

State of California  
AIR RESOURCES BOARD

**Update on Phase 2 Greenhouse Gas Emission Standards for Medium- and Heavy-Duty Engines and Vehicles, and Related Research Studies**

Resolution 16-21

**October 20, 2016**

Agenda Item No.: 16-9-3

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, and sections 39002 and 39003 of the Health and Safety Code charge the Air Resources Board (ARB or Board) with controlling air pollution from motor vehicles;

WHEREAS, the Legislature has enacted the California Global Warming Solutions Act of 2006 (Assembly Bill 32 (AB 32)); Stats. 2006, ch. 488, Health & Saf. Code, § 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 greenhouse gas (GHG) emissions to 1990 levels by 2020;

WHEREAS, AB 32 added section 38501 to the Health and Safety Code, which expresses the Legislature's intent that ARB 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, 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, and SB 32 (Stats. 2006, ch. 249) codified the 2030 target;

WHEREAS, section 38505 of the Health and Safety Code defines “greenhouse gas” or “greenhouse gases,” for purposes of Division 25.5 of the Health and Safety Code, as including all of the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;

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

WHEREAS, medium- and heavy-duty trucks emitted 21 percent of GHG emissions from the transportation sector and 8 percent of GHG emissions from all sources in California in 2012;

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, informally known as the “U.S. Phase 1” GHG program;

WHEREAS, on December 12, 2013, the Board adopted California’s Phase 1 GHG regulations as described in Resolution 13-50;

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

WHEREAS, U.S. EPA and NHTSA, on behalf of the federal Department of Transportation, jointly issued a prepublication version of a Final Rule titled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, Phase 2,” on August 16, 2016, informally known as the “U.S. Phase 2” GHG program;

WHEREAS, the U.S. 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 U.S. 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 U.S. EPA Phase 2 GHG standards when fully phased in would reduce GHG emissions by as much as 25 percent for line-haul tractors compared to U.S. Phase 1

GHG standards, up to 9 percent for trailers when compared to an average 2017 model year trailer, up to 24 percent for vocational vehicles when compared to U.S. Phase 1 standards, and up to 16 percent for pick-up trucks and vans when compared to U.S. Phase 1 standards; and

WHEREAS, the Board finds that:

California faces unique air quality goals and challenges;

Reducing criteria and GHG emissions from medium- and heavy-duty vehicles is an important element of ARB's programs to reduce the GHG emissions that contribute to climate change; and

Further regulation, building on California's Phase 1 GHG regulations, will allow California to further address the serious threat that global warming poses to California and meet its GHG emission targets.

NOW, THEREFORE, BE IT RESOLVED that the Board directs staff to: (1) return to the Board in mid-2017 with proposed new regulations and related amendments to control GHG emissions from motor vehicles in California, after consideration of U.S. EPA's Phase 2 GHG regulations, keeping in mind a goal to provide nationwide consistency wherever possible for engine and vehicle manufacturers, while meeting California's unique air quality goals and challenges; and (2) subsequent to any related Board action in 2017, continue to pursue the development of additional regulations that would address any missed opportunities for additional GHG emission reductions from medium- and heavy-duty vehicles in the U.S. EPA Phase 2 regulations.

I hereby certify that the above is a true and correct copy of Resolution 16-21 as adopted by the Air Resources Board.

---

Janice Harlan, Clerk of the Board