



Regulatory Announcement

Control of Emissions of Hazardous Air Pollutants from Mobile Sources

The U.S. Environmental Protection Agency (EPA) is issuing a final rule to address emissions of hazardous air pollutants (or "air toxics") from mobile sources. In addition to identifying 21 mobile source air toxics, this rule sets new gasoline toxic emission performance standards. It also sets out a Technical Analysis Plan to continue to conduct research and analysis on mobile source air toxics. Based on the results of that research, EPA will conduct a future rulemaking, to be completed no later than July 1, 2004, in which we will revisit the feasibility and need for additional controls for nonroad and highway engines and vehicles and their fuels.

Background

In response to public health concerns, Congress instructed EPA in 1990 to address emissions of air toxics from motor vehicles and their fuels. These instructions, contained in Section 202(l) of the Clean Air Act, consist of two parts. First, we were instructed to study the need for and feasibility of controlling emissions of toxic air pollutants associated with motor vehicles and their fuels. In this section, benzene, 1,3-butadiene, and formaldehyde were singled out for particular consideration. We completed this study in 1993 and updated it in 1999. The studies are: Motor Vehicle-Related Air Toxics Study, 1993 (Publication No. EPA420-R-93-005) and Analysis of the Impacts of Control Program on Motor Vehicles Toxics Emissions and Exposure in Urban Areas Nationwide, November 1999 (Publication No. EPA420-R-99-029). These reports are available at <http://www.epa.gov/otaq/toxics.htm>.

Second, we were instructed to set standards for hazardous air pollutants from motor vehicles and their fuels, or both. Those standards are to be promulgated under Section 202(a) or Section 211(c) of the Act and must address at least benzene and formaldehyde. They are to be set based on available technology, taking existing standards, costs, noise, energy and safety factors, and lead time into account.

Highlights of the Rule

EPA's mobile source air toxics rule has four main parts:

- For the first time, EPA identifies compounds that should be considered Mobile Source Air Toxics (MSATs). This is necessary because, unlike the provisions governing toxic emissions from stationary sources, the Clean Air Act provisions for motor vehicle toxics do not provide a list of pollutants to be controlled. Our list of 21 MSATs includes various compounds that are emitted from mobile sources, including several volatile organic compounds (VOCs) and metals, as well as diesel particulate matter plus diesel exhaust organic gases (DPM+DEOG).
- We evaluate the effectiveness of current controls in reducing highway emissions of these MSATs. Our analysis shows that the programs we put in place to reduce ozone and PM inventories, including the reformulated gasoline (RFG) program, national low emission vehicle (NLEV) program, emissions standards for passenger vehicles and gasoline sulfur control requirements (Tier 2), and the 2007 heavy-duty vehicle standards and highway diesel fuel sulfur control requirements, are expected to yield significant reductions of mobile source air toxics.
- We evaluate whether there are additional air toxics controls that could be put in place at this time to reduce highway MSAT inventories even more. With regard to fuels-based controls, we set new gasoline toxic emission performance standards that will ensure that refiners maintain their average 1998-2000 gasoline toxic emission performance levels. With regard to vehicle-based controls, we conclude that our Tier 2 and heavy-duty 2007 standards are the most stringent controls feasible at this time to reduce MSAT emissions from highway vehicles and engines.
- We establish a Technical Analysis Plan which EPA will implement to continue to conduct research and analysis on mobile source air toxics. Based on the information developed through this research, EPA will conduct a future rulemaking, to be completed no later than July 1, 2004, in which we will revisit the feasibility and need for additional controls for both nonroad



and on-highway engines and vehicles and their fuels.

Health and Environmental Benefits

Mobile sources are a significant contributor to national inventories of several key air toxics that are also considered to be urban hazardous air pollutants as identified in EPA's Integrated Urban Air Toxics Strategy. These include 1,3-butadiene, acetaldehyde, acrolein, benzene, and formaldehyde. In addition, DPM+DEOG is emitted virtually only from mobile sources. This rule clarifies that the mobile source contribution to national levels of air toxics is expected to decline significantly over the next 20 years, particularly gaseous air toxics and DPM+DEOG, due to other mobile source emission control programs, including RFG, NLEV, Tier 2, and the heavy-duty 2007 standards. The gasoline toxics emission performance standards contained in this rule will help ensure that refiners maintain their average 1998-2000 gasoline toxic emission performance levels.



Cost to Industry

This rule is not expected to impose any costs on industry. EPA believes that no refinery capital expenditures will be needed to comply with the requirements of the gasoline toxic emission performance standards since they are not technology-forcing but instead require that, beginning 2002, refiners maintain their average 1998-2000 gasoline toxic emission performance levels.

For More Information

You can access the final rule and related documents electronically on the Office of Transportation and Air Quality (OTAQ) Web site at:

<http://www.epa.gov/otaq/toxics.htm>

For further information on this final rule, please contact the Mobile Source Air Toxics Team at:

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