State of California AIR RESOURCES BOARD

Resolution 09-2

January 22, 2009

Agenda Item No.: 09-1-3

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

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has found and declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state, and in sections 39002 and 39003 of the Health and Safety Code, has charged the Board with the responsibility of systematically addressing the serious air pollution problem caused by motor vehicles;

WHEREAS, in section 43000.5 of the Health and Safety Code, the Legislature has further found and declared that the attainment and maintenance of air quality standards will necessitate the achievement of substantial improvements in the durability of vehicle emissions systems;

WHEREAS, section 43011 of the Health and Safety Code authorizes the Board to establish criteria for the evaluation of the effectiveness of motor vehicle pollution control devices:

WHEREAS, section 43107 of the Health and Safety Code authorizes the Board to adopt emission standards for new 1977 and later model-year motorcycles that are registered or identified by the Department of Motor Vehicles which are sold in the State on or after July 1, 1976;

WHEREAS, sections 27156, 38391, and 38395 of the California Vehicle Code prohibit the installation, sale, offer for sale or advertisement of any device, apparatus, or mechanism intended for use with, or as part of any required motor vehicle pollution control device or system which alters or modifies the original design or performance of any such motor vehicle pollution control device or system unless the Board finds that the device, apparatus, or mechanism either does not reduce the effectiveness of any required motor vehicle pollution control device or does not result in emissions from a modified vehicle which exceed the applicable emission standards for the vehicle;

WHEREAS, beginning with the 2004 model year, ARB's highway motorcycle emission standards became more stringent, and the standards applicable to 2008 and subsequent model year motorcycles are further increased in stringency compared to the 2004 standards;

WHEREAS, highway 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, and by increasingly integrating 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;

WHEREAS, an estimated 87 percent of new 2008 model year highway motorcycles certified in California are equipped with catalytic converters in their original exhaust systems;

WHEREAS, 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 unless ARB 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;

WHEREAS, ARB has adopted regulations applicable to aftermarket parts, and has recently amended provisions specifically applicable to aftermarket catalytic converters;

WHEREAS, because ARB's present aftermarket catalytic converter regulations were primarily developed to address issues raised in the context of passenger cars and light- and medium-duty vehicles, they are not applicable to and do not address aftermarket catalytic converters for highway motorcycles;

WHEREAS, critical emission control parts such as aftermarket catalytic converters, oxygen sensors and hydrocarbon adsorbers are primarily designed to reduce emissions and are necessary for highway motorcycles to comply with applicable emission standards;

WHEREAS, a recent survey by ARB staff indicates that up to 85 percent of motorcycle owners modify their motorcycles before the original emission warranty had expired;

WHEREAS, a commonly performed modification to a highway motorcycle is the replacement of a motorcycle's original exhaust system, which today likely includes a catalytic converter, with an aftermarket exhaust system that does not contain a catalytic converter.

WHEREAS, manufacturers of aftermarket parts for highway motorcycles have requested that ARB develop an exemption process that would allow aftermarket exhaust systems for highway motorcycles to be legally sold, installed and used in highway motorcycles in California;

WHEREAS, manufacturers of aftermarket parts for highway motorcycles have also asked ARB to allow sale of exempted aftermarket parts within the original motorcycle manufacturer's emission warranty period, (which is not allowed for aftermarket catalysts used on passenger cars and trucks), citing the current practice and high rate of exhaust system replacement while the motorcycle is relatively new as a reason to allow exempted exhaust systems and related emission control parts to be sold within the warranty period;

WHEREAS, 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;

WHEREAS, staff is therefore proposing the adoption of amendments to California's existing aftermarket part regulations that would establish exemption criteria for aftermarket critical emission control parts on highway motorcycles, these criteria 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, would require manufacturers to warrant that aftermarket critical emission control parts are free from defects for up to the full useful life of the highway motorcycle depending on its age and mileage, and would require manufacturers or installers to provide an installation warranty for 2 years or 7,456 miles, whichever occurs first;

