

California emissions regulations take effect in 2012

While other states are setting greenhouse gas emission goals and just considering ways to reduce diesel engine pollutants, California is on the verge of implementing the nation's toughest emissions standards. Beginning in 2012 and continuing for the next several years, diesel-fueled trucks and buses that operate in California must either install particulate matter (PM) diesel soot filters, for pre-2007 engine model year vehicles, or completely replace older engines. By 2023, no truck or bus will be operating in California with an engine more than 13 years old unless it has special equipment that cuts emissions.



The regulations apply to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating over 14,000 pounds that are privately or federally owned, as well as privately and publicly owned school buses. Other public fleets, garbage trucks, transit buses, and drayage trucks that transport marine containers are subject to separate regulations.

Originally approved in December 2008 by the California Air Resource Board (CARB) of the California Environmental Protection Agency, the rules were amended last year and the effective date was postponed until 2012.

Concerns about health and the environment are driving the new requirements. While heavy trucks and buses represent a very small percentage of all vehicles, they account for about 30% of the nitrogen oxides and 65% of the particulate matter emitted by all vehicles. Nitrogen oxide, the precursor to smog, is linked with serious respiratory problems and global warming. Particulate matter, the fine particles that can and cannot be seen in smoke, is linked to several serious health problems.

Trucking companies operating in California have two options for meeting the state's emissions requirements. Based on engine model year, they could follow a schedule for when to retrofit trucks with soot filters and/or replace engines. Or regardless of engine year, they could retrofit a percentage of their trucks on an annual basis according to specific targets. See more in the sidebar on this page, including a link to an online Excel-based

worksheet configured as a Compliance Schedule Tool.

California plans various enforcement actions, including inspections during traffic stops, at weigh stations, and at loading docks. The vehicle owner is responsible for violations, but California shippers and brokers are responsible for ensuring they only use compliant trucks and trailers. More about enforcement: www.arb.ca.gov/enf/enf.htm.

Visit the California Air Resource Board on the Web:
 — www.arb.ca.gov/dieseltruck —
Call 866-634-3735 to speak with CARB staff
E-mail: 8666diesel@arb.ca.gov

Compliance Schedule for Heavy Trucks

Engine Year	Requirement from January 1
Pre-1994	No requirements until 2015, then 2010 engine
1994-1995	No requirements until 2016, then 2010 engine
1996-1999	PM filter from 2012 to 2020, then 2010 engine
2000-2004	PM filter from 2013 to 2021, then 2010 engine
2005-2006	PM filter from 2014 to 2022, then 2010 engine
2007-2009	No requirements until 2023, then 2010 engine
2010	Meets final requirements

Trucks and buses with a GVWR over 26,000 pounds comply with California emissions standards in two ways: (1) by engine model year, or (2) by using a more flexible phase-in option.

Engine Model Year Option — Trucking companies install the best available particulate matter (PM) filter on 1996 model year and newer engines and then replace the vehicles 8 years later. Trucks with 1995 model year and older engines are replaced starting 2015. Replacements with a 2010 model year or newer engines meet the final requirements, but fleets could also replace with used trucks that have a future compliance date on the schedule. For example, a replacement with a 2007 model year engine complies until 2023. By 2023 all trucks and buses must have 2010 or newer engines, with few exceptions. This option requires no compliance reporting.

Phase-In Option — Companies choose which vehicles to retrofit or replace, report information about all trucks starting January 31, 2012, and meet a percentage target each year. By 2012, 30% of the company's fleet must have PM filters, increasing to 60% by 2013, 90% by 2014, and the entire fleet by 2016. This option credits fleets for any 2007 model year and newer engines originally equipped with filters and reduces the overall number of retrofit filters needed. Any engine with a PM filter regardless of model year would be compliant until at least 2020. All heavy trucks and buses must meet the requirements in the schedule above by January 2020.

Use the CARB Compliance Schedule Tool to study options:
www.arb.ca.gov/msprog/onrdiesel/compliancetool.htm