

## **TITLE 13. CALIFORNIA AIR RESOURCES BOARD**

### **NOTICE OF PUBLIC HEARING TO CONSIDER PROPOSED CALIFORNIA EVALUATION PROCEDURES FOR AFTERMARKET CRITICAL EMISSION CONTROL PARTS ON HIGHWAY MOTORCYCLES**

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider the adoption of new California evaluation procedures for aftermarket critical emission control parts on highway motorcycles.

DATE: December 11, 2008

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency  
Air Resources Board  
Byron Sher Auditorium  
1001 I Street  
Sacramento, California 95814

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., December 11, 2008, and may continue at 8:30 a.m., December 12, 2008. This item may not be considered until December 12, 2008. Please consult the agenda for the meeting, which will be available at least ten days before December 11, 2008, to determine the day on which this item will be considered.

For individuals with sensory disabilities, this document and other related material can be made available in Braille, large print, audiocassette, or computer disk. For assistance, please contact ARB's Reasonable Accommodations/Disability Coordinator at 916-323-4916 by voice or through the California Relay Services at 711, to place your request for disability services, or go to <http://www.arb.ca.gov/html/ada/ada.htm>.

If you are a person with limited English and would like to request interpreter services to be available at the Board meeting, please contact ARB's Bilingual Manager at 916-323-7053.

### **INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW**

#### **Sections Affected:**

Proposed adoption to California Code of Regulations, title 13, new subsection 2222(j), Add-On Parts and Modified Parts, and proposed adoption of the incorporated document, "California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles."

## **Background:**

ARB has been regulating emissions from highway motorcycles since 1978. Beginning with the 2004 model year, ARB's highway motorcycle emission standards became more stringent (an exhaust emission standard of 1.4 grams/kilometer for hydrocarbons plus oxides of nitrogen, the first major reduction since the 1988 model year.) The standard applicable to 2008 and subsequent model year motorcycles was further increased in stringency compared to the 2004 standard (0.8 grams/kilometer for hydrocarbons plus oxides of nitrogen). Motorcycle manufacturers have been able to comply with these increasingly more stringent standards by using cost-effective technologies in engine design, fuel injection, closed-loop control systems, and catalytic converters. Generally, this has meant the increased integration of critical emission control parts, such as oxygen sensors and catalytic converters for exhaust emissions compliance, and hydrocarbon adsorbers for evaporative emissions compliance, into motorcycle exhaust systems. Certification sales data indicates that the use of catalytic converters alone in highway motorcycles increased by almost five times percentage-wise between the 1996 and 2008 model years (from 18 to 87 percent.)

Health and Safety Code section 43100 et seq. requires that new motor vehicles comply with emission standards. Manufacturers, through new vehicle certification, must demonstrate that their vehicles will comply with applicable emission standards throughout the vehicle's useful life. Modifying a certified vehicle may be considered tampering and could result in excess emissions.

California Vehicle Code sections 27156 and 38391 prohibit the sale, offer for sale, advertisement, or installation of any device that alters the design or performance of any required motor vehicle pollution control device or system. ARB has the statutory authority to exempt add-on and modified parts from this prohibition if it finds that such modifications will not reduce the effectiveness of any required pollution control device or will not cause vehicle emissions to exceed applicable standards. Pursuant to this authority, ARB has adopted regulations applicable to aftermarket parts, and has recently adopted provisions specifically applicable to aftermarket catalytic converters. However, ARB's aftermarket converter regulations were developed to address issues raised in the context of passenger cars and light-duty and medium-duty vehicles; catalytic converters to control motorcycle emissions have not been previously addressed. Consequently, ARB's existing aftermarket converter provisions are not directly applicable to non-original equipment manufacturer aftermarket catalytic converters for highway motorcycles. These parts are considered aftermarket critical emission control parts (defined as parts that are primarily designed to reduce emissions and are necessary for vehicles to comply with emission standards). Other examples of aftermarket critical emission control parts for highway motorcycles include oxygen sensors and hydrocarbon adsorbers.

In the past, submitted applications for exemption of motorcycle aftermarket parts in general have been low. Part of the reason for this has been the lack of consistent enforcement at the dealer/retailer level to ensure that legal aftermarket parts were being sold. ARB has increased these efforts in recent years, and is actively assessing monetary penalties on manufacturers and dealers for noncompliance. Still, ARB

inspections do not confirm that motorcycle owners are indeed installing legal aftermarket parts. Ultimately, it is anticipated that an Inspection and Maintenance program (i.e., Smog Check) will provide necessary oversight of ARB's aftermarket parts program.

