State of California
AIR RESOURCES BOARD

Amendments to the Regulation for In-Use On-Road Diesel-Fueled Vehicles (Truck and Bus Regulation)

Resolution 14-3

April 25, 2014

Agenda Item No.: 14-3-2

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, on August 27,1998, the Board adopted the Amendments Identifying Particulate Emissions from Diesel-Fueled Engines as a Toxic Air Contaminant (title 17, California Code of Regulations (CCR), section 93000), and, to protect public health, on September 30, 2000, the Board approved the Diesel Risk Reduction Plan to Reduce Exposure to Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Diesel Risk Reduction Plan) which set a target of an 85 percent reduction in statewide exposure to diesel particulate matter (PM) by 2020;

WHEREAS, nearly one million diesel vehicles with a manufacturer's gross vehicle weight rating greater than 14,000 pounds that annually operate in California, as a class, remain the largest contributor of emissions from all mobile sources, and contribute substantially to violations of the ambient air quality standards for both fine particulate matter (PM2.5) and ozone, to localized health risk associated with exposure to diesel PM, and to premature deaths associated with exposure to PM2.5;

WHEREAS, on December 12, 2008, the Board adopted the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (Truck and Bus regulation or regulation), title 13, CCR, section 2025, pursuant to its authority set forth in Resolution 08-43 which is incorporated herein;

WHEREAS, on December 17, 2010, the Board approved amendments that restructured the regulation in light of the economic recession that had effectively reduced emissions from regulated trucks and buses through lower vehicle activity, pursuant to its authority set forth in Resolution 10-44, which is incorporated herein;

WHEREAS, the regulation provides substantial emissions reductions, which are necessary to meet State and federal air quality standards, reduce premature deaths

attributable to exposure to PM2.5 emissions, and reduce exposure to diesel PM to meet the State's goals established in the Diesel Risk Reduction Plan;

WHEREAS, the amended State Implementation Plan (SIP) reflecting implementation of the 2007 State Strategy (State Strategy) became effective on December 14, 2011, and the United States Environmental Protection Agency (U.S. EPA) approved the Truck and Bus regulation as part of the California's Air Quality Plan to meet federal air quality standards;

WHEREAS, two regions in California–the South Coast Air Basin (South Coast) and the San Joaquin Valley Air Basin (San Joaquin Valley) are designated nonattainment for both the annual and 24-hour PM2.5 standards and the 1-hour and both 8-hour ozone standards, the regulation maintains the reductions required under California's U.S. EPA approved SIPs to meet federal air quality standards in the South Coast and San Joaquin Valley federal nonattainment areas;

WHEREAS, ARB requested and was granted waiver authorization by the U.S. EPA on March 2, 2012, to enforce California's emission standards and accompanying enforcement procedures for in-use off-road yard trucks and auxiliary engines used in two engine sweepers as described in the Truck and Bus regulation;

WHEREAS, to the extent that the proposed amendments affect the previously granted authorization, ARB will submit a follow-up request to U.S. EPA for authorization action;

WHEREAS, at the October 24, 2013, Board meeting, ARB staff provided an update on the implementation of the Truck and Bus regulation where concerns were expressed regarding the ability of some fleet owners to make the needed upgrades to comply including small fleets, lower mileage fleets, and fleets in rural areas with cleaner air, all of which continue to be impacted by the recession;

WHEREAS, ARB staff informed the Board that it intended to develop and propose amendments that will help ensure that the air quality benefits originally envisioned by the regulation will be achieved with the objective of addressing concerns about the ability of these fleets to comply;

WHEREAS, the proposed amendments to the Truck and Bus regulation will achieve 93 percent of the emissions reductions originally envisioned in the 2010 amended regulation and provide reductions equivalent to the original regulation by 2020. The proposed amendments to the regulation will meet California's air quality obligations under the Clean Air Act (CAA) and the goals of the Diesel Risk Reduction Plan while providing additional regulatory flexibility to small fleets, lower mileage fleets, and fleets in certain areas with cleaner air;

WHEREAS, the proposed amendments to the Truck and Bus regulation will protect emission reductions by providing lower cost compliance options to small fleets, low mileage fleets, and fleets in areas with cleaner air that would result in greater levels of

compliance, will provide new opportunities for fleet owners to access public incentive funds, and will recognize fleet owners that made early investments to comply;

