## State of California AIR RESOURCES BOARD

# PROPOSED AMENDMENTS TO THE HEAVY-DUTY VEHICLE INSPECTION PROGRAM AND PERIODIC SMOKE INSPECTION PROGRAM

Resolution 18-28

July 26, 2018

Agenda Item No.: 18-6-5

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the California Air Resources Board (CARB 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, in section 43000 of the Health and Safety Code, the Legislature has declared that the emission 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 the standards that control or eliminate those air pollutants;

WHEREAS, section 43013(a) and (b) of the Health and Safety Code authorizes the Board to adopt and implement emission standards, in-use performance standards, and motor vehicle fuel specifications for the control of air contaminants and sources of air pollution for light, medium, and heavy-duty motor vehicles, which the Board has found to be necessary, cost-effective, and technologically feasible, to carry out the purposes of this division, unless preempted by federal law;

WHEREAS, pursuant to Health and Safety Code sections 39650 et seq., the Board adopted Resolution 98-35 on August 27, 1998, identifying particulate emissions from diesel-fueled engines as a toxic air contaminant;

WHEREAS, section 43018 of the Health and Safety Code directs the Board to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of state ambient air quality standards at the earliest practicable date;

WHEREAS, the Legislature in 1988 enacted section 44011.6 of the Health and Safety Code directing the Board to prohibit, by regulation, the use of heavy-duty vehicles which are determined to have excessive smoke emissions or other emissions-related defects and to commence inspecting heavy-duty motor vehicles;

WHEREAS, pursuant to section 44011.6 of the Health and Safety Code, the Board adopted the Heavy-Duty Vehicle Inspection Program, sections 2180 through 2189, title

13, California Code of Regulations, which permits CARB staff to inspect heavy-duty vehicles that operate on California roadways for excessive smoke and requires that all engines be equipped with engine emission control labels;

WHEREAS, the Legislature in 1990 enacted section 43701(a) of the Health and Safety Code directing the Board to adopt regulations requiring that owners of heavy-duty diesel motor vehicles perform regular inspections of their vehicles for excessive smoke emissions;

WHEREAS, in 1992, pursuant to section 43701(a) of the Health and Safety Code, the Board adopted sections 2190 through 2194, title 13, California Code of Regulations, establishing the Periodic Smoke Inspection Program for heavy-duty diesel-powered vehicle fleets, which requires fleets of two or more heavy-duty vehicles to conduct an annual smoke opacity test of their vehicle emissions;

WHEREAS, in 1997, the Board adopted requirements in both the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program that on-road heavy-duty vehicles meet opacity limits of 40 percent for 1991 and newer model year engines and 55 percent for 1990 and older model year engines;

WHEREAS, two regions in California, the San Joaquin Air Basin and the South Coast Air Basin, are designated nonattainment for both the annual and 24-hour standards for particulate matter with a diameter less than 2.5 micrometers (PM2.5);

WHEREAS, CARB's March 7, 2017, Revised Proposed 2016 State Strategy for its State Implementation Plan submitted to the United States Environmental Protection Agency (U.S. EPA) includes a commitment to reduce in-use PM emissions through the adoption of amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program with associated benefits of 0.022 tons per day PM2.5 in the South Coast and 0.017 tons per day PM2.5 in the San Joaquin Valley in 2031;

WHEREAS, excessive smoke emissions from heavy-duty diesel vehicles contribute significantly to air pollution problems in the State, and specifically are a significant source of diesel particulate matter;

WHEREAS, diesel particulate matter is a toxic air contaminant known to cause cancer;

WHEREAS, heavy-duty on-road vehicles account for over 25 percent of statewide diesel particulate matter emissions;

WHEREAS, heavy-duty vehicles emitting excessive smoke are operating with malfunctioning emission control systems;

WHEREAS, vehicles operating with malfunctioning emission control systems may emit substantially more diesel particulate matter than a properly functioning vehicle;

WHEREAS, emission standards instituted by U.S. EPA and CARB for model year 2007 and newer engines and the use of ultra-low sulfur diesel fuel mean that modern heavy-duty diesel engines can meet significantly lower opacity limits than the current requirements;

WHEREAS, heavy-duty vehicles operating with a properly functioning diesel particulate filter have tailpipe emissions at or near zero percent opacity when tested in accordance with the Society of Automotive Engineers (SAE) J1667 smoke opacity test procedure;

