

TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER ADOPTION OF EMISSION STANDARDS AND TEST PROCEDURES FOR NEW 2003 AND LATER SPARK-IGNITION INBOARD AND STERNDRIVE MARINE ENGINES.

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 regulations for new spark-ignition inboard and sterndrive marine engines.

DATE: July 26, 2001

TIME: 9:00 a.m.

PLACE: Ramada Plaza Hotel
Whitcomb Ballroom
1231 Market Street
San Francisco, California 94103

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., July 26, 2001, and may continue at 8:30 a.m., July 27, 2001. This item may not be considered until July 27, 2001. Please consult the agenda for the meeting, which will be available at least 10 days before July 26, 2001, 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 July 12, 2001, at (916) 322-5594 or TDD (916) 324-9531 or (800) 700-8326 for TDD calls from outside the Sacramento area to ensure accommodation.

INFORMATIVE DIGEST OF PROPOSED ACTION/POLICY STATEMENT OVERVIEW

Sections Affected: Amendment to the following sections of title 13, California Code of Regulations and the documents incorporated by reference therein: chapter 2, Enforcement of Vehicle Emission Standards and Surveillance Testing; article 2.1, Procedures for In-Use Vehicle Voluntary and Influenced Recalls; sections 2111 and 2112; chapter 2, Enforcement of Vehicle Emission Standards and Surveillance Testing; article 2.3, In-Use Vehicle Enforcement Test Procedures; section 2139 and 2140; chapter 2, Enforcement of Vehicle Emission Standards and Surveillance Testing; article 2.4, Procedures for Reporting

Failures of Emission-Related Components; section 2147; chapter 9, Off-Road Vehicles and Engines Pollution Control Devices; article 4.7, Spark-Ignition Marine Engines; sections 2440-2446; and the incorporated "California Exhaust Emission Standards and Test Procedures for 2001 Model Year and Later Spark-Ignition Marine Engines;" and the adoption of chapter 9, Off-Road Vehicles and Engines Pollution Control Devices; article 4.7, Spark-Ignition Marine Engines; section 2444.2.

The California Clean Air Act, as codified in the Health and Safety Code sections 43013 and 43018, specifically mandated ARB to regulate off-road mobile sources of emissions. Included are marine vessels, locomotives, utility engines, off-road motorcycles, and off-highway vehicles. In 1998, the Board approved regulations to control emissions from spark-ignition personal watercraft and outboard marine engines. For these types of engines, the regulations became effective with the 2001 model year. The amendments proposed herein seek to reduce hydrocarbon (HC) emissions and oxides of nitrogen (NO_x) emissions from spark-ignition inboard and sterndrive marine engines, effective with the 2003 model year.

In crafting the proposal, ARB staff met with engine manufacturers and other interested parties in numerous individual and group meetings, including trips to marine engine manufacturing facilities, as well as conference calls. The staff also held a public workshop on September 19, 2000.

STAFF PROPOSAL

The proposal applies to spark-ignition inboard and sterndrive marine engines. Specifically, California's spark-ignition marine engine regulations would be amended to include inboard and sterndrive engines. Thus, these engines would be subject to exhaust emission standards, certification test procedures, on-board diagnostic systems, compliance provisions, consumer provisions such as environmental labeling, and warranty requirements.

The proposed exhaust emission standards are shown below in Table 1. The standards commence with the 2003 model year, followed by more stringent levels that are phased-in beginning in 2007.

Table 1.

Inboard and Sterndrive Exhaust Emission Standards	
Model Year	HC+NO_x (grams/kilowatt-hour)
2003	15.0 ⁽¹⁾
2007 ⁽²⁾	5.0

(1) Sales-weighted corporate average, through 2008 model year.

(2) Phased-in standard, reaching 100% compliance with 2009 model year.

Beginning with the 2003 model year, inboard and sterndrive marine engines must show compliance with the 15.0 grams per kilowatt-hour HC+NO_x standard. This standard will keep inboard and sterndrive marine engine exhaust emissions at or below existing levels. This standard, based on a corporate average methodology for demonstrating compliance, provides manufacturers flexibility to comply with the regulations. Additionally, crankcase emissions will no longer be vented into the ambient atmosphere.

With the 2007 model year, manufacturers must comply with the catalyst-based 5 grams per kilowatt-hour HC+NO_x standard. These standards are expected to require three-way catalyst, closed-loop technology to comply with the more stringent HC+NO_x standards. Specifically, for each engine manufacturer's California production, at least 10 percent of the engines in 2007, 50 percent in 2008, and 100 percent in 2009 and beyond would comply with the 5 grams per kilowatt-hour HC+NO_x standard. A phase-in provides industry with flexibility to develop these engines over a period of years.

Small volume manufacturers will have the option to delay compliance until 2009. Inboard and sterndrive engines rated over 373 kilowatts (500 horsepower) will also be exempted from the standards until 2009. Thus by 2009, all new engines produced for sale in California and not manufactured exclusively for competition would be subject to the more stringent exhaust emission standards.

The 2007 and later model year engines complying with the catalyst-based 5 grams per kilowatt-hour HC+NO_x standard will be required to incorporate a computer-controlled on-board diagnostic system. This type of system monitors the engine, identifies emission-related malfunctions, and stores retrievable data related to the malfunction (in the form of a diagnostic trouble code(s)) in the computer's memory so that the malfunctions can be corrected. In the event of a malfunction, the system will emit either an audio or visual alert.

