

State of California  
AIR RESOURCES BOARD

**Notice of Public Availability of Modified Text**

**PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA OFF-ROAD  
EMISSIONS REGULATION FOR COMPRESSION-IGNITION ENGINES AND  
EQUIPMENT**

Public Hearing Date: December 9, 2004

Public Availability Date: July 14, 2005

Deadline for Public Comment: August 31, 2005

At its December 9, 2004, public hearing, the Air Resources Board (the Board) approved the amendment of sections 2420, 2421, 2423, 2424, 2425, 2426, and 2427, title 13, California Code of Regulations (CCR), and the incorporated documents "California Exhaust Emission Standards and Test Procedures for New 2000 and Later Tier 1, Tier 2, and Tier 3 Off-Road Compression-Ignition Engines, Part I-B," formerly "California Exhaust Emission Standards and Test Procedures for New 2000 and Later Off-Road Compression-Ignition Engines, Part I-B," adopted January 28, 2000, and "California Exhaust Emission Standards and Test Procedures for New 1996 and Later Tier 1, Tier 2, and Tier 3 Off-Road Compression-Ignition Engines, Part II," formerly "California Exhaust Emission Standards and Test Procedures for New 1996 and Later Off-Road Compression-Ignition Engines, Part II," adopted May 12, 1993. The Board also approved the adoption of section 2425.1, title 13, CCR, and the incorporated document "California Exhaust Emission Standards and Test Procedures for New 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C." These modifications to the regulations and test procedures require manufacturers to comply with more stringent exhaust emission standards and enhanced certification and compliance procedures, and harmonize California's regulations with the federal nonroad requirements.

At the hearing, the staff presented, and the Board approved modifications to the regulations originally proposed in the Staff Report released on October 22, 2004, in response to comments received since the Staff Report was published. The portion of the regulations affected by the staff's modifications are sections 2421, 2423, and 2425.1, title 13, CCR, and the incorporated documents "California Exhaust Emission Standards and Test Procedures for New 2000 and Later Tier 1, Tier 2, and Tier 3 Off-Road Compression-Ignition Engines, Part I-B," and "California Exhaust Emission Standards and Test Procedures for New 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C." The following identifies and explains the modifications by section number:

## TITLE 13, REGULATION

### § 2421 – Definitions

The definition of “Certified (emissions) configuration” was added to provide clarification of its usage in § 2423(l) pertaining to the new labeling requirements for rebuilt engines. All subsequent definitions were renumbered to accommodate the new definition.

The definition of “Constant-speed engine” was bifurcated into segments representing Pre-Tier 4 engines and Tier 4 engines. The Tier 4 segment was added for consistency with the federal definition.

The definition of “Marine diesel engine” was modified to clarify the scope of applicability for the different categories of marine diesel engines and for better consistency with the federal definition.

The definition of “Maximum Engine Power” was modified to be more consistent with the federal definition and to limit its scope of applicability to Tier 4 requirements.

The definition of “Maximum Rated Power” was modified to limit its scope of applicability to Pre-Tier 4 requirements.

The definition of “Maximum Test Speed” was reconstructed to refer to the term incorporated in Part 1065 of the 2008 and Later Test Procedures, similar to the federal definition, to avoid the potential for misinterpretation in how maximum values are to be calculated.

The definition of “Power category” was modified to generalize the usage of “maximum power” so that it could be read to apply to both Pre-Tier 4 and Tier 4 requirements. In providing the example of Tier 4 power categories, maximum engine power is now specified as a specific case.

### § 2423 – Exhaust Emission Standards and Test Procedures

Footnote 4 of Table 1b - “Tier 4 Exhaust Emission Standards” following paragraph (b)(1)(B) was modified with the addition of the phrase “Tier 2” to clarify the specific exclusion of only Tier 2 credits when utilizing the optional three year phase-in provision.

Paragraph (d)(5)(A) was modified to recognize the applicability of uncertified engines under 37 kW in the California Tier 2/3 equipment manufacturer flexibility program and to establish labeling requirements for those engines. The modifications also allow for an alternative simplified label in cases of undue hardship or cost for the Tier 2/3 program.

Paragraph (d)(7)(A)(6) was modified by removing the notification requirement for equipment manufacturers to submit a tabulation of California-directed flexibility

allowances sold in previous years as a prerequisite for being able to use Tier 4 flexibility allowances.

Paragraph (d)(7)(B) was modified by removing the reporting requirement for equipment manufacturers to provide total end-of-year California-directed equipment sales and percentages of flexibility allowances claimed. If available, however, California-specific sales and/or percentages must also be provided.

Paragraph (h) was modified such that engine manufacturers are now required to obtain a current Executive Order for all engines produced after December 31, 2005, for sale in California under the equipment manufacturer flexibility provisions. Guidelines for obtaining an Executive Order for this purpose are provided and conditions are imposed governing the selection of a valid engine family name.

