Enclosure 2

Regulations

ADOPTION OF TITLE 13, CALIFORNIA CODE OF REGULATIONS, CHAPTER 9, Article 4.5, CALIFORNIA REGULATIONS FOR NEW 2001 AND LATER OFF-ROAD LARGE SPARK-IGNITION ENGINES (25 AND GREATER HORSEPOWER)

and

AMENDMENTS TO TITLE 13, CALIFORNIA CODE OF REGULATIONS, CHAPTER 9, ARTICLE 3 CALIFORNIA REGULATIONS FOR NEW 1995 AND LATER OFF-HIGHWAY RECREATIONAL VEHICLES AND ENGINES

ADOPTION OF TITLE 13, CALIFORNIA CODE OF REGULATIONS, CHAPTER 9, Article 4.5, CALIFORNIA REGULATIONS FOR NEW 2001 AND LATER OFF-ROAD LARGE SPARK-IGNITION ENGINES (25 AND GREATER HORSEPOWER)

Proposed Regulation Order

NOTE:

This document is printed in a style to indicate changes from the originally proposed provisions. All originally proposed language is indicated by plain type. The proposed modifications are shown in <u>underline</u> to indicate additions to the original proposal and <u>strikeout</u> to indicate deletions. All proposed modifications will be made available to the public for a 15-day comment period. Only those portions containing the suggested modifications from the language contained in the original mailout, MSC 98-20, are included. All other portions remain unchanged and are indicated by the the symbol "* * * *" for reference.

Adopt Title 13, California Code of Regulations, Chapter 9 Off-Road Vehicles and Engines Pollution Control Devices, sections 2430 through 2439 to read as follows:

Chapter 9 Off-Road Vehicles and Engines Pollution Control Devices

Article 4.5. Off-Road Large Spark-Ignition Engines

2430. Applicability.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150- 43154, 43205.5 and 43210-43212, Health and Safety Code.

2431. Definitions.

DEFINITIONS

(a) The definitions in Section 1900 (b), Chapter 3 1, Title 13 of the California Code of Regulations apply to this Article with the following additions:

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(8) "Compliance testing" means ARB directed emissions tests and inspections of a reasonable number of production engines and/or equipment—that are offered for sale, or manufactured for sale, in California in order to verify compliance with the applicable emission standards. The emissions tests may be conducted at ARB, contracted out facilities, or at the manufacturer's facility. The testing will be done at the expense of the manufacturer.

- (9)(8) "Confirmatory testing" means ARB directed emissions tests and inspections of the test engines and/or test equipment used by the manufacturer to obtain test data for submittal with the certification application. The emissions tests may be conducted at ARB, contracted out facilities or at the manufacturer's facility. The testing will be done at the expense of the manufacturer.
- (10)(9) "Crankcase Emissions" means airborne substances emitted into the atmosphere from any portion of the engine crankcase ventilation or lubrication system.
- (11)(10) "Deterioration Factor" means the calculated or assigned number that represents the certification engine's emissions change over the durability period. It is multiplied by zero hour (new) engine test results to determine the engine family compliance level. The deterioration factor is determined as per the Test Procedures. See "Emission Durability Period" below.
- (12)(11)"Emission Control System" includes any component, group of components, or engine modification that controls or causes the reduction of substances emitted from an engine.
- (13)(12) "Emissions Durability Period" is the period <u>over which, for purposes of certification</u>, a manufacturer must demonstrate compliance with the standards set forth in <u>Section 2433(b)</u> that represents an engine's useful life. The emissions durability period is selected from the choices listed in the Test Procedures. The durability periods are also noted in the table in <u>sSection 2433 (b)</u>. The emissions durability period is used to determine an engine family's deterioration factors.
- (14)(13) "Emissions Durability Values" means emissions from an engine that has accumulated service equivalent to the engine's emission durability period, or the result of the product of the zero hour (new) engine test results and the appropriate deterioration factor (e.g., the certification values). The Executive Officer must approve the methods of service accumulation before the manufacturer begins service accumulation.
- (15)(14) "End of Assembly-Line" is defined as that place where the final inspection test or production line test is performed.
- (16)(15) "Engine Family" is a subclass of a basic engine based on similar emission characteristics. The engine family is the grouping of engines that is used for the purposes of certification.
 - (17)(16) "Engine Manufacturer" means the manufacturer granted certification.
- (18)(17) "Equipment Manufacturer" means the manufacturer using the engine provided by the engine manufacturer to power equipment or vehicle.

- (19)(18) "Exhaust Emissions" means substances emitted into the atmosphere from any opening downstream from the exhaust port of an engine.
- $\frac{(20)(19)}{(19)}$ "Final Calendar Quarter Production" is defined as the calendar quarter in which the production of an engine family ends.
- (21)(20) "First Calendar Quarter Production" is defined as the calendar quarter in which the production of an engine family begins.
- (22)(21) "Fuel System" means the combination of any of the following components: fuel tank, fuel pump, fuel lines, carburetor or fuel injection components, or all fuel system vents.
- (23)(22) "Gross Engine Malfunction" is defined as one yielding an emission value greater than the sum of the mean plus three (3) times the standard deviation. This definition applies only for determination of control limits.
- (24)(23) "Model year" means the manufacturer's annual production period which includes January 1 of a calendar year or, if the manufacturer has no annual production period, the calendar year.
- (25)(24) "New Engine" is defined as an engine's ownership has not been transferred to the ultimate consumer.
- (25) "New Engine Compliance testing" means ARB directed emissions tests and inspections of a reasonable number of production engines and/or equipment that are offered for sale, or manufactured for sale, in California in order to verify compliance with the applicable emission standards. The emissions tests must be conducted at a qualified testing facility. The testing facility is chosen by the manufacturer and approved by the Executive Officer. This may include ARB facilities, contracted out facilities, or the manufacturer's facility. The testing will be done at the expense of the manufacturer.

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- (32) "Scheduled Maintenance" means any adjustment, repair, removal, disassembly, cleaning, or replacement of <u>equipment or engine</u> components or systems required by the manufacturer that is performed on a periodic basis to prevent part failure or equipment or engine malfunction, or anticipated as necessary to correct an overt indication of <u>equipment or engine</u> malfunction or failure for which periodic maintenance is not appropriate.
- (33) "Small Volume Manufacturer" means a manufacturer that produces a total of less than 2000 large spark-ignition engines annually for sale in the United States.

- (33)(34) "Test Procedures" means the procedures specified in both Part I and Part II of the "California Exhaust Emission Standards and Test Procedures for New 2001 and Later Off-Road Large Spark-ignition Engines", and as specified in Section 2433(c).
- $\frac{(34)(35)}{(35)}$ "Test Sample" means the collection of engines selected from the population of an engine family for emission testing.
- $\frac{(35)(36)}{(36)}$ "Ultimate Purchaser" means the first person who in good faith purchases a new LSI engine or equipment using such engine for purposes other than resale.
- (36)(37) "Unscheduled Maintenance" means any inspection, adjustment, repair, removal, disassembly, cleaning, or replacement of <u>engine</u>, <u>equipment</u>, <u>or vehicle</u> components or systems that is performed to correct or diagnose a part failure <u>or equipment or vehicle</u> (if the <u>engine</u> were installed in a vehicle) malfunction that was not anticipated.
- (38)"Useful life" means a period of 7 years or 5000 hours of operation, whichever first occurs for engines having engine displacement greater than 1.0-liter, and 2 years or 1,000 hours of operations, whichever occurs first, for engines having engine displacement equal to or less than 1.0-liter. However, in no case may this period be less than the manufacturer's basic mechanical warranty period for the engine family.
- (37)(39) "Warrantable Condition" means any condition of an engine that requires the manufacturer to take corrective action pursuant to Section 2435.
- (38)(40) "Warranted Part" means any emissions-related part installed on a engine by the equipment or engine manufacturer, or installed in a warranty repair, which is listed on the warranty parts list.
- (39)(41) "Warranty Period" means the period of time, either in years or hours of operation, that the engine or part is covered by the warranty provisions.
- (40)(42) "Warranty Station" means a service facility authorized by the equipment or engine manufacturer to perform warranty repairs. This includes all manufacturer distribution centers that are franchised to service the subject equipment or engines.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2432. Test Procedures

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2433. Exhaust Emission Standards and Test Procedures - Off- Road Large Spark-ignition Engines.

- (a) This section applies to new off-road large spark-ignition engines produced on or after January 1, 2001. For the purpose of this section, these engines are also referred to as "new off-road LSI engines".
- (b) (1) Exhaust emissions from off-road large spark-ignition engines manufactured for sale, sold, or offered for sale in California, or that are introduced, delivered or imported into California for introduction into commerce, must not exceed:

Exhaust Emission Standards (grams per brake horsepower-hour) [grams per kilowatt-hour] [1]

Model Year	Engine Displacement	Durability Period (hours)	Hydrocarbon plus Oxides of Nitrogen	Carbon Monoxide
2001 thru 2003 2002 and subsequent	< 1.0 liter ≤1.0 liter	N/A 1,000 hours or 2 years	5.0 9.0 [12.0]	37.0 410 [549]
2001 thru <u>-</u> 2003 ^{(2),(3)}	1.0 liter or greater > 1.0 liter	N/A	3.0 [4.0]	37.0 [49.6]
2004 and subsequent	< 1.0 liter	3000 hours or 5 years	5.0	37.0
2004 - 2006 ⁽⁴⁾	> 1.0 liter	3500 hours or 5 years	3.0 [4.0]	37.0 [49.6]
2004 2007 and subsequent	1.0 liter or greater > 1.0 liter	5000 hours or 7 years	3.0 [4.0]	37.0 [49.6]

Note: (1) Standards in grams per kilowatt-hour are given only as a reference. Pollutant emissions reported to ARB by manufacturers must be in grams per brake horsepower-hour.

