

State of California  
AIR RESOURCES BOARD

**PROPOSED CALIFORNIA GREENHOUSE GAS EMISSIONS STANDARDS FOR  
MEDIUM- AND HEAVY-DUTY ENGINES AND VEHICLES (PHASE 2) AND  
PROPOSED AMENDMENTS TO THE TRACTOR-TRAILER GREENHOUSE GAS  
REGULATION**

Resolution 18-32

**September 27, 2018**

Agenda Item No.: 18-7-2

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, sections 43013, 43100, 43101, 43102, 43104, and 43806 of the Health and Safety Code authorize the Board to adopt emission standards, in-use performance standards, and test procedures to control air pollution caused by motor vehicles;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations that will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to reductions in motor vehicle exhaust and evaporative emissions, and reductions in in-use vehicular emissions through durability, performance improvements, and specification of vehicular fuel composition;

WHEREAS, section 43105 of the Health and Safety Code provides that no new motor vehicle or engine required under Part 5 of the Health and Safety Code to meet emission standards shall be sold to the ultimate purchaser, ordered or delivered for sale to the ultimate purchaser, or registered in this state if the manufacturer has violated emission standards or test procedures and has failed to take corrective action, which may include recall of vehicles or engines, specified by the Board in accordance with its regulations; and provides that the Board shall establish procedures for determining, and the facts constituting, compliance or failure of compliance pursuant to section 43105;

WHEREAS, section 43106 of the Health and Safety Code provides that each new motor vehicle or engine required under Part 5 of the Health and Safety Code to meet the emission standards established pursuant to section 43101 shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine that has been certified by the Board; [in accordance with Article 1, Chapter 2, of Part 5 of the Health and Safety Code];

WHEREAS, section 43210 of the Health and Safety Code directs the Board to provide regulations for the testing of motor vehicles on factory assembly lines, or in a manner best suited to determine compliance with the regulation;

WHEREAS, sections 39500 and 40000 of the Health and Safety Code designate CARB as the agency responsible for control of emissions from motor vehicles;

WHEREAS, sections 39010 and 39601 of the Health and Safety Code provide that a definition set forth in Chapter 2 of Division 26 of the Health and Safety Code shall govern the construction of the division unless and until rules and regulations are adopted by the Board that revise such definition, and that the Board may revise such definition in order to conform to definitions to federal laws and rules and regulations;

WHEREAS, section 38580 of the Health and Safety Code requires the Board to monitor compliance with and enforce a rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted by CARB pursuant to Division 25.5;

WHEREAS, section 38505 of the Health and Safety Code defines “greenhouse gas” (GHG) or “greenhouse gases” (GHGs), for purposes of Division 25.5 of the Health and Safety Code as including all of the following gases: carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride;

WHEREAS, section 38560 of the Health and Safety Code directs the Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions from sources or categories of sources, subject to the criteria and schedules set forth in part 4 of division 25.5 of the Health and Safety Code;

WHEREAS, the Legislature has enacted the California Global Warming Solutions Act of 2006 (Assembly Bill 32 (AB 32); Stats 2006, chapter 488, Health and Safety Code section 38500 *et seq.*), which declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and requires a comprehensive multi-year program to reduce California’s GHG emissions to 1990 levels by 2020;

WHEREAS, AB 32 added section 38501 to the Health and Safety Code, which expresses the Legislature’s findings that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and the Legislature’s intent that CARB coordinate with state agencies and consult with the environmental justice community, industry sectors, business groups, academic institutions, environmental organizations, and other stakeholders in implementing AB 32, and design emissions reduction measures to meet the statewide emissions limits for GHGs in a manner that minimizes costs and maximizes benefits for

California's economy, maximizes additional environmental and economic co-benefits for California, and complements the State's efforts to improve air quality;

WHEREAS, the Legislature has enacted Senate Bill 32 (SB 32) that expands upon the California Global Warming Solutions Act of 2006 to reduce GHG emissions to 40 percent below 1990 levels by 2030;

WHEREAS, section 43200 of the Health and Safety Code authorizes CARB to adopt regulations to prohibit the sale of a new motor vehicle to which a label displaying air pollution emissions information for consumers has not been affixed, with some flexibility on label placement;

WHEREAS, section 43200.1 of the Health and Safety Code directs CARB to modify the existing smog index label requirements to include a global warming index for 2009 and later model year vehicles;

