



# Regulatory Announcement

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## EPA's Program for Cleaner Vehicles and Cleaner Gasoline

*The U.S. Environmental Protection Agency (EPA) is announcing more protective tailpipe emissions standards for all passenger vehicles, including sport utility vehicles (SUVs), minivans, vans and pick-up trucks. This regulation marks the first time that SUVs and other light-duty trucks—even the largest passenger vehicles—are subject to the same national pollution standards as cars. And, for the first time, we are treating vehicles and fuels as a system.*

*Simultaneously, EPA is announcing lower standards for sulfur in gasoline, which will ensure the effectiveness of low emission-control technologies in vehicles and reduce harmful air pollution. When the new tailpipe and sulfur standards are implemented, Americans will benefit from the clean-air equivalent of removing 164 million cars from the road. These new standards require passenger vehicles to be 77 to 95 percent cleaner than those on the road today and reduce the sulfur content of gasoline by up to 90 percent.*

### **Tailpipe Emission Standards**

The new tailpipe standards are set at an average standard of 0.07 grams per mile for nitrogen oxides for all classes of passenger vehicles beginning in 2004. This includes all light-duty trucks, as well as the largest SUVs. Vehicles weighing less than 6000 pounds will be phased-in to this standard between 2004 and 2007.

For the heaviest light-duty trucks, the program provides a three step approach to reducing emissions. First, in 2004, we will implement standards not to exceed 0.6 grams per mile (gpm)—a more than 60 percent reduction from current standards. Second, to ensure further progress, these vehicles are required to achieve an interim standard of 0.2 gpm to be phased-in between 2004-2007, an 80 percent reduction from current standards. Third, in the final step, half of these vehicles will meet the 0.07 standard in 2008, and the remaining will comply in 2009. Vehicles weighing between 8,500 and 10,000 pounds will have the option to take advantage of additional flexibilities during the 2004 to 2008 interim period.

### **Gasoline Sulfur Standards**

Beginning in 2004, the nation's refiners and importers of gasoline will have the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production is capped at 300 parts per million (ppm) and their annual corporate average sulfur levels are 120 ppm. In 2005, the refinery average will be set at 30 ppm, with a corporate average of 90 ppm and a cap of 300 ppm. Both of the average standards can be met with use of credits generated by other refiners who reduce sulfur levels early. Finally, in 2006, refiners will meet a 30 ppm average sulfur level with a maximum cap of 80 ppm. Gasoline produced for sale in parts of the Western U.S. will be allowed to meet a 150 ppm refinery average and a 300 ppm cap through 2006 but will have to meet the 30 ppm average/80 ppm cap by 2007.

Small refiners (those who employ no more than 1,500 employees and have a corporate crude oil capacity of no more than 155,000 barrels per day) will be able to comply with less stringent interim standards through 2007, when they must meet the final sulfur standards. If necessary, small refiners that demonstrate a severe economic hardship can apply for an additional extension of up to two years.

### **Costs and Benefits**

The significant environmental benefits of this program would come at an approximate cost to consumers of less than \$100 for cars, \$200 for light-duty trucks and less than two cents per gallon of gas.

EPA estimates the program will cost industry about \$5.3 billion. In contrast, health and environmental benefits are estimated to be \$25.2 billion.

When fully implemented, this program would be the equivalent of taking 164 million cars off the road. EPA calculates that the final rule will prevent as many as 4,300 deaths, more than 10,000 cases of chronic and acute bronchitis, and tens of thousands respiratory problems a year.

As newer, cleaner cars enter the national fleet, the new tailpipe standards will significantly reduce emissions of nitrogen oxides from vehicles by about 74 percent by 2030. The standards also will reduce emissions by more than 2 million tons per year by 2020 and nearly 3 million tons annually by 2030.

### **Flexibility to Industry**

EPA worked extensively with the auto industry, the petroleum industry, states, and environmental and health experts in developing this program. EPA included several measures in the rule that will ensure flexibility and cost-effectiveness for the automobile and petroleum industries. These flexibilities include:

- 1) establishing a market-based credit system for both the auto and oil industries which will reward those companies who lead the way in reducing pollution sooner than required;
- 2) allowing industries to use an averaging program to meet both the car-emission and gasoline-sulfur standards;
- 3) allowing auto manufacturers and refiners to meet strong interim standards while they work towards full compliance of the new standards; and
- 4) providing small refiners with extra time to meet the sulfur standards.

### **Background**

This regulation grows out of a Clean Air Act requirement that EPA consider the need, feasibility, and cost-effectiveness of stronger tailpipe emissions standards beginning in 2004. In 1998, EPA reported to Congress that America faced significant air quality challenges in the future relating to vehicles, including:

- Total vehicle miles traveled yearly grew from one trillion in 1970 to 2.5 trillion in 1997 and is expected to continue increasing at the rate of two to three percent each year.
- Almost half of the passenger vehicles sold today are higher-polluting light-duty trucks, such as SUVs, and continued sales growth is expected.

EPA concluded that tighter tailpipe emission standards are necessary to maintain the nation's progress in providing Americans with cleaner, healthier air. The Agency also concluded that new emission standards could be achieved cost-effectively with available technology, and that current levels of sulfur in gasoline must be reduced, because sulfur impedes the performance of catalytic converters.

Motor vehicles generate about 30 percent of all emissions of nitrogen oxides and volatile organic compounds—the pollution that causes smog.

### **For More Information**

Additional documents on the Tier 2 standards are available electronically on the Office of Mobile Sources' web site at:

[www.epa.gov/oms/tr2home.htm](http://www.epa.gov/oms/tr2home.htm)

For further information on this final rule, please contact the Tier 2 Team at:

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