WHEREAS, between November 2013 and January 2014, ARB staff met and worked with affected industry groups and the public in developing the proposed amendments, including conducting five public workshops statewide to discuss the proposed changes to the regulation;

WHEREAS, with the information and comments received from stakeholders, ARB staff prepared a report, entitled "Staff Report: Initial Statement of Reasons for Proposed Rulemaking - Proposed Amendments to the Truck and Bus Regulation (ISOR)" released March 5, 2014; this report constitutes the reports required under Health and Safety Code section 39665;

WHEREAS, the ISOR identified and explained the need to amend the Truck and Bus regulation and the feasibility of the proposed amendments;

WHEREAS, the ISOR discussed, to the extent data could reasonably be made available, the factors specified in Health and Safety Code sections 39665(b), 43013, and 43018, including, but not limited to estimates of emissions, exposure, potential cancer risk and non-cancer health effects associated with the operation of in-use on-road heavy-duty diesel vehicles subject to the proposed regulation, technologically feasible control options, potential environmental impacts, cost of compliance for all owners and/or operators of in-use on-road diesel vehicles, and cost impacts for ARB implementation of the proposed regulation;

WHEREAS, the 2008 Staff Report further discussed the results of ARB staff's evaluations of the non-cancer health effects of exposure to primary and secondary PM emissions from the vehicles subject to the proposed regulation, and these evaluations indicate that exposure to these emissions can be associated with premature deaths and other non-cancer health impacts;

WHEREAS, the U.S. EPA in a recently published review of the PM-related health science literature, which is the first part of an ongoing review of National Ambient Air Quality Standard (NAAQS) for PM, concluded that long-term exposure to PM2.5 is causally associated with premature mortality, and that premature deaths associated with exposure to PM2.5 occur at levels as low as 5.8 micrograms per cubic meter, which is considerably lower than the current national standard of 15 micrograms per cubic meter;

WHEREAS, the U.S. EPA risk assessment methodology is the basis for ARB's estimate, published in 2010, that implementation of the amended regulation to reduce emissions to meet the NAAQS standard would result in 3,500 premature deaths (2,700 to 4,400, 95 percent confidence interval) between 2010 and 2025;

WHEREAS, the proposed amendments would have little impact on the overall emissions benefits achieved and would better ensure the anticipated reductions occur; therefore,

the health impacts are not expected to change significantly and are within the margin of error of the mortality calculations;

WHEREAS, the ISOR presents staff's proposal that the Board adopt the proposed amendments to the Truck and Bus regulation, as set forth in Appendix A to the ISOR and Attachment A to this Resolution;

WHEREAS, the significant elements of the proposed amendments to the Truck and Bus regulation are:

An amended provision that would expand the number of regions that are defined in the regulation as areas with cleaner air and would lengthen the time period in which to comply with PM filter requirements for trucks that exclusively operate in these areas from 2015 to 2020.

An amended small fleet provision whereby the compliance schedule would be adjusted for the second and third truck in the fleet, such that the second truck must have a PM filter installed by 2016 and the third truck must have a PM filter installed by 2018.

A new provision for fleets that cannot afford to comply with the PM filter requirement that would waive the requirement for up to three vehicles if the vehicles are upgraded to 2010 model year engines or newer by January 1, 2018.

A provision that would replace the existing low-mileage construction truck extension with an alternative that would allow an extended PM filter compliance schedule from January 1, 2015, to January 1, 2018, for work trucks that travel less than a total of 20,000 miles per compliance year.

An expansion of the existing Low-Use Vehicle extension that would include vehicles that operate fewer than 5,000 miles total per compliance year until January 1, 2020, and would remove the annual hourly limit for all low-use vehicles that use power take off while stationary.

An amended agricultural vehicle extension, that would allow the extension to continue for vehicles that operate less than 15,000 miles per year after January 1, 2017, and less than 10,000 miles per year from January 1, 2020, to January 1, 2023. Livestock trucks would also be newly defined as specialty agricultural vehicles.

A new compliance option for heavier cranes that would require certain cranes to be upgraded to 2010 model year or newer engines at a rate of 10 percent of the heavy cranes in the fleet per year from January 1, 2018, to January 1, 2027. It would also provide credit for heavy cranes that are equipped with a retrofit or original equipment PM filter before January 1, 2018, by counting such cranes towards meeting the proposed 2010 engine requirement.

