FACT SHEET

PROPOSED AMENDMENTS TO AIR TOXICS STANDARDS FOR PETROLEUM REFINERIES AND BENZENE WASTE OPERATIONS

ACTION

- On August 21, 2007, the Environmental Protection Agency (EPA) proposed amendments to its 1995 air toxics standards for petroleum refineries. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.
- The proposed amendments address the residual risk and the 8-year technology review provisions of the Clean Air Act. These provisions require EPA to review existing control technology standards that reduce emissions of air toxics from industrial facilities. EPA is to tighten those standards, if needed, to protect public health or because of improvements in emissions reduction methods.
- EPA analyzed emissions from emission sources at petroleum refineries after implementation of the 1995 air toxics standards and determined that the risks to human health and the environment are low enough that no further controls are warranted to protect human health.
- Because the risks are acceptable, EPA is proposing, as one option, to retain the current level of the standard by not including any new requirements for these emissions sources.
- In addition, EPA is proposing a second option to amend the standards to provide additional health protection. This second option would add new requirements to the existing rule for certain storage vessels and wastewater treatment units.
- Under both options, EPA is proposing work practice standards for the detection and repair of leaks from refinery cooling towers.
- EPA issued a national rule to limit emissions of toxic air pollutants from these facilities in 1995. This rule is one of 96 rules called maximum achievable control technology (MACT) standards that require 174 industry sectors to eliminate 1.7 million tons of 187 toxic air pollutants. Congress listed these toxics air pollutants in the Clean Air Act.
- EPA estimates that the 1995 standards reduce nationwide emissions of air toxics from petroleum refineries by 53,000 tons per year.
- EPA will take public comment on the proposed rule for 60 days following publication in the <u>Federal Register</u>.

HEALTH AND ENVIRONMENTAL BENEFITS AND COSTS

EPA judges the level of risk in the current refinery rule to be acceptable. The highest

maximum individual lifetime cancer risk for all of these refineries is 70-in-1 million. The total annual cancer incidence for the exposed population is between 0.04 and 0.09 cases per year or one case every 11 to 25 years.

- The first option would not require the installation of additional control technologies; however, it would reduce emissions by approximately 380 tons per year by adding work practice standards for cooling towers.
- Under the second option, EPA projects the proposed amendments would reduce air toxics from refineries by about 1,000 to 4,600 tons per year from 153 facilities. EPA estimates these reductions could result in a in a nationwide cost of \$1.1 million to a nationwide savings of up to \$4.0 million due to reductions in product losses.

BACKGROUND

- The Clean Air Act requires EPA to regulate toxic air pollutants from large industrial facilities in two phases.
- The first phase is "technology-based," where EPA develops standards for controlling the emissions of air toxics from sources in an industry group (or source categories). The standards for large sources are know as MACT standards, and are based on emissions levels that are already being achieved by the better-controlled and lower-emitting sources in an industry.
- In the second phase, the law requires EPA to review the technology-based standards and revise them, if necessary, to account for improvements in air pollution controls and/or prevention. The law directs EPA to repeat this assessment every 8 years.
- During the second phase of the program, EPA also is required to assess the remaining health risks from each industry group for which it has set MACT standards and determine whether more health-protective standards are necessary.

FOR MORE INFORMATION

- To download a copy the proposed rule, go to EPA's Worldwide Web site at <u>http://www.epa.gov/ttn/oarpg/</u> under newly proposed or issued rules.
- Today's proposed rule and other background information are also available either electronically at <u>http://www.regulations.gov</u>, EPA's electronic public docket and comment system, or in hardcopy at the EPA Docket Center's Public Reading Room.
 - The Public Reading Room is located in the EPA Headquarters Library, Room Number 3334 in the EPA West Building, located at 1301 Constitution Ave., NW, Washington, DC. Hours of operation are 8:30 a.m. to 4:30 p.m. eastern standard time, Monday through Friday, excluding Federal holidays.
 - Visitors are required to show photographic identification, pass through a metal

detector, and sign the EPA visitor log. All visitor materials will be processed through an X-ray machine as well. Visitors will be provided a badge that must be visible at all times.

- Materials for this action can be accessed using Docket ID No. EPA-HQ-OAR-2003-0146 (for petroleum refineries) or EPA-HQ-OAR-2003-0147 (for benzene waste operations).
- HOW TO COMMENT: Comments should be identified by Docket ID No. EPA-HQ-OAR-2003-0146 (for petroleum refineries) or EPA-HQ-OAR-2003-0147 (for benzene waste operations) and submitted by one of the following methods:
 - Federal eRulemaking Portal (http://www.regulations.gov),
 - e-mail (a-and-r-Docket@epa.gov),
 - Mail (Air and Radiation Docket and Information Center, Environmental Protection Agency, Mailcode 2822T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460), or
 - Hand delivery (EPA Docket Center, Environmental Protection Agency, Room 3334, 1301 Constitution Avenue, NW, Washington, DC).
- For further information about the proposed rule, contact Mr. Robert Lucas of EPA's Office of Air Quality Planning and Standards at (919) 541-0884 or <u>lucas.bob@epa.gov.</u>