

State of California  
AIR RESOURCES BOARD

Resolution 05-62

December 8, 2005

Agenda Item No.: 05-12-4

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, section 39002 of the Health and Safety Code provides that the control of air pollution from vehicular sources, except as otherwise provided in Division 26 of the Health and Safety Code, shall be the responsibility of ARB;

WHEREAS, section 41511 of the Health and Safety Code provides that for the purpose of carrying out its duties, ARB may adopt rules and regulations to require the owner or the operator of any pollution emission source to take such action as ARB may determine to be reasonable for the determination of the amount of emissions from such source;

WHEREAS, in section 43000 of the Health and Safety Code, the Legislature has declared that the emissions of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the State; also, the State has the responsibility to establish uniform procedures for compliance with standards which control or eliminate those air pollutants, vehicle emission standards apply to new and used motor vehicles equipped with motor vehicle pollution control devices;

WHEREAS, sections 43013(a) and 43101 of the Health and Safety Code authorize the Board to adopt motor vehicle emission standards and in-use performance standards, and test procedures, which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, sections 43013(b) of the Health and Safety Code, authorizes ARB, consistent with 43013(a), to adopt standards and regulations for light-, medium-, and heavy-duty vehicles and off-road engine categories;

WHEREAS, section 43018 of the Health and Safety Code further directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources to accomplish the attainment of State ambient air quality standards by the earliest practicable date and to adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles;

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 that prevent harm to the public health;

WHEREAS, on August 27, 1998, the Board identified emissions from diesel fueled engines (diesel PM) as a toxic air contaminant pursuant to article 3 (commencing with section 39650), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, in identifying diesel PM matter as a toxic air contaminant, the Board determined, pursuant to section 39662 of the Health and Safety Code, that there is not sufficient scientific evidence to support identification of a threshold level below which no significant adverse health effects are anticipated; this is codified in title 17, California Code of Regulations (CCR), section 93000;

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

WHEREAS, pursuant to section 39665 of the Health and Safety Code, ARB staff prepared a comprehensive risk reduction plan (Diesel Risk Reduction Plan) to significantly reduce PM emissions from diesel-fueled engines and vehicles, which the Board approved on September 28, 2000;

WHEREAS, sections 39658, 39665, 39666, and 39667 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCM) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, in fulfilling the requirements of the aforementioned sections set forth in the paragraph immediately above, the Board is required to consider adoption of an ATCM for all sources to achieve the maximum possible reduction in public exposure based on its prior determination not to specify a threshold exposure level for diesel PM under section 39662 of the Health and Safety Code;

WHEREAS, an ATCM for an existing source, developed pursuant to section 39667 of the Health and Safety Code, is required to be based on application or utilization of the best available control technologies (BACT) or more effective control methods, unless the Board determines, based on an assessment of risk, that an alternative level of emission reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, sections 39674, 39675, 42400, 42400.1, 42400.2, 42400.3, 42400.4, 42400.8, 42402, 42402.1, 42402.3, 42402.4, 42403, 42410, 43016 and 43017 of the Health and Safety Code authorize the Board to request that state and local prosecutors seek criminal prosecution, civil and administrative penalties, and injunctive relief for violations of adopted ARB regulations and ATCMs;

WHEREAS, diesel-fueled engines associated with mobile cargo handling equipment are sources of diesel PM;

WHEREAS, to augment the general information and recommendations provided in the Diesel Risk Reduction Plan, ARB staff met and worked with affected private industry, federal, State, and local public agencies, and the public;

WHEREAS, with the information and comments received from such meetings, ARB staff prepared a report, entitled "Staff Report: Initial Statement of Reasons for Proposed Rulemaking – Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards," released October 21, 2005 (ISOR);

WHEREAS, the ISOR further identified and explained the need and appropriate degree of regulation for diesel PM that was earlier addressed in the Diesel Risk Reduction Plan required by Health and Safety Code section 39665(a);

WHEREAS, the ISOR discussed, to the extent data were reasonably available, the factors specified in Health and Safety Code section 39665(b) in adopting the Diesel Risk Reduction Plan, including: estimates of emissions, exposure, and potential health effects due to the operation of diesel-fueled engines associated with mobile cargo handling equipment, feasible control options, potential environmental impacts, cost of compliance for all owners and/or operators of mobile cargo handling equipment at ports and intermodal rail yards, and cost impacts for ARB implementation of the proposed regulation;

WHEREAS, the ISOR presents staff's proposal that the Board adopt a proposed regulation for mobile cargo handling equipment at ports and intermodal rail yards, title 13, CCR, section 2479, as set forth in Attachment A to the ISOR and Attachment A hereto; staff concluded that the proposed regulation would reduce diesel PM and oxides of nitrogen (NOx) emissions and associated cancer and other adverse health effects statewide and significantly reduce such emissions and adverse health effects near California's ports and intermodal rail yards where mobile cargo handling equipment operate;

WHEREAS, concepts and draft proposals regarding the proposed regulation were discussed at six public workshops, four public workgroup meetings, and five public outreach meetings;

WHEREAS, in accordance with the authority set forth above, staff evaluated various control options, including:

