FACT SHEET
PROPOSED RULE TO REDUCE AIR TOXICS EMISSIONS FROM AREA SOURCE ELECTRIC ARC FURNACE STEELMAKING FACILITIES

ACTION

- On September 10, 2007, the U.S. Environmental Protection Agency (EPA) proposed air toxics standards for smaller emitting sources, called area sources, that use electric arc furnaces (EAFs) in steel manufacturing. EAFs melt scrap steel that will be recycled into bulk steel.

- The Clean Air Act defines two types of stationary sources that emit air toxics: major sources and area sources. Smaller emitting EAFs are regulated as area sources.

- Area sources are smaller commercial and industrial operations that release lesser quantities of toxic pollutants into the air. Area sources emit less than 10 tons per year of a single air toxic, or less than 25 tons per year of a combination of air toxics. (Major sources emit 10 tons per year of any of the listed toxic air pollutants, or 25 tons per year of a mixture of air toxics.)

- The proposed rule would reduce mercury emissions by requiring that EAF steelmakers only buy motor vehicle scrap from providers that participate in an EPA-approved program for the removal of mercury switches.

- The proposed rule would also reduce emissions of other toxic metal compounds by limiting particulate matter (PM) emissions. Facilities that produce less than 150,000 tons per year (tpy) of stainless or specialty steel would need to comply with an emissions limit of 0.8 pounds of PM per ton of steel. All other facilities would be required to meet a PM limit of 0.0052 grains per dry standard cubic foot. A 6 percent opacity limit would apply to fugitive emissions from EAFs.

- Existing area sources that would be affected by the rule are generally well-controlled by other EPA and state regulations. The proposed rule may require the installation of additional emission controls or upgrades to existing controls at a few facilities.

- The proposed rule would reduce emissions of toxic air pollutants such as mercury, lead, manganese, nickel, and chromium. These chemicals are known or suspected to cause cancer, other serious health problems and environmental damage. EPA estimates total annual air toxic reductions of about 39 tons per year (tpy), including 5 tpy of mercury, and PM emissions by about 540 tpy.

- Total annualized cost would be approximately $6 million per year on existing facilities covered under this rule. Capital costs would be about $34 million.

BACKGROUND

- The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more of 188 listed toxic air pollutants. These industrial categories include both larger emitting (major) and smaller emitting (area) sources.

- The Clean Air Act directs EPA to limit emissions of air toxics from industrial and commercial facilities. This proposal responds to the following Clean Air Act requirements.

    - **The EPA must identify at least 30 toxic air pollutants that pose the greatest threat to public health in urban areas.** Air toxics are of special concern in urban areas because so many people live, work, and play near multiple pollution sources. The EPA identified 33 toxic air pollutants emitted by major, mobile and area sources in urban areas. Area sources emit significant amounts of 30 of these pollutants. (See http://www.epa.gov/ttn/atw/urban/list33.html for the full list.)

    - **The EPA must identify and list the industrial and commercial source categories that emit 90 percent of the air toxics in urban areas.** The EPA sets emissions standards for industrial categories, not individual pollutants. The EPA listed 70 area source categories and developed the Integrated Urban Air Toxics Strategy to implement reductions. For more information, go to http://www.epa.gov/ttn/atw/urban/urbanpg.html.

    - **The EPA must regulate source categories that account for at least 90 percent of emissions of seven specific air toxics due to their persistence and tendency to bioaccumulate in the environment.** EAF steelmaking is listed as one of these source categories based on emissions of mercury. The mercury standards in the proposed rule for EAF must be based on MACT.

    - **For smaller emitting sources, the EPA can develop standards requiring the use of generally available control technologies (GACT) or management practices rather than the maximum achievable control technology (MACT) required for major sources.** The standard in the proposed rule to reduce other toxic metal compounds emitted by area source EAFs uses GACT.

- The EPA has already set standards for 28 area source categories and is under a series of court-ordered deadlines to set more.

HOW TO COMMENT

- EPA will take public comment on the proposed rule for 30 days following publication in the *Federal Register.*

- EPA will hold a public hearing if requested. The Agency is under a court order to finalize the rule by December 15, 2007.

- Comments should be identified by Docket ID No. EPA-HQ-OAR-2004–0083 and submitted by one of the following methods:

    - Federal eRulemaking Portal (http://www.regulations.gov)

    - e-mail (a-and-r-docket@epa.gov)

    - Mail (EPA Docket Center, Environmental Protection Agency, Mail code 6102T, 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 MORE INFORMATION

- To download a copy of the proposed rule, go to EPA's Worldwide Web site at: http://www.epa.gov/ttn/oarpg.

- For further information about the proposed rule, contact Phil Mulrine of EPA's Office of Air Quality Planning and Standards at (919) 541-5289 or mulrine.phil@epa.gov.