#### **FACT SHEET**

# PROPOSED RULE TO REDUCE TOXIC AIR POLLUTANTS FROM TACONITE IRON ORE PROCESSING FACILITIES

## **TODAY'S ACTION**

- ! The Environmental Protection Agency (EPA) is proposing a regulation to reduce emissions of toxic air pollutants from taconite iron ore processing facilities. Toxic air pollutants, or air toxics, are those pollutants known to cause cancer or other serious health effects.
- ! A taconite iron ore processing facility separates and concentrates iron ore from taconite, a low-grade iron ore, and produces taconite pellets, which are approximately 60 percent iron.
- ! At present, eight taconite iron ore processing facilities are operating in the United States, with six plants located in Minnesota, and two in Michigan.
- ! Today's proposed action focuses on reducing air toxics emitted at a number of points at these facilities, including emissions from crushing, screening, handling, and drying the ore, indurating furnaces that oxidize the ore at high temperatures, and handling the finished pellets. Emissions from the indurating furnaces account for over 90 percent of all toxic air pollutants emitted from a taconite iron ore processing facility.
- **!** EPA developed today's proposed rule through participation with representatives from the affected industry and representatives of the States of Minnesota and Michigan.
- **!** EPA will accept comment on the proposal through 60 days after publication of the proposed rule in the *Federal Register*. After reviewing all comments, the Agency anticipates issuing the final rule in 2003.

#### **BACKGROUND**

- ! The Clean Air Act requires EPA to regulate emissions of 188 listed toxic air pollutants. For major sources (those with the potential to emit 10 tons annually or more of a listed pollutant or 25 tons or more of a combination of pollutants), the law requires EPA to develop standards that require the application of stringent air pollution controls.
- ! EPA has identified the taconite iron ore processing source category as a major source of air

toxics.

#### **HEALTH AND ENVIRONMENTAL BENEFITS**

- **!** EPA's proposed rule will reduce emissions of air toxics, including compounds containing manganese, chromium, cobalt, arsenic, and lead.
- ! Chronic, or long term, exposure to high levels of manganese results primarily in central nervous system effects. Chronic breathing of arsenic compound 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.

! Today's proposed rule is expected to reduce air toxic emissions by about 43 percent from existing levels.

#### WHAT THE PROPOSED RULE REQUIRES

- ! The proposed rule would apply to all existing taconite iron ore processing facilities. EPA estimates that all eight existing facilities would be subject to this proposal.
- ! The proposed regulation would establish particulate matter emission limits from process stacks for both existing and new taconite iron ore facilities. The particulate matter emission limits serve as a surrogate, or more easily measured but reliable substitute, for the air toxic emissions targeted by today's proposed rule.
- ! The standards for fugitive dust sources such as stockpiles, material transfer points, plant roadways, tailings basin, pellet loading areas and yard areas are in the form of work practice and operating standards.
- ! The proposed rule would also requires requirements for monitoring to ensure that the emission reductions are being met.

# **HOW MUCH WOULD THE EPA'S PROPOSED REGULATION COST?**

**!** EPA estimates the capital cost of the proposed rule for all affected facilities would be about \$59 million (approximately \$7.4 million per facility).

**!** EPA estimates the total annual costs of the proposed rule for all affected facilities would be about \$9 million (approximately \$1.1 million per facility).

## FOR FURTHER INFORMATION

- ! 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/rules.html). For further information about the proposal, contact Mr. Conrad Chin of EPA's Office of Air Quality Planning and Standards at (919) 541-1512.
- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's home page address is: (http://www.epa.gov/oar/).