Unlike cars whose exhaust systems are rarely modified until a repair is needed, a recent survey by ARB staff showed that 85 percent of motorcycle owners modify their motorcycles while relatively new. A frequent modification is to replace the original exhaust system, which may likely include a catalytic converter, with an aftermarket exhaust system that does not. This type of modification increases emissions and is illegal under state law. Unfortunately, it is a widespread practice.

As ARB staff investigated this practice, manufacturers of motorcycle aftermarket exhaust systems suggested that ARB develop an aftermarket exhaust system approval process that would result in the legal sale of aftermarket exhaust systems that did not degrade emissions given the high rate of modifications occurring. Staff agreed and developed the proposed regulation.

The proposed regulatory procedures were developed after considering the issues unique to highway motorcycles, and the procedures therefore allow exempted parts to replace fully functional original equipment manufacturer (OEM) emission control systems within the original emission warranty period. The procedures also incorporate safeguards to ensure that any exempted parts do not reduce the effectiveness of any required pollution control device or cause motorcycles to exceed applicable emission standards, as required by Vehicle Code sections 27156 and 38391. Such safeguards essentially mirror the requirements applicable to OEM motorcycle manufacturers.

The absence of exemption procedures for aftermarket critical emission control parts for highway motorcycles may cause motorcycle owners to use aftermarket parts that have not received ARB's approval and are therefore likely to cause increased emissions. ARB's current emissions inventory includes the emissions contribution of catalyst, non-catalyst, fuel injected, carbureted, tampered and non-tampered motorcycles. As part of the 1998 motorcycle rulemaking, staff estimated the impact of tampering on motorcycles. Although the impact of tampering on the benefits of the rulemaking was estimated to be small overall, the impact on an individual motorcycle may be significant. As an example, a 2008 motorcycle with fuel injection and a catalytic converter that has been tampered will emit approximately ten times the hydrocarbon emissions of a non-tampered motorcycle.<sup>1</sup> Establishing a process for evaluating and approving aftermarket critical emission control parts will help reduce the effects of tampering by allowing emission compliant aftermarket parts to be sold and installed on highway motorcycles in California.

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<sup>1</sup> EMFAC2007, Technical Support Document Section 4.11 On-road Motorcycle Activity, Technology Groups, and Emission Rates, [http://www.arb.ca.gov/msei/onroad/doctable\\_test.htm](http://www.arb.ca.gov/msei/onroad/doctable_test.htm) Appendix 4.11-D, comparing FTP Bag 1 HC emission zero mile emission rates.

## **PROPOSED REGULATORY ACTION**

Staff is proposing new evaluation procedures that would establish criteria for aftermarket critical emission control parts on highway motorcycles in California. Because these parts will likely be installed on relatively new highway motorcycles that are still within the coverage of the original manufacturer's warranty, the proposed procedures incorporate many certification provisions applicable to new highway motorcycles to help ensure that exempted parts will be as reliable and durable as the original emission controls in certified highway motorcycles.

The proposed procedures would require manufacturers to demonstrate that their aftermarket critical emission control parts, when installed and aged on a designated test vehicle, would not cause the vehicle to exceed applicable exhaust or evaporative emission standards over the useful life of the motorcycle.

The procedures would also require manufacturers to warrant their aftermarket critical emission control parts are free from defects for up to the full useful life of the highway motorcycle if the part is installed within four years of the date that the motorcycle is first acquired by an ultimate purchaser. Shorter warranty periods apply if parts are installed on older motorcycles. Manufacturers or installers would also be required to provide an installation warranty for two years or 7,456 miles, whichever occurs first.

The proposed procedures also establish warranty reporting requirements, labeling requirements, and audit reporting and testing and recall procedures that essentially mirror requirements applicable to manufacturers of new motorcycles.

## **COMPARABLE FEDERAL REGULATIONS**

The United States Environmental Protection Agency (U.S. EPA) has adopted regulations applicable to aftermarket parts in Code of Federal Regulations, title 40, part 85. However, these regulations only establish a voluntary self-certification program. In contrast, ARB's aftermarket parts regulations require aftermarket part manufacturers to receive and obtain an exemption before they can sell parts in California.

Aftermarket catalytic converters are legal for sale federally under an enforcement policy established by U.S. EPA in 1986, but the policy does not constitute a regulation. Moreover, U.S. EPA's policy was established to address issues regarding aftermarket converters for light-duty vehicles and light-duty trucks, not highway motorcycles. Since issuing its enforcement policy, U.S. EPA has thus far decided not to issue regulations specific to aftermarket converters, and has not announced any plans to do so in the near future.