(2) Small volume manufacturers are not required to comply with these emission standards.

(3) Manufacturers must show that at least 25 percent of its California engine sales comply with the standards in 2001, 50 percent in 2002, and 75 percent in 2003.

The standards for in-use compliance for engine families certified to the standards in the row noted are 4.0 g/bhp-hr (5.4 g/kW-hr) hydrocarbon plus oxides of nitrogen and 50.0 g/bhp-hr (67.0 g/kW-hr) carbon monoxide, with a useful life of 5000 hours or 7 years. In-use averaging, banking, and trading credits may be generated for engines tested in compliance with these in-use compliance standards. If

the in-use compliance level is above 3.0 but does not exceed 4.0 g/bhp-hr hydrocarbon plus oxides of nitrogen or is above 37.0 but does not exceed 50.0 g/bhp-hr carbon monoxide, and based on a review of information derived from a statistically valid and representative sample of engines, the Executive Officer determines that a substantial percentage of any class or category of such engines exhibits within the warranty periods noted in Section 2435, an identifiable, systematic defect in a component listed in that section, which causes a significant increase in emissions above those exhibited by engines free of such defects and of the same class or category and having the same period of use and hours, then the Executive Officer may invoke the enforcement authority under Section 2439, Title 13, California Code of regulations to require remedial action by the engine manufacturer. Such remedial action is limited to owner notification and repair or replacement of defective components, without regard to the requirements set forth in Section 2439(b)(5) or Section 2439(c)(5)(B)(vi). As used in the section, the term "defect" does not include failures that are the result of abuse, neglect, or improper maintenance.

- (2) No crankcase emissions may shall be discharged into the ambient atmosphere from any new 2004 or later model year off-road LSI engines.
- (c) The test procedures for determining certification and compliance with the standards for exhaust emissions from new off-road LSI engines with engine displacement 1.0 liter or greater greater than 1.0 liter sold in the state are set forth in "California Exhaust Emission Standards and Test Procedures for New 2001 and Later Off-Road Large Spark-ignition Engines," adopted _____
- (d) [Reserved] The test procedures for determining certification and compliance with the standards for exhaust emissions from new off-road LSI engines with engine displacement equal to or less than 1.0 liter sold in the state are set forth in "California Exhaust Emission Standards and Test Procedures for 1995 and Later Small Off-Road Engines," as last amended March 23, 1999.
- (e) No new engines may be produced for sale to replace pre-2001 model engines after January 1, 2004, unless such new those engines comply with the 2004 model emission standards Replacement Engines.
 - (1) Reserved
- (2) (A) <u>Beginning in 2004, a A</u> new off-road large spark-ignition engine intended solely to replace an engine in a piece of off-road equipment that was originally produced with an engine manufactured prior to the applicable implementation date as described in paragraph (b), shall not be subject to the emissions requirements of paragraph (b) provided that:

(I)(i) The engine manufacturer has ascertained that no engine produced by itself or the manufacturer of the engine that is being replaced, if different, and certified to the requirements of this article, is available with the appropriate physical or performance characteristics to repower the equipment; and

(ii) Unless an alternative control mechanism is approved in advance by the Executive Officer, the engine manufacturer or its agent takes ownership and possession of the engine being replaced; and

(iii) The replacement engine is clearly labeled with the following language, or similar alternate language approved in advance by the Executive Officer:

THIS ENGINE DOES NOT COMPLY WITH CALIFORNIA OFF-ROAD OR ON-HIGHWAY EMISSION REQUIREMENTS. SALE OR INSTALLATION OF THIS ENGINE FOR ANY PURPOSE OTHER THAN AS A REPLACEMENT ENGINE IN AN OFF-ROAD VEHICLE OR PIECE OF OFF-ROAD EQUIPMENT WHOSE ORIGINAL ENGINE WAS NOT CERTIFIED IS A VIOLATION OF CALIFORNIA LAW SUBJECT TO CIVIL PENALTY.

(B) At the beginning of each model year, the manufacturer of replacement engines must provide, by engine model, an estimate of the number of replacement engines it expects to produce for California for that model year, and a description of the physical or performance characteristics of those models that indicate that a certified replacement is not available as per paragraph (A).

(C) At the conclusion of the model year, the manufacturer must provide, by engine model, the actual number of replacement engines produced for California during the model year, and a description of the physical or performance characteristics of those models that indicate that certified replacement engine(s) were not available as per paragraph (A).

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2434. Emission Control Labels - 2001 and Later Off-Road Large Spark-ignition Engines

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- (b) Applicability. These specifications apply This section applies to:
- (1) 2001 and later model year off-road LSI engines <u>with engine displacement</u> greater than 1.0 liter, that have been certified to the applicable emission standards pursuant to Health and Safety Code Section 43013.
- (2) Engine manufacturers and original equipment manufacturers, as applicable, that have certified such engines.
- (3) Original equipment manufacturers, regardless of whether they have certified the engine, if their equipment obscures the emission control labels of such certified engines.
- (4) 2002 and later model year off-road LSI engines with engine displacement less than or equal to 1.0 liter must comply with the applicable labeling specifications set forth in the California Code of Regulations, Title 13, Section 2404.
 - (c) Label Content and Location.
- (1) A metal tune-up label must be welded, riveted or otherwise permanently attached to the engine block or other major component in such a way that it will be readily visible after installation of the engine in the equipment. If the equipment obscures the label on the engine, the equipment manufacturer must attach a supplemental label such that it is readily visible.
- (2) In selecting an acceptable location, the manufacturer must consider the possibility of accidental damage (e.g., possibility of tools or sharp instruments coming in contact with the label). Each label must be affixed in such a manner that it cannot be removed without destroying or defacing the label, and must not be affixed to any part which is likely to be replaced during the equipment's useful life. The label(s) must not be affixed to any component which is easily detached from the engine.
- (3) In addition, an engine serial number <u>and date of engine manufacture (month and year)</u> must be stamped on the engine block or stamped on a metal label riveted <u>or permanently attached</u> to the engine block. Engine manufacturers must keep records such that the engine serial number can easily be used to determine if an engine was certified for the applicable model year. <u>Alternative engine serial number identification methods or tracking number may be allowed with prior approval from the Executive Officer.</u>
- (4) The label must be in the English language and use block letters and numerals which must be of a color that contrasts with the background of the label.
 - (5) The label must contain the following information:
 - (A) The label heading must read:

"Important Engine Information."

- (B) Full corporate name and trademark of the manufacturer.
- (C) "THIS ENGINE IS CERTIFIED TO OPERATE ON (specify

operating fuel(s))."

- (D) Identification of the Exhaust Emission Control System. Abbreviations may be used and must conform to the nomenclature and abbreviations found in the Society of Automotive Engineers document J1930 which is incorporated by reference in Section 1977, Title 13, CCR, entitled "Diagnostic Acronyms, Terms, and Definitions for Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms".
- (E) The maintenance specifications and adjustments recommended by the engine manufacturer, including, as applicable: spark plug gap width, valve lash, ignition timing, idle air/fuel mixture setting procedure and value (e.g., idle CO, idle speed drop), and high idle speed. These specifications must indicate the proper transmission position, (if applicable), during tune-up and what accessories, if any, should be in operation, and what systems, if any (e.g., vacuum advance, air pump), should be disconnected during the tune-up. If the manufacturer does not recommend adjustment of the foregoing specifications, the manufacturer must include in lieu of the "specifications" the single statement "No other adjustments needed." For all engines, the instructions for tune-up adjustments must be sufficiently clear on the label to preclude the need for a mechanic or equipment owner to refer to another document in order to correctly perform the adjustments.
- (F) Any specific fuel or engine lubricant requirement (e.g., research octane number, engine lubricant type).
 - (G) The date of engine manufacture (month and year).
- (H)(G) An unconditional statement of compliance with the appropriate model year (for 2001-2003) or (2004 and subsequent) California regulations for the specific emission durability period; for example, "This engine conforms to 2002 California regulations for off-road large spark-ignition engines." or "This engine conforms to 2006 California regulations for off-road large spark-ignition engines with an emission durability period of 3000 (or 5000) hours." The specific durability period must also be stated in the owner's manual and on the exterior of the equipment, as applicable.
- $\overline{\text{(H)}}$ Total engine displacement (in cubic inches and/or liters) of the engine upon which the engine label is attached.
- $\frac{\text{(J)}(I)}{\text{(i.e., engine family identification (i.e., engine family name and manufacturer's own engine group/code)}$.

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(e) (4) A supplemental engine label must contain the information as specified in Subsection (c)(4), except that the date of engine manufacture specified in $\frac{c}{c}$ ($\frac{c}{c}$)($\frac{c}{c}$) may be deleted from the supplemental engine label. When the date of engine manufacture does not appear on the supplemental engine label, the responsible original equipment manufacturer must display (e.g., label, stamp, etc.) the date elsewhere on the engine or equipment so as to be readily visible.

