United States Environmental Protection Agency EPA420-F-00-025 July 2000

Office of Transportation and Air Quality



Regulatory Announcement

Control of Emissions of Hazardous Air Pollutants from Mobile Sources

The U.S. Environmental Protection Agency is issuing a proposed rule to address emissions of toxic air pollutants from mobile sources. In addition to identifying 21 mobile source air toxics, this rule proposes limits on the amount of benzene in gasoline. It also sets out a Technical Analysis Plan whereby EPA will continue to conduct research and analysis and to revisit in 2003 the need for and feasibility of additional controls on toxic emissions from motor vehicles and fuels.

Highlights of the Proposed Rule

EPA is proposing a program to address emissions of hazardous air pollutants from mobile sources. The proposal has four parts:

• For the first time, EPA identifies those 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 does not include a list of pollutants that should be classified as motor vehicle toxics. The list of 21 MSATs (which is attached) includes various compounds that result from fuel combustion in motor vehicle engines, as well as certain metal compounds and diesel exhaust.



- The proposal includes an evaluation of the effectiveness of federal emission control programs in reducing emissions of these MSATs. The analysis shows that existing programs put in place to reduce motor vehicle emissions of ozone precursors, such as VOCs and NOx, and particulate matter (PM), as well as programs that will take effect in the future, will reduce MSATs for the next 20 years. Existing and future programs that reduce MSATs include reformulated gasoline (RFG) national low emission vehicles (NLEV) the Tier 2 tailpipe standards for passenger vehicles and gasoline sulfur control and the recently proposed program to establish new exhaust standards for diesel-powered large trucks and buses and highway diesel fuel sulfur control.
- The proposal evaluates whether there are additional measures that could be put in place at this time to reduce highway MSAT pollutants even more. With regard to fuels-based controls, EPA proposes to set maximum limits on the amount of benzene that can be added to RFG and conventional gasoline. The proposed standards would require refiners to maintain their average 1998-1999 benzene levels. Benzene is a known human carcinogen that is a common component of gasoline. With regard to vehicle-based controls, the proposal concludes that the Tier 2 and proposed heavy duty standards are the most stringent controls feasible at this time to reduce MSAT emissions from motor vehicles.
- The proposal sets up a process by which EPA will continue to conduct research and analysis and, in 2003, revisit the question of the need for and feasibility of additional controls on vehicles or fuels.

Background

In response to public health concerns, Congress instructed EPA as part of the Clean Air Act Amendments of 1990 to develop a program to address emissions of toxic air pollutants from motor vehicles and their fuels. First, EPA was instructed to study the need for and feasibility of controlling toxic emissions associated with motor vehicles and their fuels. EPA completed this study in 1993 and updated it in 1999. The studies: Motor Vehicle-Related Air Toxics Study, 1993, and Analysis of the Impacts of Control Program on Motor Vehicles Toxics Emissions and Exposure in Urban Areas Nationwide, November 1999, 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 set based on available technology, taking existing standards, costs, noise, energy and safety factors, and lead time into account.

Health and Environmental Benefits

Mobile sources are significant contributors of several key air toxics that are also considered to be urban hazardous air pollutants. These include 1,3-butadiene, acetaldehyde, acrolein, benzene, and formaldehyde. In addition, diesel exhaust comes virtually only from mobile sources. The gasoline benzene standards proposed in this action will ensure that refiners maintain the current RFG and anti-dumping fuel benzene limits. While this proposal does not contain new, additional control programs to reduce emissions of toxic air pollutants from mobile sources, it clarifies that mobile source MSATs are expected to decline significantly over the next 20 years, particularly gaseous air toxics and diesel exhaust, due to existing and proposed mobile source emission control programs, including RFG, NLEV, Tier 2, and the proposed large diesel truck and bus standards.

Cost to Industry

This proposed rule is expected to impose negligible additional costs on industry, since the proposed standards require that, beginning 2002, refiners maintain the average 1998-1999 gasoline benzene levels.

Public Participation Opportunities

EPA desires full public participation in arriving at rulemaking decisions. The Agency solicits comments from all interested parties. Commenters are especially encouraged to provide specific suggestions for changes to any aspect of the proposal that they believe needs to be modified or improved.

EPA will hold a public hearing in August 2000 and will accept written comments on the NPRM for 30 days after the public hearing. For more information on the public hearing or 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-2000-12. In addition, the NPRM and related documents are available at http://www.epa.gov/otaq/toxics.htm

For More Information

For further information on this proposed rule, please contact:

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Acetaldehyde*	Diesel Exhaust	MTBE
Acrolein*	Ethylbenzene	Naphthalene
Arsenic compounds*	Formaldehyde*	Nickel compounds*
Benzene*	n-Hexane	POM (Sum of 7 PAHs)*
1,3-Butadiene*	Lead compounds*	Styrene
Chromium compounds*	Manganese compounds*	Toulene
Dioxin/Furans*	Mercury compounds*	Xylene

Proposed List of Mobile Source Air Toxics (MSATs)

* Also on the list of urban HAPs for the Urban Air Toxics Strategy