A new compliance option would set an upper limit on the number of vehicles within a fleet that would need to be upgraded with a 2010 model year engine in any given year starting January 1, 2015. The limit would be the greater of 25 percent of the vehicles in the fleet or two vehicles.

Amendments to extend the use of existing credits for fleets that took action to comply would:

- Extend the use of a vehicle from 2020 to 2023 for vehicle owners that installed a retrofit PM filter on their vehicle before January 1, 2014;
- Extend the use of existing compliance credits by one to three years, and;
- Extend compliance for a retrofit PM filter that is recalled and cannot be repaired by the manufacturer for up to five years from the date of the recall.

WHEREAS, in accordance with the authority set forth above, staff evaluated various control options such as making no change to the existing regulation and proposals that would defer compliance beyond 2020, and determined that these alternatives would do one or more of the following: not provide flexibility for fleets such that they are better able to comply; not meet goals of the Diesel Risk Reduction Plan, or; not meet SIP commitments;

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

WHEREAS, the Board has considered the community impacts of the proposed regulation including environmental justice concerns;

WHEREAS, the California Environmental Quality Act (CEQA) requires that a public agency not approve a project as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of such a project; in the event that specific economic, social, or other conditions make infeasible the alternatives or mitigation measures, the project may be approved if it is determined that any remaining unavoidable significant impacts are acceptable due to overriding considerations;

WHEREAS, Public Resources Code section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program;

WHEREAS, that portion of ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary of Resources Agency (CEQA Guidelines, section 15251(d));

WHEREAS, in accordance with ARB's certified regulatory program at title 17, CCR, section 60005 (b), and the policy and substantive requirements of CEQA, as part of the

ISOR, ARB staff prepared an assessment of the potential for significant adverse and beneficial environmental impacts associated with the proposed amendments;

WHEREAS, the environmental analysis, circulated with the ISOR for 45 days, concluded the proposed amendments would result in no adverse impacts to the environment;

WHEREAS, written comments were received during the 45-day comment period that raise significant environmental issues;

WHEREAS, ARB staff reviewed written comments received during the 45-day comment period that raise significant environmental issues and prepared written responses to such comments that are set forth in Attachment B, entitled "Response to Comments on the Environmental Analysis Prepared for the Proposed Amendments to the Regulation for In-Use On Road Diesel-Fueled Vehicles (Truck and Bus Regulation)";

WHEREAS, the Board has reviewed and considered both the environmental analysis and the "Response to Comments on the Environmental Analysis Prepared for the Proposed Amendments to the Regulation for In-Use On Road Diesel-Fueled Vehicles (Truck and Bus Regulation)";

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

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, in consideration of the information in the public record, including the ISOR, and updated on-road vehicle emissions inventory;

WHEREAS, the Board finds that:

> In-use on-road diesel vehicles that operate in the State, whether based in California or not, continue to be significant contributors of diesel PM and NOx emissions, which California must reduce to attain the ozone and PM2.5 NAAQS and to reduce the health risks associated with such pollutants;
>
> The proposed amendments are necessary to increase the ability of fleet owners to comply while assuring that California continues to meet its air quality obligations and health based goals;
>
> The proposed amended regulation would continue to reduce PM emissions from trucks and buses and meet the goals of the Diesel Risk Reduction Plan by achieving the maximum feasible PM reductions by 2020;

The proposed amended regulation would help achieve the SIP reduction goals for attainment in the South Coast and the San Joaquin Valley air basins;

In accordance with Health and Safety Code section 39667, and based upon the Board's determinations under Health and Safety Code section 39662, the amended regulation would achieve the maximum possible reduction in public exposure to toxic air contaminants by 2020;

In accordance with Health and Safety Code section 43013(a) and (b), the in-use emission standards and other requirements of the proposed amendments are necessary, cost-effective, and technologically feasible for in-use on-road heavy-duty diesel fleets within the time provided for compliance;

The economic impacts of the proposed amendments would reduce the costs of compliance for affected fleets and have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR and the benefits of the regulation to public health and the environment justify the costs of compliance, and enforcement;

The amended regulation will exceed $50 million in economic costs through capital savings in the years 2016 through 2019 compared to the existing regulation; therefore it is considered to be a major regulation under SB 617 (Chapter 496, Statutes of 2011);

In accordance with SB 617 and its implementing regulations (title 1, CCR, section 2000, et seq.), ARB conducted a standardized regulatory impact assessment (SRIA), solicited the comments of the Department of Finance, and summarized these comments and ARB's responses in the Notice of Public Hearing for the proposed amendments dated February 25, 2014;

The expected impact of the proposed amendments would be to reduce the overall cost of the regulation by over $400 million over its lifetime or about 20 percent lower than the existing regulation;

None of the proposed amendments would make the regulation more stringent; therefore, the proposed amendments would not increase the costs to any individual businesses;

The reporting requirements of the proposed amended regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the state;

On the basis of the whole record, including the environmental analysis included in the ISOR, there is no substantial evidence that the proposed

amendments will result in any significant adverse impacts on the environment; and

The proposed amendments are consistent with ARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income.