WHEREAS, section 28114 of the Vehicle Code requires every heavy-duty vehicle used to transport persons for compensation and operated by a transit authority or district, or owned by private entity to meet emission standards;

WHEREAS, in recognition of the devastating impacts of climate change emissions on California, Governor Arnold Schwarzenegger, in June 2005, enacted Executive Order S-3-05 which established the following GHG emission targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emission 80 percent below 1990 levels;

WHEREAS, Governor Brown in Executive Order B-16-12 reaffirmed a 2050 GHG emission reduction target for the transportation sector of 80 percent below 1990 levels;

WHEREAS, Governor Brown in Executive Order B-30-15 established a 2030 GHG emission reduction target of 40 percent below 1990 levels, in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050;

WHEREAS, section 38510 of the Health and Safety Code designates CARB as the State agency charged with monitoring and regulating sources of GHG emissions that cause global warming in order to reduce such emissions;

WHEREAS, CARB adopted the Heavy-Duty Vehicle GHG Emission Reduction regulation (hereinafter "Tractor-Trailer GHG regulation"), which became effective January 1, 2010, and is set forth at title 17, CCR sections 95300 to 95311, and subsequently amended it in 2010, 2012, and 2013;

WHEREAS, the Tractor-Trailer GHG regulation requires long-haul tractor-trailer combination vehicles be either SmartWay certified or to be retrofitted with SmartWay

verified technologies that improve fuel efficiency and reduce GHG emissions by reducing aerodynamic drag and tire rolling resistance;

WHEREAS, the Tractor-Trailer GHG regulation requires 2011 and subsequent model year sleeper cab tractors that haul 53-foot or longer box-type trailers on California highways to be SmartWay certified beginning January 1, 2010, and requires 2011 and subsequent model year day cab tractors that haul 53-foot or longer box-type trailers on California highways to be equipped with low-rolling resistance (LRR) tires meeting SmartWay specifications beginning January 1, 2010;

WHEREAS, the Tractor-Trailer GHG regulation requires 2010 and earlier model year sleeper cab tractors and day cab tractors that haul 53-foot or longer box-type trailers on California highways to be equipped with LRR tires that meet SmartWay specifications beginning January 1, 2013;

WHEREAS, the Tractor-Trailer GHG regulation requires 2011 and subsequent model year 53-foot or longer dry-van or refrigerated van trailers pulled by Class 7 or Class 8 tractors on California highways to either be SmartWay certified or retrofitted with SmartWay verified aerodynamic technologies and equipped with LRR tires that meet SmartWay specifications beginning January 1, 2010;

WHEREAS, the Tractor-Trailer GHG regulation requires 2010 and earlier model year 53-foot or longer dry-van or refrigerated van trailers pulled by Class 7 or Class 8 tractors on California highways to either be SmartWay certified or retrofitted with SmartWay verified aerodynamic technologies by January 1, 2013, and equipped with LRR tires that meet SmartWay specifications either by January 1, 2017, or by the applicable compliance year, if participating in a compliance phase-in plan;

WHEREAS, medium- and heavy-duty trucks account for one fifth of the GHG emissions from the transportation sector nationally, and are the fastest growing segment of the transportation sector in both the United States and worldwide;

WHEREAS, the United States Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA), on behalf of the federal Department of Transportation, jointly issued a Final Rule titled "Greenhouse Gas Emission Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles," (76 Fed. Reg. 57106 (September 15, 2011)), effective on November 14, 2011, and referred to as the Phase 1 GHG regulation;

WHEREAS, on December 12, 2013, the Board adopted California's Phase 1 GHG regulations as described in Resolution 13-50, and the regulations largely aligned with the Phase 1 GHG regulations;

WHEREAS, staff's environmental analysis projected that California's Phase 1 GHG regulations would reduce statewide CO<sub>2</sub> emissions from affected engines and vehicles 7.2 percent in 2020, and 12.5 percent in 2035;

WHEREAS, U.S. EPA and NHTSA, on behalf of the federal Department of Transportation, jointly issued a Final Rule titled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2,” on October 25, 2016 (81 Fed. Reg. 73478 et seq. (Oct. 25, 2016)), referred to as the Phase 2 GHG regulation;

WHEREAS, the trailer requirements in the federal Phase 2 GHG regulation have been challenged in court by the Truck Trailer Manufacturers Association;

