

Talking Points:
Emission Reductions from On-Road Diesel Engines

- In 2002, on-road diesel engines contributed approximately 1% of the nation's total emissions of volatile organic compounds and carbon monoxide.
- In 2002, on-road diesel engines contributed nearly 1.5% of the nation's total emissions of fine particulate matter and approximately 16% of the nation's total emissions of oxides of nitrogen (NOx).
- Unlike some other source categories which have increased fine particulate matter emissions over the last decade, on-road diesel engines have cut fine particulates emissions by more than half over the last decade.
- Over the last 18 years, emission levels from the new diesel engines used primarily by over-the-road trucking companies have been lowered by 80% for particulate matter and the smog-forming compound NOx.
- NOx emissions from today's new diesel engines are 50% less than a similar engine sold just four years ago.
- Beginning in 2007, new diesel engines used primarily by over-the-road trucking companies will produce 90% fewer particulate matter and 50% fewer smog-forming NOx emissions than a similar engine built today. By 2010, NOx levels will be lowered by 90%.
- The sulfur content of diesel fuel contributes to particulate matter emissions. In 1993, a maximum sulfur standard for on-road diesel fuel was established at 500 parts per million (ppm). This was approximately an 80% reduction from the pre-regulated levels.
- In 2006, the sulfur standard for on-road diesel fuel will be lowered 97% from 500 ppm to 15 ppm. According to EPA estimates, this reduction in sulfur is expected to reduce particulate emissions from existing diesel engines by 5% or more.
- Nationally, on-road heavy-duty diesel trucks produce half as much fine particulate matter as off-road sources, including construction and farm equipment, locomotives, and marine vessels.
- When compared to 2002, particulate matter and NOx emissions from heavy-duty trucks will be reduced by more than 40% by 2010 and by more than 70% by 2020 due to stricter engine emission and diesel fuel standards.