WHEREAS, the Board further finds that no alternatives considered or that have otherwise been identified and brought to the attention of ARB would be more effective in carrying out the purpose for which the amendments to the regulation is proposed, or would be as effective and less burdensome to affected private persons than the proposed amendments, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law. Alternatives that staff considered are discussed in the ISOR.

NOW, THEREFORE, BE IT RESOLVED that the Board approves the written responses to comments received during the 45-day comment period raising significant environmental issues that are set forth in Attachment B, "Response to Comments on the Environmental Analysis Prepared for the Proposed Amendments to the Regulation for In-Use On Road Diesel-Fueled Vehicles (Truck and Bus Regulation)."

BE IT FURTHER RESOLVED that the Board hereby approves for adoption the proposed regulation, which consists of amendments to section 2025, title 13, CCR, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to ensure that changes to the provisions regarding the compliance extension for owners that cannot comply are modified to improve their enforceability and to ensure that they are restricted to fleets that sufficiently face economic challenges in compliance. Such changes could include, but are not limited to, requirements to apply for a loan through a chartered lending institution or other state sanctioned program, requirements to submit documentation regarding financial information or any loan applications and any associated loan terms and conditions, information about the replacement truck, and requirements that applicants and lenders attest, under penalty of perjury, to the veracity of any loan application. The Board further directs the Executive Officer to shorten the time period of this compliance extension from 2018 to January 1, 2017 and to include the installation of diesel particulate filters as a compliance option.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to determine if additional conforming modifications to the regulation are appropriate. If no additional modifications are appropriate, the Executive Officer shall take final action to adopt the regulation, as set forth in Attachment A. If the Executive Officer determines that additional conforming modifications are appropriate, the Executive Officer shall adopt the modified regulation after making the modified regulatory language and any additional supporting documents and information available to the public 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 such further 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.

BE IT FURTHER RESOLVED if it is determined that any 15-day modifications to the regulation affect the conclusion of the environmental analysis, the Executive Officer shall prepare and circulate any additional environmental analysis to the extent required by ARB's regulations at title 17, CCR, sections 60001-60007, and/or prepare written responses to any comments received raising significant environmental issues to present to the Board for its consideration for approval along with the proposed Final Regulation Order.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to pursue additional incentive funding options for compliance.

BE IT FURTHER RESOLVED that the Board reaffirms the State's responsibility for meeting its aggregate emission reduction commitment in the 2007 SIP for the San Joaquin Valley and the South Coast Air Basin, which includes responsibility for any emission reduction shortfalls that may impact that commitment as a result of the adoption of the amendments to the On-Road Truck and Bus Regulation.

BE IT FURTHER RESOLVED that the Board finds that because section 209(a) of the federal CAA does not preempt California from adopting emission standards for non-new on-road motor vehicles, California is not required to request a waiver from the U.S. EPA pursuant to CAA section 209(b) to enforce the regulation as amended.

BE IT FURTHER RESOLVED that the Board finds that the amendments that affect in-use off-road engines are not preempted under section 209(e)(1) in that they do not apply to new off-road engines under 175 horsepower used in farm and construction vehicles or to new locomotives and locomotive engines.

I hereby certify that the above is a true and correct copy of Resolution 14-3, as adopted by the Air Resources Board.

Tracy Jensen

Tracy Jensen, Clerk of the Board

Resolution 14-3

April 24, 2014

Identification of Attachments to the Board Resolution

Attachment A: Proposed amendments to California Code of Regulations, title 13, section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (Truck and Bus regulation)" as set forth in Appendix A to the Initial Statement of Reasons, released March 5, 2014.

Attachment B: Response to Comments on the Environmental Analysis Prepared for the Proposed Amendments to the Regulation for In-Use On Road Diesel-Fueled Vehicles (Truck and Bus Regulation)