* * * *

(g) The labels and any adhesives used must be designed to withstand, for the engine's or equipment's total expected life, typical equipment environmental conditions in the area where the label is attached. Typical equipment environmental conditions must include, but are not limited to, exposure to engine fuels, lubricants and coolants (e.g., diesel fuel gasoline, motor oil, water, ethylene glycol). The manufacturer must submit, with its certification application, a statement attesting that its labels comply with these requirements.

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(1)(i) Samples of all actual production labels used within an engine family must be submitted to the Executive Officer within thirty days after the start of production. Engine manufacturers must provide samples of tier their own applicable production labels, and samples of applicable production original equipment manufacturer labels that are accessible to the engine manufacturer due to the direct market arrangement between such manufacturers.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43017, 43018, 43101, 43102, and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2435. Defects Warranty Requirements for 2001 and Later Off-Road Large Spark-ignition Engines.

- (a) Applicability. This section applies to new 2001 and later model year off-road large spark-ignition engines with engine displacement greater than 1.0 liter that are certified for sale in California. The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser. The use of alternative fuels must not void the warranties on any engine certified to use such fuel. 2002 and later model year off-road LSI engines with engine displacement less than or equal to 1.0 liter must comply with the applicable warranty requirements set forth in the California Code of Regulations, Title 13, Section 2405.
- (b) General Emissions Warranty Coverage. The manufacturer of each off-road large spark-ignition engine must warrant to the ultimate purchaser and each subsequent purchaser that the engine is:
- (1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board pursuant to its authority in Chapters 1 and 2, Part 5, Division 26 of the Health and Safety Code; and
- (2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for engines having engine displacements equal or greater than 1200 cubic centimeter a period of six years or 4000 hours of operation, whichever occurs first, and for engines having engine displacements equal or less than 1200 cubic centimeter a period of four years or 2400 hours of operation, whichever occurs first. In the absence of a device to measure hours of use, the engine must be warranted for a period of seven years or five years, as applicable.
- (2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for a period of:
- (A) 2 years or 1,500 hours, whichever occurs first, for 2001-2003 model year certified engines having engine displacement greater than 1.0 liter.
- (B) 3 years or 2,500 hours, whichever occurs first, for 2004 and later model year engines having engine displacement greater than 1.0 liter.
- (3) Free from defects in materials and workmanship which cause the failure of a high-cost warranted part to be identical in all material respects to the part as described in the engine manufacturer's application for certification for 2004 and later model year engines having engine displacements greater than 1.0 liter, for a period of five years or 3,500 hours of operation, whichever occurs first.
- (A) Each manufacturer shall identify in its application for certification the "high-priced" warranted parts which (i) are included on the Board's "Emission Warranty Parts List" as last amended February 22, 1985, incorporated herein by reference, and (ii) have an individual replacement cost, at the time of certification, exceeding the cost limit defined in

subsection (B). The replacement cost shall include the cost of the part, labor and standard diagnosis. The costs shall be those of the highest-cost metropolitan area of California.

(B) The dollar value of a high cost part shall be based on the following

formula:

Cost Limit_n = $$300 * (CPI_{n-2}/118.3)$

where,

Cost Limit_n is the cost limit for the applicable model year of the engine rounded to the nearest ten dollars.

n is the model year of the new engines.

n-2 is the calendar year two years prior to the model year of the new engines.

<u>CPI= is the annual average nationwide urban consumer price index published by the</u> United States Bureau of Labor Statistics.

(C) The cost limit shall be reviewed annually by the Executive Officer. The highest-cost metropolitan area in California shall be identified by the Executive Officer for use in this subsection. If a manufacturer seeks certification of an engine before the applicable annual average CPI is available, the cost limit shall be calculated using the average of the monthly nationwide urban CPI figures for the most recent twelve month period for which figures have been published by the United States Bureau of Labor Statistics.

(D) Each manufacturer shall submit to the Executive Officer the documentation used to identify the "high-priced" warranted parts required in this subsection. The documentation shall include the estimated retail parts costs, labor rates in dollars per hour, and the labor hours necessary to diagnosis and replace the parts.

- (4) In the absence of a device to measure hours of use, the engine must be warranted for a period of the years noted above in subsections (2) and (3). If a device to measure hours is used, the engine must be warranted for the number of hours or the number of years noted above in subsections (2) and (3), whichever occurs first.
 - (c) The warranty on emissions-related parts must be interpreted as follows:
- (1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by Subsection (e) must be warranted for the warranty period defined in Subsection (b)(2) and (b)(3). If any such part fails during the period of warranty coverage, it must be repaired or replaced by the engine manufacturer according to Subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for the remaining warranty period.
- (2) Any warranted part that is scheduled only for regular inspection in the written instructions required by Subsection (e) must be warranted for the warranty period defined in Subsection (b)(2) and (b)(3). A statement in such written instructions to the effect of "repair or replace as necessary" must not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for the remaining warranty period.

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(8) Throughout the engine's warranty period defined in Subsection (b)(2) and (b)(3), the engine manufacturer must maintain a supply of warranted parts sufficient to meet the

expected demand for such parts.

- (9) Any replacement part, as defined in Section 1900(B)(b)(13), Title 13, may be used in the performance of any maintenance or repairs and must be provided without charge to the owner. It is not necessary for replacement parts to be the same brand or by the same manufacturer as the original part sold with the engine. Such use must not reduce the warranty obligations of the engine manufacturer.
- (10) Add-on or modified parts, as defined in Section 1900(B)(b)(1) and (B)(10), Title 13, may not be used. Such use must be grounds for disallowing a warranty claim made in accordance with this article. The engine manufacturer must not be liable under this article to warrant failures of warranted parts caused by the use of such an add-on or modified part.

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2436. Emission Control System Warranty Statement.

(a) Each manufacturer must furnish a copy of the following statement with each new off-road large spark-ignition engine with engine displacement greater than 1.0 liter, using those portions of the statement applicable to the engine. Each manufacturer must furnish a copy of the warranty statement as set forth in the California Code of Regulations, Title 13, Section 2406(a) with each new off-road large spark-ignition engine with engine displacement less than or equal to 1.0 liter, using those portions of the statement applicable to the engine.

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (and manufacturer's name, optional) is pleased to explain the emission control system warranty on your (current model year(s)) (equipment type or off-road large spark-ignition) engine. In California, new off-road large spark-ignition (LSI) engines must be designed, built and equipped to meet the State's stringent anti-smog standards. (Manufacturer's name) must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the carburetor, regulator or fuel-injection system, ignition system, engine computer unit (ECM), catalytic converter and air induction system. Also included may be sensors, hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, (manufacturer's name) will repair your LSI engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

The (**current model year**(**s**)) off-road large spark-ignition engines are warranted for (**warranty period**). If any emission-related part on your engine is defective, the part will be repaired or replaced by (manufacturer's name).

OWNER'S WARRANTY RESPONSIBILITIES:

- As the off-road LSI engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. (Manufacturer's name) recommends that you retain all receipts covering maintenance on your off-road engine, but (manufacturer's name) cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

- As the off-road large spark-ignition engine owner, you should however be aware that (manufacturer's name) may deny you warranty coverage if your off-road large spark-ignition engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
- Your engine is designed to operate on (**specific fuel**) only. Use of any other fuel may result in your engine no longer operating in compliance with California's emissions requirements.
- You are responsible for initiating the warranty process. The ARB suggests that you present your off-road large spark-ignition engine to a (manufacturer's names) dealer as soon as a problem exists. The warranty repairs should be completed by the dealer as expeditiously as possible.

If you have any questions regarding your warranty rights and responsibilities, you should contact (Insert chosen manufacturer's contact) at **1-XXX-XXX-XXXX**.

(b) Warranty statement furnishing requirements.

- (b)(1) Commencing with the 2001 model year for large off-road large sparkignition engines with engine displacement greater than 1.0 liter, each manufacturer must furnish with each new engine a warranty statement that generally describes the obligations and rights of the engine manufacturer and owner under this article. Engine manufacturers must also include in the warranty statement a phone number the customer may use to obtain their nearest franchised service center.
- (2) Commencing with the 2002 model year for large off-road large sparkignition engines with engine displacement less than or equal to 1.0 liter, each manufacturer must furnish with each new engine a warranty statement as set forth in the California Code of Regulations, Title 13, Section 2406(b).

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NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

2437. New Engine Compliance and Production Line Testing - New Off-Road Large Spark-ignition Engines Selection, Evaluation, and Enforcement Action.

(a) Compliance Test Procedures

(1) These procedures are applicable apply, commencing with the 2004 2001 model year, to any large off-road spark-ignition engine family group (as defined in Sections 2 and 11 of the "California Exhaust Emission Standards and Test Procedures for New 2001 and Later Off-Road Large Spark-ignition Engines") or any subgroup within an engine family group selected for compliance testing pursuant to this section, with an engine displacement greater than 1.0 liter. 2002 and later model year large off-road spark-ignition engines with engine displacement less than or equal to 1.0 liter must comply with the new engine compliance test procedures set forth in the California Code of Regulations, Title 13, Section 2407.