Reliance on existing new engine standards and voluntary programs with no additional control of in-use cargo handling equipment engines; and

Adopting requirements for yard trucks only and not addressing the non-yard truck equipment;

WHEREAS, staff estimated the overall cost effectiveness associated with compliance with the proposed regulation to be approximately \$41 per pound of diesel PM reduced, or with reductions of NOx included, \$21 per pound of diesel PM reduced and \$1 per pound of NOx reduced;

WHEREAS, no significant compliance costs are expected for federal, State, or local public agencies because few of these agencies own or operate mobile cargo handling equipment that would be subject to the proposed regulation;

WHEREAS, some initial costs associated with implementation and enforcement of the proposed regulation are expected to be incurred by ARB, which may include the addition of two to three personnel, depending on the compliance routes chosen;

WHEREAS, the California Environmental Quality Act (CEQA), section 21080.5 of the Public Resources Code and Board regulations at title 17, CCR, section 60006 require that no project that 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 definitions of vehicular source, motor vehicle, and vehicle respectively set forth in sections 39060, 39040, and 39059 of the Health and Safety Code, most, if not all, cargo handling equipment are vehicular sources that fall exclusively within the jurisdiction of ARB;

To the extent that some mobile cargo handling equipment could be considered nonvehicular sources, ARB has authority under sections 39666, 43013(b), and 43018 to adopt the proposed regulation;

WHEREAS, in consideration of the ISOR, written comments, and public testimony it has received, the Board finds that:

Adverse health and environmental impacts result from the emissions of diesel PM and NOx from mobile cargo handling equipment operation at ports and intermodal rail yards, and mitigation measures are necessary to reduce emissions of these air contaminants;

The proposed regulation is expected to provide flexibility in the choice of compliance options to control emissions, reduce exposure, and protect health more effectively than any other possible alternative evaluated in accordance with the authority vested under the Health and Safety Code by requiring that, on or after January 1, 2007, the owners or operators of newly purchased, leased or rented mobile cargo handling equipment (i.e., equipment acquired and placed into service after December 31, 2006) will be required to have the equipment meet the following emission standards:

Yard trucks must be equipped with 2007 or later model-year certified on-road engines for the year of manufacture of the vehicle or, when available, engines certified to the Tier 4 off-road emission standards;

Non-yard truck cargo handling equipment must be equipped with certified Tier 4 off-road engines or the highest certified tier level available for a specific type of equipment, and if Tier 4 engines are not available, the engines must be equipped with the most stringent diesel emission control strategies (VDECS);

To meet the objectives set forth above, the proposed regulation appropriately further requires that on or after January 1, 2007, owners and operators of in-use mobile cargo handling equipment (i.e., equipment that was part of an owner's or operator's port terminal or intermodal rail yard fleet on or before December 31, 2006) must begin phasing in a selection of engine emission standards based on BACT:

For yard trucks, BACT will be determined by, among other things, the specific model year of the engine, whether the engine was certified as on-road or off-road, the size of the in-use fleet, and whether VDECS had been installed on the engine prior to December 31, 2006;

For non-yard truck mobile cargo handling equipment, BACT will be determined, from among other things, the category of the non-yard truck mobile cargo handling equipment, the size of the in-use fleet, and the model year of the engine;

For purposes of the health, safety, and welfare of the people of California, the proposed regulation appropriately requires that owners and operators of mobile cargo handling equipment comply with the following compliance schedule:

By December 31, 2006, start maintaining detailed records of their new and in-use cargo handling fleets;

By January 31, 2007, and before each and every applicable compliance date thereafter, submit a compliance plan demonstrating the control strategy used for each identified cargo handling equipment subject to the regulation;

By January 31, 2007, and by every January 31 thereafter through 2016, submit an annual report including company contact information and the location of the port or intermodal rail yard at which covered equipment is operated;

The proposed regulation would reduce exposure to potential diesel PM emissions and associated cancer and other adverse health effects in all communities near ports and intermodal rail yards where mobile cargo handling equipment operate;

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

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

No alternatives considered or that have otherwise been identified and brought to the attention of ARB would be more effective carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to the affected private businesses and public agencies than the proposed regulation;

WHEREAS, the Board further finds, in accordance with Health and Safety Code section 39650(e), that while absolute and undisputed scientific evidence may not be available to determine the exact risk from diesel PM from diesel-fueled engines associated with mobile cargo handling equipment, it is necessary to take action to protect public health and that the maximum feasible emission reductions permitted by law should be obtained;

WHEREAS, pursuant to Health and Safety Code section 39667, the Board further finds that the proposed in-use emission standards approved herein are based on utilization of BACT identified within the time scheduled for compliance;

WHEREAS, pursuant to section 43013(a) and (b) of the Health and Safety Code, the Board further finds that the in-use emission standards approved herein are necessary, cost-effective, and technologically feasible within the time provided for compliance; and

WHEREAS, the Board further finds based on its independent judgment and analysis of the entire record before it that:

With respect to the requirements of CEQA, the proposed regulation will not have a significant adverse effect on the environment, but will result in the reduction of diesel PM and NOx;

