

State of California  
AIR RESOURCES BOARD

Resolution 04-7

February 26, 2004

Agenda Item No: 04-2-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or 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, under section 39650 of the Health and Safety Code, the Legislature finds and declares that it is the public policy of the state that emissions of toxic air contaminants should be controlled to levels which prevent harm to the public health;

WHEREAS, on August 27, 1998, the Board identified diesel exhaust particulate matter as a toxic air contaminant pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, in identifying diesel exhaust particulate matter as a toxic air contaminant, the Board determined that there is not sufficient scientific evidence to support identification of a threshold level for diesel exhaust particulate matter below which no significant adverse health effects are anticipated (as codified in title 17, California Code of Regulations, section 93000);

WHEREAS, pursuant to section 39669.5(a) of the Health and Safety Code, the Office of Environmental Health Hazard Assessment listed diesel exhaust particulate matter as possibly causing infants and children to be especially susceptible to illness;

WHEREAS, pursuant to section 39665 of the Health and Safety Code, the Air Resources Board staff prepared a comprehensive risk reduction plan to significantly reduce diesel exhaust particulate matter emissions from diesel-fueled engines and vehicles, which the Board approved on September 28, 2000;

WHEREAS, sections 39658 and 39666 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCMs) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, for toxic air contaminants for which the Board has not specified a threshold exposure level, section 39666 of the Health and Safety Code requires ATCMs to be designed to reduce emissions to the lowest level achievable through the application of best available control technology (BACT) or a more effective control method, considering factors specified in section 39665, unless the Board determines, based on

an assessment of risk, that an alternative level of emissions reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, section 43013(b) of the Health and Safety Code additionally requires the Board, consistent with section 43013(a), to adopt standards and regulations for controlling air pollution from nonvehicle engine categories;

WHEREAS, section 43013(c) of the Health and Safety Code requires the Board, prior to adopting standards and regulations for farm equipment, to hold a public hearing and find and determine that the standards and regulations are necessary, cost-effective, and technologically feasible;

WHEREAS, the ARB staff has worked closely with the air pollution control districts and air quality management districts (districts), the affected industry, and the public, as required by Health and Safety Code section 39665, to prepare a report on the need for, and appropriate degree of, control of toxic air contaminants;

WHEREAS, diesel-fueled portable engines and associated equipment are a source of diesel exhaust particulate matter;

WHEREAS, ARB staff has determined that existing federal, State and local regulations do not sufficiently protect the public from diesel exhaust particulate matter associated with diesel-fueled portable engines;

WHEREAS, the diesel exhaust particulate matter risk reduction plan included recommendations for reducing emissions, exposure, and associated potential cancer risk from diesel-fueled portable engines;

WHEREAS, the ARB staff has prepared a report entitled, Staff Report: Initial Statement of Reasons for Proposed Rulemaking – Airborne Toxic Control Measure for Diesel-Fueled Portable Engines, which was released on January 9, 2004 (hereinafter referred to as the ISOR);

WHEREAS, the ARB staff has proposed an ATCM for diesel-fueled portable engines, as set forth in Attachment A, which was developed through the sharing of information and discussions of concepts and draft versions that were made available to the public for review and comment at four public meetings and six public workgroup meetings;

WHEREAS, in accordance with Health and Safety Code section 39665(c), the ISOR and relevant comments received during public consultation with the districts, affected sources, and the public were made available for public review and comment 45 days prior to the public hearing to consider the proposed ATCM;

WHEREAS, the ISOR further discussed, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b) in adopting the diesel exhaust particulate matter risk reduction plan, including: estimates of emissions, exposure, and potential cancer risk due to the operation of diesel-fueled

portable engines, feasible control options, potential environmental impacts, and cost of compliance for private, federal, State and local public agency facilities operating portable engines;

WHEREAS, the staff has now proposed adoption of title 17, California Code of Regulations (CCR), sections 93116 - 93116.5 and concluded that compliance with the following requirements would reduce diesel exhaust particulate matter emissions and associated cancer and other adverse health effects statewide:

All portable engines 50 horsepower and greater be certified to a new nonroad engine emission standard (Tier 1, 2, or 3) by 2010; and

Fleets of portable engines 50 horsepower and greater meet weighted particulate matter emission standards that become more stringent in 2013, 2017, and 2020;

WHEREAS, the Board has considered the impact of the proposed ATCM on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, the California Environmental Quality Act, section 21080.5 of the Public Resources Code, and Board regulations, title 17, CCR, section 60006, require that no project which 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;

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, the Board finds that:

Adverse health and environmental impacts result from the emissions of diesel exhaust particulate matter from diesel-fueled portable engines, and mitigation measures are necessary to reduce emissions of these toxic air contaminants;

Excessive diesel exhaust particulate matter emissions from diesel-fueled portable engines are a significant source of toxic air contaminants, which contribute significantly to serious air pollution in local communities and across the State;

The ATCM would be consistent with ARB's environmental justice policy by reducing health risks from diesel exhaust in all communities where diesel-fueled portable engines are operated, including those with low-income and minority populations;

