### **FACT SHEET**

# PROPOSED RULE TO REDUCE TOXIC AIR EMISSIONS FROM INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS

## **TODAY'S ACTION**

- ! The Environmental Protection Agency (EPA) is issuing a proposed rule to reduce toxic air pollutant emissions from industrial, commercial and institutional boilers and process heaters. The proposed rule would apply to boilers and process heaters used at facilities such as refineries, chemical and manufacturing plants, and paper mills.
- ! The proposed rule would substantially reduce emissions of a number of toxic air pollutants such as lead, arsenic, manganese, and hydrogen chloride, which are known or suspected to cause cancer, other serious health problems and environmental damage.
- **!** EPA worked with major stakeholders, including representatives from the industry, in developing the proposal.
- **!** EPA will take public comment on the proposed rule for 60 days following publication in the *Federal Register*.
- ! EPA is also seeking public comment on three options that could reduce the economic burden associated with this proposed rule. The options would focus emission control requirements on those facilities with air toxics emissions that pose the greatest health risks. Under each of these options, a facility could be exempt from additional emission control requirements if it can demonstrate that its air toxic emissions pose risks below certain health effects thresholds.
- **!** EPA will hold a public hearing if requested. The Agency expects to finalize the rule within 1 year after proposal.

## **HEALTH/ENVIRONMENTAL BENEFITS**

! This proposed rule would provide important improvements in protecting human health and the environment by reducing emissions of toxic air pollutants or air toxics. EPA estimates total annual air toxic reductions of over 60,000 tons per year in the 5th year after the proposed rule is final. The main air toxics reduced are listed below:

Pollutant Emissions Reductions

Hydrogen Chloride	42,300 tons
Metals	1,100 tons

! Exposure to emissions of these air toxics may produce a wide variety of human health effects including irritation of the lungs, skin and mucous membranes, problems with the central nervous system, kidney damage, and cancer. Lead is a very toxic metal. Long-term exposure to lead results in problems with the blood, central nervous system, blood pressure, and kidneys. EPA has classified lead as a probable human carcinogen.

## PROPOSED RULE REQUIREMENTS

- ! The proposed rule would affect any new or existing boiler and process heater located or built at a major source facility. EPA estimates that 58,000 existing boilers and process heaters would be subject to this proposed rule.
- ! New boilers and process heaters would have up to 6 months after the rule is final, or 6 months after startup, whichever is later, to comply with the new rule. EPA estimates that 800 new boilers and process heaters will be built each year over the next 5 years and would be subject to this proposed rule.
- ! The proposed rule would set limits on the amount of air pollution that may be released from exhaust stacks of industrial, commercial and institutional boilers and process heaters.
- ! Affected sources would have the flexibility to meet the proposed emission limits in two ways:
  - < Sources may install add-on control devices such as fabric filters and scrubbers to chemically or physically remove air pollutants from emission streams. The proposed rule is based on the use of these technologies. These systems not only reduce metals and hydrogen chloride emissions, they also reduce particulate matter and sulfur dioxide emissions.</p>
  - < Sources may use other means to reduce emissions such as changing the type of fuel they burn to one producing fewer toxic emissions.

### **COST**

EPA estimates that new boilers coming on-line would already have the necessary control systems as a result of compliance with new source performance standards currently in place for industrial, commercial, and institutional boilers. Under the Clean Air Act, EPA is required to set "new source performance standards" to ensure that emissions from newly built or reconstructed facilities meet strict limits.

**!** EPA estimates that the total nationwide capital costs for the proposed rule is \$1.7 billion for the first 5 years, with an annualized cost of \$800 million in the 5th year.

### **BACKGROUND**

- ! The Clean Air Act requires EPA to develop rules to reduce air toxic emissions from categories of facilities that emit one or more of 188 listed toxic air pollutants. These rules require the application of strict controls known as maximum achievable control technology.
- ! According to the Clean Air Act, a major source emits 10 tons a year or more of a single toxic air pollutant, or 25 tons or more of a combination of toxic air pollutants.
- **!** EPA included Industrial Boilers, Commercial and Institutional Boilers, and Process Heaters as categories of major sources for which emission standards must be developed.

## **FOR MORE INFORMATION**

- ! To download the proposed rule from EPA's web site, go to "Recent Actions" at the following address: http://www.epa.gov/ttn/oarpg.
- **!** For further information about the proposed rule, contact Mr. Jim Eddinger at EPA's Office of Air Quality Planning and Standards at 919-541-5426.
- ! For information regarding boilers and process heaters, visit EPA's web site at: http://www.epa.gov/ttn/atw/combust/boiler/boilerpg.html. For other combustion-related regulations, visit EPA's Combustion Related Rules page at: http://www.epa.gov/ttn/atw/combust/list.html.