State of California
AIR RESOURCES BOARD

AMENDMENTS TO THE TRACTOR-TRAILER GREENHOUSE GAS REGULATION

Resolution 13-51

December 12, 2013

Agenda Item No.: 13-11-1

WHEREAS, the Legislature has enacted the California Global Warming Solutions Act of 2006 (Assembly Bill 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 greenhouse gas (GHG) emissions to 1990 levels by 2020;

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

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, subdivisions (a), (b), and, (d) of section 38560.5 of the Health and Safety Code required ARB to publish and make available to the public a list of discrete early action GHG reduction measures (Discrete Early Action Measures) on or before June 30, 2007, and requires that regulations to implement the Discrete Early Action Measures be adopted on or before January 1, 2010;

WHEREAS, the "SmartWay Truck Efficiency" measure to reduce GHG emissions from heavy-duty trucks through improved fuel efficiency (later renamed the "Heavy-Duty Vehicle GHG Emission Reduction" measure), was designated by the Board as one of the Discrete Early Action Measures to be established by regulation on or before January 1, 2010;

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize ARB 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 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 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, in section 43000 of the Health and Safety Code, the Legislature 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 of the Health and Safety Code charges the Board with the responsibility of controlling air pollution from motor vehicles, except as otherwise provided in division 26 of the Health and Safety Code;

WHEREAS, heavy-duty trucks, buses, and motor homes emitted 23 percent of GHG emissions from on-road vehicles and 8 percent of GHG emissions from all sources in California in 2010;

WHEREAS, the United States Environmental Protection Agency (U.S. EPA) developed in 2004 a voluntary program called the U.S. EPA SmartWay Partnership Program (SmartWay), which is designed to improve the environmental performance associated with the ground freight movement system in the United States and includes the certification of fuel efficient on-road, long-haul heavy-duty tractors and box-type trailers, and the verification of fuel efficiency improving retrofit devices for these types of tractors and trailers;

WHEREAS, in 2008, despite the availability of fuel-efficient heavy-duty tractors and trailers and retrofit devices that improve fuel efficiency, most long-haul heavy-duty trucks that operate on California highways were not using these technologies;

WHEREAS, these technologies that reduce GHG emissions and the emission of other air pollutants through improved fuel efficiency also generate operating cost savings to heavy-duty tractor and trailer owners;

WHEREAS, after a public hearing on December 11 and 12, 2008, the Board approved for adoption the Heavy-Duty Vehicle GHG Emission Reduction regulation (hereinafter "Tractor-Trailer GHG regulation"), which became effective of January 1, 2010, and is set forth at title 17, California Code of Regulations (CCR) sections 95300 to 95311;

WHEREAS, the Tractor-Trailer GHG regulation requires long-haul tractor-trailer combination vehicles be either SmartWay certified or retrofitted with SmartWay verified technologies that improve fuel efficiency and reduce GHG emissions by reducing aerodynamic drag and tire rolling resistance;

WHEREAS, after a public hearing on December 16, 2010, the Board approved the adoption of amendments to the Tractor-Trailer GHG regulation, set forth at title 17, CCR, sections 95300 to 95311, which became effective on January 11, 2012, (2010 Amendments);

WHEREAS, the Board adopted emergency amendments to the Tractor-Trailer GHG regulation in 2012 to address an oversight that affected a registration deadline, compliance schedules, and annual reporting deadlines for the optional trailer fleet compliance plans;

WHEREAS, the Tractor-Trailer GHG regulation currently requires new 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 new 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 tires meeting SmartWay specifications beginning January 1, 2010;

WHEREAS, the Tractor-Trailer GHG regulation currently 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 low-rolling resistance tires that meet SmartWay specifications beginning January 1, 2013;

WHEREAS, the Tractor-Trailer GHG regulation currently requires new 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 low-rolling resistance tires that meet SmartWay specifications beginning January 1, 2010;

WHEREAS, the Tractor-Trailer GHG regulation currently 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 low-rolling resistance 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, ARB has requested that U.S. EPA take appropriate action under the federal Clean Air Act section 209(b) in granting California a waiver of preemption for the Tractor-Trailer GHG regulation;

WHEREAS, U.S. EPA adopted regulations in 2011 that establish GHG emission standards applicable to 2014 and subsequent model-year heavy-duty vehicles and engines (U.S. Phase I GHG regulation) that set separate standards for three distinct categories of heavy-duty vehicles – combination tractors, heavy-duty pickups and vans, and vocational vehicles;