WHEREAS, glider vehicles with older engines may appear identical to modern trucks because they are newly manufactured with new chassis, on the exterior, and may be very difficult to distinguish from trucks equipped with modern, much cleaner, engines and aftertreatment;

WHEREAS, in recent testing, glider vehicle oxides of nitrogen (NOx) levels were 4 to 40 times higher, and particulate matter levels were 50 to 450 times higher than for modern vehicles;

WHEREAS, the federal Phase 2 GHG regulation would require all glider vehicles to comply with the GHG standards and glider engines to comply with the GHG and criteria pollutant engine standards, but with some transitional flexibilities;

WHEREAS, U.S. EPA released a notice of proposed rulemaking titled, “Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits,” on November 9, 2017 (83 Fed. Reg. 53442 et seq. (Nov. 16, 2017)) to repeal the current heavy-duty glider requirements in the federal Phase 2 GHG regulation;

WHEREAS, CARB testified in opposition to the proposed repeal of the current heavy-duty glider requirements in a public hearing on December 4, 2017, in Washington, D.C.;

WHEREAS, staff has proposed California GHG Emissions Standards for Medium- and Heavy-Duty Engines and Vehicles (Phase 2) and Proposed Amendments to the Tractor-Trailer GHG Regulation, as set forth in Appendix A to the Initial Statement of Reasons (ISOR or Staff Report) released to the public on December 22, 2017, and modified regulatory language developed in response to comments received since the Staff Report was released, as set forth in Attachment G to Resolution 18-2;

WHEREAS, the federal Phase 2 GHG regulations, which apply to new 2021 and subsequent model year medium- and heavy-duty engines and vehicles (with trailer requirements applying to 2018 and subsequent model year trailers), build upon federal Phase 1 GHG regulations, establishing more stringent technology forcing GHG emission standards and the first national GHG emission standards for trailers pulled by heavy-duty tractors;

WHEREAS, the federal Phase 2 GHG regulations when fully phased in would achieve up to a 25 percent reduction in GHG emissions for line-haul tractors compared to federal Phase 1 GHG standards, up to a 9 percent reduction in GHG emissions for trailers when compared to an average 2017 model year trailer, up to a 24 percent reduction for vocational vehicles when compared to federal Phase 1 standards, and up to a 16 percent reduction for pick-up trucks and vans when compared to federal Phase 1 standards;

WHEREAS, although the proposed regulations would largely harmonize federal and California GHG requirements for medium- and heavy-duty engines and vehicles, including trailers, the proposed regulations would incorporate minor distinctions from the federal Phase 2 GHG regulations as discussed in Chapter III of the Staff Report;

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 regulations are exempt from CEQA under California Code of Regulations, title 14, section 15061(b)(3) ("common sense" exemption) and section 15308 ("Class 8" exemption: Actions Taken by Regulatory Agencies for Protection of the Environment) the regulatory process involves procedures for protection of the environment and because the record of evidence shows that the regulation will enhance the environment by better protecting the public from the negative impacts of climate change, and shows with certainty that there is no possibility that the proposed activity may result in a significant adverse impact on the environment, as described in Chapter V 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 February 8, 2018, to consider the proposed adoption of the California Greenhouse Gas Emissions Standards for Medium- and Heavy-Duty Engines and Vehicles and Amendments to the Tractor-Trailer GHG Regulation, as set forth in Appendices A through C to the Initial Statement of Reasons (Staff Report) released to the public on December 19, 2017, as modified by regulatory language developed in response to comments received since the Staff Report was released, as set forth in Attachment G to Resolution 18-2;

WHEREAS, following the February 8, 2018, hearing, the Board issued Resolution 18-2, in which the Board approved for adoption amendments to sections 1956.8, 1961.2, 1965, 2036, 2037, 2065, 2112, and 2141, title 13, and sections 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95311, 95662, and 95663, title 17, California

Code of Regulations, as set forth in Attachment A to Resolution 18-2, as amended by Attachment G to Resolution 18-2; and to the following incorporated documents:

- “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles,” as set forth in Attachment B to Resolution 18-2, as amended by Attachment G to Resolution 18-2;
- “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles,” as set forth in Attachment C to Resolution 18-2;
- “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles,” as set forth in Attachment D to Resolution 18-2;
- “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles,” as set forth in Attachment E to Resolution 18-2; and
- “California Environmental Performance Label Specifications for 2021 and Subsequent Model Year Medium-Duty Vehicles, Except Medium-Duty Passenger Vehicles,” as set forth in Attachment F to Resolution 18-2; as amended by Attachment G to Resolution 18-2;

WHEREAS, Resolution 18-2, directed the Executive Officer to make the modified regulatory language in Attachment G to Resolution 18-2, and any additional conforming modifications that were appropriate, available for public comment, with any additional supporting documents and information, for a period of at least 15 days. The Executive Officer was also directed to consider written comments submitted during the public review period and to make any further modifications that were appropriate available for public comment for at least 15 days. Additionally, the Executive Officer was directed to present the regulation to the Board for further consideration if warranted, and if not, the Executive Officer was directed to take final action to adopt the regulation after addressing all appropriate modifications;

WHEREAS, on July 3, 2018, CARB staff published modified regulatory language and supporting documentation initiating the 15-day public comment period, with the changes to the originally proposed regulatory text and incorporated test procedures and environmental label specifications clearly indicated, according to provisions of California Code of Regulations, title 1, section 44 and Government Code section 11340.85, as shown in Attachments A to F to the notice of availability of modified text published on July 3, 2018;

WHEREAS, the current version of the proposed amendments to sections 1956.8, 1961.2, 1965, 2036, 2037, 2065, 2112, and 2141, title 13 and sections 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95311, 95662, and 95663, title 17 California Code of Regulations, is set forth in Attachment A hereto; to the incorporated

“California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles,” is set forth in Attachment B hereto; to the incorporated “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles,” is set forth in Attachment C hereto; to the incorporated “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles,” is set forth in Attachment D hereto; to the incorporated “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles,” is set forth in Attachment E; hereto and to the incorporated, “California Environmental Performance Label Specifications for 2021 and Subsequent Model Year Medium-Duty Vehicles, Except Medium-Duty Passenger Vehicles,” is set forth in Attachment F hereto;

WHEREAS, during the 15-day comment period, one commenter purported to raise significant environmental issues associated with the proposal;

WHEREAS, staff subsequently prepared written responses, to the written comments submitted during the 15-day public comment period that purported to raise significant environmental issues as set forth in Attachment G hereto;

WHEREAS, 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:

California faces unique air quality goals and challenges;

Heavy-duty trucks are significant sources of NO<sub>x</sub>, and emitted approximately a third of statewide NO<sub>x</sub> emissions or 509 tons per day in 2015;

Medium- and heavy-duty trucks over 8,500 pounds in California emit about a fifth of the total transportation GHG emissions, which is about 8 percent of the statewide total;

Reducing GHG emissions from medium and heavy-duty vehicles, including trailers, is an important element of CARB’s programs to reduce the GHG emissions that contribute to climate change;

The proposed California Phase 2 GHG regulations would provide GHG emission reductions that help California meet AB 32 targets;

The proposed regulations were developed using the best available economic and scientific information and will achieve the maximum technologically feasible and cost-effective GHG emission reductions from medium- and heavy-duty engines and vehicles including trailers;



The proposed regulations would establish GHG standards for new 2021 and subsequent model year California medium- and heavy-duty engines and vehicles that are identical to the federal Phase 2 GHG regulation;

The proposed regulations would establish GHG standards for new trailers beginning with the 2020 model year in California;

The proposed new regulations and amendments would align California's GHG emission standards and test procedures with those of the federal Phase 2 GHG regulations in structure, timing, and stringency, providing nationwide consistency for engine and vehicle manufacturers;

Because CARB is proposing to largely harmonize California's Phase 2 GHG standards with the federal Phase 2 GHG standards, U.S. EPA's technical feasibility analysis as contained in the following documents: Greenhouse Gas Emissions Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2, Regulatory Impact Analysis, August 2016 (EPA-420-R-16-900) and Final Rule, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2, October 25, 2016, (EPA-HQ-OAR-2014-0827) is applicable to the proposed regulations;

The proposed regulation would allow staff's timely access to certification documentation for independent review to ensure compliance;

The proposed air conditioning (A/C) system reporting would allow staff to better enforce the A/C system leakage requirements. This is important because refrigerants have a significantly higher global warming potential than CO<sub>2</sub>;

The transit bus custom chassis proposal would incentivize the introduction of advanced zero-emission technology in the transit bus sector;

