State of California
AIR RESOURCES BOARD

Resolution 11-30

September 22, 2011

Agenda Item No.: 11-7-5

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 sections 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, the State has the responsibility to establish uniform procedures for compliance with standards which control or eliminate those air pollutants, and vehicle emission standards applied to new and used motor vehicles and to used motor vehicles equipped with motor vehicle pollution control devices are standards with which all motor vehicles shall comply;

WHEREAS, sections 43013(a) and (b) of the Health and Safety Code authorize the Board to adopt motor vehicle emission standards, in-use performance standards, and regulations for light, medium, and heavy-duty vehicles and off-road engine categories, which it finds to be necessary, cost-effective, and technologically feasible;

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

WHEREAS, in December 2005, the Board approved for adoption the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards to reduce emissions of diesel PM from cargo handling equipment (CHE) operating at California's ports and intermodal rail yards (the regulation); the regulation was formally adopted and became operative in 2006;

WHEREAS, since January 2007 many stakeholders that own and operate cargo handling equipment at California ports and intermodal rail yards have voluntarily complied with implementation of the regulation while California's request for a waiver and authorization of the regulation has been pending before the United States Environmental Protection Agency (U.S. EPA) pursuant to section 209(e) of the federal Clean Air Act (CAA);

WHEREAS, in recent years there have been regulatory implementation issues regarding some of the requirements of the regulation including the unavailability of verified diesel emissions control strategies (VDECS) for some types of equipment; the use of infrequently used, but costly to replace, specialty equipment; the potential future introduction of engines certified to Tier 4 Family Emission Limits; the need to encourage owners and operators of mobile cargo handling equipment to perform better

maintenance and operational practices; and a request by the local air quality management district to exempt equipment at the Port of Humboldt Bay given the low use of CHE and rural location of the port;

WHEREAS, with the information and comments received in recent years, ARB staff prepared a report, entitled "Staff Report: Initial Statement of Reasons for Proposed Amendments to the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards," released August 3, 2011 (ISOR);

WHEREAS, the ISOR identifies and explains the need to amend the regulation, consistent with 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 amended CHE regulation;

WHEREAS, the ISOR presents staff's proposal that the Board adopt the proposed amendments to the regulation for mobile cargo handling equipment at ports and intermodal rail yards, title 13, California Code of Regulations (CCR), section 2479, as set forth in Attachment A to the ISOR and Attachment A hereto;

WHEREAS, the ISOR includes an updated emissions inventory which contains a revised forecast of the emissions baseline;

WHEREAS, over the next nine years the proposed amendments would provide additional reductions of diesel PM but slight foregone emission reduction benefits in oxides of nitrogen (NO_x) emissions from the benefits that were initially forecasted with the adoption of the CHE regulation in 2005/2006; however, the proposed amendments would still achieve emission reductions significantly below the revised emissions baseline forecast;

WHEREAS, the proposed amendments continue to reduce associated cancer risk and other adverse health effects statewide and near California's ports and intermodal rail yards where mobile cargo handling equipment operate;

WHEREAS, concepts and draft proposals regarding the proposed amendments were discussed at three public workshops, one technical meeting, and one site visit with public meeting;

WHEREAS, the overall cost-effectiveness of the proposed amendments would not significantly impact the cost-effectiveness of the regulation as initially adopted (i.e., approximately $41 per pound of diesel PM reduced, or with reductions of NO_x included, $21 per pound of diesel PM reduced and $1 per pound of NO_x 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 amendments;

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 almost exclusively within the jurisdiction of ARB;

WHEREAS, to the extent that some mobile cargo handling equipment could be considered nonvehicular sources, ARB has authority under sections 39666, 43013(b), and 43018 of the Health and Safety Code to adopt the proposed amendments;

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 NO_x from mobile cargo handling equipment operation at ports and intermodal rail yards, and emission reduction measures were necessary and were adopted in 2005/2006 to reduce emissions of these air contaminants;
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> The proposed amendments to the CHE regulation will provide additional flexibility in the choice of compliance options to control emissions while continuing to protect public health, and will reduce public health-risk exposure to diesel PM, specifically by, among other things, requiring owners and operators of mobile cargo handling equipment to continue to comply, except as provided specifically below, with the existing compliance standards and schedules;
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> To ensure that the objectives of the initially adopted regulation continue to be met, staff initially proposed the following amendments that affect the regulation's retrofit, operational, and compliance requirements:
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>> Require owners and operators to treat Tier 4 engines certified to Alternate PM emissions standards as Tier 3 engines;

Require owners and operators to conduct in-use opacity testing on all cargo handling equipment that operate at ports and intermodal rail yards;