## **AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS**

ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and

environmental impacts of the proposal. The report is entitled: "Public Hearing to Consider Proposed California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles."

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout format to allow for comparison with the existing regulations, may be accessed on the ARB's website listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing on December 11, 2008.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the ARB's website listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Mr. Dean Hermano, Staff Air Pollution Specialist, at (626) 459-4487 or [ehermano@arb.ca.gov](mailto:ehermano@arb.ca.gov), or Ms. Rose Castro, Manager, Aftermarket Parts Section, at (626) 575-6848 or [rcastro@arb.ca.gov](mailto:rcastro@arb.ca.gov).

Further, the agency representative and designated back-up contact persons, to whom nonsubstantive inquiries concerning the proposed administrative action may be directed, are Lori Andreoni, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-4011, or Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB website for this rulemaking at [www.arb.ca.gov/regact/2008/amhmc08/amhmc08.htm](http://www.arb.ca.gov/regact/2008/amhmc08/amhmc08.htm).

### **COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED**

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5), the Executive Officer has determined that the proposed amendments would not impose a mandate on local agencies or school districts. The Executive Officer has further determined pursuant to Government Code section 11346.5(a)(6) that the proposed regulatory action would result in some additional costs to ARB to implement and enforce the proposed regulatory action. In addition, the Executive Officer has determined that the proposed regulatory action would not create costs or savings in federal funding to the State, will not create costs or savings to local agencies or school districts that are required to be reimbursed under the Government Code, title 2, division 4, part 7 (commencing with

section 17500), and will not result in other nondiscretionary savings to State or local agencies.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. Manufacturers of aftermarket critical emission control parts for highway motorcycles would incur additional costs resulting from this regulation only if they choose to enter the existing California market for those parts. Therefore, costs that a part manufacturer may pay related to the regulation's specific provisions for durability emission testing, warranty, audit testing, and recall are not accounted for since they are considered normal costs that any part manufacturer would be required to pay in order to legally sell aftermarket critical emission control parts in the State. Part manufacturers voluntarily make a decision to comply with the regulation based on their ability to generate satisfactory profits and to compete with motorcycle OEMs that may already be selling similar, compliant parts in California. The only applicable costs then attributable to the regulation would be those associated with the preparation and submittal of exemption applications that demonstrate compliance with the provisions. ARB staff estimates that this cost would be approximately \$100 per application. Over a five year regulatory life, the 60 potentially affected part manufacturers could be expected to spend up to \$58,000 for those applications. The proposal is not expected to affect the ability of California part manufacturers to compete with part manufacturers in other states since it applies to all manufacturers that choose to sell parts in California.

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action could affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. Jobs are not expected to be lost as a result of the proposed regulatory action, but rather some jobs may be created in order to perform the exemption provisions. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to the California Code of Regulations, title 1, section 4, that the proposed regulatory action would affect small businesses. Recordkeeping costs would be borne by retailers and installers to document their sales of aftermarket critical emission control parts for highway motorcycles. Proposed recordkeeping would require maintenance of basic information about each sold part and its purchaser for a period of five years at a cost of about \$60 per year per retailer or installer. Over that five year period, the overall cost to the 1,000+ part retailers and installers in California to comply with this requirement is estimated to be \$300,000.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action.

### **SUBMITTAL OF COMMENTS**

Interested members of the public may also present comments orally or in writing at the meeting, and in writing or by e-mail before the meeting. To be considered by the Board, written comments submissions not physically submitted at the meeting must be received **no later than 12:00 noon, December 10, 2008**, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board  
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Facsimile submittal: (916) 322-3928

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

The Board requests, but does not require, that 30 copies of any written statement be submitted and that all written statements be filed at least ten days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

### **STATUTORY AUTHORITY AND REFERENCES**

This regulatory action is proposed under that authority granted in Health and Safety Code sections 39600, 39601, 43000, 43000.5, 43011, and 43107, and Vehicle Code sections 27156, 38391, and 38395. This action is proposed to implement, interpret and make specific sections in Health and Safety Code sections 39002, 39003, 39500, 43000, 43000.5, 43009.5, 43011, 43107, 43204, 43205, 43205.5, and 43644, and Vehicle Code sections 27156, 38391, and 38395.

## **HEARING PROCEDURES**

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action; in such event, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

James N. Goldstene  
Executive Officer

Date: October 14, 2008

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs see our website at [www.arb.ca.gov](http://www.arb.ca.gov).*