



Heavy-Duty Truck Emissions

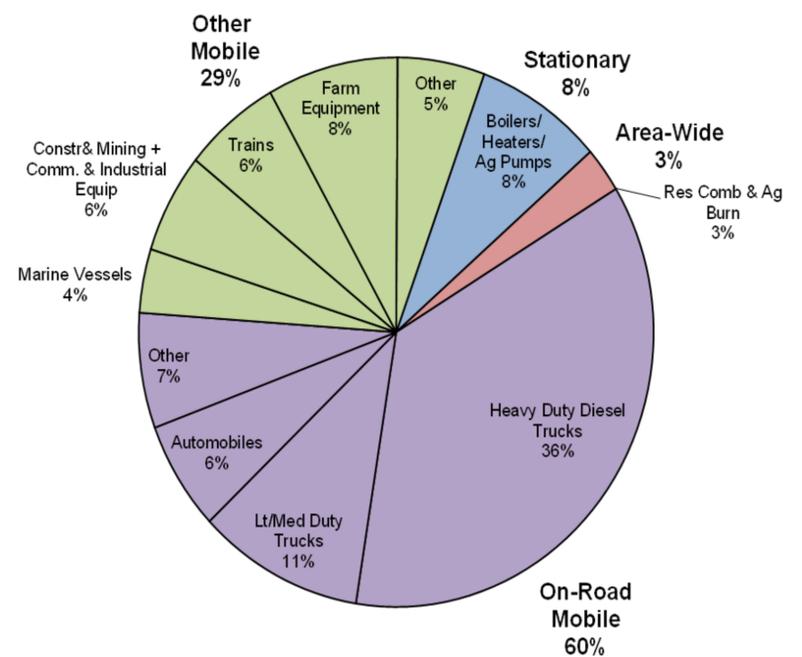
Heavy-duty diesel trucks are the largest source of emissions in the Sacramento region, affecting our obligation to protect public health by attaining the National Ambient Air Quality Standards (NAAQS) for Ozone. We urge the Federal Government to tighten rules for Nitrogen Oxides (NOx) emissions from trucks and advance a 50-state-strategy for implementation.



Requested Actions: Reduce NOx Emissions from Heavy-Duty Trucks

- U.S. EPA should move quickly to finalize new incentives and rules that **reduce Nitrogen Oxides (NOx) emissions** from highway heavy-duty vehicles and engines by at least 90 percent from current in-use levels as soon as possible but by no later than model year 2027.
- Advance a **single national highway heavy-duty truck and engine program** with provisions consistent with California's 2020 Heavy-Duty Omnibus Rule.
- This action centers **environmental justice** by reducing the impacts of NOx on residents of frontline communities who live near freeways and high-traffic roads.
- Because the Clean Air Act largely preempts state and local regulation of mobile sources, this action **supports small businesses** by reducing the needs to impose stringent limits on stationary sources such as factories, power plants and refineries as they pursue necessary emission reductions.
- Continue to **identify opportunities** to reduce emissions from on-road sources.

Emissions Sources in the Sacramento Region



Background: NOx Standards and Implementation Needs

Heavy-duty diesel trucks are the largest single source of Nitrogen Oxides (NOx) emissions in the Sacramento region, contributing to **public health issues and environmental injustices**. Long term exposure to NOx can decrease lung function, increase the risk of respiratory conditions, and increase response to allergens. NOx also contributes to the formation of fine particles (PM) and ground level ozone, both of which are associated with adverse health effects. Tighter NOx standards for heavy-duty trucks will help areas meet their legal obligation to attain the health-based National Ambient Air Quality Standards (NAAQS). EPA acknowledges that numerous states will need to obtain substantial NOx emission reductions in order to meet both the 2008 and 2015 ozone standards. As of June 2017, 177 counties across the nation – home to approximately one-third of the U.S. population – are nonattainment for the 2008 ozone standard. On April 30, 2018, EPA designated 51 areas as nonattainment for the more stringent 2015 ozone standard. Emissions from heavy-duty trucking contribute significantly to NOx in these areas. These areas have been designated as nonattainment for the 2015 ozone NAAQS but were attainment for the 2008 ozone NAAQS. EPA further acknowledges that NOx emission reductions will also help states and local areas reduce PM2.5 and regional haze. In the absence of a more stringent national on-highway heavy-duty NOx standard, many nonattainment areas, and areas on the cusp of nonattainment, across the country will find themselves unable to address emissions from one of their largest sources, likely **delaying their attainment or driving them into nonattainment** of the NAAQS.

A harmonized **50-state-strategy** is more cost-effective and achieves greater emission reductions than more stringent regional standards. The “Heavy-Duty Low NOx Omnibus Regulation,” approved by the CA Air Resources Board in August 2020, requires manufacturers to comply with tougher emissions standards, overhaul engine testing procedures, and further extend engine warranties to ensure reductions in NOx emissions. Because most of the trucks operated in California are purchased outside the state, this California-specific standard will not achieve the same emission reductions as a national standard. Second, having to comply with both federal and California standards imposes significant burdens on engine manufacturers, who, during the Phase 2 rulemaking for heavy-duty trucks, encouraged EPA to work with the California Air Resources Board (CARB) to develop appropriate, cost-effective NOx emission standards with the goal of a 50-state NOx program. Significant emission reductions are feasible, but will be most cost-effective when applied on a national scale.