

LARGE SPARK-IGNITED REGULATION

This regulation, which required owners of propane, natural gas, gasoline and electric forklifts, sweepers/scrubbers, industrial tow tractors, and airport ground support equipment to improve their in-use equipment NOx emissions between 2007 and 2013, was revised in 2016 to incorporate reporting and equipment labeling requirements to ensure full compliance.

Owners with fleets of 4 or more Class I, II, IV or V forklifts (forklift fleet), and fleets of 4 or more sweepers/scrubbers, industrial tow tractors, and airport ground support equipment (non-forklift fleet) were required to meet fleet averages according to the following compliance schedule:

Fleet Average Emission Level Standards in grams per kilowatt-hour (brake-horsepower-hour) of hydrocarbons plus oxides of nitrogen			
Fleet Type	Initial Compliance Date		
	1/1/2009	1/1/2011	1/1/2013
Large Forklift Fleet	3.2 (2.4)	2.3 (1.7)	1.5 (1.1)
Medium Forklift Fleet	3.5 (2.6)	2.7 (2.0)	1.9 (1.4)
Non-Forklift Fleet	4.0 (3.0)	3.6 (2.7)	3.4 (2.5)

Fleet averages for forklift and non-forklift fleets were calculated separately. Electric vehicles, and equipment rented and leased more than a year, were counted in determining the fleet size. Fleets of 3 or less forklifts, fleets of 3 or less non-forklifts, and in-field agricultural equipment were exempt from the regulation's performance requirements. First-processing agricultural fleets were not exempt, but they had a different set of compliance requirements within the regulation. Compliance was met either by adding on catalytic converters to non-certified engines, or by replacement of equipment with newer engines meeting more stringent NOx emissions standards.

CARB's 2016 revision requires reporting and labeling requirements for fleets of 4 or more forklifts using the online reporting system used by the off-road diesel regulation (DOORS) to enforce compliance. Agricultural is exempt from reporting, and agricultural first processing facilities is also exempt from reporting provided their fleet is the equivalent of 2004 or later certified engines, or older engine with catalytic converters meeting at least 4.0 g/kW-hr (3.0 g/bhp-hr). For more information on this regulation visit, the CARB [LSI website](#).