

TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADOPTION OF A PROPOSED AIRBORNE TOXIC CONTROL MEASURE FOR PORTABLE DIESEL-FUELED ENGINES

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adopting an airborne toxic control measure (ATCM) to reduce public exposure to diesel particulate matter (PM) emitted from portable diesel-fueled engines (proposed ATCM).

DATE: February 26, 2004

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Central Valley Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the ARB, which will commence at 9:00 a.m., on February 26, 2004, and may continue at 8:30 a.m., on February 27, 2004. This item may not be considered until February 27, 2004. Please consult the agenda for the meeting, which will be available at least 10 days before February 26, 2004, to determine the day on which this item will be considered.

If you have special accommodation or language needs, please contact the ARB's Clerk of the Board at (916) 322-5594 or sdorais@arb.ca.gov as soon as possible. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed adoption of sections 93116, 93116.1, 93116.2, 93116.3, 93116.4, and 93116.5, title 17, California Code of Regulations (CCR).

Background: In 1998 the Board identified diesel PM emissions from diesel-fueled engines as a toxic air contaminant (TAC). In September 2000, the Board approved the Diesel Risk Reduction Plan, which outlined steps that would be taken to reduce diesel emissions from both new and existing diesel-fueled engines and vehicles, including portable engines. The ultimate goal of the Diesel Risk Reduction Plan is to reduce California's diesel PM emissions and associated cancer risks by 85 percent by 2020.

Unlike stationary engines, portable engines may be moved readily from one location to another. The engines are used to power a variety of equipment, including pumps

(e.g., agricultural irrigation pumps and other water pumps), ground support equipment at airports, cranes, oil-well drilling and workover rigs, power generators, dredging equipment, rock crushing and screening equipment, welding equipment, woodchippers, and compressors. Portable diesel engines emit approximately 1,500 tons per year of diesel PM. These engines are distributed throughout California, and many are located in urban centers where the population is exposed to diesel PM emissions.

The proposed ATCM is designed to minimize the public's exposure to diesel PM emitted from diesel-fueled portable engines. Health and Safety Code (H&SC) sections 39666 and 39667 require the ARB to adopt regulations to achieve the maximum possible reduction in public exposure to TACs through the application of best available control technology (BACT), or a more effective control method, in consideration of cost, risk, environmental impacts, and other specified factors.

Furthermore, the Children's Environmental Health Protection Act (Stats. 1999, Ch. 731) requires the California Environmental Protection Agency to specifically consider children in setting Ambient Air Quality Standards and in developing criteria for TACs. The Office of Environmental Health Hazard Assessment (OEHHA) identified diesel PM and several other TACs associated with motor vehicle exhaust among the top priority pollutants affecting children's health.

The ARB staff has prepared an Initial Statement of Reasons (ISOR) for the proposed ATCM that, together with the needs assessment (Diesel Risk Reduction Plan), serves as the report on the need and appropriate degree of regulation for diesel-fueled portable engines.

EXISTING FEDERAL AND STATE REGULATIONS

There are no federal regulations that are comparable to the proposed ATCM. However, since January 1, 1996, new portable engines sold in California have been subject to ARB's Off-Road Compression Ignition emission standards (title 13, CCR, sections 2320 et seq.), which are equivalent to the United States Environmental Protection Agency (U.S. EPA) emission standards for newly manufactured nonroad engines (40 CFR, Part 89). There are currently three tiers of standards; Tier 1, 2, and 3. The U.S. EPA proposed Tier 4 emission standards in April 2003, which will, if adopted, require most engines to meet more stringent emission limits in the 2011-2014 timeframe.

The ARB currently administers a Statewide Portable Equipment Registration Program (PERP; title 13, CCR, sections 2450-2466) that allows portable-engine owners to voluntarily register their engines with the State in lieu of obtaining operating permits from the local air pollution control and air quality management districts (districts). By January 1, 2010, only engines certified to U.S. EPA/ ARB off-road engine emission standards (Tier 1, 2, or 3) can be registered under PERP.

Description of the Proposed Regulatory Action

Applicability and Requirements

The proposed ATCM would affect all diesel-fueled portable engines that are larger than 50 horsepower (hp). The proposed ATCM would require all portable engines to be certified to Tier 1, 2, or 3 U.S. EPA/ARB off-road engine standards by 2010, as is currently required for engines registered in the PERP. After 2010, it would require all fleets of portable engines to meet diesel PM emission averages that become more stringent in 2013, 2017, and 2020. The owners/operators of these fleets will have flexibility in determining how the fleet emission standards are to be satisfied. Options that are available to satisfy this standard include replacing engines, using add-on control devices, switching to alternative fuels or alternative diesel fuels, and receiving credit for electrification. By 2020, the proposed ATCM would require diesel-fueled portable engines to either:

- 1) be certified to Tier 4 emission standards for newly manufactured off-road engines; or
- 2) be equipped with a diesel PM control technology that has been verified by the ARB under its Verification Procedure for diesel PM control technologies (title 13, CCR sections 2700-2710) to reduce diesel PM emissions by 85 percent (Level-3 Verification), or equipped with a combination of verified control technologies that cumulatively achieve 85 percent diesel PM reduction.