Paragraph (l) was reconstructed to reference the practices for rebuilding engines as described in the incorporated test procedures, to clarify the distinction between original and replacement rebuilt engines, and to provide alternative methods of complying with the labeling requirements.

#### § 2425.1 - Defect Investigation and Reporting Requirements

Paragraph (b) was modified to clarify that the thresholds for triggering a defect report are to be based on federal levels only. If available, however, California-specific incidence rates must be provided in the defect report.

#### Miscellaneous

Formatting changes were made to correct the inaccurate conversion of inequality symbols (i.e., <, >, ≤, and ≥) from Microsoft Word™ to certain versions of the free Adobe Reader and Adobe Acrobat™ software. The Microsoft Word™ version posted on the ARB website correctly displays the inequality symbols.

#### 2000 PLUS LIMITED TEST PROCEDURES

##### § 89.2 - Definitions

The definition for “Certified (emissions) configuration” was added to provide clarification of its usage in § 89.130 pertaining to the requirements for rebuilt engines.

##### § 89.102 - Effective dates, optional inclusion, flexibility for equipment manufacturers

Paragraph (g) was modified to remove the requirement for equipment manufacturers to petition the engine manufacturer in writing prior to the production of flexibility engines. This provision was only meant to be applicable to Tier 4 flexibility engines. Further, the

paragraph now also requires engine manufacturers to obtain a current Executive Order for all engines produced after December 31, 2005, for sale in California under the equipment manufacturer flexibility provisions. Guidelines for obtaining an Executive Order for this purpose are provided and conditions are imposed governing the selection of a valid engine family name.

#### § 89.110 - Emission control information label

Paragraph (e) was modified to recognize the applicability of uncertified engines under 37 kW in the California Tier 2/3 equipment manufacturer flexibility program and to establish labeling requirements for those engines. The modifications also allow for an alternative simplified label in cases of undue hardship or cost for the Tier 2/3 program.

## 2008 AND LATER TEST PROCEDURES

### PART 1039

#### § 1039.104 - Are there interim provisions that apply only for a limited time?

Paragraph (a)(4)(iii) was modified to reference California regulations and to require the citing of 13 CCR 2423(b)(6) on the statement of compliance portion of the label for some engines produced under the engine manufacturer early incentive program, whereas only federal references had been required previously. Language was also added to allow similar federal references in addition to the California references.

#### § 1039.135 - How must I label and identify the engines I produce?

Paragraph (h) was reconstructed to remove references to remanufacturers and remanufactured engines, to clarify the distinction between original and replacement rebuilt engines, and to provide alternative methods of complying with the labeling requirements for rebuilt engines.

#### § 1039.625 - What requirements apply under the program for equipment-manufacturer flexibility?

Paragraph (g)(1)(vi) was modified by removing the notification requirement for equipment manufacturers to submit a tabulation of California-directed flexibility allowances sold in previous years as a prerequisite for being able to use Tier 4 flexibility allowances.

Paragraph (g)(2) was modified by removing the reporting requirement for equipment manufacturers to provide total end-of-year California-directed equipment sales and percentages of flexibility allowances claimed.

Paragraph (j)(1) was modified such that engine manufacturers are now required to obtain a current Executive Order for all engines produced after December 31, 2005, for sale in California under the equipment manufacturer flexibility provisions. Guidelines for obtaining an Executive Order for this purpose are provided and conditions are imposed governing the selection of a valid engine family name.

Paragraph (j)(2) was modified to simplify the statement of compliance required for flexibility engine labels and to more accurately reflect the level of compliance of these engines with the regulation.

§ 1039.801 - What definitions apply to this part?

The definition for “Certified (emissions) configuration” was added to provide clarification of its usage in § 1039.135(h) pertaining to the requirements for rebuilt engines.

PART 1068

§ 1068.30 - What definitions apply to this part?

The definition for “Certified (emissions) configuration” was added to provide clarification of its usage in § 1068.120 pertaining to the requirements for rebuilt engines.

§ 1068.240 - What are the provisions for exempting new replacement engines?

Paragraph (c) was modified by enclosing the labeling text with parentheses to avoid potential confusion regarding the required label content.

Paragraph (d) was modified by enclosing the labeling text with parentheses to avoid potential confusion regarding the required label content.

Staff has made several other non-substantial 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.

Board Resolution 04-43, 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/offrdcie/offrdcie.htm>

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

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt revised sections 2421, 2423, and 2425.1, title 13, CCR, and the revised incorporated documents "California Exhaust Emission Standards and Test Procedures for New 2000 and Later Tier 1, Tier 2, and Tier 3 Off-Road Compression-Ignition Engines, Part I-B," and "California Exhaust Emission Standards and Test Procedures for New 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C," after making them available to the public for comment for a period of at least 45 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.

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, 23<sup>rd</sup> Floor  
Sacramento, California 95814

Electronic mail is to be sent to: [offrdcie@listserv.arb.ca.gov](mailto:offrdcie@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 shall be considered by the Executive Officer.