

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE CALIFORNIA EXHAUST STANDARDS FOR ON-ROAD MOTORCYCLES

The Air Resources Board (the Board or ARB) will conduct a public hearing at the time and place noted below to consider amendments to the California on-road motorcycle regulation, including lower tailpipe emission standards for hydrocarbons plus oxides of nitrogen (HC+NO_x), corporate averaging on an HC+NO_x basis, and other technical modifications. The amendments are designed to help meet the ARB's commitment to achieve emission reductions from motor vehicles under the State Implementation Plan (SIP) for ozone attainment.

DATE: December 10, 1998

TIME: 8:30 a.m.

PLACE: Air Resources Board
Hearing Room
Northern California Headquarters
2020 L Street
Sacramento, California

This item will be considered at a two-day meeting of the Board, which will commence at 8:30 a.m., December 10, 1998, and may continue at 8:30 a.m., December 11, 1998. This item may not be considered until December 11, 1998. Please consult the agenda for the meeting, which will be available at least 10 days before December 10, 1998, to determine the day on which this item will be considered.

This facility is accessible to persons with disabilities. If accommodation is needed, please contact the Clerk of the Board by November 25, 1998, at (916) 322-5594, or Telecommunications Device for the Deaf (TDD) at (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area, to ensure accommodation.

To obtain this document in an alternative format, please contact the ARB Coordinator for the Americans with Disabilities Act (ADA) at (916) 322-4505, TDD (916) 324-9531 or (800) 700-8326 for TDD calls outside the Sacramento area.

INFORMATIVE DIGEST/PLAIN ENGLISH POLICY STATEMENT OVERVIEW OF PROPOSED ACTION

Sections Affected:

Amendments to title 13, California Code of Regulations (CCR), section 1958 and the incorporated "Exhaust Emission Standards and Test Procedures - Motorcycles Manufactured on

or After January 1, 1978.”

The Existing California On-Road Motorcycle Regulation

The ARB adopted the first on-road motorcycle regulation in 1975 to reduce ozone-forming emissions from this mobile source category. The regulation established exhaust and evaporative emission standards for HC beginning with the 1978 model year. Depending on the motorcycle engine size, the original HC exhaust standards ranged from 5.0 grams per kilometer (g/km) to 14.0 g/km.

The regulation established standards for motorcycles with engines as small as 50 cubic centimeters (cc). Because in this rulemaking staff proposes to amend the standards only for Class III motorcycles (280 cc or greater), the remainder of this discussion will focus on the standards that currently apply to this class of on-road motorcycles.

In 1984, the ARB amended the model year 1985 HC standard to give manufacturers more flexibility. The new standards for model year 1985 and beyond focused on the Class III category (280 cc and above): 280 to 699 cc engines were limited to 1.0 g/km for model years, while 700 cc and larger motorcycles were limited to 1.4 g/km HC. The ARB established provisions to allow manufacturers to meet these limits on a “corporate average” basis, with no individual engine family allowed to exceed 2.5 g/km HC.

Additionally, in 1984 the Board directed the ARB staff to revisit the regulation when catalytic and other emissions control technologies had matured to the point that it would be feasible to apply these technologies to on-road motorcycles. Significant strides in controlling emissions from internal combustion engines have taken place since then, with developments in the automotive sector gradually being applied to motorcycles. This is particularly true in Europe and Asia, where engine modifications, fuel injection, secondary pulse-air injection, and catalytic converters are used in significant numbers of on-road motorcycles. On the other hand, the ARB emission standards for motorcycles have not kept pace with the rate at which emission control technologies have developed. Therefore, ARB staff believe it is appropriate to amend the existing standards to the proposed levels, which reflect the use of reasonably available technologies.

The Proposed Amendments

The primary impetus for the proposed amendments comes from the ARB’s obligations under the State Implementation Plan for Ozone adopted by the Board in 1994. The ozone SIP, which represents California’s commitment to attain and maintain the federal ambient air quality standard for ozone in greater Los Angeles and the rest of the state, was approved by U.S. EPA in 1995. The ozone SIP includes measures to reduce emissions from mobile sources under State control (including cars, heavy-duty trucks, off-road equipment), as well as federal assignments to control emissions from sources under exclusive or practical federal control (such as airplanes, marine vessels, and locomotives). The ozone SIP also relies upon the development of additional technology measures (the mobile source “black box”) to provide additional emission reductions needed for attainment in the South Coast Air Basin.