Initially, the 2003-2008 model year inboard and sterndrive engines would be required to provide a two-year emissions defects warranty to the ultimate purchaser. By 2009, the engines would be warranted for three years. This warranty ensures that emission-related parts are free of defects.

Compliance of production engines subject to this rulemaking would be determined using selective enforcement audit (SEA) testing. Procedurally, this program is identical to that used by the United States Environmental Protection Agency (U.S. EPA) and, as the name implies, would be used when the Executive Officer has reason to believe that the emissions of the engines being produced during the production run may exceed the standards.

To ensure that 2009 and later model year engines are meeting the emission standards throughout their 480-hour/10-year compliance period; staff also proposes ARB's traditional in-use testing program. For any engine family selected for testing under this program, exhaust emission testing would be performed on an appropriate sample of in-use engines. If an engine family exceeds the applicable HC+NO_x standard on average, the manufacturer would be subject to recall provisions to remedy the noncompliance.

Staff is also proposing that inboard and sterndrive engines participate in the engine and environmental labeling programs for marine engines. The engine label identifies the engine as compliant with California regulations and may be used for enforcement purposes. The environmental labeling program denotes the relative level of emissions emitted by the engine. Currently, for personal watercraft and outboard marine engines, there are three tiers that represent graduated levels of reduced emissions. The proposal adds a fourth tier, which is appropriate for inboard and sterndrive engines certified to 2007 catalyst-based exhaust emission standards. Upon demonstration of compliance to the applicable emission standard, 2003 and later model year inboards and sterndrives shall display the corresponding emission label.

RELATED FEDERAL ACTIONS

In 1996, U.S. EPA adopted exhaust emission standards for personal watercraft and outboard marine engines. Although U.S. EPA has recently issued an Advance Notice of Proposed Rulemaking that seeks to include inboard and sterndrive marine engines, there currently are no federal regulations for these classes of engines.

BENEFITS OF THE PROPOSAL

The staff analysis indicates that by 2020, the proposal will reduce HC by 11 tons and NO_x by 45 tons per summer weekend day. The combined 56 tons per day reduction is equivalent to removing 1.6 million cars from the road in 2020. The combined HC+NO_x reductions would cost less than \$3.50 per pound reduced, which is within the range of cost-effectiveness of other ARB and district emission reduction programs.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the environmental and economic impacts of the proposal. The Staff Report is entitled, "PUBLIC HEARING TO CONSIDER ADOPTION OF EMISSION STANDARDS AND TEST PROCEDURES FOR NEW 2003 AND LATER SPARK-IGNITION INBOARD AND STERNDRIVE MARINE INBOARD ENGINES."

Copies of the Staff Report and the full text of the proposed regulatory language, in underline and strike-out format to allow for comparison with the existing regulations, may be obtained from the Public Information Office, Air Resources Board, 1001 "I" Street, Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990 at least 45 days prior to the scheduled hearing (July 26, 2001).

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 web site listed below.

Inquiries concerning the proposed administrative action or substance of the proposed regulations may be directed to the designated agency contact persons, Ms. Jackie Lourenco, Manager, Off-Road Controls Section of the Air Resources Board's Mobile Source Control Division at (626) 575-6676.

Further, the agency representative and designated back-up contact persons to whom inquiries concerning the proposed administrative action may be directed are Artavia Edwards, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-6070, 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 agency representatives.

If you are a person with a disability and desire to obtain this document in an alternative format, please contact the Air Resources Board ADA Coordinator at (916) 323-4916, or TDD (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on the ARB Internet site for this rulemaking at <http://www.arb.ca.gov/regact/marine01/marine01.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 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 section 11346.5(a)(6), to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary costs or savings to local agencies. However, the Air Resources Board may incur additional implementation or enforcement costs at some future time.

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

The Executive Officer has also determined that there will be no, or an insignificant cost impact on representative private persons or businesses resulting from the proposed action.

Furthermore, the Executive Officer has initially assessed that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within California, or the expansion of businesses currently doing business within California. An assessment of the economic impacts of the proposed regulatory action can be found in the Staff Report.

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

Finally, the Executive Officer has also determined that the proposed regulatory action may affect small businesses.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received **no later than 12:00 noon, July 25, 2001**, and addressed to the following:

Postal mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, California 95814

Electronic mail is to be sent to marine01@listserv.arb.ca.gov, facsimiles are to be sent to (916) 322-3928 and received at the ARB **no later than 12:00 noon, July 25, 2001**.

The Board requests but does not require 30 copies of any written submission. Also, the ARB requests that written, facsimile and e-mail statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The ARB 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

This regulatory action is proposed under that authority granted in Health and Safety Code sections 39600, 39601, 43013, 43018, 43101, 43102 and 43104. This action is proposed to implement, interpret and make specific Health and Safety Code sections 43013, 43017, 43018, 43101, 43102, 43104, 43105, 43150-43145, 43205.5 and 43210-43212.

HEARING PROCEDURES

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 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 that 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, 1001 "I" Street, Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Michael P. Kenny
Executive Officer

Date: May 29, 2001

"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 Web-site at www.arb.ca.gov."