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TRUCKING EFFORTS IMPROVE AIR QUALITY

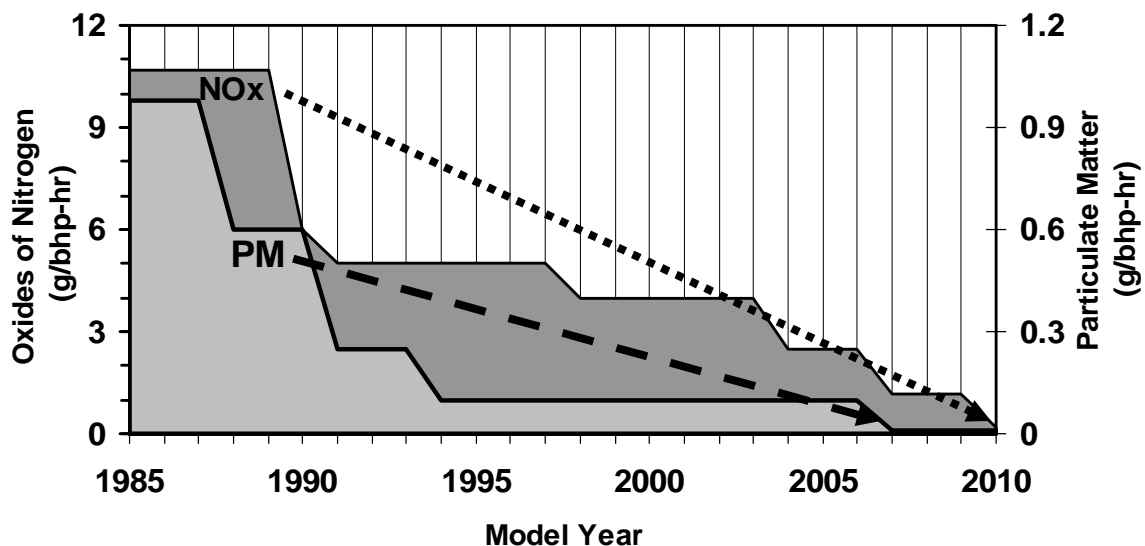
*Prepared by American Trucking Associations, Environmental Affairs
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Trucking was the first freight industry to widely use advanced diesel engine emission control systems. In 2002, the industry began buying new trucks which incorporated exhaust gas recirculation (EGR) combined with other emission control technologies to reduce tailpipe emissions of nitrogen oxide (NO_x) by half. The additional cost of purchasing this new engine technology was estimated to be as much as \$0.5 billion annually.

In 2007, the new diesel trucks purchased by the industry began incorporating diesel particulate filters (DPFs) to reduce tailpipe emissions of particulate matter by 90%. To illustrate the significance of these reductions, every 60 new trucks purchased this year will equal the particulate emissions of 6 trucks purchased just three years ago and of a single new truck purchased 20 years ago. These new trucks also began the first half of what; ultimately, will be an additional 90% reduction in NO_x emissions.

To advance the use of these new emission reduction technologies, the trucking industry began transitioning to a new ultra-low sulfur diesel fuel (ULSD) in 2006. ULSD, which represents the majority of the on-road diesel fuel being purchased in the United States, is refined to lower the sulfur content to near-zero levels (15 parts/million). The additional cost of purchasing this newest engine technology and ULSD has been estimated to be as much as \$4 billion annually.

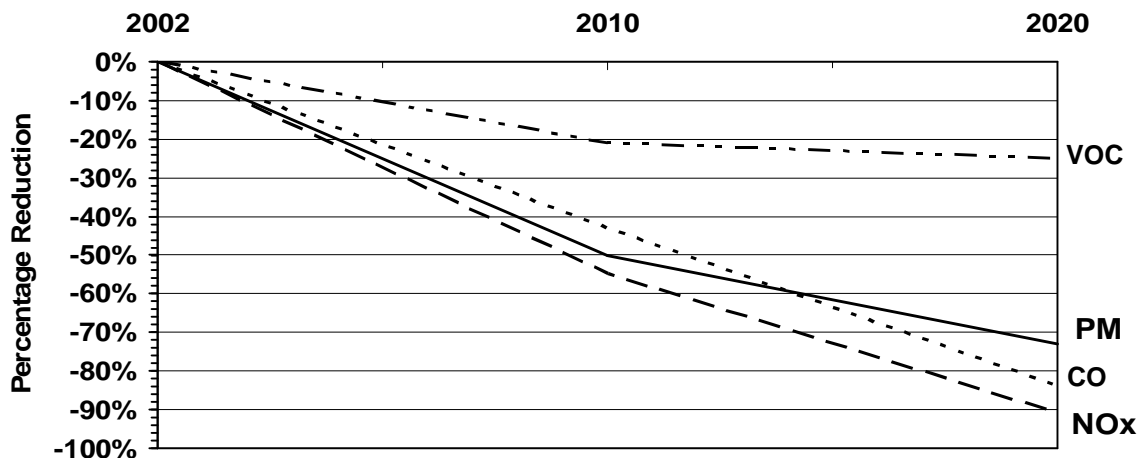
U.S On-Highway Heavy-Duty Diesel Engine Emissions Standards



These latest efforts to improve air quality continue a quarter-century trend of reducing truck emissions. In 2002 (the most current year data is available), on-road diesel engines contributed approximately 1% of the nation's total emissions of volatile organic compounds, carbon monoxide and sulfur dioxide, less than 1.5% of the nation's total emissions of fine particulate matter, and approximately 16% of the nation's total emissions of NOx. (EPA, 2005) On-road heavy-duty trucks account for less than 6% of the nation's greenhouse gas emissions. (EPA, 2008)

Nationally, on-road heavy-duty diesel trucks produce half as much fine particulates as off-road sources, including construction and farm equipment, locomotives, and marine vessels. When compared to 2002, PM and NOx emissions from heavy-duty trucks will be reduced by more than 50% by 2010 and by more than 70% by 2020 due to the stricter engine and diesel fuel standards. (FHWA, 2005)

U.S. On-Highway Diesel Truck Emissions Projections



Source: FHWA