



Regulatory Announcement

Proposed Strategy to Reduce Emissions from Heavy Duty Vehicles

The U.S. Environmental Protection Agency (EPA) is announcing a strategy to significantly reduce emissions from on-highway heavy-duty vehicles (vehicles with a gross vehicle weight rating greater than 8,500 pounds), including diesel and gasoline engines used in large commercial trucks, large versions of full-size pickup trucks, passenger vans, and the largest sport utility vehicles. Vehicles weighing up to 8,500 pounds would be covered under the tailpipe emission standards that EPA proposed in May, commonly known as Tier 2 standards. The first phase of the strategy to reduce emissions from heavy-duty trucks would take effect starting with the 2004 model year. The second phase could take effect as early as 2007. This strategy will play an important role in reducing the harmful health and environmental effects of ozone and particulate matter.

Highlights of Proposed Rule—The First Phase of the Strategy

EPA is proposing new emission standards that will significantly reduce emissions from heavy-duty vehicles. These new standards are part of a two-phase strategy to reduce emissions from heavy-duty trucks and the largest passenger vans and sport utility vehicles (SUVs). The proposed standards are just the first phase of this strategy and would require gasoline trucks to be 78 percent cleaner and diesel trucks to be 50 percent cleaner than today's models. A reduction in particulate matter of about 55,000 tons per year would also be achieved.

In order to ensure the best operation of these vehicles and their pollution control systems, the proposal includes several actions regarding new emission limits and improved testing procedures. For example, for vehicles weighing between 8,500 and 14,000 pounds (gross vehicle weight), EPA is proposing to require on-board diagnostics systems to help identify any possible failure of components of the emission control system.

The following tables list the proposed oxides of nitrogen (NOx) and hydrocarbon (HC) standards for gasoline and diesel vehicles with a gross vehicle weight above 8,500 pounds. The current NOx standard for both diesel and gasoline vehicles is 4.0 grams per brake horsepower hour (g/bhp-hr). The current HC standard for diesel is 1.3 g/bhp-hr and for gasoline is 1.1 g/bhp-hr.

Diesel Vehicles

Gross Vehicle Weight	Combined Standard NOx and HC
8,500 pounds and above	2.4 g/bhp-hr

Gasoline Vehicles

Gross Vehicle Weight	NOx	HC
8,500 - 10,000 pounds	0.9 grams per mile	0.28 grams per mile
10,001 - 14,000 pounds	1.0 grams per mile	0.33 grams per mile
14,001 pounds and above	1.0 g/bhp-hr (combined NOx and HC)	

Costs of Program

The significant environmental benefits of this program would come at an average projected long-term cost increase of less than \$400 per vehicle for heavy-duty diesel engines and less than \$300 per vehicle for heavy-duty gasoline vehicles and engines.

More Work to be Done—The Second Phase

EPA plans to propose late this year or early next year to again significantly reduce pollution from heavy-duty trucks. The Agency is considering even more stringent standards that could take effect as early as 2007 and reduce NO_x emissions by between 75 and 90 percent even beyond today's proposal. Emissions of particulate matter could be reduced by 80 to 90 percent.

As part of this second phase, in order to enable new emissions-control technology on heavy trucks, EPA will be proposing the reduction of the sulfur content of highway diesel fuel by approximately 90 percent from its current level of 500 ppm. EPA already has proposed to significantly reduce sulfur levels in gasoline in the Tier 2 proposal.

Health and Environmental Benefits

Without significant new controls on motor vehicle emissions, millions of Americans will continue to breathe unhealthy air. The emission reductions from this program would provide much-needed assistance to states facing ozone and particulate matter air pollution problems.

Ozone causes a range of health problems related to breathing, including chest pain, coughing, and shortness of breath. Particulate matter is deposited deep in the lungs and causes premature death, increased emergency room visits, and increased respiratory symptoms and disease. With both ozone and particulate matter, children and the elderly are most at risk. In addition, ozone, nitrogen oxides, and particulate matter adversely affect the environment in various ways, including crop damage, acid rain, and visibility impairment.

Background

In a separate action, on May 1, 1999, EPA proposed tighter tailpipe emission standards for cars and light trucks weighing up to 8,500 pounds. Commonly referred to as Tier 2, these standards would take effect beginning in 2004 when manufacturers would start producing passenger cars that are 77 percent cleaner than those on the road today. Light-duty trucks, such as SUVs, which now are subject to standards that are less protective than those for cars, would be as much as 95

percent cleaner under the new standards. EPA's heavy-duty engines proposal will address all vehicles weighing more than 8,500 pounds, and ensure that the heaviest passenger vans and SUVs will also meet Tier 2 standards.

In addition, in late 1998, the Agency signed consent decrees with several of the largest heavy-duty diesel engine manufacturers to address several in-use emission problems. This proposal contains several new provisions for the heavy-duty diesel engine manufacturers which have arisen because of the issues highlighted by these consent decrees. These provisions include new emission tests and associated limits that are designed to ensure that heavy-duty diesel engines meet emission standards in actual use and over a broad range of operating conditions. In the consent decrees, the manufacturers agreed to introduce cleaner new engines and rebuild older engines to cleaner levels. Under the agreements, the companies will meet emission levels for heavy-duty diesel engines beyond what the law requires by October 2002.

Public Participation Opportunities

We welcome public comments on this proposed program from all interested parties. Wherever applicable, please submit full supporting data and detailed analyses to allow EPA to make maximum use of the comments. We especially encourage specific suggestions for changes.

There will be a public hearing regarding the proposal on November 2 in Philadelphia, Pennsylvania, at the Top of the Tower located at 1717 Arch Street 51st floor. You may submit written comments to EPA up to 30 days after the public hearing. For instructions on submitting written comments, please see the Federal Register notice. It is available from the EPA Air and Radiation Docket by calling (202) 260-7548; please refer to Docket No. A-98-32. The proposed rule and related documents are available electronically via the Office of Mobile Sources's web site at:

<http://www.epa.gov/oms/hd-hwy.htm>

For More Information

Additional documents on the proposed rule are available electronically at the Internet site listed above, or by contacting:

U.S. Environmental Protection Agency
Office of Mobile Sources
2000 Traverwood Dr.
Ann Arbor, MI 48105
(734) 214-4349