Adoption of the ATCM is not expected to result in any significant adverse environmental impact; any potential adverse environmental impacts, including the possible increase of nitrogen dioxide (NO<sub>2</sub>) in some passive catalyzed filters and

zinc-containing ash collected from diesel particulate filters, which is expected to be minimal; and

The considerations identified above override any adverse environmental impacts that may occur as a result of increased NO<sub>2</sub> or zinc in the ash waste, and no feasible alternatives or mitigation measures would reduce the potential adverse environmental impacts while at the same time providing the benefits described above;

WHEREAS, based on the Initial Statement of Reasons (ISOR) and the written comments and public testimony it has received, the Board further finds that:

In accordance with Health and Safety Code 39666, the fleet weighted particulate matter emission standards adopted herein are based on utilization of the best available control technology (BACT) identified within the time scheduled for compliance;

In accordance with Health and Safety Code section 43013(c), the standards and other requirements in the ATCM are necessary, cost-effective, and technologically feasible for diesel-fueled portable engines used in agricultural operations;

The ATCM could result in increased amounts of nitrogen dioxide (NO<sub>2</sub>) emissions in some passive catalyzed filters, but no significant adverse environmental impacts would result because for those engines retrofitted with verified diesel particulate filters, the NO<sub>2</sub> emissions are capped by the Board-approved Verification Procedure (title 13, California Code of Regulations, section 2700 et seq.); any ash cleaned from diesel particulate matter filters, if determined to contain zinc or other elements in sufficient concentration to characterize the ash as a hazardous waste, may be disposed of as a hazardous waste pursuant to State and federal law; any increases in sulfate particulate caused by the use of diesel oxidation catalysts are minimized by the use of California low sulfur diesel fuel; and the disposal of diesel oxidation catalysts, if considered to be hazardous waste, are minimized by the usual industry practice of recycling catalysts for their precious metal content;

There are no feasible mitigation measures or alternatives that would further reduce any potential adverse environmental impacts, while at the same time ensuring that the long-term benefits of the program would be achieved;

Existing federal, State and local regulations do not sufficiently protect the public health from diesel exhaust particulate matter associated with operating diesel-fueled portable engines;

The proposed ATCM will significantly reduce diesel exhaust particulate matter emissions and associated risks from diesel-fueled portable engines;

The economic impacts of the proposed ATCM have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR;

The reporting requirements applicable to businesses under section 93116.4, title 17, CCR, are necessary for the health, safety, and welfare of the people of the State;

The benefits of the proposed ATCM to public health and the environment justify the costs of compliance, implementation, and enforcement; and

No alternative considered would be more effective at carrying out the purpose for which the ATCM is proposed, or be as effective and less burdensome to the affected private persons and businesses than the ATCM.

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer to adopt new sections 93116 – 93116.5, title 17, California Code of Regulations, with the modifications approved by the Board as set forth in Attachment B hereto and such other conforming modifications as may be appropriate, after making the modified regulatory language available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make further modifications as may be appropriate in light of the comments received or as necessary to ensure consistency with the modifications approved by the Board, and shall bring any proposed changes to the Board for further consideration if the Executive Officer believes that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that pursuant to Title II, section 209(e)(2) of the federal Clean Air Act, as amended in 1990, that the emission standards and other requirements related to the control of emissions adopted as part of this ATCM are, in the aggregate, at least as protective of public health and welfare as applicable federal standards, that California needs the adopted standards to meet compelling and extraordinary conditions, and that the adopted standards and accompanying enforcement procedures are consistent with the provisions of section 209.

BE IT FURTHER RESOLVED that the Board directs the Air Resources Board staff to:

Pursuant to the determination set forth above, file a request for authorization from the United States Environmental Protection Agency pursuant to section 209(e)(2) of Title II of the federal Clean Air Act as amended in 1990;

Identify, in coordination with the districts, affected portable engine owners that have not obtained district permits;

Develop an outreach program for all sectors of affected industry and the public to educate them on the requirements and effective dates of the ATCM;

Send the adopted ATCM to the districts for implementation and enforcement and provide assistance to the districts in implementing and enforcing the ATCM; and

Closely monitor the progress and development of emission control technologies as they apply to the emission standards set forth in the ATCM, monitor the progress of engines meeting the United States Environmental Protection Agency's proposed Tier 4 new nonroad engine emission standards, and report back to the Board in 2008 on staff's conclusions regarding the feasibility of the standards in the time provided in the ATCM.

I hereby certify that the above is a true and correct copy of Resolution 04-7, as adopted by the Air Resources Board.

---

Lori Andreoni, Clerk of the Board

Resolution 04-7

February 26, 2004

**Identification of Attachments to the Resolution**

Attachment A: The Proposed Airborne Toxic Control Measure Diesel-Fueled Portable Engines, as set forth in Appendix A to the Staff Report (released January 2004).

Attachment B: Staff Proposed Changes to the Proposed Airborne Toxic Control Measure Diesel-Fueled Portable Engines, as set forth in Appendix A to the Staff Report (released January 2004).