Having determined that the proposed regulation will not adversely affect the environment, but rather provide environmental benefits that are achieved both statewide and locally, the proposed regulation should not adversely impact any community in the State, especially low-income or minority communities;

WHEREAS, section 209(b) of the federal Clean Air Act (CAA) requires that California request a waiver from the U.S. Environmental Protection Agency (U.S. EPA) prior to enforcing emission standards or other requirements relating to the control of emissions from new motor vehicles;

WHEREAS, on April 22, 2003, U.S. EPA granted California a waiver for new diesel-powered medium-duty vehicles meeting the LEV II emission standards (LEV II waiver, 68 Fed.Reg. 18811), and on August 25, 2005, U.S. EPA granted California a waiver for diesel-powered heavy-duty vehicle engine emission standards for 2007 and subsequent model-year engines (2007 HDDE waiver, 70 Fed.Reg. 50322).

WHEREAS, section 209(e)(2) of the CAA requires that California seek authorization from U.S. EPA prior to enforcing emission standards or other requirements relating to the control of emissions from new and in-use nonroad engines (of which off-road diesel engines are a subpart) not otherwise preempted by section 209(a) or (e)(1); and

WHEREAS, under the CAA, U.S. EPA does not have authority to establish emission standards for in-use nonroad vehicles and equipment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption new section 2479 of article 3, chapter 3, division 3, title 13, CCR, as set forth in Attachment A hereto with the following modifications:

Modify section 2479(c), as appropriate, to exclude military tactical support cargo handling equipment from coverage of the regulation; and

Modify section 2479(h) to require that the alternative compliance plan (ACP) process include provisions for public comment on all elements of any proposed ACP request submitted to the Executive Officer for approval; that in granting an ACP the Executive Officer shall ensure that at least comparable emission reductions be achieved at the same facility where the equipment covered by the regulation resides; that the Executive Officer issue a written decision on any requested ACP; and that the decision address all relevant comments received regarding the granting of the ACP.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to incorporate into the approved regulation the modifications described above, with such other

conforming modifications as may be appropriate, and then to adopt the new regulation, 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 regarding the modifications as may be submitted during this period, shall make further modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if the Executive Officer determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines, in accordance with CAA section 209(b), that to the extent the regulation approved herein affects new motor vehicle or motor vehicle engines as defined in CAA section 216(2), the regulation falls within the scope of the existing LEV II and 2007 HDDE waiver, in that the regulation does not undermine the Board's previous determination that its LEV II and 2007 HDDE standards, in the aggregate, are as protective of public health and welfare as comparable federal standards, does not affect the consistency of California's requirements with section 202(a) of the CAA, and raises no new issues affecting the Administrator's previous waiver determinations.

BE IT FURTHER RESOLVED that the Board hereby determines, in accordance with CAA section 209(e)(2), that to the extent the regulation approved herein affects nonroad vehicles or nonroad engines as defined in CAA section 216(10) and (11), the emission standards and other requirements related to the control of emissions in the regulation approved herein are, in the aggregate, at least as protective of public health and welfare as applicable federal standards, California needs its nonroad emission standards to meet compelling and extraordinary conditions, and the standards and accompanying enforcement procedures approved herein are consistent with CAA section 209.

BE IT FURTHER RESOLVED that the Board directs ARB staff to:

Pursuant to the determinations set forth above, file a request that U.S. EPA confirm or determine that the adopted regulation, as applicable, falls within the scope of the existing 2007 HDV and LEV II waivers for new motor vehicles and engines pursuant to CAA section 209(b), or meets the requirements for authorization in CAA section 209(e)(2);

Develop implementation guidance as appropriate – with special direction to develop, as part of a public process, guidance to implement the ACP process for non-yard truck mobile cargo handling equipment, title 13 CCR, section 2479(h) – and report back to the Board in approximately six months on the status of the development of the ACP guidance and semi-annually on the number of ACP applications that have been received and how those applications have been handled;

Work with industry groups and affected businesses to educate affected owners and operators of mobile cargo handling equipment at ports and intermodal rail yards about the requirements of the regulation;

Form a technology working group to monitor the feasibility of retrofit emission controls, encourage manufacturers to apply for ARB verification, share information on successful applications of non-verified emission control strategies, and address concerns regarding the use of VDECS in non-yard truck mobile cargo handling equipment;

Monitor implementation of the adopted regulation, including advancements in emission control technologies and the application of BACT;

Update the emissions inventory for off-road equipment with data submitted by owners and operators of mobile cargo handling equipment as part of the reporting requirements of the adopted regulation; and

Ensure compliance with the regulation through facility audits and other enforcement actions as necessary.

I hereby certify that the above is a true and correct copy of Resolution 05-62, as adopted by the Air Resources Board.

---

Lori Andreoni, Clerk of the Board

Resolution 05-62

December 8, 2005

Identification of Attachments to the Board Resolution

**Attachment A:** Proposed Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards (division 3, chapter 3, article 4, section 2479, title 13, California Code of Regulations) as set forth in Appendix A to the Initial Statement of Reasons, released October 21, 2005.