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

WHEREAS, the proposed amendments to California Code of Regulations title 13, section 2222, are set forth in Attachment A hereto;

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

WHEREAS, the staff proposes that the Board adopt new criteria and procedures to evaluate the compliance of new aftermarket critical emission control parts for highway motorcycles with the criteria for receiving an exemption from the prohibitions of Vehicle Code sections 27156 and 38391, as set forth in Attachment B hereto;

WHEREAS, ARB staff prepared a staff report entitled "Initial Statement of Reasons (ISOR) for Rulemaking, Proposed California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles," (ISOR) which presents the rationale for the proposed regulation;

WHEREAS, the ISOR and proposed regulatory language were made available to the public for at least 45 days prior to the public hearing to consider the proposed regulation;

WHEREAS, the Board has considered the effects of the proposed requirements on the economy of the State;

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

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

WHEREAS, in consideration of the information in the public record, including the ISOR, written comments, and testimony provided at the hearing, the Board finds that:

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

To meet federal and California Clean Air Act emissions reductions requirements, ARB must continue to seek reductions from all sources under its authority, including highway motorcycles;

Since the mid-1970s, catalytic converters have become critical components of the emissions control system for gasoline-fueled passenger cars, and light-duty and medium-duty motor vehicles;

The emission standards applicable to new 2004, and new 2008 and subsequent model year highway motorcycles have substantially increased in stringency compared to previously applicable standards;

Manufacturers of highway motorcycles 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 and by increasingly integrating 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;

An estimated 87 percent of new 2008 model year highway motorcycles certified in California are equipped with catalytic converters in the original exhaust systems;

ARB's current provisions for exempting aftermarket converter regulations were developed to address issues raised in the context of passenger cars and light- and medium-duty vehicles, and are not applicable to aftermarket catalytic converters for highway motorcycles;

Critical emission control parts such as aftermarket catalytic converters, oxygen sensors and hydrocarbon adsorbers for motorcycles are primarily designed to reduce emissions and are necessary for motorcycles to comply with emission standards:

Many highway motorcycles currently undergo modifications to their exhaust systems while they are still within the coverage of the motorcycle original equipment manufacturer's (OEM) emission warranty period;

A frequent modification is the replacement of the original highway motorcycle's exhaust system, which today likely includes a catalytic converter, with an aftermarket exhaust system that does not contain a catalytic converter;

The absence of an exemption process for aftermarket critical emission control parts would result in the continued illegal use and sale of aftermarket exhaust systems that do not contain catalytic converters, while also preventing part manufacturers who wish to develop aftermarket exhaust systems that do not degrade emissions from doing so;

The current aftermarket converter regulations need to be amended to include provisions for specifically evaluating aftermarket critical emission control parts on highway motorcycles, to ensure that the in-use emission performance of highway motorcycles is not adversely compromised by the use of non-OEM aftermarket critical emission control parts;

Staff has drafted criteria for evaluating aftermarket critical emission control parts on highway motorcycles, to ensure that any such exempted 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 proposed criteria would require manufacturers to warrant that their aftermarket critical emission control parts are free from defects for up to the full useful life of the highway motorcycle depending on its age and mileage, this warranty is similar to the emissions defect warranty that new highway motorcycle manufacturers are required to provide;

Ensuring that approved aftermarket critical emission control parts are properly installed in highway motorcycles is also critical for realizing the full expected benefits of the proposed amendments and incorporated evaluation procedures, and the proposed procedures therefore set forth installation warranty requirements applicable to manufacturers or installers of approved aftermarket critical emission control parts;

The proposed procedures would also require manufacturers to supply a warranty registration card with each aftermarket critical emission control part that would be used to notify purchasers in the event of a warranty claim or a recall action, and to ensure that at least 50 percent of registration cards are returned by customers;

