

FACT SHEET

FINAL AIR TOXICS STANDARDS FOR AREA SOURCES IN FOUR INDUSTRY CATEGORIES

ACTION

- On December 11, 2006, the U.S. Environmental Protection Agency (EPA) issued final air toxics standards for four industrial source categories that emit toxic air pollutants. Toxic air pollutants, or air toxics, are known or suspected to cause cancer and other health problems.
- The final standards apply to smaller sources of air toxics known as “area sources” in these four categories:
 1. polyvinyl chloride and copolymer production,
 2. primary copper smelting,
 3. secondary copper smelting, and
 4. primary nonferrous metals-zinc, cadmium, and beryllium.
- The air toxics emitted from area sources in these industrial source categories include vinyl chloride (from polyvinyl chloride and copolymers production) and toxic metals such as arsenic, cadmium, chromium, lead, manganese, and/or nickel, depending on the type of plant. Secondary copper smelters also emit dioxin. Exposure to these compounds may cause cancer, central nervous system effects, kidney damage, and acute health disorders such as respiratory and skin irritation.
- Area sources are sources that have the potential to emit less than 10 tons per year of a single toxic air pollutant or less than 25 tons per year of any combination of toxic air pollutants. If sources emit more than these amounts, they are called ‘major’ sources.

Primary Copper and Primary Zinc Plants

- Primary copper smelting is the industry which refines copper sulfide ore concentrate from mined ore to produce anode grade copper, using pyrometallurgical processes. Pyrometallurgical processes use high temperature furnaces to smelt or refine ores to produce pure metals or metal oxides.
- Primary zinc production is the refining of zinc sulfide ore concentrates from mined ore to produce zinc or zinc oxide, using pyrometallurgical processes.
- The final rule will require existing primary copper smelters and primary zinc plants to control air toxic emissions by assuring they limit particulate matter emissions as required by their operating permits (also known as Title V permits). Controlling particulate matter emissions provides effective air toxics emission controls. Monitoring, recordkeeping, and reporting requirements are also the same as those in their Title V permits.

- In addition, startup, shutdown, and malfunction requirements either in the Title V permit or in the General Provisions also apply. Standards are also applied to new and reconstructed sources.
- The final rules will have little cost impact on existing area sources. EPA estimates that one-time compliance costs for affected plants will average less than \$1,000.

Secondary Copper Smelters

- Secondary copper smelters process copper scrap in a blast furnace and converter to produce anode grade copper.
- EPA did not establish rules for existing secondary copper smelters because there are none in the U.S. as defined in the final standards. Today's final air toxics standards set emissions limits, work practice standards, and compliance provisions for any new secondary copper smelter that may be constructed in the future.

Polyvinyl Chloride/Copolymer and Beryllium Plants

- Polyvinyl chloride and copolymer plants include any plant where vinyl chloride alone or in combination with other materials is modified in chemical structure or "polymerized".
- Primary beryllium production facilities produce beryllium metal, oxide, or alloy from beryllium ore using chemical processes.
- All polyvinyl chloride and copolymer plants and primary beryllium plants, including both area sources and major sources, are required to comply with established federal air toxics rules (National Emission Standards for Hazardous Air Pollutants).
- Existing area sources that are affected by the rules are well controlled as a result of federal regulations. The final rules would not change the level of emissions control provided by the current standards.
- The final rules will have no cost impact on existing area sources.

BACKGROUND

- The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more listed 187 toxic air pollutants. These industrial source categories include both major and area sources.

- The Clean Air Act requires EPA to identify the toxic air pollutants that pose a health threat in the largest number of urban areas and to regulate sufficient area source categories to ensure that the emissions of these “urban” air toxics are reduced. EPA implements these requirements through the Integrated Urban Air Toxics Strategy.
- Each of the source categories included in today’s final rules are included on the area source category list of the Strategy.
- For area sources within each source category, the Clean Air Act allows EPA to develop standards or requirements which provide for the use of generally available control technologies (GACT) or management practices rather than the maximum achievable control technology (MACT) required for major sources.
- The final air toxics rules were developed in response to the requirements in section 112(k) of the Clean Air Act and are being issued at this time in response to a court order that directs EPA to issue final rules for area sources every 6 months.

FOR MORE INFORMATION

- To download a copy the final rules, go to EPA's Worldwide Web site at <http://www.epa.gov/ttn/oarpg/> under newly proposed or issued rules.
- For further information about the final rules, contact Ms. Sharon Nizich of EPA's Office of Air Quality Planning and Standards at (919) 541-2825 or Nizich.Sharon@epa.gov.