WHEREAS, recent testing has shown that even vehicles with damaged emission control systems meet the current opacity requirements; and hence, the current opacity limits are not adequate to identify heavy-duty vehicles with malfunctioning emission control systems;

WHEREAS, the proper performance of the SAE J1667 smoke opacity test procedure is critical for identifying vehicles with malfunctioning diesel particulate emission control systems;

WHEREAS, annual smoke opacity testing of each vehicle is critical for identifying vehicles with malfunctioning emission control systems;

WHEREAS, 2013 and newer model year heavy-duty diesel engines are equipped with on-board diagnostics (OBD) systems;

WHEREAS, OBD systems continuously monitor all emission control systems installed in the vehicle;

WHEREAS, along with the SAE J1667 smoke opacity testing procedure, OBD systems equipped on 2013 and newer model year heavy-duty diesel vehicles adequately identify vehicles with excessive smoke;

WHEREAS, staff has proposed amending the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program as set forth in Appendix A to the Initial State of Reasons (ISOR, or Staff Report), released to the public on April 3, 2018, to:

Modify the in-use opacity standards for both the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program;

Establish training requirements for smoke opacity testers in the Periodic Smoke Inspection Program;

Establish reporting requirements for the Periodic Smoke Inspection Program starting in 2023;

Establish a voluntary provision allowing fleets to submit OBD data in lieu of performing the smoke opacity test required in the Periodic Smoke Inspection Program;

Provide additional minor clean-up revisions to the existing regulatory language;

WHEREAS, CARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations, title 14, section 15251(d)), and CARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, sections 60000–60007);

WHEREAS, staff has determined that the proposed Amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program are exempt from CEQA under California Code of Regulations, title 14, section 15308 ("Class 8" exemption: Actions Taken by Regulatory Agencies for Protection of the Environment) and California Code of Regulations, title 14, section 15061(b)(3) ("common sense" exemption) because the record evidence shows that the amendments will enhance the environment by better protecting the public from health impacts associated with exposure to particulate matter, the regulatory process involves procedures for protection of the environment, and the amendments will not result in any significant adverse environmental impacts as described in Chapter III of the Staff Report;

WHEREAS, a public hearing and other administrative proceedings have been held according to the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board held a hearing on May 25, 2018, and at that hearing issued Board Resolution 18-20, which approved proposed amendments to the Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program;

WHEREAS, at the May 25, 2018, hearing, the Board directed the Executive Officer to provide an exemption to the proposed testing requirement upon vehicle sale for family transfers under the Periodic Smoke Inspection Program;

WHEREAS, at the May 25, 2018, hearing, written comments were received that purported to raise significant environmental issues associated with the proposal, which the Board did not have the opportunity to consider at that time;

WHEREAS, staff subsequently prepared written responses, as set forth in Attachment B, to the written comments received at the May 25, 2018, hearing that purported to raise significant environmental issues, and the Board has reviewed and considered the written responses along with the environmental analysis included in the Staff Report; and

#### WHEREAS, the Board finds that:

Despite advances in reducing emissions from mobile sources, stationary sources, and area sources, California still has the most severe air pollution problems in the United States;

To meet federal and California Clean Air Act emission reduction requirements, CARB must continue to seek reductions from all sources under its authority, including heavy-duty on-road vehicles;

Diesel particulate matter was identified as a toxic air contaminant in August 1998, and in response, the diesel risk reduction plan was adopted to achieve an 85 percent reduction in diesel particulate matter by 2020;

Diesel particulate matter from the excessive smoke of heavy-duty diesel motor vehicles is a significant source of air contaminants and a risk to public health;

The operation of heavy-duty vehicles with damaged emission control systems may lead to the release of excessive smoke and excess diesel particulate emissions;

Any heavy-duty vehicle that exceeds the opacity standards approved herein constitutes a vehicle that emits excessive smoke;

Ensuring the proper performance of the SAE J1667 smoke opacity test is a critical component of identifying vehicles with excessive smoke emissions;

The reporting requirements applicable to businesses in the proposed amendments are necessary for the health, safety, and welfare of the people of the State:

Without the proposed amendments, a significant portion of the statewide heavyduty diesel vehicle population may continue to operate with damaged emission control systems and emit excessive smoke and diesel particulate emissions;

The proposed amendments are necessary, appropriate, and feasible;

The economic and fiscal impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Staff Report, as supplemented by staff's presentation at the hearing of this item;

The proposed amendments meet the statutory requirements authorizing the adoption and implementation of in-use performance standards for the control of air contaminants and sources of air pollution for light, medium, and heavy-duty vehicles which the State Board finds necessary, cost effective, and

technologically feasible unless preempted by federal law identified in section 43013(a) and (b) of the Health and Safety Code;

The proposed amendments were developed in an open public process, in consultation with affected parties, through numerous public workshops, individual meetings, and other outreach efforts, and these efforts are expected to continue;

No reasonable alternatives to the amendments considered to date, or that have otherwise been identified and brought to the attention of CARB, would be more effective at carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected entities than the proposed regulation;

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

The proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15308 because substantial evidence in the record shows that they will enhance the environment by better protecting the public from health impacts associated with exposure to particulate matter, the regulatory process involves procedures for the protection of the environment, and the proposal will not result in any significant adverse environmental impacts. Additionally, the proposed amendments are exempt from CEQA under California Code of Regulations, title 14, section 15061(b)(3) because substantial evidence in the record shows with certainty that there is no possibility that the proposal may result in a significant adverse impact on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby repeals Resolution 18-20 (May 25, 2018).

BE IT FURTHER RESOLVED that the Board approves the response to environmental comments set forth in Attachment B to this resolution.

BE IT FURTHER RESOLVED that the Board hereby approves for adoption amendments to sections 2180.1, 2181, 2182, 2183, 2185, 2186, 2187, 2190, 2191, 2192, 2193, and 2194, Title 13, California Code of Regulations, and the adoption of section 2195, title 13, California Code of Regulations, as set forth in Attachment A.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to modify the proposed amendments to provide an exemption the proposed testing requirement upon vehicle sale for family transfers under the Periodic Smoke Inspection Program and to provide a 15-day public comment period for that exemption.

BE IT FURTHER RESOLVED that if there is a possibility that any modifications to the regulation made available for one or more 15-day public comment periods may affect the conclusion of the environmental analysis, the Executive Officer shall prepare and circulate any additional environmental analysis to the extent required by CARB's regulations pursuant to California Code of Regulations, title 17, sections 60000–60007, and prepare written responses to any comments received raising significant environmental issues as necessary, to present to the Board for approval along with the final regulation.

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 modified regulatory language shall be made available for public comment, with any additional supporting documents and information. The Executive Officer shall consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days. The Executive Officer may present the regulation to the Board for further consideration if warranted, and if not, the Executive Officer shall take final action to adopt the regulation after addressing all appropriate conforming modifications.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, submit the proposed regulatory action to U.S. EPA for approval as a revision to the California State Implementation Plan as required by the federal Clean Air Act. The adopted regulatory action would be submitted as a State Implementation Plan revision because it amends regulations intending to reduce emissions of air pollutants to attain and maintain the National Ambient Air Quality Standards promulgated by the U.S. Environmental protection Agency under the federal Clean Air Act.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulations adopted herein will not cause California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

I hereby certify that the above is a true and correct copy of Resolution 18-28 as adopted by the Air Resources Board.

Rana McReynolds, Clerk of the Board

#### Resolution 18-28

July 26, 2018

### **Identification of Attachments to the Board Resolution**

**Attachment A\*:** Proposed Amendments to the Heavy-Duty Vehicle Inspection

Program and the Periodic Smoke Inspection Program, Title 13, California Code of Regulations, sections 2180.1, 2181, 2182, 2183, 2185, 2186, 2187, 2190, 2191, 2192, 2193, and 2194, and proposed addition of section 2195, Title 13, California Code of Regulations, as set forth in Appendix A to the Initial Statement of Reasons, released

April 3, 2018.

**Attachment B\*:** Responses to Comments on the Environmental Analysis for

Proposed Amendments to the Heavy-Duty Vehicle Inspection

Program and the Periodic Smoke Inspection Program

<sup>\*</sup>Attachment A and B are <u>NOT</u> attached to the proposed resolution; it is simply described on this page.