Fleet Requirements

In addition to the requirements outlined above, portable engines will be subject to the following fleet weighted standards starting in 2013 and becoming progressively more stringent in 2017 and 2020. Fleet weighted diesel PM standards are proposed for engines less than 175 horsepower (hp), engines between 175 hp and 749 hp, and engines greater than or equal to 750 hp.

Fleet Standard Compliance Date	Diesel PM Standard (g/bhp-hr) for Engines <175 hp	Diesel PM Standard (g/bhp-hr) for Engines 175 hp to 749 hp	Diesel PM Standard (g/bhp-hr) for Engines ≥ 750 hp
1/1/13	0.3	0.15	0.25
1/1/17	0.18	0.08	0.08
1/1/20	0.04	0.02	0.02

Owners of portable engine fleets will determine compliance with the proposed fleet standard by comparing the fleet's actual weighted diesel PM emission rate with the fleet emission standard.

Engines that are used exclusively in emergency applications or meet the requirements for low-use engines must be certified to U.S. EPA/ARB off-road engine standards by

2010 but are not subject to the fleet emission standards in 2013 or 2017. These engines would be required by January 1, 2020, to be certified to Tier 4 engines standards, or be equipped with a Level-3 diesel PM control technology, or a combination of verified control technologies to achieve a 85 percent diesel PM reduction.

Incentives

The proposed ATCM provides several incentives to encourage repowering or replacement of older engines with new, lower-emitting engines as part of the fleet reduction approach. Credits are being proposed for satisfying a fleet standard for adding alternative-fueled engines to the fleet, replacing diesel-fueled engines with electrification, and early replacement of older engines with Tier 4 engines.

Recordkeeping and Reporting Requirements

Specific recordkeeping requirements address only those engines in a fleet whose use is based on hourly limitations, fleets taking advantage of the electrification incentive, and engines equipped with Selective Catalytic Reduction (SCR). All fleet owners will have to submit a status report to the ARB by March 1, 2011, that includes the fleet's average diesel PM emission rate for the 2010 calendar year, information identifying each engine in the fleet, and each engine's emission rate. In addition, fleet owners must submit signed statements of compliance and corroborating data indicating that they are meeting the fleet standards by March 1 of each applicable year (i.e., 2013, 2017, 2020).

Exemptions

Engines that would be exempt from the proposed ATCM include: engines less than or equal to 50 hp, engines used to propel mobile equipment or motor vehicle; portable equipment that is owned by the United States Department of Defense and used in combat, combat support, tactical or relief operations, or training for such operations (military tactical support equipment); and portable engines used at San Clemente or San Nicolas Island.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The Board staff has prepared an ISOR for the proposed regulatory action, which includes a summary of the potential environmental and economic impacts of the proposal, if any. The ISOR is entitled, "Staff Report: Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Greater Than 50 Horsepower."

Copies of the ISOR and the full text of the proposed regulatory language may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing, which will begin on February 26, 2004.

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 web site listed below.

Inquiries concerning the substance of the proposed regulations may be directed to the designated agency contact persons, Mike Waugh, Manager of the Program Assistance Section, at (916) 445-6018, or by email at mwaugh@arb.ca.gov, or Grant Chin, Staff Air Pollution Specialist, at (916) 327-5602, or by email at gchin@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 Artavia Edwards, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-6070, and Alexa Malik, Regulations Coordinator, (916) 322-4011. 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.

If you are a person with a disability and desire to obtain this document in an alternative format, please contact the ARB's Clerk of the Board at (916) 322-5594 or sdorais@arb.ca.gov as soon as possible. TTY/TDD/Speech-to-Speech users may dial 7-1-1 for the California Relay Service

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/porteng/porteng.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 section 11346.5(a)(5), the Executive Officer has determined that the proposed regulations will possibly impose a mandate on local agencies. The Executive Officer has further determined pursuant to Government Code section 11346.5(a)(6) that the proposed regulations will result in some additional costs to the Air Resources Board and other state agencies. In addition, the Executive Officer has also determined pursuant to Government Code section 11346.5(a)(6) that the proposed regulatory action will possibly create a cost to local agencies that are required to be reimbursed under Part 7 (commencing with section 17500) of division 4 of the Government Code or other nondiscretionary costs or savings imposed on local agencies. The Executive Officer further determines that the proposed regulations will result in some additional cost to federal agencies in the state.