The proposed procedures would also require installers and retailers of aftermarket critical emission control parts to document the applicable sales and/or installation of such parts with basic information pertaining to the aftermarket critical emission control part, the highway motorcycle, and the purchaser;

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

Audit testing would be ARB's primary means of ensuring that a manufacturer's production parts are identical in all material respects to an exempted part, and that production parts comply with applicable emission standards;

The proposed regulatory action will have a positive impact on air quality by ensuring that the emission benefits attributable to California's emission standards for highway motorcycles are realized and not diminished by exhaust system tampering;

ARB's current emissions inventory, including the adopted emission standards, shows that highway motorcycles contribute approximately 53 tons per day of hydrocarbon plus oxides of nitrogen emissions statewide in 2010 and 2020;

The true extent to which original catalyst exhaust systems are replaced with non-catalyst exhausts on highway motorcycles, and when during the life of the motorcycle this occurs, is not accurately known, but removing a catalyst exhaust can increase a highway motorcycle's exhaust emissions by up to ten times;

Tampering has been estimated to occur in many highway motorcycles that have only accumulated low mileages and that are still covered under the motorcycle OEM's emission control warranty period;

Establishing a process that is specifically developed to encourage the development of emission compliant aftermarket critical emission control parts for on highway motorcycles, will reduce the usage of non-complying exhaust systems and the generation of excess emissions due to tampering;

The proposed regulatory action would also allow exempted parts to replace fully functional OEM emission control components and systems within the OEM emission warranty period and would serve to ensure that any exempted parts would not reduce the effectiveness of any required pollution control device or would cause highway motorcycles to exceed applicable emission standards, and would additionally serve to ensure that such exempted parts are comparable in durability to OEM parts;

The proposed amendments are necessary and appropriate in that they alert parties of the manner in which ARB will determine compliance with the aftermarket regulation and incorporated evaluation procedures for aftermarket critical emission control parts for highway motorcycles;

The economic and fiscal impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR, as supplemented by staff's presentation at the hearing of this item;

The proposed amendments will not have any significant adverse impact on the environment;

WHEREAS, the Board further finds that:

The adoption of the proposed amendments will not have a significant adverse environmental impact and is projected to positively impact air quality by ensuring that the emission benefits attributable to California's emission standards for highway motorcycles are realized and not diminished by exhaust system tampering:

The reporting requirements of the proposed amendments are necessary for the health, safety, and welfare of the people of the State;

The proposed amendments are voluntary in the sense that manufacturers are not compelled to manufacture or sell aftermarket critical emission control parts for highway motorcycles, and therefore the only cost impacts of the proposal are those associated with the preparation and submittal of exemption applications;

The proposed amendments could result in the creation of a small number of businesses and jobs within the State;

The proposed amendments will not affect the ability of California businesses to compete with businesses in other states; and

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

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the proposed amendments to CCR title 13, section 2222 as set forth in Attachment A hereto, and the incorporated "California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles," as set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board hereby finds that separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board hereby determines that the amendments approved herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards, will not cause the California requirements to be inconsistent with section 202(a) of the federal Clean Air Act, and raise no new issues affecting previous

waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that to the extent it is necessary, the Executive Officer shall, upon adoption, forward the amendments to the United States Environmental Protection Agency with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption pursuant to section 209(b) of the federal Clean Air Act, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 09-2, as adopted by the Air Resources Board.

Monica Vejar, Clerk of ne Board

Resolution 09-2

January 22, 2009

Identification of Attachments to the Resolution

Attachment A:

Proposed amendments to title 13, California Code of Regulations, section 2222, as set forth in Attachment 1 to the Staff Report: Initial Statement of Reasons, released October 24, 2008.

Attachment B:

Proposed "California Evaluation Procedures for Aftermarket Critical Emission Control Parts on Highway Motorcycles" as set forth in Attachment 2 to the Staff Report: Initial Statement of Reasons released October 24, 2008.