Provide owners and operators with up to an additional two-year extension before having to come into compliance with the regulation's retrofit requirements when no verified diesel emissions control strategy (VDECS) continues to exist for a specified type of equipment;

Expressly require ARB to consider safety when evaluating if a VDECS is technologically feasible and available;

Allow owners and operators to obtain an extension for experimental diesel PM emissions control strategies that require gathering verification data regardless of availability of another type of VDECS;

Provide owners and operators with more time before having to file extension applications;

Once a VDECS becomes available for equipment that has been granted a "No VDECS Available" extension, provide owners and operators with up to six months before having to come into compliance;

Allow owners and operators of low-use equipment to obtain a total of two annual compliance extensions;

Encourage the use of alternative technology by allowing owners and operators to demonstrate emissions equivalency of such technologies;

Allow owners and operators to transfer non-yard truck equipment between port and rail yard facilities under common ownership;

Allow warranty engine replacement in situations where engines fail within the original equipment manufacturer's warranty period (warranty period is normally one to two years);

Allow owners and operators to rent equipment that does not meet current engine emission standards, but meet standards one tier lower than current standards, in cases where new compliant equipment has been purchased but there is a manufacturer's delay in delivery;

Exempt cargo-handling equipment at rural low-throughput ports from having to comply with the regulation; such equipment, by definition, will be covered under the regulation for in-use off-road diesel-fueled fleets (see title 13, CCR, section 2449(b)); and

Allow owners and operators to modify their compliance schedules to bring older engines into compliance first.

WHEREAS, the initially proposed amendments also clarify the regulation and add a number of definitions, which, among other things, make clear that equipment brought onto a port or intermodal rail yard solely for construction or unexpected repairs are exempt from the regulation;

WHEREAS, after considering comments received on its initial proposal, staff has proposed the following modifications to the initial proposal; staff's suggested modifications are attached hereto as Attachment B:

Allow owners and operators to submit Alternative Compliance Plans that could include yard truck equipment, as well as non-yard truck equipment, which would encourage increased use of electric and hybrid yard trucks, as well as non-yard truck equipment;

Require all applicable non-yard truck equipment for which a compliance option is feasible to be brought into compliance prior to Executive Officer approval of low-use compliance extensions;

Require that owners or operators meet the following condition to receive a third or fourth year compliance extension for equipment for which no VDECS is available: at the end of the extension period, the equipment owner or operator would be required to replace the engine and equipment for which an extension has been granted with either electric or hybrid equipment, if such equipment is available; and

Restrict an owner or operator from receiving a third or fourth year compliance extension for equipment for which no VDECS is available if the basic reason that a VDECS is not available is high engine exhaust opacity.

WHEREAS, the Board further finds that:

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;

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;

Pursuant to Health and Safety Code section 39667, the proposed in-use emission standards are based on utilization of BACT identified within the time scheduled for compliance; and

Pursuant to section 43013(a) and (b) of the Health and Safety Code, the proposed in-use emission standards are necessary, cost-effective, and technologically feasible within the time provided for compliance.

WHEREAS, pursuant to the requirements of CEQA and the Board's regulations under its certified regulatory program, ARB staff prepared an environmental analysis for the proposed amendments, which is contained in Chapter VI of the ISOR and concludes that:

The proposed amendments will not result in any adverse impacts on aesthetics, agricultural and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land-use/planning, mineral resources, population and housing, public services, recreation, transportation and traffic, or utility and service systems;

The proposed amendments would substantially reduce both PM and NO_x emissions, as compared to the environmental conditions that currently exist, because the requirements of the CHE regulation have not yet been fully implemented and have not fully achieved the emission reductions forecasted in 2005/2006;

While, in the short term, both PM and NO_x emission reductions under the proposed amendments would be slightly less than what would have occurred under the current regulation, the proposed amended regulation would overall achieve greater PM emission reductions; and the amended regulation would overall result in slight foregone NO_x emission benefits that would have been achieved if the regulation were not amended;

The updated emissions inventory demonstrates that emissions are lower today than originally anticipated when the current regulation was adopted in 2005/2006, and emissions in future years will also be lower than anticipated;

That, taking a conservative approach and in the interest of full public disclosure, staff's environmental analysis indicated that it could be argued that the foregone emission reductions resulting from the initially proposed amendments could cause a potentially significant adverse environmental impact; and

The ISOR describes the benefits of the proposed amendments, which are designed to address the implementation issues that have been

encountered during regulatory implementation and ensure fuller compliance with the regulation.