* * * *

- (b) 2004 2001 and Subsequent Model Cumulative Sum Production Line Test Procedures
- (1) The 2004 2001 and subsequent model year off-road large spark-ignition engines with an engine displacement of greater than 1.0 liter, that have been certified for sale in California, are subject to production line testing performed according to the requirements specified herein in this section. The 2002 and subsequent model year off-road large spark-ignition engines with an engine displacement of less than or equal to 1.0 liter, that have been certified for sale in California, must comply with production line testing performed according to the requirements set forth in the California Code of Regulations, Title 13, Section 2407.
- (A) Standards and Test Procedures. The emission standards, exhaust sampling and analytical procedures are those described in the Test Procedures, and are applicable to engines tested only for exhaust emissions. The production line test procedures are specified in conjunction with the Test Procedures. An engine is in compliance with these production line standards and test procedures only when all portions of these production line test procedures and specified requirements from the Test Procedures are fulfilled, except any adjustable engine parameters must may be set to any value or position that is within the range available to the ultimate purchaser.

* * *

(2)(A) (iii) Beginning with the 2006 model year, a manufacturer may annually request of the Executive Officer a reduction in production line testing for an engine family. In making such request, the manufacturer must demonstrate that the engine family's production line test data is consistent and in-use compliance data is consistent for the previous year(s) and in compliance with the emission standards in Section 2433. If the Executive Officer determines that a reduction is warranted, the manufacturer may test as few as one production

engine during the subject model year.

* * * *

(4) (A) Manufacturers will calculate the required sample size for the model year for each engine family using the Sample Size Equation below. N is calculated from each test result. The number N indicates the number of tests required for the model year for an engine family. N, is recalculated after each test. Test results used to calculate the variables in the Sample Size Equation must be final deteriorated test results as specified in (d)(3)(4)(D)(iii).

$$N = \left[\frac{(t_{95} \times \sigma)}{(x - STD)} \right]^2 + 1$$

Where:

N = required sample size for the model year.

 $t_{95} = 95\%$ confidence coefficient. It is dependent on the number of tests completed, n, as specified in the table in paragraph (4)(B)(C) of this

section. It defines one-tail, 95% confidence intervals.

 σ = test sample standard deviation calculated from the following equation:

$$\sigma = \sqrt{\frac{\sum (X_i - x)^2}{n - 1}}$$

Where:

 X_i = emission test result for an individual engine

x = mean of emission test results of the sample

STD = emission standard

n = The number of tests completed in an engine family

* * * *

(F) A manufacturer must continue testing and updating each engine family's sample size calculations according to paragraphs (4)(A) through (4)(\overline{D})(\overline{F}) of this section until a decision is made to stop testing as described in paragraph (4)(\overline{G}) of this section or a noncompliance decision is made pursuant to (c)(\overline{G})($\overline{$

* * * *

- (K) Small volume manufacturers may limit the number of engines tested to one percent of their California production. Compliance would be determined based on the available test data.
- (4)(5) The manufacturer must produce and assemble the test engines using its normal production and assembly process for engines to be distributed into commerce.
- (5)(6) No quality control, testing, or assembly procedures will be used on any test engine or any portion thereof, including parts and subassemblies, that have not been or will not be used during the production and assembly of all other engines of that family, unless the Executive Officer approves the modification in production or assembly procedures.
- (c) Calculation of Cumulative Sum (CumSum) Statistic. Each engine manufacturer must review the test results using the following procedure:

$$C_i = \max[0 \text{ OR } (C_{i-1} + X_i - (STD + F))]$$

(1) Manufacturers must construct the following CumSum equation for each regulated pollutant for each engine family. Test results used to calculate the variables in the CumSum Equation must be final deteriorated test results as defined in (d)(3)(4)(c).

$$C_i = \max[0 \text{ OR } (C_{i,1} + X_i - (STD + F))]$$

Where:

 C_i = The current CumSum statistic

 C_{i-1} = The previous CumSum statistic. Prior to any testing, the CumSum statistic

= 0 (i.e. $C_0 = 0$)

 X_i = The current emission test result for an individual engine

STD = Emission standard

 $F = 0.25 \times \sigma$

* * * * *

(8) All results from the previous quarters of the same model year must be included in the on-going Cumulative Sum analysis, provided that he the engine family has not failed (e.g., if three engines of a family were tested in the first quarter, the first test of the second quarter would be considered as the fourth test).

* * * *

(d)(5)(G) (vi) The retest emission data, as described in paragraph $(\underline{d})(D)$ above for any engine or unit of equipment failing the initial test, and description of the corrective actions and measures taken, including specific component replaced or adjusted.

* * * *

- (f) Suspension and revocation of Executive Order.
- (1) The Executive Order is automatically suspended with respect to any engine family failing pursuant to paragraph (c)(5) effective from the time that testing of that engine family is completed.

* * * *

- (10) Once the Executive Order has been revoked for an engine family, if the manufacturer desires to continue introduction into commerce of a modified version of that family, the following actions must be taken before the Executive Officer may issue a certificate for that modified family:
- (A) If the Executive Officer determines that the proposed change(s) in engine design may have an effect on emission performance deterioration, the Executive Officer shall notify the manufacturer, within five working days after receipt of the report in paragraph (9)(A)(c)(4) of this section, whether subsequent testing under this subpart will be sufficient to evaluate the proposed change or changes or whether additional testing will be required; and

* * * *

(12) Any suspension of an Executive Order under paragraph $\underline{(f)(4)(e)}$ of this section:

* * * *

NOTE: Authority cited: Sections 39600, 39601, 43013, 43017, 43018, 43101, 43102, and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

Section 2438 In-Use Compliance Testing Program

- (a) This section applies to new 2004 and later model year off-road large spark-ignition engines with engine displacement greater than 1.0 liter.
 - (a)(b) Manufacturer In-Use Testing Program.

Standards and Test Procedures. The emission standards, exhaust sampling and analytical procedures are those described in the Test Procedures, and are applicable to engines tested only for exhaust emissions. The production line test procedures are specified in conjunction with the Test Procedures. An engine is in compliance with these production line standards and test procedures only when all portions of these production line in-use test procedures and specified requirements from the Test Procedures are fulfilled, except that any adjustable engine parameters must be set to any the nominal value or position that is within the range available to the ultimate purchaser as indicated on the engine label.

- (1) Within a manufacturer's model-year engine production period Within 12 months after completion of a model-year's certification and the issuance of appropriate Executive Orders, the ARB will identify those engine families, and the specific configurations within an engine family, that the manufacturer must subject to in-use testing as described below. For each model year, ARB may identify a number of engine families that is no greater than 25 percent of the number of engine families to which this article is applicable. For those manufacturers producing three or less engine families in a model year, ARB may designate a maximum of one engine family per model year for in-use testing.
- (2) For each engine family identified by ARB, engine manufacturers must perform emission testing of an appropriate sample of in-use engines from each engine family. Manufacturers must submit data from this in-use testing to ARB.
- (3) An engine manufacturer must test in-use engines from each engine family identified by ARB. All engines selected by the manufacturer for testing must be identified by the manufacturer, and submitted to the Executive Officer, prior to the onset of testing. Engines to be tested must have accumulated a minimum of 0.75 (75 percent) 0.50 (50 percent) of the family's certified useful life period. The number of engines to be tested by a manufacturer will be determined by the following method:
- (A) a minimum of four engines per family, provided that no engine exceeds <u>fails</u> any <u>emission</u> standard. For each exceedance, two additional engines must be tested until the total number of engines equals ten.
- (B) For engine families of less than 500 engines (national production) for the identified model year or for engine manufacturers who make less than or equal to 2,000 engines nationally for that model year, a minimum of two (2) engines per family provided that no engine fails any emission standard. For each failing engine, two more engines shall be tested until the total number of engines equals ten (10).
- (C) If an engine family was certified using carryover emission data and has been previously tested under paragraphs $\frac{(c)(1)}{(b)(3)(A)}$ or $\frac{(c)(2)}{(b)(3)(B)}$ of this section (and ARB has not ordered a recall for that family has not occurred), then only one engine for that

family must be tested. If that one engine fails any pollutant emission standard, testing must be conducted as outlined at in subsections $\frac{(c)(1)}{(b)(3)(A)}$ or $\frac{(c)(2)}{(b)(3)(B)}$ in this section, whichever is appropriate.

- (4) At the discretion of the Executive Officer, an engine manufacturer may test more engines than the minima described in paragraph (C) (3) of this section or may concede failure before testing a total of ten engines.
- (5) The Executive Officer will consider failure rates, average emission levels and the existence of any defects, among other factors, in determining whether to pursue remedial action under this subpart. The Executive Officer may order a recall pursuant to Article 4.5, Section 2439 before testing reaches the tenth engine.
- (6)(4) The Executive Officer may approve an alternative to manufacturer in-use testing, where:
- (a)(A) Engine family production is less than or equal to 200 per year, nationally;
- (B) Engines cannot be obtained for testing because they are used substantially in vehicles or equipment that are not conducive to engine removal such as large vehicles or equipment from which the engine cannot be removed without dismantling either the engine, vehicle, or equipment; or
- (C) Other compelling circumstances associated with the structure of the industry and uniqueness of engine applications. Such alternatives shall be designed to determine whether the engine family is in compliance.
- operated between 0.75 0.50 and 1.0 times the certified engine's useful life period. The engine manufacturer may test engines from more than one model year in a given year. The manufacturer shall begin testing shall submit a plan for testing within twelve calendar months after receiving notice that ARB has identified a particular engine family for testing and shall complete testing of such engine family within twelve 24 calendar months from the date of approval of the plan by ARB start of such testing. Test engines may be procured from sources associated with the engine manufacturer (i.e., manufacturer-established fleet engines, etc.) or from sources not associated with the manufacturer (i.e., consumer-owned engines, independently owned fleet engines, etc.).
 - (b)(c) Maintenance, procurement and testing of in-use engines.
- (1) <u>A test</u> Test engine must have a maintenance and use history representative of in-use conditions.
- (a)(A) To comply with this requirement a manufacturer must obtain information from the end users regarding the accumulated usage, maintenance, <u>repairs</u>, operating conditions, and storage of the test engines.
- (B) Documents used in the procurement process must be maintained as required.
- (2) The manufacturer may perform minimal set-to-spec restorative maintenance on components of a test engine that are not subject to parameter adjustment. Maintenance may include only that which is listed in the owner's instructions for engines with the

amount of service and age of the acquired test engine. Repairs may be performed on a test engine with prior Executive Officer approval. Documentation of all maintenance, repairs, defects, and adjustments shall be maintained and retained as required.

- (3) At least one valid emission test, according to the \underline{T} test \underline{P} procedure outlined in subpart E of this part, is required for each in-use engine.
- (4) The Executive Officer may waive portions or requirements of the test procedure, if any, that are not necessary to determine in-use compliance.
- (5) If a selected in-use engine fails to comply with any applicable emission standards, the manufacturer shall determine the reason for noncompliance. The manufacturer must report within 72 hours after the completion of the test specifying the emission results and identifying the pollutant which failed to comply with the emission standard. The manufacturer must report all such reasons of noncompliance within fifteen business days of completion of testing. Additional time beyond the initial fifteen days may be granted providing that the manufacturer receives prior approval from the Executive Officer. The reports may be filed electronically or mailed to the following address: Chief of Mobile Source Operations Division, 9528 Telstar Avenue, El Monte, CA 91731.
- (6) At the discretion of the Executive Officer, an engine manufacturer may test more engines than the minima described in paragraph (b)(3) of this section or may concede failure before testing a total of ten engines. Upon conceding failure the manufacturer shall proceed with a voluntary recall program as specified in Section 2439.
- (7) The Executive Officer will consider failure rates, average emission levels and the existence of any defects, among other factors, in determining whether to pursue remedial action under this subpart. The Executive Officer may order a recall pursuant to Article 4.5, Section 2439 before testing reaches the tenth engine whenever the Executive Officer has determined, based on production-line test results or in-use test results, enforcement testing results, or any other information, that a substantial number of a class or category of equipment or engines produced by that manufacturer, although properly maintained and used, contain a failure in an emission-related component which, if uncorrected, may result in the equipments' or engines' failure to meet applicable standards over their useful lives; or whenever a class or category of equipment or engines within their useful lives, on average, do not conform to the emission standards prescribed pursuant to Part 5 (commencing with Section 43000) of Division 26 of the Health and Safety Code, or any regulation adopted by the state board pursuant thereto, other than an emissions standard applied to new engines to determine "certification" as specified in Chapter 9, as applicable to the model year of such equipment or engines.
- (8) Prior to an ARB-ordered recall, the manufacturer may perform a voluntary emissions recall pursuant to Article 4.5, Section 2439(b). Such manufacturer is subject to the reporting requirements in subsection (d) below.
- (9) Once ARB determines that a substantial number of engines fail to conform with the requirements, the manufacturer will not have the option of a voluntary emissions recall.

- (c)(d) In-use test program reporting requirements.
- (1) The manufacturer shall electronically submit to the Executive Officer within three months of completion of testing all emission testing results generated from the in-use testing program. The following information must be reported for each test engine:
 - $\frac{(a)(A)}{(a)}$ engine family,
 - (B) model,
 - (C) engine serial number <u>or alternate identification</u>, as <u>applicable</u>,
 - (D) date of manufacture,
 - (E) estimated hours of use,
 - (F) date and time of each test attempt,
 - (G) results (if any) of each test attempt,
 - (H) results of all emission testing,
 - (I) summary of all maintenance, <u>repairs</u>, and adjustments performed,
 - (J) summary (if any) of all ARB pre-approved modifications and repairs,
 - (K) determinations of noncompliance <u>or compliance</u>.
- (2) The manufacturer must electronically submit the results of its inuse testing with a pre-approved information heading. The Executive Officer may exempt manufacturers from this requirement upon written request with supporting justification.
- (3) All testing reports and requests for approvals made under this subpart shall be sent to the Designated Executive Officer.
- (4) The Executive Officer may require modifications to a manufacturer's in-use testing programs.

(d) Voluntary emissions recall

- (1) Prior to an ARB-ordered recall, the manufacturer may perform a voluntary emissions recall pursuant to paragraph (d) of this part. Such manufacturer is subject to the reporting requirements.
- (2) Once ARB determines that a substantial number of engines fail to conform with the requirements, the manufacturer will not have the option of a voluntary emissions recall.
 - (e) In-use emissions credit, averaging, banking, and trading <u>program</u>.
 - (1) General applicability
- (A) The in-use credit program for eligible engines is described in this subsection. Participation in this program is voluntary.
- (B) An engine family is eligible to participate in the in-use credit program if it is subject to regulation under subpart B Section 2433 of this part with certain exceptions specified in paragraph (C) (c) of this section.

* * * *

- (J) Manufacturers must demonstrate a zero or positive credit balance under the in-use credit program for a particular model year within 90 days of the end of the in-use testing of that model year's engine families., or at the same time as the final certification averaging, banking and trading (AB&T) report, whichever is later
- (2) Engines subject to the 2004 and later model-year emission standards are eligible to participate in the in-use credit program.
 - (3) The definitions below shall apply to this subsection:
- (A) Averaging means the exchange of in-use emission credits among LSI engine families within a given manufacturer's product line.
- (B) Banked credits refer to positive emission credits based on applicable actual production or sales volume as contained in the end of model year inuse testing reports submitted to Executive Officer of the ARB. Some or all of these banked credits may be revoked if the Executive Officer's review of the end of model year in-use testing reports or any subsequent audit action(s) uncovers problems or errors.
- (C) Banking means the retention of in-use emission credits by the manufacturer generating the emission credits for use in future model year averaging or trading as permitted by these regulations.
- (D) Carry-over engine family means an engine family which undergoes certification using carryover test data from previous model years.
- (E) Compliance level for an engine family is determined by averaging the in-use test results from each engine.
- (E)(F) In-use credits represent the amount of emission reduction or exceedance, for each regulated pollutant, by an engine family below or above, respectively, the applicable emission standards. Emission reductions below the emission standard are considered "positive credits," while emission exceedances above the emission standard are considered "negative or required credits."
- (F)(G) Trading means the exchange of in-use emission credits between manufacturers or brokers.
- (G) Compliance level for an engine family is determined by averaging the in-use test results from each engine.

* * * *

(7) Credit Calculation.

(A) For each participating engine family, emission credits (positive or negative) are to be calculated according to the following equation and rounded, in accordance with ASTM E29-93a, to the nearest gram. ASTM E29-93a has been incorporated by reference. Consistent units are to be used throughout the equation. The following equation is used to determine the credit status for an engine

family whether generating positive or negative in-use emission credits:

Credits (grams) = SALES
$$\times$$
 (STD - CL) \times POWER \times AF \times LF \times UL

Where:

SALES = the number of eligible sales tracked to the point of first retail sale in the U.S. for the given engine family during the model year.

STD = the emission standard in g/bhp-hr as noted in California Code of Regulations, Title 13, Section 2433.

CL = compliance level of the in-use testing in g/bhp-hr as approved by ARB.

UL= useful life in hours (5000 hours for engines with displacement of 1.2 liters or greater than 1.0 liter; 3000 hours for engine with displacement less than 1.2 liters).

Power = the average power of an engine family in bhp (sales weighted). The power of each configuration is the rated output in kilowatts as determined by SAE J1228. This procedure has been incorporated by reference.

LF = Load factor; Fraction of rated engine power utilized in-use (0.32 for engines with displacement of 1.2 liters or greater than 1.0 liter; 0.47 for engines with displacement less than 1.2 liters).

AF = adjustment factor for the number of tests conducted, as determined from the following table, except that when a manufacturer concedes failure before completion of testing, the adjustment factor shall be 1.0:

Number of Engines Tested	Adjustment Factor	
2*, 4	0.5	
6	0.75	
8	0.9	
10	1.0	

^{*}Small volume manufacturer

(B) Any credits used for either averaging, banking, or trading shall be assessed a one-time discount of 10 percent.

* * * *

(9) (B) Reports shall be submitted to the Executive Officer or designee Chief of the Mobile Source Operations Division.

* * * *

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104, Health and Safety Code.

Reference: Sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43154, 43205.5 and 43210-43212, Health and Safety Code.

Section 2439 Procedures for In-Use Engine Ordered Recalls for Large Off-Road Spark-Ignition Engines with an Engine Displacement Greater Than 1.0 Liter

(a) The provisions regarding applicability of the ordered recall procedures and the definitions shall be the same in this section apply as those set forth in Title 13, California Code of Regulations, Sections 2336 2433 and 2338 2438.

