

## **FACT SHEET**

### **FINAL RULE TO REDUCE TOXIC AIR EMISSION FROM FACILITIES THAT PRODUCE HYDROCHLORIC ACID**

#### **TODAY'S ACTION**

- ! The U.S. Environmental Protection Agency (EPA) is issuing a final rule to control emissions of toxic air pollutants during hydrochloric acid (HCl) production. Toxic air pollutants, also known as air toxics, are those pollutants known or suspected to cause cancer or other serious health problems.
  
- ! Hydrochloric acid is used in a variety of industrial processes including:
  - refining ore for the production of tin and tantalum,
  - pickling and cleaning of metal products,
  - electroplating,
  - cleaning boilers,
  - neutralizing chemically basic systems,
  - manufacturing fertilizers, dyes, textiles and rubber, and
  - preparing various food products.Hydrochloric acid is also used as a laboratory reagent.
  
- ! The final rule will affect new, reconstructed, and existing HCl production facilities located or built at a facility considered a major source of air toxics under the Clean Air Act. The rule will only apply to HCl production facilities that produce liquid HCl at a concentration of 30 percent by weight or greater.
  
- ! This final rule will limit toxic air emissions from process vents (HCl and chlorine), storage tanks (HCl), and transfer operations (HCl). Owners/operators of equipment with toxic air emissions from leaking equipment in HCl service will be required to prepare and operate according to an equipment leak detection and repair plan.

#### **HEALTH/ENVIRONMENTAL BENEFITS**

- ! This rule will protect human health and the environment by reducing toxic air emissions of HCl and chlorine by approximately 49 percent from current levels. EPA estimates total annual air toxic reductions of 1,585 tons per year when the rules are fully implemented.
  
- ! Exposure to HCl and chlorine may produce a wide variety of human health effects including irritation of the lungs, skin, and mucous membranes; dysfunction of the central nervous system; and digestive and respiratory problems.

## **COST**

- ! EPA estimates that the capital cost associated with the rule will be approximately \$23 million. The total annual cost of the rule will be approximately \$8 million, including an estimate of the costs of: controls and monitoring equipment, operation and maintenance of the control and monitoring equipment, and the annual labor to comply with the reporting and recordkeeping requirements of the rule. These costs are for 65 existing and 10 new sources in the 5<sup>th</sup> year following promulgation.
- ! EPA's economic analysis shows that the estimated costs associated with this rule are no more than 1.0 percent of the revenues for any of the affected firms. The Agency expects no adverse impact to HCl producers as a result of the proposed rule.

## **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 or more annually of a listed pollutant or 25 tons or more of a combination of listed pollutants, the Clean Air Act requires the application of strict controls known as maximum achievable control technology.
- ! In 1992, EPA developed a list of industrial categories that will be subject to air toxic emission controls. EPA included HCl production and fume silica production on that list. Fume silica is a fine white powder used as a thickener, or reinforcing agent in inks, resins, rubber, paints, and cosmetics.

## **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. Bill Maxwell at EPA's Office of Air Quality Planning and Standards at 919-541-5430.
- ! 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>.