State of California
AIR RESOURCES BOARD

New Passenger Motor Vehicle Greenhouse Gas Emission Standards for Model Years 2017-2025 to Permit Compliance Based on Federal Greenhouse Gas Emissions Standards and Additional Minor Revisions to the LEV III and ZEV Regulations

Resolution 12-35

November 15, 2012

Agenda Item No.: 12-8-3

WHEREAS, sections 39600 and 39601 of California's 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, 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 Board with the responsibility of air pollution control from motor vehicles;

WHEREAS, sections 43013, 43101, and 43104 of the Health and Safety Code authorizes the Board to adopt emission standards and test procedures to control air pollution caused by motor vehicles;

WHEREAS, section 43018(a) of the Health and Safety Code directs the Board to endeavor 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, 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 39667 of the Health and Safety Code directs the Board to consider revisions to ARB's emissions standards for vehicular sources to achieve the maximum possible reduction in public exposure to substances that the Board has identified as toxic air contaminants pursuant to section 39662 of the Health and Safety Code; such regulations affecting new motor vehicles are to be based on the most advanced technology feasible for the model-year and may include, but are not limited to, the required installation of vehicular control measures on new motor vehicles;

WHEREAS, the Board's California State Implementation Plan (SIP) for ozone establishes the State strategy for attaining the ambient air quality standard for ozone in all areas of

the State as required by federal law; as part of the mobile source element developed by ARB, the SIP relies on the California Low-Emission Vehicle (LEV) program to provide significant reductions of ozone precursor pollutant emissions from passenger cars and light-duty trucks; and to reach the 1997 ozone standard by the attainment date in 2023, oxides of nitrogen (NOx) emissions in the greater Los Angeles region must be reduced by two-thirds, even after considering all of the regulations in place today with the most significant share of needed emission reductions coming from long-term advanced clean air technologies;

WHEREAS, California's passenger cars and light-duty trucks are the single largest contributor of greenhouse gas emissions in the State, producing approximately 30 percent of all such emissions;

WHEREAS, California enacted Assembly Bill (AB) 1493 (Pavley) (codified at Health and Safety Code section 43018.5), which directs the Board to develop and adopt regulations that achieve the maximum feasible and cost-effective reductions of greenhouse gas emissions from motor vehicles, beginning with the 2009 model year;

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 greenhouse gas emission targets:

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

WHEREAS, the Legislature enacted the California Global Warming Solutions Act of 2006 (AB 32; Health and Safety Code section 38500 et seq.), which declares that global warming poses a serious threat to the environment of California and creates a comprehensive multi-year program to reduce greenhouse gas emissions that cause global warming;

WHEREAS, in December 2008, the Board adopted a Scoping Plan to chart ARB's course toward meeting the requirements of the Global Warming Solutions Act of 2006;

WHEREAS, the AB 32 Scoping Plan identifies "California Light-Duty Vehicle Greenhouse Gas Standards," which include both implementation of the current "Pavley" standards and the development of "Pavley II light-duty vehicle standards," as part of the "Recommended Greenhouse Gas Reduction Measures" for reducing California's greenhouse gas emissions to 1990 levels by 2020;

WHEREAS, in a 2004 – 2005 rulemaking, the Board adopted the "Pavley regulations," which reduce greenhouse gas emissions from passenger vehicles by approximately 30 percent between 2009 and 2016 by establishing a mechanism requiring each manufacturer to phase-in a progressively cleaner mix of vehicles from year to year with the option of credit trading;

WHEREAS, the Pavley regulations are contained primarily in title 13, California Code of Regulations, section 1961.1, and in the "California 2001 through 2014 Model Criteria

Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Model Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles," incorporated by reference in section 1961;

WHEREAS, after Board approval in 2004, motor vehicle manufacturers and their trade associations challenged the Pavley regulations in numerous federal and State court proceedings and opposed California's request for a U.S. EPA waiver of preemption under the federal Clean Air Act to allow California to enforce its adopted standards;

WHEREAS, on May 19, 2009, challenging parties, individual automakers, California, and the federal government memorialized commitments to undertake a series of actions to resolve those current and potential future disputes over the California standards through model year 2016;