(b) Voluntary Emissions Recall

(1) When any manufacturer initiates a voluntary emission recall, the manufacturer shall notify the Executive Officer of the recall at least 30 days before owner notification is to begin. The manufacturer shall also submit to the Executive Officer a voluntary recall plan for approval, as prescribed in the following:

(A) (i) a description of each class or category of engines to recall, including the number of engines to be recalled, the engine family or a sub-group thereof, the model year, and such other information as may be required to identify the engines;

(ii) a description of the specific modifications, alterations, repairs, corrections, adjustments, or other changes to be made to correct the engines affected by the nonconformity;

(iii) a description of the method by which the manufacturer will notify engine owners including copies of any letters of notification to be sent to engine owners;

(iv) a description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the recall plan, and a description of the proof to be required of an engine owner to demonstrate compliance with any such conditions;

(v) a description of the procedure to be followed by engine owners to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor to remedy the nonconformity, and the designation of facilities at which the nonconformity can be remedied;

(vi) a description of the class of persons other than dealers and authorized warranty agents of the manufacturer who will remedy the nonconformity;

(vii) a description of the system by which the manufacturer will assure that an adequate supply of parts is available to perform the repair under the plan; or

(B) (i) a description of each class or category of engines to recall, including the number of engines to be recalled, the engine family or a sub-group thereof, the model year, and such other information as may be required to identify the engines;

(ii) a description of the method by which the manufacturer

will use the in-use emissions credit, averaging, banking, and trading program, as described in Section 2438(e), to remedy the nonconformity.

- (2) Voluntary Recall Progress Report. The manufacturer must submit at least one report on the progress of the recall campaign. This report shall be submitted to the Executive Officer by the end of the fifth quarter, as defined in Section 2112 (j), Chapter 2, Title 13 of the California Code of Regulations, following the quarter in which the notification of equipment or engine owners was initiated, and include the following information:
- (A) Engine family involved and recall campaign number as designated by the manufacturer.
 - (B) Date owner notification was begun, and date completed.
 - (C) Number of equipment or engines involved in the recall

campaign.

- (D) Number of equipment or engines known or estimated to be affected by the nonconformity.
- (E) Number of equipment or engines inspected pursuant to the recall plan and found to be affected by the nonconformity.
 - (F) Number of inspected equipment or engines.
 - (G) Number of equipment or engines receiving repair under

the recall plan.

- (H) Number of equipment or engines determined to be unavailable for inspection or repair under the recall plan due to exportation, theft, scrapping, or for other reasons (specify).
- (I) Number of equipment or engines determined to be ineligible for recall action due to removed or altered components.
- (J) A listing of the identification numbers of equipment or engines subject to recall but for whose repair the manufacturer has not been invoiced. This listing shall be supplied in a standardized computer data storage device to be specified by the Executive Officer.
- (K) Any service bulletins transmitted to dealers which relate to the nonconformity and which have not previously been submitted.
- (L) All communications transmitted to equipment or engine owners which relate to the nonconformity and which have not previously been submitted.
- (3) The information gathered by the manufacturer to compile the reports must be retained for not less than seven years from the date of the manufacture of the engines and must be made available to the Executive Officer or designee of the Executive Officer upon request.
- (4) A voluntary recall plan shall be deemed approved unless disapproved by the Executive Officer within 20 business days after receipt of the recall plan.
- (5) Under a voluntary recall program, initiated and conducted by a manufacturer or its agent or representative as a result of in-use enforcement testing or other evidence of noncompliance provided or required by the Board to remedy any

nonconformity, the capture rate shall be at a minimum 55 percent of the equipment or engine within the subject engine family or a sub-group thereof. The manufacturer shall comply with the capture rate by the end of the fifth quarter, as defined in Section 2112 (j), Chapter 2, Title 13 of the California Code of Regulations, following the quarter in which the notification of equipment or engine owners was initiated. If the manufacturer cannot correct the percentage of equipment specified in the plan by the applicable deadlines, the manufacturer must use good faith efforts through other measures, subject to approval by the Executive Officer, to bring the engine family into compliance with the standards. If the Executive Officer does not approve the manufacturer's efforts, the manufacturer shall propose mitigation measures to offset the emissions of the unrepaired equipment within 45 days from the last report filed pursuant to paragraph (b)(2), above. The Executive Officer shall approve such measures provided that:

- (A) The emission reductions from the recalled and repaired equipment or engines and the mitigation measures are equivalent to achieving the capture rate; and
- (B) The emission reductions from the mitigation measures are real and verifiable; and
- (C) The mitigation measures are implemented in a timely manner.

(b)(c) Initiation and Notification of Ordered Emission-Related Recalls.

- (1) A manufacturer shall be notified whenever the Executive Officer has determined, based on production-line test results or in-use test <u>results</u>, enforcement testing results, or any other information, that a substantial number of a class or category of equipment or engines produced by that manufacturer, although properly maintained and used, contain a failure in an emission-related component which, if uncorrected, may result in the equipments' or engines' failure to meet applicable standards over their useful lives; or whenever a class or category of equipment or engines within their useful lives, on average, do not conform to the <u>emission</u> standards prescribed pursuant to <u>Section</u> **43101** of the Health and Safety Code Part 5 (commencing with Section 43000) of Division 26 of the Health and Safety Code, or any regulation adopted by the state board <u>pursuant thereto</u>, other than an emissions standard applied to new engines to determine <u>"certification"</u> as specified in Chapter 9, as applicable to the model year of such equipment or engines.
- (2) It shall be presumed for purposes of this section that an emission-related failure will result in the exceedance of emission standards unless the manufacturer presents evidence in accordance with the procedures set forth in Title 13, California Code of Regulations, Sections 2336 or 2338 subsections (A), (B), and (C) which demonstrates to the satisfaction of the Executive Officer that the failure will not result in exceedance of emission standards over within the useful life of the equipment or engine.

(A) In order to overcome the presumption of noncompliance set forth in paragraph (c)(2) above, the average emissions of the equipment and engines

with the failed emission-related component must comply with applicable emission standards. A manufacturer may demonstrate compliance with the emission standards by following the procedures set forth in either paragraphs (c)(2)(B) or (c)(2)(C) of this section.

(B) A manufacturer may test properly maintained in-use equipment with the failed emission-related component pursuant to the applicable certification emission tests specified in Section 2433, Title 13 of the California Code of Regulations. The emissions shall be projected to the end of the equipment's or engine's useful life using in-use deterioration factors. The in-use deterioration factors shall be chosen by the manufacturer from among the following:

(i) "Assigned" in-use deterioration factors provided by the ARB on a manufacturer's request and based on ARB in-use testing; or,

(ii) deterioration factors generated during certification, provided adjustments are made to account for equipment aging, customer hour usage-accumulation practices, type of failed component, component failure mode, effect of the failure on other emission-control components, commercial fuel and lubricant quality, and any other factor which may affect the equipment's or engine's operating conditions; or,

(iii) subject to approval by the Executive Officer, a manufacturer-generated deterioration factor. Such deterioration factor must based on inuse data generated from certification emission tests performed on properly maintained and used equipment in accordance with the procedures set forth in Section 2433 of Title 13 of the California Code of Regulations, and the equipment from which it was derived must be representative of the in-use fleet with regard to emissions performance and equipped with similar emission control technology as equipment with the failed component.

- (C) In lieu of the equipment or engine emission testing described in subsection (B) above and subject to approval by the Executive Officer, a manufacturer may perform an engineering analysis, laboratory testing or bench testing, when appropriate, to demonstrate the effect of the failure.
- (3) The notification shall include a description of each class or category of equipment or engines encompassed by the determination of nonconformity, shall set forth the factual basis for the determination and shall designate a date at least 45 <u>business</u> days from the date of receipt of such notification by which the manufacturer shall submit a plan to remedy the nonconformity.

(c)(4) Availability of Public Hearing.

(1)(A) The manufacturer may request a public hearing pursuant to the procedures set forth in Subchapter 1.25, Title 17, California Code of Regulations to contest the finding of nonconformity and the necessity for or the scope of any ordered corrective action.

(2)(B) If a manufacturer requests a public hearing pursuant to subsection (1)(A) above, and if the Executive Officer's determination of nonconformity is confirmed at the hearing, the manufacturer shall submit the recall plan

required by Section 2439 within 30 days after receipt of the Board's decision.

(d)(5) Ordered Recall Plan.

(1)(A) Unless a public hearing is requested by the manufacturer, a recall plan shall be submitted to the Chief, Mobile Source Operations Division, 9528 Telstar Avenue, El Monte, CA 91731, within the time limit specified in the notification. The Executive Officer may grant the manufacturer an extension upon good cause shown.

$\frac{(2)(B)}{(2)}$ The recall plan shall contain the following:

(A)(i) A description of each class or category of equipment or engine to be recalled, including the engine family or sub-group thereof, the model-year, the make, the model, and such other information as may be required to identify the equipment or engines to be recalled.

(B)(ii) A description of the nonconformity and the specific modifications, alterations, repairs, corrections, adjustments or other changes to be made to bring the equipment or engines into conformity including a brief summary of the data and technical studies which support the manufacturer's decision regarding the specific corrections to be made.

(C)(iii) A description of the method by which the manufacturer will determine the names and addresses of equipment or engine owners and the method by which they will be notified.

