postal mail, electronic mail, or facsimile as follows:

Postal Mail is to be sent to:
Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Electronic mail is to be sent to: sore03@listserv.arb.ca.gov

Facsimile submissions are to be transmitted to: (916) 322-3928.

In order to be considered by the Executive Officer, comments must be directed to the ARB in one of the three forms described above and received by the ARB by 5:00 p.m. on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations, test procedures, and certification procedures shall be considered by the Executive Officer.

If you have a disability-related accommodation need, please go to <http://www.arb.ca.gov/html/ada/ada.htm> for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please go to <http://inside.arb.ca.gov/as/eo/languageaccess.htm> or contact the Bilingual Coordinator at (916) 324-5049. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

Attachment

ATTACHMENT

This attachment shows the staff's modifications to the originally proposed Small Off-Road Engine exhaust and evaporative regulations, test procedures, and certification procedures.

The 30-day Notice modifications to the original proposal are shown in **bold double-underline** to indicate additions and **~~bold strikeout~~** to indicate deletions. The first 15-day Notice modifications are shown in **shaded bold double-underline** to indicate additions and **~~shaded bold strikeout~~** to indicate deletions. The newly modified text is shown in **italicized shaded bold double-underline** to indicate additions and **~~italicized shaded bold strikeout~~** to indicate deletions. *Note: Only the parts of the sections that have changed from the text contained in the previously released 45-day, 30-day, 15-day packages are shown.*

Modifications to the Originally Proposed Exhaust Test Procedures

§ 90.103 Exhaust emission standards.

(a)(3)... ~~*(ii) Additional standards. Blue Sky Series engines are subject to all provisions that would otherwise apply under this part. Engine families that comply with the Blue Sky Series emission standards may comply with any of the applicable evaporative emission standards, in Title 13, California Code of Regulations, Sections 2754 or 2754.1 or 2751(b) or 2757.*~~

§ 90.118 Certification procedure – service accumulation and usage of deterioration factors.

~~*(f) The use of auxiliary cooling fans for engine cooling must be indicated in the application for certification approved by the Executive Officer prior to service accumulation. The manufacturer must detail justify to the satisfaction of the Executive Officer in the application for certification the need for and use of such fans and. The manufacturer must also demonstrate that the supplemental cooling resulting from the use of the fans is representative of in-use engine operation. The records shall be maintained by the manufacturer and shall be made available to the Executive Officer upon request.*~~

§ 90.307 Engine cooling system.

An engine cooling system is required with sufficient capacity to maintain the engine at normal operating temperatures as prescribed by the engine manufacturer. Auxiliary fan(s) may be used to maintain sufficient engine cooling during engine dynamometer operation. The use of auxiliary cooling fans for

engine cooling must be indicated in the application for certification approved by the Executive Officer prior to testing. The manufacturer must detail justify to the satisfaction of the Executive Officer in the application for certification the need for and use of such fans and. The manufacturer must also demonstrate that the supplemental cooling resulting from the use of the fans is representative of in-use engine operation. The records shall be maintained by the manufacturer and shall be made available to the Executive Officer upon request.

Modifications to the Originally Proposed Evaporative Regulations, Test Procedures, and Certification Procedures

13 CCR Chapter 15, Article 1

Section 2767(a)

The Executive Officer may make a determination that tank vent emission control achieved by an innovative technology may be approved per section 2767.1 if an evaluation of the innovative technology reveals that the technology can meet the diurnal evaporative emission standards requirements in section 2754.

TP-902

Section 6.1, Paragraph 1

The purpose of the preconditioning period is to introduce gasoline into the fuel system and precondition all fuel system components. Precondition the tank and other fuel delivery system components by filling the tank to its nominal capacity with fresh test fuel as specified in Section 7 of these procedures. After filling the tank start the engine and allow it to run at rated speed (unloaded or blade load) for approximately five minutes. Soak the tank and other components at $30^{\circ} \text{C} \pm 10^{\circ} \text{C}$ for not less than 140 days. Data documenting that the tank has reached equilibrium must be provided for tanks soaked less than 140 days. The period of slosh testing may be considered part of the preconditioning period provided each tank and all fuel system components tested remain filled with fuel and are never empty for more than fifteen minutes one hour over the entire preconditioning period.

CP-902

Section 4, Paragraph 2

Evaporative emission control systems may be grouped into evaporative families for

certification and other implementation purposes (e.g., testing, recall). An evaporative family includes engine or equipment models that share similar fuel systems, engine designs, and emission control features such that the equipment can be expected to exhibit similar evaporative emission characteristics. Attachment 1 of these procedures defines the classification criteria and codes for determining evaporative families. **Any engine certified as a complete (both exhaust and evaporative emissions) unit can be certified ~~with~~ one common exhaust and evaporative family name.** ~~a~~ **At the manufacturers option, the two letters identifying the evaporative control system can be part of the family name or be placed elsewhere on the emission label, under the exhaust family name where the last three two letters represent the evaporative family code.**