WHEREAS, the May 19, 2009 commitment letters contained the following commitments and understandings: the U. S. Environmental Protection Agency (U.S. EPA) and the U.S. Department of Transportation (NHTSA) would propose a federal program to reduce greenhouse gases and improve fuel economy, respectively, from passenger vehicles, to achieve equivalent or greater greenhouse gas benefits as the Pavley regulations for the 2012 – 2016 model years; manufacturers and related entities would ultimately drop then current challenges, and forego similar future legal challenges, including challenging a waiver grant (which U.S. granted June 30, 2009 (74 Fed.Reg. 32744 (July 8, 2009)); and California would amend the 2009-2016 Pavley regulations to (1) allow manufacturers to demonstrate compliance with the fleet average greenhouse gas emission standard by "pooling" California, the District of Columbia, and Clean Air Act Section 177 State vehicle sales, (2) allow manufacturers to use emission data from the federal Corporate Average Fuel Economy program to demonstrate compliance with the 2009-2016 Pavley regulations, and (3) accept compliance with U.S. EPA-adopted equivalent greenhouse gas standards for 2012-2016 model years;

WHEREAS, in September 2009, the Board approved amendments to the Pavley regulations to address commitments (1) and (2) above made by California, and in February 2010 the Board approved amendments to the Pavley regulations to address the third commitment ((3) above) made by California;

WHEREAS, the Board's decision to modify the Pavley regulations to accept compliance with U.S. EPA-adopted greenhouse gas standards as compliance with California's standards in the 2012 through 2016 model years was premised on U.S. EPA adopting a final rule that preserved the greenhouse gas reduction benefits of the Pavley regulations;

WHEREAS, on September 30, 2010, U.S. EPA and NHTSA issued a Notice of Intent to begin developing new standards for greenhouse gases and fuel economy for passenger vehicles for the 2017 through 2025 model years;

WHEREAS, in July 2011, automakers, California, and the federal government committed to a series of actions that would allow for the development of national greenhouse gas standards for model years 2017 through 2025 that would meet the needs of California as well as the nation as a whole;

WHEREAS, California's July 2011 commitments were as follows: (1) California committed that if U.S. EPA proposed federal greenhouse gas standards and NHTSA proposed Corporate Average Fuel Economy standards for model years 2017 and beyond substantially as described in the July 2011 Notice of Intent (published in the Federal Register on August 9, 2011), and the agencies adopted standards substantially as proposed, California would not contest such standards; (2) California committed to propose to revise its standards on greenhouse gas emissions from new motor vehicles for the 2017 through 2025 model years, such that compliance with the greenhouse gas emissions standards adopted by U.S. EPA for those model years that are substantially as described in the July 2011 Notice of Intent, even if amended after 2012, shall be deemed in compliance with the California greenhouse gas emissions standards, in a manner that is applicable to states that adopt and enforce California's greenhouse gas standards under Clean Air Act (CAA) Section 177; and (3) California committed to propose that its revised Zero-Emission Vehicle (ZEV) program for the 2018 through 2021 model years include a provision providing that over-compliance with the federal greenhouse gas standards in the prior model year may be used to reduce in part a manufacturer's ZEV obligation in the next model year;

WHEREAS, California's commitment to work with the federal government in no way relinquished California's right to develop and adopt new greenhouse gas emission standards for 2017 and subsequent model passenger vehicles that are specific to California;

WHEREAS, on December 1, 2011 U.S. EPA and the federal Department of Transportation jointly issued a Notice of Proposed Rulemaking for 2017 through 2025 model year passenger vehicles that proposes a coordinated federal greenhouse gas and fuel economy program for light-duty vehicles, referred to as the "2017 through 2025 MY National Program" (76 Fed. Reg. 74854 (December 1, 2011));

WHEREAS, in a January 2012 rulemaking, the Board approved its second generation greenhouse gas regulations as part of the Low-Emission Vehicle III (LEV III) element of the Advanced Clean Cars program, which reduce car CO_2 emissions by about 36% and truck CO_2 emissions by about 32% from model year 2016 through 2025;

WHEREAS, a second element of the Advanced Clean Cars program, the ZEV regulations, includes regulatory changes that implement California's third (3) commitment above;

WHEREAS, the LEV III greenhouse gas regulations are contained primarily in title 13, California Code of Regulations, section 1961.3, which incorporates by reference the "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," incorporated by reference in section 1961.2;

WHEREAS, at the January 2012 hearing, the Board directed the Executive Officer to either propose modifications to the approved regulatory amendments, or to return to the Board with a new regulatory proposal, to accept compliance with the 2017 through 2025

MY National Program as compliance with California's greenhouse gas emission standards in the 2017 through 2025 model years, once U.S. EPA adopted a final rule, if the Executive Officer determined that the final federal rule at a minimum preserved the greenhouse reduction benefits set forth in U.S. EPA's December 1, 2011 Notice of Proposed Rulemaking for 2017 through 2025 model year passenger vehicles (76 Fed. Reg. 74854 (December 1, 2011);