(D)(iv) A description of the procedure to be followed by equipment or engine owners to obtain correction of the nonconformity including the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor required to correct the nonconformity, and the designation of facilities at which the nonconformity can be remedied. The repair shall be completed within a reasonable time designated by the Executive Officer from the date the owner delivers the equipment or engine for repair. This requirement becomes applicable on the date designated by the manufacturer as the date on or after which the owner can have the nonconformity remedied.

(E)(v) If some or all of the nonconforming equipment or engines are to be remedied by persons other than dealers or authorized warranty agents of the manufacturer, a description of such class of persons and a statement indicating that the participating members of the class will be properly equipped to perform such remedial action.

(F)(vi) The capture rate required for each class or category of equipment or engine to be recalled. Under recalls based on exceedance of emission standards, the capture rate shall be at a minimum 80 percent of the equipment or engine within the subject engine family.

(G)(vii) The plan may specify the maximum incentives (such as a free tune-up or specified quantity of free fuel), if any, the manufacturer will offer to induce equipment or engine owners to present their equipment for repair, as evidence that the manufacturer has made a good faith effort to repair the

percentage of equipment or engines specified in the plan. The plan shall include a schedule for implementing actions to be taken including identified increments of progress towards implementation and deadlines for completing each such increment.

(H)(viii) A copy of the letter of notification to be sent to equipment or engine owners.

(I)(ix) A description of the system by which the manufacturer will assure that an adequate supply of parts will be available to perform the repair under the recall plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

 $\frac{(J)(x)}{(J)}$ A copy of all necessary instructions to be sent to those persons who are to perform the repair under the recall plan.

(K)(xi) A description of the impact of the proposed changes on fuel economy, driveability operation, performance and safety of each class or category of equipment or engines to be recalled and a brief summary of the data, technical studies, or engineering evaluations which support these descriptions.

(L)(xii) A description of the impact of the proposed changes on the average emissions of the equipment or engines to be recalled based on noncompliance described as defined in section 2439subsection (c)(1), above. The description shall contain the following:

- (1.) Average noncompliance emission levels.
- (2.) Average emission reduction or increase per

pollutant resulting from the recall repair. These averages shall be verified by the manufacturer by applying the proposed recall repairs to two or more in-use equipment or engines representing the average noncompliance emission levels. Only those equipment or engines with baseline emission levels within 25 percent of the average emission levels of noncomplying pollutant(s) established under the in-use enforcement test program may be used by manufacturers to verify proposed recall repairs. The Executive Officer may allow the use of equipment or engines exceeding these upper averaging noncompliance limits if none which meet the limits can be reasonably procured.

(3.) An estimate of the average emission level per pollutant for a class or category of equipment or engines after repair as corrected by the required capture rate. The estimated average emission level shall comply with the applicable emission standards. If the average emissions levels achieved by applying the average emission reduction per equipment or engine after repair and the estimated capture rate, do not achieve compliance with the emissions standards, a manufacturer shall propose other measures to achieve average emissions compliance.

(M)(xiii) Any other information, reports, or data which the Executive Officer may reasonably determine to be necessary to evaluate the recall plan.

(e)(6) Approval and Implementation of Recall Plan.

(1)(A) If the Executive Officer finds that the recall plan is designed effectively to correct the nonconformity and complies with the provisions of this Section, he or she will so notify the manufacturer in writing. Upon receipt of the approval notice from the Executive Officer, the manufacturer shall commence implementation of the approved plan. Notification of equipment or engine owners and the implementation of recall repairs shall commence within 45 days of the receipt of notice unless the manufacturer can show good cause for the Executive Officer to extend the deadline.

(2)(B) If the Executive Officer does not approve the recall plan or the mitigation measures provided in this Section as submitted, the Executive Officer shall order modification of the plan or mitigation measures with such changes and additions as he or she determines to be necessary. The Executive Officer shall notify the manufacturer in writing of the disapproval and the reasons for the disapproval.

(3)(C) The manufacturer may contest the Executive Officer's disapproval by requesting a public hearing pursuant to the procedures set forth in Subchapter 1.25, Title 17, California Code of Regulations. As a result of the hearing, the Board may affirm, overturn or modify the Executive Officer's action. In its decision, affirming or modifying, the Board shall specify the date by which the manufacturer shall commence notifying equipment or engine owners and implementing the required recall repairs.

(4)(D) If no public hearing is requested in accordance with (3)(C) above, the manufacturer shall incorporate the changes and additions required by the Executive Officer and shall commence notifying equipment or engine owners and implementing the required recall repairs within 60 days of the manufacturer's receipt of the Executive Officer's disapproval.

(f)(7) Notification of Owners.

(1)(A) Notification to equipment or engine owners shall be made by first class mail or by such other means as approved by the Executive Officer provided, that for good cause, the Executive Officer may require the use of certified mail to ensure an effective notification.

(2)(B) The manufacturer shall use all reasonable means necessary to locate equipment or engine owners provided, that for good cause, the Executive Officer may require the manufacturer to use motor equipment registration lists, as applicable, available from State or commercial sources to obtain the names and addresses of equipment or engine owners to ensure effective notification.

(3)(C) The Executive Officer may require subsequent notification by the manufacturer to equipment or engine owners by first class mail or other reasonable means provided, that for good cause, the Executive Officer may require the use of certified mail to ensure effective notification.

(4)(D) The notification of equipment or engine owners shall contain the following:

 $\frac{(A)(i)}{\text{California Air Resources}}$ Board has determined that your (equipment or engine) (is or may be) releasing air pollutants which exceed (California or California and Federal) standards. These standards were established to protect your health and welfare from the dangers of air pollution."

(B)(ii) A statement that the nonconformity of any such equipment or engines will be remedied at the expense of the manufacturer.

(C)(iii) A statement that eligibility may not be denied solely on the basis that the equipment or engine owner used parts not manufactured by the original equipment manufacturer, or had repairs performed by outlets other than the equipment or engine manufacturer's franchised dealers.

(D)(iv) A clear description of the components which will be affected by the recall action and a general statement of the measures to be taken to correct the nonconformity.

(E)(v) [Reserved]

(F)(vi) A description of the adverse effects, if any, that an uncorrected nonconformity would have on the performance, fuel economy, or driveability of the equipment or engine or to the function of other engine components.

(G)(vii) A description of the procedure which the equipment or engine owner should follow to obtain correction of the nonconformity including the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to correct the nonconformity, and a designation of the facilities located in California at which the nonconformity can be remedied.

(H)(viii) After the effective date of the recall enforcement program referred to above, a statement that a certificate showing that the equipment has been repaired under the recall program shall be issued by the service facilities and that such a certificate may be required as a condition of equipment registration or operation, as applicable.

(1)(ix) A card to be used by a equipment or engine owner in the event the equipment or engine to be recalled has been sold. Such card should be addressed to the manufacturer, have postage paid, and shall provide a space in which the owner may indicate the name and address of the person to whom the equipment or engine was sold.

(J)(x) The statement: "In order to ensure your full protection under the emission warranty made applicable to your (equipment or engine) by State or Federal law, and your right to participate in future recalls, it is recommended that you have your (equipment or engine) serviced as soon as possible. Failure to do so could be determined to be a lack of proper maintenance of your (equipment or engine)".

 $\frac{(K)(xi)}{(K)}$ A telephone number provided by the manufacturer, which may be used to report difficulty in obtaining recall repairs.

 $\frac{\text{(L)}(xii)}{\text{(min)}}$ The manufacturer shall not condition eligibility for repair on the proper maintenance or use of the equipment except for strong or compelling reasons and with approval of the Executive Officer; however, the

manufacturer shall not be obligated to repair a component which has been removed or altered so that the recall action cannot be performed without additional cost.

(M)(xiii) No notice sent pursuant to this section above Section (D), nor any other communication sent to equipment or engine owners or dealers shall contain any statement, express or implied, that the nonconformity does not exist or will not degrade air quality.

(N)(xiv) The manufacturer shall be informed of any other requirements pertaining to the notification under this section which the Executive Officer has determined are reasonable and necessary to ensure the effectiveness of the recall campaign.

$\frac{(g)(8)}{(g)}$ Repair Label.

(1)(A) The manufacturer shall require those who perform the repair under the recall plan to affix a label to each equipment or engine repaired or, when required, inspected under the recall plan.

(2)(B) The label shall be placed in a location as approved by the Executive Officer and shall be fabricated of a material suitable for such location and which is not readily removable.

 $\frac{(3)(C)}{(3)}$ The label shall contain the recall campaign number and a code designating the facility at which the repair, inspection for repair, was performed.

(h)(9) Proof of Correction Certificate.

The manufacturer shall require those who perform the recall repair to provide the owner of each equipment or engine repaired with a certificate, through a protocol and in a format prescribed by the Executive Officer, which indicates that the noncomplying equipment or engine has been corrected under the recall program. This requirement shall become effective and applicable upon the effective date of the recall enforcement program referred to in this section, above.

(i)(10) Capture Rates and Alternative Measures.

The manufacturer shall comply with the capture rate specified in the recall plan as determined pursuant to this Section, above, within six consecutive quarters beginning with by the end of the fifth quarter, as defined in Section 2112 (j), Chapter 2, Title 13 of the California Code of Regulations, following the quarter in which the notification of equipment or engine owners was initiated. If, after good faith efforts, the manufacturer cannot correct the percentage of equipment specified in the plan by the applicable deadlines and cannot take other measures to bring the engine family into compliance with the standards, the manufacturer shall propose mitigation measures to offset the emissions of the unrepaired equipment within 45 days from the last report filed pursuant to Section 2439(k)(c)(13), below. The Executive Officer shall approve such measures provided that:

 $\frac{(1)}{(A)}$ The emission reductions from the recalled and repaired equipment or engines and the mitigation measures are equivalent to achieving

the capture rate; and

 $\frac{(2)(B)}{(B)}$ The emission reductions from the mitigation measures are real and verifiable; and

(3)(C) The mitigation measures are implemented in a timely manner.

(j)(11) Preliminary Tests.

The Executive Officer may require the manufacturer to conduct tests on components and equipment or engines incorporating a proposed correction, repair, or modification reasonably designed and necessary to demonstrate the effectiveness of the correction, repair, or modification.

$\frac{(k)(12)}{(k)}$ Communication with Repair Personnel.

The manufacturer shall provide to the Executive Officer a copy of all communications which relate to the recall plan directed to dealers and other persons who are to perform the repair. Such copies shall be mailed to the Executive Officer contemporaneously with their transmission to dealers and other persons who are to perform the repair under the recall plan.

(1)(13) Recordkeeping and Reporting Requirements.

(1)(A) The manufacturer shall maintain sufficient records to enable the Executive Officer to conduct an analysis of the adequacy of the recall campaign. For each class or category of equipment or engine, the The records shall include, for each class or category of equipment or engine, but need not be limited to, the following:

(A)(i) Engine family involved and recall campaign

number as designated by the manufacturer.

(B)(ii) Date owner notification was begun, and

date completed.

(C)(iii) Number of equipment or engines involved

in the recall campaign.

(D)(iv) Number of equipment or engines known or estimated to be affected by the nonconformity.

 $\frac{(E)(v)}{(v)}$ Number of equipment or engines inspected

pursuant to the recall plan and found to be affected by the nonconformity.

(F)(vi) Number of inspected equipment or

engines.

(G)(vii) Number of equipment or engines receiving

repair under the recall plan.

(H)(viii) Number of equipment or engines determined to be unavailable for inspection or repair under the recall plan due to exportation, theft, scrapping, or for other reasons (specify).

(I)(ix) Number of equipment or engines

determined to be ineligible for recall action due to removed or altered components.

(J)(x) A listing of the identification numbers of equipment or engines subject to recall but for whose repair the manufacturer has not been invoiced. This listing shall be supplied in a standardized computer data storage device to be specified by the Executive Officer. The frequency of this submittal, as specified in subsection (c)(C) below, may be changed by the Executive Officer depending on the needs of recall enforcement.

 $\frac{(K)(xi)}{(K)}$ Any service bulletins transmitted to dealers which relate to the nonconformity and which have not previously been submitted.

(L)(xii) All communications transmitted to equipment or engine owners which relate to the nonconformity and which have not previously been submitted.

 $\frac{(2)(B)}{(1)(C)(A)(iii)}$ If the manufacturer determines that the original responses to subsections $\frac{(1)(C)(A)(iii)}{(1)(C)(A)(iii)}$ and $\frac{(D)(iv)}{(1)(D)}$ of these procedures are incorrect, revised figures and an explanatory note shall be submitted. Responses to subsections $\frac{(1)(E)(A)(v)}{(D)(vi)}$, $\frac{(C)(vii)}{(D)(vii)}$, and $\frac{(D)(iv)}{(D)(iv)}$ shall be cumulative totals.

(3)(C) Unless otherwise directed by the Executive Officer, the information specified in subsection (1)(A) of these procedures shall be included in six quarterly reports or two annual reports, beginning with the quarter in which the notification of owners was initiated, or until all nonconforming equipment or engines involved in the campaign have been remedied, whichever occurs sooner. Such reports shall be submitted no later than 25 days after the close of each calendar quarter.

(4)(D) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, and shall make available to the Executive Officer or his or her authorized representative upon request, lists of the names and addresses of equipment or engine owners:

(A)(i) To whom notification was given;

(B)(ii) Who received remedial repair or inspection

under the recall plan; and

(C)(iii) Who were denied eligibility for repair due to removed or altered components.

(5)(E) The records and reports required by these procedures shall be retained for not less than one year beyond the useful life of the equipment or engines involved, or one year beyond the reporting time frame specified in subsection (3)(C) above, whichever is later.

$\frac{\text{(m)}(14)}{\text{Penalties}}$

Failure by a manufacturer to carry out all recall actions ordered by the Executive Officer pursuant to Sections 2439(b)(c) through (c) of these procedures is a violation of Health and Safety Code Section 43013 and 43105 and shall subject the manufacturer, on a per engine basis, to any and all remedies available under Part 5, Division 26 of the Health and Safety Code.

 $\frac{(n)}{(d)}$ Extension of Time.

The Executive Officer may extend any deadline in the plan if he or she finds in writing that a manufacturer has shown good cause for such extension.

(e) The Executive Officer may waive any or all of the requirements of these procedures if he or she determines that the requirement constitutes an unwarranted burden on the manufacturer without a corresponding emission reduction.

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, 43102, 43104 and 43105, Health and Safety Code.

Reference: Sections <u>43000</u>, <u>43009</u>, <u>43009</u>, <u>43013</u>, 43017, 43018, 43101, 43102, 43104, 43105, <u>43106</u>, <u>43107</u>, <u>43150</u>-43154, <u>43205</u> - <u>43205</u>, <u>5 and 43210</u>-43212, Health and Safety Code.

State of California AIR RESOURCES BOARD

AMENDMENTS TO TITLE 13, CALIFORNIA CODE OF REGULATIONS, CHAPTER 9, ARTICLE 3 CALIFORNIA REGULATIONS FOR NEW $\{-1995, 1997\}$ AND LATER OFFHIGHWAY RECREATIONAL VEHICLES AND ENGINES

Adopted: May 26, 1995

Amended:

Regulation

NOTE:

This Document contains portions of the text of Article 3, Section 2411and is printed in a style to indicate changes from the text approved by the Board at its October 22, 1998 hearing on large off-road spark-ignition (LSI) engines. Only those portions containing the suggested modifications from the language contained in the original LSI mailout, MSC 98-20, are included. All other portions remain unchanged and are indicated by the the symbol "* * * *" for reference.

The Board directed staff to modify the definition of all-terrain vehicle (ATV) within Title 13, Section 2411(a)(1) to remove the 600 pound unladen weight limit restriction. The result is that all ATV's, regardless of weight, are subject to the off-highway recreational vehicle (OHRV) regulation. To accomplish the Board's directive staff included this change as part of a 15-day notice of modified text for the OHRV rule, released March 5, 1999 as Mail-Out MSC 99-03. During the comment period on the LSI item, staff will accept comments on the degree to which the OHRV changes accomplish the Board's directive noted above. The portions of the text of Article 3, Section 2411 provided consist of the original text of the OHRV regulation, and: 1) amendments approved by the Board at the December 10, 1998 hearing on OHRV amendments, and 2) additional modifications proposed in the 15-day notice of modified text for that item.

The text of Article 3, Section 2411 includes text appearing within {{}} which consists of amendments approved by the Board at the December 11, 1998 hearing on off-highway recreational vehicles and engines (OHRV), along with additional modifications to the OHRV text proposed in a separate 15-day notice of modified text on that item. All originally proposed language is indicated by plain type. The suggested modifications are shown in <u>underline</u> to indicate additions to the original proposal and <u>strikeout</u> to indicate deletions. Although approved by the Board, text appearing within {{}} have not yet been submitted to the Office of Administrative Law (OAL) and are not yet legally effective. Modified text appearing within {{}} that are not approved by the OAL before the effective date of this regulation will not appear in this regulation when final.

Amend Title 13, California Code of Regulations, Chapter 9 Off-Road Vehicle and Engines Pollution Control Devices, sections 2411 to read as follows:

Article 3. Off-Highway Recreational Vehicles and Engines

§ 2411. Definitions.

- (a) The definitions in Section 1900(b), Chapter $\{\{3\,\underline{1}, \underline{\text{Division 3}}, \}\}$ Title 13 of the California Code of Regulations, $\{\{3\,\underline{1}, \underline{\text{Division 3}}, \}\}$ apply with the following additions:
- (1) "All-Terrain Vehicle { (ATV)}}" means any motorized off-highway vehicle 50 inches (1270 mm) or less in overall width, {{with an unladen dry weight of 600 pounds (275 kg) or less,}} designed to travel on four low pressure tires, having a seat designed to be straddled by the operator and handlebars for steering control, and intended for use by a single operator and no passengers. The vehicle is designed to carry not more than 350 pounds (160 kg) payload, excluding the operator, and is powered by an internal combustion engine. Width {{and unladen weight}}shall be exclusive of accessories and optional equipment. A {{go-kart,}} golf cart {{or specialty vehicle}} is not, for purposes of this regulation, to be classified as an all-terrain vehicle.{{-An all-terrain vehicle that is not used exclusively in competition/racing events in a closed course is not a competition/racing vehicle for purposes of these regulations.}}

* * * *

NOTE: Authority cited: Sections 39600, 39601, 43013, 43018, 43101, and 43107, Health and Safety Code.

Reference: Sections 43013, 43018, 43101, and 43107, Health and Safety Code.