WHEREAS, the U.S. Phase I GHG regulation establishes engine exhaust emission standards for carbon dioxide (CO2), nitrous oxide, and methane, and combination tractor vehicle standards for hydrofluorocarbons (HFC) emissions and CO2 that are based on the gross vehicle weight rating and cab attributes of the tractor;

WHEREAS, the U.S. Phase I GHG regulation establishes combination tractor standards for CO2 based on the aerodynamic shapes of tractor vehicles and the rolling resistance of tires used by the tractor vehicles, and those standards correlate to approximately the same level of usage of aerodynamic technologies and low-rolling resistance tires as currently required by the Tractor-Trailer GHG regulation;

WHEREAS, the U.S. Phase I GHG regulation's CO2 combination tractor standards apply to high-roof sleeper-cab and day cab tractors regardless of the type of trailer they are hauling, or even if they are not hauling trailers, and will therefore result in GHG emission reductions that are at least as great as those attributable from the Tractor-Trailer GHG regulation;

WHEREAS, the U.S. Phase I GHG regulation establishes a combination tractor vehicle standard for HFC emissions to account for refrigerant leakage from air conditioning systems, whereas the Tractor-Trailer GHG regulation does not regulate HFC emissions from heavy-duty tractor vehicles that haul 53-foot or longer box-type trailers on California highways;

WHEREAS, the U.S. Phase I GHG regulation establishes aerodynamic technology and low-rolling resistance tire requirements for combination tractors that are essentially identical to the requirements applicable to sleeper-cab tractors in the existing Tractor-Trailer GHG regulation, and therefore, eliminating the requirements of the Tractor-Trailer GHG regulation applicable to new 2014 and subsequent model-year sleeper-cab tractors would harmonize California and federal requirements without affecting the GHG benefits of the existing Tractor-Trailer GHG regulation;

WHEREAS, the U.S. Phase I GHG regulation establishes aerodynamic technology and low-rolling resistance tire requirements for combination tractors that are more comprehensive than the requirements applicable to day-cab tractors in the existing Tractor-Trailer GHG regulation, and therefore, eliminating the requirements of the Tractor-Trailer GHG regulation applicable to new 2014 and subsequent model-year day-cab tractors would harmonize California and federal requirements without affecting the GHG benefits of the existing Tractor-Trailer GHG regulation;

WHEREAS, staff is proposing, in a separate rulemaking action, new regulations to establish GHG standards and test procedures for new 2014 and subsequent model year California medium- and heavy-duty engines and vehicles that are essentially identical to the emission standards and test procedures of the U.S. Phase 1 GHG regulation;

WHEREAS, the proposed amendments to sunset the tractor-based requirements of the Tractor-Trailer GHG regulation for 2014 and subsequent model year sleeper-cab tractors, in conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as the emission reductions attributable to the existing Tractor-Trailer GHG regulation, because the Phase 1 GHG regulation would subject all sleeper-cab tractors to aerodynamic technology and low-rolling resistance tire requirements that are essentially identical to those in the existing

Tractor-Trailer GHG regulation, and further applies to sleeper-cab tractors regardless of the type of trailer they are hauling, or even if they are not hauling trailers;

WHEREAS, although the proposed amendments to the Tractor-Trailer GHG regulation would sunset the tractor-based requirements for 2014 and subsequent model year sleeper-cab tractors that require tractor aerodynamic technologies to be maintained in good operating condition, such tractors would be subject to the proposed Phase 1 GHG regulation's provisions that prohibit tractors from being modified from certified configurations during their useful lives, and restrict such modifications after their useful lives, and therefore the proposed amendments, in conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as those attributable to the existing Tractor-Trailer GHG regulation;

WHEREAS, the proposed amendments to sunset the tractor-based requirements for 2014 and subsequent model year day-cab tractors, in conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as the emission reductions attributable to the existing Tractor-Trailer GHG regulation because the proposed Phase 1 GHG regulation would subject such tractors to low-rolling resistance tire requirements that are essentially identical to the tire requirements of the Tractor-Trailer GHG regulation, as well as aerodynamic performance requirements that are not present in the Tractor-Trailer GHG regulation;

WHEREAS, the U.S. Phase I GHG regulation allows manufacturers to optionally certify model year 2013 combination tractors to generate emission credits;

WHEREAS, the existing Tractor-Trailer GHG requirements that require new 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, only apply to tractors that were designed and built by tractor manufacturers to be sleeper-cab tractors, and therefore the proposed amendments to clarify that the new sleeper-cab requirements do not apply to day-cab tractors that are subsequently retrofitted to be sleeper-cab tractors by owners are consistent with and merely serve to clarify the existing Tractor-Trailer GHG requirements;

WHEREAS, the proposed amendments would establish the following modifications to the existing Tractor-Trailer GHG regulation:

- Sunset the Tractor-Trailer GHG regulation's requirements applicable to new 2014 and subsequent model year sleeper-cab tractors;

- Sunset the Tractor-Trailer GHG regulation's requirements applicable to new 2014 and subsequent model year day-cab tractors;

- Clarify that 2013 model year tractors that are optionally certified to the U.S. Phase 1 GHG regulation are exempted from the Tractor-Trailer GHG regulation;

- Add a definition of "emission standard" to be consistent with the definition set forth in *Engine Manufacturers Association v. South Coast Air Quality Management District* (2004) 541 U.S. 246, 253, 124 S.Ct. 1756, 1762 (*EMA)* for purposes of clarity, consistency, and conformity;

- Exempt day-cab and sleeper-cab tractors that have been certified under either the U.S. Phase 1 GHG regulation or the proposed California Phase 1 GHG regulation from the new tractor requirements of the Tractor-Trailer GHG regulation;

- Permit day-cab and sleeper-cab tractors that have been certified under either the U.S. Phase 1 GHG regulation or the proposed California Phase 1 GHG regulation to be eligible for the existing exemptions in the Tractor-Trailer GHG regulation for short-haul tractor and local-haul tractors; and

- Establish a new definition of a "sleeper-cab tractor" to clarify that owners of 2011 and subsequent model day-cab tractors that are subsequently retrofitted with after-market sleeper-cab compartments are only required to comply with the Tractor-Trailer GHG regulation's requirements applicable to day cab tractors.

WHEREAS, the proposed amendments apply to title 17, CCR, sections 95300, 95301, 95302, 95303, 95305, as set forth in Attachment A hereto, with the modifications as set forth in Attachment B hereto;

WHEREAS, ARB staff prepared a staff report entitled "Initial Statement of Reasons (ISOR) for Proposed Rulemaking, Proposed GHG Regulations for Medium- and Heavy-Duty Engines and Vehicles, Optional Reduced Emission Standards for Heavy-Duty Engines, and Amendments to the Tractor-Trailer GHG Regulation, the Diesel-Fueled Commercial Motor Vehicle Idling Rule and the Heavy-Duty Hybrid-Electric Vehicles Certification Procedures", which presents the rationale for the proposed amendments;

WHEREAS, the ISOR and proposed regulatory language were made available to the public for at least 45 days prior to the public hearing to consider the proposed amendments to the Tractor-Trailer GHG regulation;

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 the 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, California Code of Regulations (CCR), section 60005 (b), and the policy and substantive requirements of CEQA, as part of the Initial Statement of Reasons (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, no comments were received during the 45-day comment period that raise significant environmental issues, therefore, no approval of written responses to such comments is required per title 17, California Code of Regulations, section 60007;

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; and

WHEREAS, in consideration of the information in the public record, including the ISOR, written comments, and testimony provided at the hearing, the Board finds that:

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;

The proposed amendments were developed using the best available economic and scientific information and will achieve the maximum technologically feasible and cost-effective GHG emission reductions from tractor-trailer combination vehicles;

The proposed amendments are necessary for the successful implementation of the non-sunsetting requirements in the existing regulation;

The U.S. Phase I GHG regulation specifies combination tractor standards for CO2 that correlate to approximately the same level of usage of aerodynamic

technologies and low-rolling resistance tires as presently required by the Tractor-Trailer GHG regulation;

The U.S. Phase I GHG regulation's CO2 combination tractor standards apply to high-roof sleeper-cab and day-cab tractors regardless of the type of trailer they are hauling, or even if they are not hauling trailers, and will therefore result in GHG emission reductions that are at least as great as those attributable from the Tractor-Trailer GHG regulation;

The U.S. Phase I GHG regulation specifies a combination tractor vehicle standard for HFC emissions to account for refrigerant leakage from air conditioning systems, whereas the Tractor-Trailer GHG regulation does not regulate HFC emissions from new or used heavy-duty tractors that haul 53-foot or longer box-type trailers on California highways and will therefore result in GHG emission reductions that are at least as great as those attributable from the Tractor-Trailer GHG regulation;

Staff is proposing a separate regulatory action, as described in Resolution 13-50 to amend existing regulations to control GHG emissions from new medium and heavy-duty engines and to adopt a regulation to establish GHG requirements applicable to medium- and heavy-duty vehicles that would align California's GHG related requirements for such engines and vehicles with those existing in the EPA's Phase I GHG regulation;