Although on-road motorcycles have been regulated since the 1978 model year, the ozone SIP does not specifically plan for emission reductions from on-road motorcycles. The staff's proposal for on-road motorcycles is a new emission reduction effort reflecting reasonably available technologies. The staff's proposal offers additional, cost-effective emission reductions needed to continue progress towards attainment of the federal ambient ozone standard. The additional emission reductions will also ensure continued progress toward meeting State and new federal air quality standards for ozone and particulate matter.

The ARB staff proposal maintains the regulatory approach used in the existing regulation. The proposal will maintain the current standards until model year 2004, when the first of the new standards becomes effective. The proposed Tier-1 standard for model year 2004 is 1.4 g/km HC+NO_x. Beginning in model year 2008, the proposed Tier-2 standard of 0.8 g/km HC+NO_x becomes effective. Manufacturers would be allowed to meet these proposed standards on a corporate average basis, with all engine families limited to no more than 2.5 g/km HC+NO_x. For small-volume manufacturers, staff is proposing that the Tier-1 standard of 1.4 g/km HC+NO_x become effective starting in model year 2008. In the staff's proposal, small-volume manufacturers are those which have combined California Class I (50 cc to 169 cc), Class II (170 cc to 279 cc) and Class III (280 cc and greater) sales of no greater than 1000 units in a model year.

To provide incentives for early compliance with the Tier-2 standard, staff is also proposing a set of multiplier factors that provide extra credit to manufacturers that introduce motorcycles which meet the Tier-2 standard earlier than the 2008 model year. Use of these credits will make it easier for a manufacturer to comply with the corporate emissions average standard in 2008.

Comparable Federal Regulations

Under Title II of the federal Clean Air Act (CAA), the U.S. EPA has adopted comprehensive regulations to control emissions from new motor vehicles and motor vehicle engines, including on-road motorcycles (see Title 40, Code of Federal Regulations, Part 86 (40 CFR 86)). However, both state law and CAA section 209(b) authorize California to establish its own standards that differ from the federal standards.

While similar in purpose and scope, the California exhaust emission standards are more stringent than the comparable federal requirements. The current federal exhaust emission standard applicable to the engine size class (Class III) affected by the proposed amendments is 5.0 g/km (HC only). The federal standard for carbon monoxide (CO) is identical to California's existing standard (12 g/km). The more stringent California on-road motorcycle program is necessary to help attain the national and state ambient ozone standards.

AVAILABILITY OF DOCUMENTS AND CONTACT PERSON/PLAIN ENGLISH POLICY STATEMENT OVERVIEW

The Board staff has prepared a staff report that includes the initial statement of reasons for the

proposed action and a summary of the environmental impacts of the proposal, if any. Copies of the staff report and the full text of the proposed regulatory language may be obtained from the Board's Public Information Office, 2020 L Street, Sacramento, CA 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing. The ARB has determined the proposed action will affect small business. The ARB has also determined that it is not feasible to draft the regulations in plain English due to the technical nature of the regulations; however, a plain English summary of the regulations is available from the agency contact person named in this notice, and/or is also contained in the staff report for this regulatory action. The Board staff has compiled a record that includes all information upon which the proposal is based. This material is available for inspection upon request from the contact person identified immediately below.

Further inquiries regarding this matter should be directed to Mr. Floyd Vergara, P.E., On-Road Control Regulation Branch, Mobile Source Control Division, at (916) 327-1503 or by e-mail at fvergara@arb.ca.gov.

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 in reasonable compliance with the proposed regulations are presented below.

The Executive Officer has determined that the proposed regulatory action will not create costs or savings, as defined in Government Code §11346.5(a)(6), to any state agency or in federal funding to the state, costs or a mandate to any local agency or school district whether or not reimbursable by the state pursuant to part (commencing with §17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to local agencies.

