

UPDATED INFORMATIVE DIGEST

PUBLIC HEARING TO CONSIDER THE ADOPTION OF PROPOSED AMENDMENTS TO THE HEAVY-DUTY VEHICLE GREENHOUSE GAS EMISSION REDUCTION MEASURE

Sections Affected: Adoption of amendments to the Heavy-Duty Vehicle Greenhouse Gas (GHG) Emission reduction regulation (Tractor-Trailer GHG regulation), sections 95301 to 95309, 95311, and new section 95312, title 17, California Code of Regulations (CCR).

Background: On December 11, 2008, the Air Resources Board (ARB or Board) approved the existing Tractor-Trailer GHG regulation. This regulation reduces GHG emissions from 53-foot or longer dry-van and refrigerated-van trailers (hereinafter collectively referred to as box-type trailers) and the tractors that pull such trailers by requiring them to utilize technologies that would result in improved fuel efficiency. Such technologies have been verified by the United States Environmental Protection Agency (U.S. EPA) under their SmartWay¹ Program (e.g., low-rolling resistance tires and aerodynamic technologies such as side skirts, gap fairings, and rear trailer fairings). The Tractor-Trailer GHG regulation is one of the measures identified in ARB's Scoping Plan to reduce GHG emissions from on-road heavy-duty vehicles and contributes towards meeting the GHG emission reduction goals of Assembly Bill 32 (Global Warming Solutions Act of 2006).

Applicability

The Tractor-Trailer GHG regulation applies to 53-foot or longer box-type trailers and the tractors that pull them on California highways. The regulation applies primarily to affected tractor and trailer owners who are responsible for replacing or retrofitting their affected vehicles. In addition, drivers, motor carriers, California-based brokers and California-based shippers that operate or use affected tractors and trailers also share responsibility for compliance with the regulation. The regulation applies to both California and out-of-state registered tractors and trailers that operate in California. The regulation does not apply to box-type trailers shorter than 53 feet in length; refuse trailers, chassis trailers, drop frame trailers, curtain side trailers, livestock trailers, emergency vehicles, or military tactical vehicles.

Existing Requirements

The Tractor-Trailer GHG regulation requires new and existing 53-foot or longer box-type trailers, and the tractors that pull them, to be SmartWay designated or retrofitted with SmartWay verified aerodynamic technologies and low-rolling resistance tires when they operate on California highways. Fleets with pre-2011 model year trailers have the option of retrofitting their affected trailers over several years by following one of two

¹ U.S. EPA SmartWay Partnership Program: <http://www.epa.gov/smartway/index.htm>

compliance schedules based on fleet size. The regulation also includes a special provision for 2003 to 2008 model year refrigerated-van trailers to delay compliance until 2017 to 2019 depending on trailer model year. Since the technologies required by the regulation offer the most efficient improvements at highway speeds, the regulation includes provisions to exempt local-haul trailers and the tractors that pull them, local-haul tractors, and short-haul tractors and the trailers they pull from some or all of the requirements.

Description of the Regulatory Action: On December 17, 2010, the Board adopted Resolution 10-46 which directed the Executive Officer to adopt the amendments initially proposed by staff in the California Code of Regulations, title 17, sections 95301 through 95309, and 95311, as originally proposed in the Staff Report: Initial Statement of Reasons released on October 28, 2010. The Board, in Resolution 10-46 also directed the Executive Officer to determine if additional modifications to the originally proposed amendments were appropriate, and if the Executive Officer so determined, to make the modified regulatory language available for public comment for a period of at least 15 days, to consider written comments submitted during the 15-day comment period, to make such further modifications as may be appropriate in light of the comments received, and that he should return to the Board for further consideration if he determined that this was warranted.

Amendments Approved at the Board Hearing (45-Day Notice)

The amendments approved at the Board hearing provide affected fleets additional flexibility to meet the requirements of the regulation. These amendments include:

- an optional second compliance schedule for large fleets that will provide them an additional year to register with ARB, but will have the same final compliance deadline as the existing large fleet phase-in option;
- an option to report compliance on an annual basis for trailers participating in an optional compliance schedule, rather than on an up-front, one-time basis as currently required;
- with Executive Officer approval, a provision to allow owners of trailers to modify SmartWay verified aerodynamic equipment from its original verified configuration;
- a provision to exempt storage trailers from the aerodynamic and tire requirements when traveling empty on California highways;
- with Executive Officer approval, a limited term exemption from the aerodynamic technology requirements for trailers that are configured such that none of the SmartWay verified aerodynamic technologies can be effectively installed on them;
- a provision to exempt empty local-haul trailers from meeting the aerodynamic equipment requirements and empty storage trailers from meeting both the aerodynamic equipment and tire requirements when they are being relocated to another local-haul base or storage location;
- with Executive Officer approval, a provision for temporary passes (Relocation Pass and Transfer of Ownership Pass) to allow trailers loaded with freight to travel on California highways on a temporary basis without the required aerodynamic technologies and low rolling resistance;