The Executive Officer has made an initial determination that 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, or on representative private persons.

The Executive Officer has determined that the total lifetime cost of the proposed ATCM to affected businesses will vary between \$290 and \$340 million, in 2002 expenditure equivalent dollars. This value represents the total cost of the regulation if all money required to comply with the proposed ATCM were spent today. On an annual basis, the cost will vary between \$2 to \$29 million per year, averaging \$12 million per year. The total cost to a typical business (a fleet of fifteen engines), including capital and ongoing costs, is estimated to be between \$226,000 and \$238,000, in 2002 expenditure equivalent dollars. Annual costs would vary between \$1,500 and \$17,000 per year, with an average cost of \$8,200 per year.

The Executive Officer has determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will have some impact on small businesses. The ARB staff believes that approximately 10 percent of portable engines are owned by small businesses. The ARB staff estimates that the total cost, including capital and ongoing costs, to a typical small business (a fleet of five or less engines) to be between \$30,000 and \$38,000, in 2002 expenditure equivalent dollars. Annual costs would vary between \$400 and \$5,200 per year, with an average cost of \$2,000 per year.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

In accordance with Government Code sections 11346.3 and 11346.5(a)(10), the Executive Officer has determined that the proposed regulatory action may lead to creation or elimination of some businesses, 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. Due to the long lead-time for compliance, we believe that most businesses will be able to absorb the compliance costs. However, it is possible that a small number of businesses (those with marginal profitability) may experience financial difficulty in complying with the regulation. Businesses that may be created in the short term include those that package engines and install engines. In the long term, engine manufacturers and businesses that sell and maintain diesel emission control systems are likely to see an increase in business due to early engine replacement and other options available to meet the proposed diesel PM standard requirements. In addition, the cost of complying with the proposed ATCM may encourage some fleet owners to replace engines with rented engines, which could lead to an increase of engine rental businesses.

The Executive Officer has determined the total capital outlay for complying with the proposed ATCM for local agencies will be between \$102 million and \$147 million, in

2002 expenditure equivalent dollars. Annual outlay will vary between \$2 million and \$13 million. The initial outlay will not be necessary until fiscal year 2008-2009. These costs are not reimbursable state mandated costs pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code because most, if not all, of these agencies are authorized to collect fees to recoup their costs under section 17500 et seq. of the Government Code, and the ATCM applies to all entities that own or operate portable engines and, therefore does not impose unique requirements on local government agencies.

The Executive Officer has also determined that the total cost for complying with the proposed ATCM for State agencies will be between \$7 million and \$11 million, in 2002 expenditure equivalent dollars. Annual outlay will vary between \$0.1 million and \$1 million. Initial outlay will not be necessary until fiscal year 2008-2009. Given the current fiscal and economic conditions, the Executive Officer cannot determine with certainty whether State agencies will be able to absorb these additional costs within current or future budgets, but it is anticipated that the agencies will be able to absorb annualized costs of this magnitude, given the extended period allowed for compliance.

The Executive Officer has also determined that the total cost for complying with the proposed ATCM for federal agencies will be between \$2.0 million and \$2.9 million, in 2002 expenditure equivalent dollars. Annual outlay will vary between \$30,000 and \$250,000. Initial outlay will not be necessary until fiscal year 2008-2009.

The Executive Officer has determined that individual local air districts may incur some permitting and enforcement costs as a result of implementing the proposed ATCM. However, the costs incurred by the air districts should be recovered through permit fees or fees imposed under the Statewide Portable Equipment Registration Program.

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 that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

In accordance with H&SC section 43013(c), the Executive Officer has determined that the standards and other requirements in the proposed ATCM are necessary, cost-effective, and technologically feasible for agricultural operations (i.e., farm equipment).

A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

Consideration of Alternatives

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of 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 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, February 25, 2004**, 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: porteng@listserv.arb.ca.gov, and received at the ARB **no later than 12:00 noon, February 25, 2004**.

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB **no later than 12:00 noon, February 25, 2004**.

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 AND REFERENCES

This regulatory action is proposed under the authority granted to the ARB in Health and Safety Code sections 39600, 39601, 39650, 39658, 39659, 39665, 39666, 41511, 41752, 43013, and 43018. This action is proposed to implement, interpret, or make specific Health and Safety Code sections 39002, 39650, 39658, 39659, 39665, 39666, 40000, 41511, 41752, 43013, and 43018.

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 ARB 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 that the regulatory language as modified could result from the proposed regulatory action. In the event that such modifications are made, 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 ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Catherine Witherspoon
Executive Officer

Date:

"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."