WHEREAS, the Board re-iterated this commitment at the March 2012 "Public Hearing to Consider Approval of Responses to Public Comments on the Environmental Analysis for the Advanced Clean Cars Regulations and to Take Final Action on These Regulations;"

WHEREAS, on August 28, 2012, U.S. EPA and the federal Department of Transportation jointly issued a Final Rule for 2017 through 2025 model year passenger vehicles titled "2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards," referred to as the "2017 through 2025 MY National Program" 77 Fed.Reg. 62624 (October 15, 2012));

WHEREAS, as part of the 2017 through 2025 MY National Program, U.S. EPA has committed to a mid-term evaluation of their 2022 through 2025 model year light-duty vehicle greenhouse gas standards;

WHEREAS, it is ARB's intent to participate in the mid-term evaluation, however, California reserves all rights to contest final actions taken or not taken by U.S. EPA or NHTSA as part of or in response to the mid-term evaluation;

WHEREAS, the current proposed amendments to the LEV III greenhouse gas regulations address California's second July 2011 commitment ((2) above);

WHEREAS, this proposal also makes minor changes to the LEV III criteria pollutant regulations and ZEV regulation that correct errors, and update procedures to reflect information received since Board approval of the Advanced Clean Car regulations in January, 2012;

WHEREAS, on June 27, 2012, ARB sent U.S. EPA a request to waive preemption of California's Advanced Clean Car program as a whole, including its amended LEV/GHG and ZEV standards, pursuant to Clean Air Act Section 209(b);

WHEREAS, on August 28, 2012, U.S. EPA issued a notice (77 Fed.Reg. 53199 (August 31, 2012)) offering a hearing on California's ACC waiver request and opened a Docket (Docket ID No. EPA-HQ-OAR-2012-0562) to receive public comment and ARB's response thereto;

WHEREAS, one commenter (Document ID No. EPA-HQ-OAR-2012-0562-0367, pp. 5-6 and 12) has contended that: A) the Board failed to make a finding that California's passenger vehicle program remains as protective as applicable federal standards given this proposed Board action noticed September 14, 2012 (California Regulatory Notice Register No. 37-Z at p. 1367); and B) that California's program is no longer as protective given the 2017 through 2025 MY National Program Final Rule;

WHEREAS, ARB sufficiently addressed said protectiveness issues in its November 14, 2012 supplemental submittal to the ACC waiver Docket;

WHEREAS, to the degree there remains any contention that California's passenger motor vehicle program remains as protective as applicable federal standards, it is prudent for the Board to address such contentions in this action;

WHEREAS, the Board has considered the impact of this proposed regulatory action on the economy of the State;

WHEREAS, ARB has a regulatory program certified under Public Resources Code section 21080.5, and pursuant to this program ARB conducts environmental analyses to meet the requirements of the California Environmental Quality Act (CEQA);

WHEREAS, ARB has a regulatory program certified under Public Resources Code section 21080.5, and pursuant to this program ARB conducts environmental analyses to meet the requirements of the California Environmental Quality Act (CEQA);

WHEREAS, in 2011, pursuant to ARB's certified regulatory program, ARB prepared a programmatic environmental analysis (EA) for the Advanced Clean Cars program, which included three regulations: the LEV III regulations, the ZEV regulations, and the Clean Fuels Outlet regulations. The LEV III and ZEV regulations became effective on August 7, 2012;

WHEREAS, pursuant to ARB's certified regulatory program, ARB staff prepared a subsequent EA for additional proposed amendments to the LEV III, and ZEV regulations. The EA presents an analysis of the potential environmental impacts related to the proposed amendments and determined that there would be an overall beneficial impact to criteria air pollutant and greenhouse gas emissions, and would not result in any significant or potentially significant adverse impacts on the environment;

WHEREAS, ARB's certified regulatory program provides that prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue; no final decision will be made until comments on the EA are fully considered and a written response approved by the decision maker;

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

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; and

WHEREAS, the Board, having considered all information presented in the public hearing and administrative proceedings finds that:

The proposed amendments are necessary to effectuate a carefully balanced compromise between ARB, the auto industry, and the federal government that will preserve California's ability to regulate greenhouse gases while retaining equivalent or greater emission reductions;

All of the approved amendments are necessary, appropriate, and technologically feasible; and

WHEREAS, the Board further finds that:

The amendments approved herein will not affect the stringency of the ZEV amendments approved January 2012 and finalized March 22, 2012, and the ZEV program continues to achieve both criteria and greenhouse gas emission reductions upstream of, and in addition to, emission reductions achieved from applicable federal passenger motor vehicle standards;

