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Air Resources Board

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Gray Davis
Governor

August 22, 2000

Mail Out # MSC 00-18

TO: MANUFACTURERS OF RECREATIONAL MARINE INBOARD AND
STERNDRIVE BOATS AND ENGINES
ALL OTHER INTERESTED PARTIES

SUBJECT: WORKSHOP TO DISCUSS PROPOSED SPARK-IGNITED INBOARD
MARINE ENGINE REGULATIONS

The staff of the Air Resources Board (ARB) will be holding a public workshop to discuss proposed regulations establishing emission standards and requirements for spark-ignited (SI) propulsion engines incorporated in recreational marine vessels (inboards and sterndrives). The proposed standards will include provisions for certification testing, production-line testing, defects warranty requirements, and in-use compliance testing and recall. The proposed standards will not affect inboard-mounted 2-stroke engines used in personal watercraft and mini jet boats. Those engines are covered under existing state emission regulations.

The workshop will be held at the following time and location.

Date: September 19, 2000
Time: 9:00 AM to Noon
Location: Air Resources Board
Annex IV Auditorium
9530 Telstar Avenue
El Monte, California
Staff Contact: Ben Hancock,
(626) 575-6805, bhancock@arb.ca.gov

At the workshop, the ARB staff will present an overview of the prominent regulatory issues as they are currently understood, and some of the options available for addressing those issues. The primary issues are:

- Emission standards—ARB staff plans to develop numerical standards for nitrogen oxide and non-methane hydrocarbon (NO_x+NMHC) emissions based on what is achievable with automobile-derived technologies. Staff is considering combined HC+NO_x emission levels of 7.0 grams per horsepower-hour (g/hp-hr) for new engines starting in 2003. This level is based on the

application of electronic fuel injection and exhaust-gas recirculation. Staff is considering an HC+NO_x emission limit of 3.0 g/hp-hr for new engines starting in 2007. This level is based on the application of three-way catalysts.

In addition, staff is seeking comments at this workshop on an alternative one-step approach. Staff is considering a 3.0 g/hp-hr HC+NO_x standard (catalyst-based level) beginning in 2005.

- Test-cycle—Staff suggests use of the ISO 8178 E4 cycle.
- Useful life—For emissions compliance, staff is considering a useful life of 1250 hours or 16 years.
- On-board emission control system malfunction indication—Staff is proposing that boat-makers install malfunction-indication lights on the dashboard to alert operators to malperformance of the catalyst, the EGR valve, and the air-fuel ratio controller implemented at the same time as the particular technology requirement.
- Small-business provisions—Staff is proposing to delay implementation dates for engine marinizers which have sales less than 2000 engines per year in the entire United States.
- Emission warranty requirements—Staff is proposing that marinizers warrant the emission-related parts for 50% of useful life of the boat engine, and warrant high-cost emission-related parts for 70% of useful life.
- Other issues include production assembly-line testing requirements using the EPA “cum-sum” method, in-use testing requirements according to the ARB method, and anti-tampering provisions.

The regulations to be proposed to the Board for its approval in 2001 will be based on the most promising of these options, modified, as appropriate, to respond to public comments or concerns expressed at the workshop or at other times. The ARB encourages all interested parties to present comments and information on the subject of standards and regulations at this workshop and to be prepared to discuss technical issues. Those who are unable to participate in person in the workshop process or who wish to supply additional information are encouraged to submit written comments by October 10. Workshop participants who wish to discuss confidential data may schedule individual meetings following the workshop. Participants who wish to be tied in to the workshop by conference phone can contact Ben Hancock at (626) 575-6805 to arrange this.

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An electronic version of this notice and draft Proposed Regulation and Proposal Summary will be available on the Air Resources Board's web page at www.arb.ca.gov under the "Mobile Sources Program" heading.

Persons with disabilities who require accommodation are requested to contact Angela Iniguez at (626) 575-6632 or (800) 700-8326 (Telecommunications Device for the Deaf or TDD) by September 15, 2000.

The public board hearing for this regulatory item has been tentatively set for Spring 2001. If you have any questions or comments regarding this subject, please contact Ms. Jackie Lourenco, Manager, Off-Road Controls Section, at (626) 575-6676, or by mail at Air Resources Board, MSCD, 9528 Telstar Avenue, El Monte, CA 91731.

Sincerely,

Robert H. Cross, Chief
Mobile Source Control Division