

FACTS ABOUT

Drayage Truck Regulations

Reducing emissions from goods movement in California

What is a Drayage truck?

Drayage trucks are diesel-fueled, heavy-duty trucks that transport containers, bulk, and break-bulk goods to and from ports and intermodal rail yards to other locations. ARB estimates that there are approximately 100,000 drayage trucks statewide and nearly 20,000 of them frequently service ports and rail yards.

Why are control measures necessary?

Control measures are necessary to reduce emissions of diesel particulate matter (PM) and oxides of nitrogen (NO_x) that cause adverse health effects for Californians. The drayage truck regulation is part of ARB's ongoing efforts to reduce emissions from diesel-fueled engines and improve air quality associated with goods movement.

Drayage trucks emit an estimated 850 tons of diesel PM and 17,600 tons of NO_x annually

The ARB identified diesel PM as a toxic air contaminant in 1998. Exposure to diesel PM may result in cancer and other harmful health effects. Eye and lung irritation, allergic reactions in the lungs, asthma exacerbation, blood toxicity, immune system dysfunction, and developmental disorders are examples of health effects caused by diesel emissions.

NO_x, a contributor to ozone, has also shown to cause adverse health effects including respiratory irritation, suppression of the immune system, and asthma exacerbation. Although the ARB is considering control measures that primarily address diesel PM emission reductions, the agency will also maximize its efforts on NO_x emission reductions.

Who would be affected by the regulation?

The regulation applies to any person who owns or operates a diesel-fueled drayage truck having a gross vehicle weight rating greater than 33,000 pounds that operates at specified California ports, intermodal rail yards, or both.

What does the regulation require?

The regulation sets two compliance deadlines that will affect all drayage trucks operating at specific California's ports and intermodal rail yards:

- Phase 1: By December 31, 2009, all pre-1994 model year (MY) engines are to be retired or replaced with 1994 and newer MY engines. Furthermore, all drayage trucks with 1994 – 2003 MY engines would be required to achieve an 85 percent PM emission reduction through the use of an ARB approved level 3 verified diesel emission control strategy (VDECS).
- Phase 2: By December 31, 2013, all trucks would be required to further reduce emissions to meet the 2007 MY California or federal heavy-duty diesel-fueled on-road emission standards.



This regulation is expected to prevent about 1,200 premature deaths and provide a health cost savings of \$8.7 billion through 2020.

- All drayage trucks involved in work at affected ports and rail yards would be registered in a drayage truck registry (DTR) by late 2009 and would be required to affix a compliance label to the driver's side door.

What are the estimated benefits of the regulation?

The regulation is expected to significantly reduce emissions of diesel PM and NOx. In 2010, after full implementation of Phase 1, diesel PM emissions from drayage trucks would be reduced by 86 percent and NOx emissions would be reduced by approximately 3 percent from 2007 levels. In 2014, after full implementation of Phase 2, NOx emissions would be reduced by nearly 56 percent from 2007 levels. The regulation is expected to prevent about 1,200 premature deaths with significant health cost savings of \$8.7 billion through 2020

What are the estimated costs?

ARB estimates that the drayage truck regulation compliance costs would be approximately \$1.1 - \$1.5 billion (2006 dollars). This total combines the incremental expenses of regulation compliance and those associated with the early replacement of trucks (the residual value of the replaced truck), retrofit after-treatment installation and maintenance costs; and recordkeeping and reporting fees.

ARB has calculated the total for Phase 1 to be \$360 to \$480 million (2006 dollars) for retrofit and/or replacement and for Phase 2 to be approximately \$780 to \$1,050 million (2006 dollars) for truck replacement.

For more information

The ARB report and technical support document for the regulation are posted at:

<http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm> or contact ARB's Public Information Office at (800) 242-4450.

To obtain this information in other languages please contact ARB's Bilingual Manager at (916) 323-7053.