The proposed amendments to sunset the Tractor-Trailer GHG regulation's requirements for new 2014 and subsequent model year sleeper-cab tractors, in conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as the emission reductions attributable to the existing Tractor-Trailer GHG regulation, because the Phase 1 GHG regulation subjects all sleeper-cab tractors to aerodynamic technology and low-rolling resistance tire requirements that are essentially identical to those in the existing Tractor-Trailer GHG regulation, and further applies to sleeper-cab tractors regardless of the type of trailer they are hauling, or even if they are not hauling trailers;

The proposed amendments to sunset the Tractor Trailer GHG regulation's requirements for new 2014 and subsequent model year sleeper-cab tractors, in conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as those attributable to the existing Tractor-Trailer GHG regulation because the Phase 1 GHG regulation contains provisions that restrict modifications of tractor aerodynamic technologies that are similar to the Tractor Trailer GHG regulation's requirements to maintain tractor aerodynamic technologies in good operating condition;

The proposed amendments to sunset the Tractor-Trailer GHG regulation's requirements for new 2014 and subsequent model year day-cab tractors, in

conjunction with the proposed adoption of the Phase 1 GHG regulation, will achieve GHG emission reductions that are at least as large as the emission reductions attributable to the existing Tractor-Trailer GHG regulation, because the Phase 1 GHG regulation subjects such tractors to low-rolling resistance tire requirements that are essentially identical to the tire requirements of the Tractor-Trailer GHG regulation, as well as aerodynamic performance requirements that are not present in the Tractor-Trailer GHG regulation;

The proposed amendment to exempt 2014 and subsequent model year sleeper-cab and day-cab tractors from the Tractor-Trailer regulation, in conjunction with the proposed adoption of the Phase 1 GHG regulation, which will subject such tractors to the combination tractor standards of the proposed Phase 1 GHG regulation would harmonize California and federal requirements without affecting the GHG benefits of the existing Tractor-Trailer GHG regulation;

The proposed amendment to exempt 2013 model year tractors that are optionally certified to the U.S. Phase 1 GHG regulation from the Tractor-Trailer GHG regulation is needed to clarify that such tractors are not subject to the amended Tractor-Trailer GHG regulation and to harmonize the requirements between the U.S. Phase 1 GHG regulation and the amended Tractor-Trailer GHG regulation;

The proposed amendment to add a definition of "emission standard" that conforms to the definition in federal law, is needed to clarify that under the federal definition, requirements to equip tractors and trailers with specified aerodynamic equipment and low-rolling resistance tires relate to a requirement that a vehicle be equipped with a certain type of pollution-control device or a design feature related to the control of emissions, and are emission standards;

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 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 ISOR, as supplemented by staff's presentation at the hearing of this item;

Overall, the proposed amendments are not anticipated to impose any additional costs on the entities currently subject to the Tractor-Trailer GHG regulation; No reasonable alternative considered, or that has otherwise been identified and brought to the attention of ARB, would be more effective at carrying out the purpose for which the amendments are proposed, or would be as effective and less burdensome to affected private persons and businesses than the proposed amendments;

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;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the amendments to title 17, CCR sections 95300, 95301, 95302, 95303, and 95305, as set forth in Attachment A hereto, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to make the modified regulatory language and any additional supporting documents and information available to the public for a period of at least 15 days, provided such modifications do not alter the conclusion of the environmental analysis, and 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, shall make those modifications available for public comment for at least 15-days, and shall present the regulation to the Board for further consideration if he determines that this is warranted. Upon the Executive Officer addressing the need for any additional conforming modifications as appropriate and making such modifications, if any, publicly available for comment, the Executive Officer shall take final action to adopt the regulation, as set forth in the Attachments hereto and in any subsequent modifications that have been made publicly available for comment.

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 hereby determines that the amendments adopted herein will not cause California's motor vehicle emission standards as they apply to new 2011 and subsequent model year tractors and trailers, 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 as adopted 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, to the extent such action is necessary, the Executive Officer shall, upon adoption, forward the regulation 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) of the federal Clean Air Act, as appropriate.

I hereby certify that the above is a true and correct copy of Resolution 13-51, as adopted by the Air Resources Board.

Tracy Jensen, Clerk of the Board

Resolution 13-51

December 12, 2013

Identification of Attachments to the Resolution

Attachment A: Proposed Amendments to the Tractor-Trailer Greenhouse Gas Regulation, title 17, California Code of Regulations, subarticle 1, sections 95300, 95301, 95302, 95303, and 95305, as set forth in Appendix I-B to the Initial Statement of Reasons, released October 23, 2013.

Attachment B: Staff's Suggested Modifications to the Tractor-Trailer Greenhouse Gas (GHG) Regulation (Distributed at the December 12, 2013 Board hearing)

*Attachment A is not attached to the proposed resolution; it is simply described on this page.