

CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH

DONALD F. SCHWARZ, MD, MPH
Health Commissioner and
Deputy Mayor, Health & Opportunity

March 2013

New Diesel Retrofit Requirements in Philadelphia Public Works Contracts

Effective April 1, 2013, Philadelphia will begin implementing Executive Order 1-07,¹ which addresses the need to reduce harmful emissions from certain vehicles used in City public works contracts. The new policy requires all diesel powered non-road vehicles used in public works projects of over \$1,000,000 to install diesel retrofits to reduce tailpipe emissions of particulate matter by at least 20 percent. Vehicles meeting Tier 4 emissions standards are exempt from the requirement.

The purpose of the program is to protect the public's health from the adverse effects of air pollution stemming from diesel powered vehicles working on construction activities for the City. While new EPA regulations require diesel engines to use low-sulfur fuel and reduce emissions beginning in 2007, vehicles purchased before 2007 are not required to meet new emission standards. Many diesel engines are used for 25-30 years.

Older diesel engines emit large amounts of nitrogen oxides (NOx) and particulate matter (PM). Both of these pollutants contribute to serious public health problems that result in instances of premature mortality, asthma attacks, lost work days, and numerous other health effects. In addition, children, the elderly, and people with existing heart or lung disease, asthma, or other respiratory problems are especially sensitive to the health effects of fine particles. EPA has also determined that diesel exhaust is a likely human carcinogen. Retrofitting diesel engines currently in use will allow significant and immediate emission reductions from diesel engines that would not otherwise be addressed, will improve Philadelphian's health, reduce related health care costs, and help Philadelphia in meeting its obligations under the Clean Air Act. The Department of Public Health estimates annual health care cost savings of approximately \$6,000,000 with implementation of the Executive Order.

These units are direct muffler replacements and can be installed fairly quickly and require no special engineering. The City's Office of Fleet Management has been installing retrofit units on a variety of City vehicles including fire trucks, waste haulers, and sewer maintenance vehicles, with most units costing less than \$2,500. The Clean Air Council has obtained \$50,000 in funding to assist contractors and subcontractors with costs associated with installing the devices. Grants will cover half of the cost of each unit up to \$1,000.

The Philadelphia Air Management Services (AMS) will enforce the program in coordination with the City's Procurement Department. For more information contact Alison Riley, Voluntary Programs Coordinator, AMS, at Alison.riley@phila.gov

¹ "The Procurement Department is directed to develop standards for and require the use of low-emission diesel vehicles or alternative fuels for other vehicles engaged in public works contracts. All such contracts shall require the minimization of idling to the maximum extent possible."