- with Executive Officer approval, a provision for a temporary pass for tractors, and the trailers they pull, that only travel in California once a year, allowing them to travel on California highways without the required aerodynamic technologies and low rolling resistance tires for a period of no more than three days;
- a requirement on California-based vehicle dealers of 53-foot and longer box-type trailers and heavy duty tractors to maintain records of the disclosure statement given to buyers regarding the Tractor-Trailer GHG regulation;
- a provision to include 2009 model year refrigerated-van trailers in the extended compliance provision for trailers equipped with 2003 model year or newer TRUs.
- a provision to extend the compliance deadlines with the low rolling resistance tire requirements by one year for pre-2011 model year tractors and four years for pre-2011 model year trailers; and
- a provision to allow the use of any open shoulder drive tire (U.S. EPA SmartWay verified or not) on 2011 and subsequent model year tractors until January 1, 2013.

Fifteen-Day Modifications

Subsequent to the hearing, staff proposed modifications to the regulatory text that largely clarify the regulation's provisions and provide regulated entities additional flexibility to comply with the regulation. The most significant of these post-hearing modifications were:

- with Executive Officer approval, a provision to allow owners or operators to modify U.S. EPA SmartWay certified tractors provided they demonstrate that the modification is needed for the tractor to perform its designed job function and that there is no reasonable alternative to the modification that would involve or require a lesser degree of modification to the tractor;
- extend the previously approved provision to exempt empty local-haul and storage trailers to include all empty trailers (including local-haul and storage trailers) subject to the regulation, as well as the tractors pulling such trailers; and
- a provision to extend the maximum applicable time period of a relocation pass for trailers, transfer of ownership pass for trailers, and non-compliant tractor pass from three to five consecutive days.

Comparable Federal Regulations: As described above, the Tractor-Trailer GHG regulation is based on the voluntary U.S. EPA SmartWay Partnership Program. Recently, U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) adopted regulations to reduce GHG emissions and improve fuel efficiency of on-road medium- and heavy-duty vehicles and engines² (hereinafter referred to as federal regulations). As described below, there are significant differences between the federal regulations and the Tractor-Trailer GHG regulation both in terms of their applicability and the requirements.

² U.S. EPA and NHTSA. *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles*, Federal Register, Vol. 76, No. 179, September 15, 2011 (<http://www.gpo.gov/fdsys/pkg/FR-2011-09-15/pdf/2011-20740.pdf>)

The federal regulations apply to companies that manufacture and sell new heavy-duty engines and new Class 2b through Class 8 trucks including heavy-duty pick-up trucks and vans, combination tractors, as well as all types and sizes of vocational trucks and buses. The federal regulations establish separate GHG emission and fuel efficiency standards for both the vehicle and the engine and compliance with GHG emissions standards begin with model year 2014 engines and vehicles. The Tractor-Trailer GHG emission reduction requirements, on the other hand, are targeted to a very small subset of the vehicles subject to the federal regulations and apply to owners and operators of the vehicles, as opposed to manufacturers and sellers of engines and vehicles. That is, the Tractor-Trailer GHG emission reduction requirements apply to owners and operators of long-haul combination tractors that pull 53-foot or longer box-type trailers and the 53-foot or longer box-type trailers pulled by these tractors. Heavy-duty engines, heavy-duty pick-up trucks and vans, buses, as well as combination tractors that do not pull 53-foot or longer box-type trailers are not regulated by the Tractor-Trailer GHG regulation. Moreover, trailers are not regulated by the federal regulations, and thus, the benefits from trailer improvements are not accounted for in the federal regulations. Thus, the small subset of vehicles that may be impacted by both regulations at the same time includes only 2014 model year and newer tractors that pull 53-foot or longer box-type trailers.

Although the federal GHG emission standards for combination tractors are predicated on the application of technologies that include improvements in aerodynamic drag and tire rolling resistance, the regulation does not mandate the use of these technologies to meet GHG standards. The Tractor-Trailer GHG regulation, on the other hand, mandates the use of SmartWay technologies that improve aerodynamic drag and tire rolling resistance to achieve GHG emission reductions expected from the regulation. Thus, a federally certified tractor that also meets the Tractor-Trailer GHG requirements will either have the same or better fuel efficiency as a federally certified tractor that does not meet the requirements of the Tractor-Trailer GHG regulation.

Furthermore, unlike the federal program that applies to new engines and vehicles beginning with model year 2014, the Tractor-Trailer GHG emission reduction requirements apply to both in-use and new tractors and box-type trailers. U.S. EPA does not have authority to adopt in-use emission standards relating to the control of in-use motor vehicles, and thus, the federal regulations do not apply to in-use long-haul combination tractors and box-type trailers.

Additionally, U.S. EPA has a voluntary program, the U.S. EPA SmartWay Partnership Program, which is a collaboration between U.S. EPA and the freight industry designed to improve energy efficiency, reduce greenhouse gas and air pollutant emissions, and improve energy security. The Tractor-Trailer GHG regulation utilizes aspects of the voluntary U.S. EPA SmartWay program but mandates the use of the SmartWay verified aerodynamic and low rolling resistance tire technologies.