The proposed additional requirement of showing no NO<sub>x</sub> increase and meeting a minimum all-electric range in order for plug-in hybrid electric vehicles to receive an advanced technology multiplier would prevent NO<sub>x</sub> increases and spur the development of better hybrids;

The proposed consumer label for Class 2b/3 pick-up trucks and vans would allow consumers to compare vehicle choices based on the provided GHG and smog ratings on the required label and potentially choose lower-emitting, more fuel efficient vehicles;

The proposed regulations permit effective enforcement of the proposed GHG emission standards in California such that real emission reductions can be verified and achieved;

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

The requirements of the proposed regulations are similar but not identical to requirements of the federal Phase 2 GHG regulations; the different California requirements are authorized by the Health and Safety Code and the cost of the different State provisions is justified by the benefit to human health, public safety, public welfare, or the environment;

The proposed regulations are necessary, appropriate, and technologically 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 regulation would impose additional compliance costs on the regulated engine/vehicle/trailer manufacturers and the increased costs would be passed on to the California heavy-duty vehicle fleets that purchase the California Phase 2-certified vehicles and trailers. Cost impacts on a representative business were estimated based on increased costs per California private heavy-duty fleet. The estimated average annual cost is \$5 for the first year and about \$45 for the subsequent years per impacted private business from 2018 to 2028. Phase 2 costs will be offset over time by the fuel savings associated with Phase 2 technologies;

The proposed amendments to the California Tractor-Trailer regulation would have no cost impacts on California private businesses;

The proposed regulation would essentially align with the final federal Phase 2 regulations adopted by U.S. EPA on October 25, 2016, including emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits;

The proposed regulation meets the statutory requirements to monitor and regulate sources of GHG emissions identified in section 38510; and to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in part 4 of division 25.5 identified in section 38560 of the Health and Safety Code;

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

The proposed regulations 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, that it will enhance the environment by better protecting the public from health impacts the negative impacts of climate change, and the regulatory process involves procedures for protection of the environment.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby repeals Resolution 18-2.

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

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the proposed amendments to sections 1956.8, 1961.2, 1965, 2036, 2037, 2065, 2112, and 2141, title 13 and sections 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95311, 95662, and 95663, title 17 California Code of Regulations, as set forth in Attachment A hereto; to the incorporated "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles," as set forth in Attachment B hereto; to the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles," as set forth in Attachment C hereto; to the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles," as set forth in Attachment D hereto; to the incorporated "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles," as set forth in Attachment E hereto; and to the incorporated, "California Environmental Performance Label Specifications for 2021 and Subsequent Model Year Medium-Duty Vehicles, Except Medium-Duty Passenger Vehicles," as set forth in Attachment F hereto.

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, and documents incorporated by reference therein, as set forth in Attachments B through F of this resolution. 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 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.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the regulations to U.S. EPA with a request for a waiver or confirmation that the regulations are within the scope of an existing waiver of federal preemption pursuant to section 209(b) or authorization pursuant to section 209(e)(2)(A) of the Clean Air Act, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 18-32 as adopted by the Air Resources Board.

  
Cristina Granados, Clerk of the Board

Resolution 18-32

September 27, 2018

**Identification of Attachments to the Board Resolution**

- Attachment A\*:** Phase 2 Greenhouse Gas Regulations and Test Procedures section(s) 1956.8, 1961.2, 1965, 2036, 2037, 2065, 2112, and 2141, Title 13 and sections(s) 95300, 95301, 95302, 95303, 95304, 95305, 95306, 95307, 95311, 95662, and 95663, Title 17 California Code of Regulations.
- Attachment B\*:** Phase 2 Greenhouse Gas Amendments to “California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles”.
- Attachment C\*:** Phase 2 Greenhouse Gas Amendments to “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles”.
- Attachment D\*:** Phase 2 Greenhouse Gas Amendments to “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles”.
- Attachment E\*:** Phase 2 Greenhouse Gas Amendments to “California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles”.
- Attachment F\*:** “California Environmental Performance Label Specifications for 2021 and Subsequent Model Year Medium-Duty Vehicles, Except Medium-Duty Passenger Vehicles”.
- Attachment G:** Responses to Comments on the Environmental Analysis for Proposed Amendments.

\*Attachment A - F are not attached to the proposed resolution; they are simply describing herein. Only attachment G, the response to environmental comments, is actually attached.