

May 15, 2002

FACT SHEET

FINAL AIR TOXICS REGULATION FOR PRIMARY COPPER SMELTERS

TODAY'S ACTION

- C The Environmental Protection Agency (EPA) is today issuing a final rule to reduce emissions of toxic air pollutants from primary copper smelters. Toxic air pollutants or air toxics are those pollutants known or suspected to cause cancer or other serious health effects.
- C Primary copper smelting is the industry which refines copper concentrate from mined ore to anode grade copper, using pyrometallic processes. Pyrometallic processes use high temperatures to refine copper.
- C At present, four primary copper smelters are operating in the United States. Three additional smelters are not currently operating because of buildups of commercial grade copper inventories and a shortage of copper concentrates used as feed stock for primary copper production. EPA's rule will apply to as many as six of these seven when they are in operation.
- C EPA developed today's final rule through participation with representatives from the affected industry and representatives of the States of Arizona, New Mexico, Texas and Utah.

HEALTH AND ENVIRONMENTAL BENEFITS

- C EPA's final regulation will reduce emissions of eleven toxic air pollutants, including compounds containing antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium. These metal compounds are contained in the copper concentrate that is the raw material for the smelter operations.
- C Chronic breathing of arsenic compounds is associated with lung cancer and irritation of the skin and mucus membranes. Chronic exposure to lead compounds can result in adverse effects on the blood, central nervous system, blood pressure, and kidneys. Children are particularly sensitive to lead exposure, resulting in reduced growth.
- C Today's final rule will reduce emissions of toxic metal compounds from 190 metric tons per year to 155 metric tons per year, an 18 percent reduction. This represents approximately 6 metric tons per year of arsenic and 22 metric tons per year of lead.

- C The emissions reductions required by this final rule are the maximum achievable controls for all emission points in the smelters. EPA determined these controls by evaluating the best performing smelters in the country. EPA evaluated the impact of additional control devices, but the identified controls would have imposed capital costs of at least \$150 million per smelter. This cost would have forced most of the existing smelters to close and was unacceptable.

BACKGROUND

- C The Clean Air Act Amendments of 1990, require EPA to regulate emissions of 188 listed toxic air pollutants. On July 16, 1992, EPA published a list of industrial source categories that emit one or more of these air toxics. For listed categories of "major" sources (those that emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the Clean Air Act requires EPA to develop standards that require the application of stringent air pollution reduction measures known as maximum achievable control technology.
- C EPA identified primary copper smelting as one of the industrial sources emitting one or more toxic air pollutants. EPA proposed emission standards for copper smelters in April 1998. The Agency took public comment on the proposal and is now issuing this final rule.

FINAL RULE REQUIREMENTS

- C EPA's promulgated standards affect both existing and newly built primary copper smelters.
- C EPA's final regulation establishes limitations for metallic toxic air pollutants emitted by process stacks, or ducts (point sources) and other uncontrolled points (fugitive sources) at primary copper smelters. In addition, today's rule offers flexibility to the industry by providing cost-effective options for both emissions control and monitoring.

HOW MUCH WILL EPA'S FINAL REGULATION COST?

- C EPA estimates the capital cost of the final rule for all affected facilities to be about \$8.2 million (approximately \$1.3 million per facility).
- C EPA estimates the total annual costs of the final rule for all affected facilities to be about \$1.7million per year (approximately \$243,000 per facility).

FOR FURTHER INFORMATION

- C Interested parties can download the rule from EPA's web site on the Internet under recent actions at the following address: (<http://www.epa.gov/ttn/oarpg>). For further information about the final rule, contact Mr. Eugene Crumpler of EPA's Office of Air Quality Planning and Standards at (919) 541-0881.

- C The EPA's Office of Air and Radiation's (OAR's) homepage on the Internet contains a wide range of information on the air toxics program and many other air pollution programs and issues. The OAR's home page address is: (<http://www.epa.gov/air/>).