The amendments approved herein will not affect the stringency of the LEV III 1 milligram/mile particulate matter standard approved in January 2012 (finalized March 22, 2012), which also provides criteria pollutant emission reductions additional to those achieved from applicable federal passenger motor vehicle standards;

The amendments approved herein would provide a compliance option for 2017-2025 greenhouse gas standards that affected manufacturers need not exercise, but even if every manufacturer does exercise that option in every model year, doing so would provide greenhouse gas emission reductions for California equal to those provided by the 2017-2025 National Program Final Rule;

The amendments approved herein will achieve equal or better greenhouse gas emission reduction benefits from 2017 through 2025 model year light-duty vehicles compared to those sold in California and states that have adopted California's LEV III greenhouse gas standards as provided in Section 177 of the Clean Air Act;

The amendments approved herein will not have a significant adverse impact on the environment;

While the California motor vehicle emissions regulations as amended herein are different from the federal regulations administered by U.S. EPA, the California regulations approved herein are authorized by State law; and

The approved amendments will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or the elimination of existing businesses within California, or the ability of California businesses to compete with businesses in other states.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the proposed amendments to sections 1900, 1956.8, 1960.1, 1961, 1961.2, 1961.3, 1962.1, 1962.2, and 1976, Title 13, California Code of Regulations, and the proposed amendments to (and adoption of) the documents incorporated by those regulations, as

set forth in Attachments A through I hereto, with the modifications set forth in Attachment J hereto.

BE IT FURTHER RESOLVED that the Board re-affirms that the ZEV program is necessary for California's attainment of National Ambient Air Quality Standards and that the obligations of the ZEV program upon regulated parties are separate from those of the LEV III greenhouse gas regulations or a national program.

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

1. Prior to taking final action on these amendments conduct such further environmental analysis as deemed 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 Public Resource Code section 21080.5(d)(2)(D), and title 17, CCR section 60007;

2. Determine whether there are additional feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts;

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

4. Take final action on the proposed amendments as directed below, as well as any additional 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 directs the Executive Officer to take final action to adopt the proposed amendments set forth in Attachments A through I, including incorporated documents as amended, with the modifications set forth in Attachment J and as further resolved and directed above, after making the modified regulatory language, with such other conforming modifications as may be appropriate, and additional supporting documents and information, available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications and additional supporting documents and information as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted; the Executive Officer has the discretion to return the amendments to the Board for final action.

BE IT FURTHER RESOLVED that the Board hereby determines that the proposed regulations approved for adoption 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 Board hereby finds that separate California emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board finds that the California emission standards and test procedures approved for adoption herein will not cause the California requirements to be inconsistent with section 202(a) of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon final adoption, forward the regulations to the Environmental Protection Agency 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) of the Clean Air Act, as appropriate.

FILED
DEC 06 2012
Resources Agency of California

I hereby certify that the above is a true and correct copy of Resolution 12-35, as adopted by the Air Resources Board.

Lori Andreoni

Lori Andreoni, Manager, Office of Legal Affairs

Resolution 12-35

November 15, 2012

Identification of Attachments to the Board Resolution

Attachment A: Proposed Regulation Order: Amendments to Sections 1900, 1956.8, 1960.1, 1961, 1961.2, and 1976, Title 13, California Regulations, as set forth in Appendix A to the Initial Statement of Reasons, released September 14, 2012.

Attachment B: Proposed Amendments to the "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 Appendix B to the Initial Statement of Reasons, released September 14, 2012.

Attachment C: Proposed Amendments to the "California 2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Model Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles", as set forth in Appendix C to the Initial Statement of Reasons, released September 14, 2012.

Attachment D: Proposed Amendments to the "California Non-Methane Organic Gas Test Procedures", as set forth in Appendix D to the Initial Statement of Reasons, released September 14, 2012.

Attachment E: Proposed Amendments to the "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", as set forth in Appendix E to the Initial Statement of Reasons, released September 14, 2012.

Attachment F: Proposed Amendments to the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines", as set forth in Appendix F to the Initial Statement of Reasons, released September 14, 2012.

Attachment G: Proposed Amendments to the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles", as set forth in Appendix G to the Initial Statement of Reasons, released September 14, 2012.

Attachment H: Proposed Amendments to the : Proposed Amendments to the "California Exhaust Emission Standards and Test Procedures for 2009 through 2017 Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", as set forth in Appendix H to the Initial Statement of Reasons, released September 14, 2012.

Attachment I: Proposed Amendments to the "California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty Truck and Medium-Duty Vehicle Classes", as set forth in Appendix I to the Initial Statement of Reasons, released September 14, 2012.

Attachment J: Staff's Suggested Modifications to the Original Proposal (Distributed at the November 15, 2012 Board hearing)