The affected businesses that would be required to comply with the proposed amendments are manufacturers of on-road motorcycles sold in California. Six companies worldwide manufacture the vast majority (over 95%) of California-certified, on-road motorcycles. Other affected companies are smaller manufacturers generally located in Europe, as well as numerous very small manufacturers located throughout the United States, including several located in California. Also affected would be businesses that supply parts for these California-certified, on-road motorcycles. California businesses account for only a small share of total nationwide manufacturing of on-road motorcycle parts because most new parts suppliers also tend to locate in areas close to vehicle assembly plants to minimize shipping costs and delivery time. In addition, on-road motorcycle dealerships may be affected by the proposed amendments.

The proposed amendments may result in increased costs to on-road motorcycle manufacturers and dealers. The complete cost analysis concerning the proposed exhaust emission standards is contained in the Staff Report. When the proposed amendments are fully phased in, the total annual manufacturers' cost is estimated at up to \$3.6 million. The overall cost increases are not expected to have a noticeable impact on the profitability or sales of affected manufacturers and dealers. Most manufacturers are expected to pass on the bulk of the cost increase to motorcycle

purchasers in the form of higher prices.

The proposed amendments are expected to affect the retail price of new on-road motorcycles purchased by California consumers to the extent manufacturers are able to pass on their cost increases to purchasers. If the entire costs of compliance are passed on to the consumer, we estimate a retail price increase from the proposed amendments of up to approximately \$200 per motorcycle, with an average of about \$100 per motorcycle. As the average retail price of an on-road motorcycle is currently about \$7,600, the cost increase on average represents less than a two percent increase in the price of new on-road motorcycles. The magnitude of this increase is generally not expected to significantly dampen consumer demand for new on-road motorcycles in California.

While no significant dampening of sales is expected, the projected higher prices resulting from staff's proposal may cause a slight decrease in new motorcycle sales. This could have a small negative effect on motorcycle dealers. However, the overall net effect, if any, is expected to be minor since motorcycle dealers also sell other products such as accessories, apparel, and other types of vehicles unaffected by staff's proposal.

The Executive Officer has determined that the proposed amendments would have no adverse economic impact on businesses including the ability of California businesses to compete with businesses in other states, as the proposed standards are anticipated to have only a minor impact on retail prices of new, on-road motorcycles. In addition, no impacts on competitiveness are expected since all manufacturers selling new, on-road motorcycles in California must meet the proposed standards, regardless of the manufacturers' location.

The proposed amendments are not expected to cause a noticeable change in California employment because California accounts for only a small share of on-road motorcycle and parts manufacturing employment. There could be a slight increase in California employment, as suppliers of parts that will be used to help meet the standards increase their production of such parts or their workforce to meet the demand. Also, to the extent manufacturers use contract laboratories located in California for bench testing or other research and development efforts, there could potentially be an increase in employment in California.

Other than the possible increase in the use of contract laboratories to conduct in-use testing, the proposed amendments are not expected to affect business creation, elimination or expansion.

The estimated statewide benefits of the proposal would be approximately 1.3 tpd HC and NO_x by 2010, and 2.9 tpd HC and NO_x by 2020. The estimated California cost-effectiveness of the staff's proposal would range from about \$3.00 to \$5.60 per pound of ROG + NO_x reduced, depending on the production and distribution strategy chosen by the manufacturers. This cost-effectiveness is within the range of other emission control measure costs.

Before taking final action on the proposed regulatory action, the Board must determine that no alternative considered by the agency 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

The public may present comments relating to this matter orally or in writing. To be considered by the Board, written submissions must be addressed to and received by the Clerk of the Board, Air Resources Board, P.O. Box 2815, Sacramento, CA 95812, no later than 12:00 noon, December 9, 1998, or received by the Clerk of the Board at the hearing.

The Board requests, but does not require, that 20 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing. 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 HEARING PROCEDURES

This regulatory action is proposed under that authority granted in California Health and Safety Code sections 39600, 39601, 43013, 43101, 43104, and 43107. This action is proposed to implement, interpret and make specific California Health and Safety Code sections 39002, 39003, 43000, 43013, 43100, 43101, 43104, 43107.

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Title 2, Division 3, Part 1, Chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with nonsubstantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications, including changes to proposed emission standards, if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice 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 the Board's Public Information office, 2020 L Street, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Michael P. Kenny
Executive Officer

Date: October 13, 1998