WHEREAS, pursuant to the requirements of CEQA and the Board's regulations under its certified regulatory program, and upon full consideration of the initially proposed amendments in conjunction with staff's proposed modifications to the amendments, the staff has found that, to the extent that electric and hybrid equipment are available as replacements for CHE for which there is no VDECS available, the replacement of these equipment with electric and hybrid equipment will mitigate any potential foregone NOx emission reductions that would have resulted from the initially proposed amendments;

WHEREAS, the Executive Officer is the decision maker for the purposes of title 17, California Code of Regulations, section 60007, and no final decision will be made until comments on the environmental analysis are fully considered and addressed by the decision maker;

WHEREAS, section 209(b) of the 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, 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 subcategory) not otherwise preempted by section 209(a) or (e)(1); and

WHEREAS, ARB submitted to U.S. EPA a request for an on-road motor vehicle engine waiver under CAA section 209(b) and an off-road engine request for authorization under CAA section 209(e) on January 29, 2007, which are both presently pending.

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer to take the following actions:

Make the modified regulatory language as set forth in Attachment B and as directed below, with such other conforming modifications as may be appropriate, available for public comment for a period of at least 15-days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of the comments received, and shall present the regulation to the Board for further consideration if he determines that this is warranted;

Prior to taking final action on these amendments, the Executive Officer shall conduct such further environmental analysis as he deems necessary for a regulatory program certified under Public Resource Code section 21080.5, including evaluation of all comments received during the public comment periods, including comments raising significant environmental issues, and prepare and

approve written responses as required by Government Code section 11346.9, Public Resource Code section 21080.5(d)(2)(D), and title 17, CCR section 60007;

Determine whether the proposed amendments will have one or more significant adverse environmental effects, and, if so, determine whether there are additional feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts, while at the same addressing the compliance implementation issues that have been identified by ARB staff;

Make findings as required by Public Resources Code § 21081 if the proposed amendments would result in one or more significant adverse environmental effects; and

Take final action on the proposed amendments set forth in Attachment A, with the modifications set forth in Attachment B, any additional conforming modifications that may be appropriate, and any modifications that are necessary to ensure that all feasible mitigation measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts have been incorporated into the final action, or return the proposed amendments and findings to the Board for further consideration before taking final action, if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines, in accordance with CAA sections 209(b) and (e), that to the extent the proposed amendments are covered by the preemptions of CAA sections 209(a) or 209(e) that such amendments fall within the scope of the previous waiver and authorization requests for the CHE regulation filed with U.S. EPA and that such amendments that affect standards or other requirements related to the control of emissions, in the aggregate, are as protective of public health and welfare as comparable federal standards, do not affect the consistency of California's requirements with section 202(a) of the CAA, and raise no new issues that would affect the Administrator's granting of the previous requests.

BE IT FURTHER RESOLVED that the Board directs to the Executive Officer to:

Monitor CHE emissions through the reporting and recordkeeping provisions of the regulation in conjunction with the off-road emissions inventory model;

Account for any CHE emissions increases in the inventories prepared for the PM 2.5 and ozone State Implementation Plan attainment demonstrations, and address any emissions increases in the control strategies developed to bring nonattainment areas into attainment with federal air quality standards;

Work with the ports in addressing any CHE emissions increases in their clean air plans;

Work with industry groups and affected businesses to continue to support owners/operators of mobile cargo handling equipment at ports and intermodal rail yards in their efforts to comply with the regulation;

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

Continue working with the technology working group to address any performance and/or maintenance concerns dealing with the use of on-road engines in yard trucks, share information on successful maintenance practices and manufacturer recommended updates;

Monitor implementation of the adopted amendments to the regulation, including advancements in emission control technologies, technologies that meet the current off-road engine emissions standards, and the application of BACT; and

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

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to advance the deployment of zero-emission cargo handling equipment technologies at ports and intermodal rail yards by conducting a comprehensive assessment of zero-emission cargo handling equipment technologies including, but not limited to, the associated costs, cost-effectiveness, and feasibility. This work should be included as part of the broad strategy to develop a more efficient, sustainable freight transport system to meet California's longer-term air quality, climate, energy, and transportation needs. ARB staff should initiate discussions on the freight strategy with government, industry, and community/environmental stakeholders this year, and present an update to the Board on progress in 2012.

I hereby certify that the above is a true and correct copy of Resolution 11-30, as adopted by the Air Resources Board.

Mary Alice Morency, Clerk of the Board

Resolution 11-30

September 22, 2011

Identification of Attachments to the Board Resolution

Attachment A: Proposed Amendments to the 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 August 3, 2011.

Attachment B: Staff's Suggested Modifications to the Proposed Amendments to the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards