

November 26, 2002

## FACT SHEET

### AIR TOXICS RULE FOR MUNICIPAL SOLID WASTE LANDFILLS

#### TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing a rule to ensure reductions of toxic air pollutants from municipal solid waste (MSW) landfills.
- ! Toxic air pollutants, also known as hazardous air pollutants, are those pollutants known or suspected to cause cancer or other adverse health effects in humans. The air toxics reduced by this final rule include, toluene, benzene, xylenes, vinyl chloride, and ethyl benzene.
- ! The final rule will:
  - S require landfill operators to continuously monitor control devices to ensure compliance with the operating conditions for landfill gas control systems;
  - S enhance existing collection and control activities by adding new reporting requirements to ensure that any deviations will be corrected in a timely fashion;
  - S require municipal solid waste landfills to prepare and implement a plan to control toxic air emissions during startup, shutdown, and malfunction of their landfill gas collection and control systems and to report when this plan is not followed;
  - S reduce toxic air emissions from bioreactor operations at MSW landfills. Bioreactor operations are those in which liquids are added to increase the moisture content of the waste and increase the biodegradation rate; and
  - S require bioreactor landfills to install and operate the collection and control systems, required by existing rules, on an earlier schedule than conventional landfills.
- ! The final rule affects the same municipal landfills nationwide that are currently affected by existing environmental rules known as “emission guidelines” and “new source performance standards”. These rules require the best available landfill gas collection and control technology known.

#### WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- ! The final rule ensures reductions of air toxics from municipal landfills, while providing flexibility to the landfill industry.
- ! Waste degrades more quickly in a bioreactor landfill than in a conventional landfill. In 180 days, a bioreactor landfill generates the same amount of landfill gas that conventional/dry

landfills generate in 2 years. Requiring bioreactor landfills to operate a control system on an earlier time line than that required for conventional landfills will contribute to significant reductions in toxic landfill gas emissions - ranging from 60 to 240 megagrams at a single, medium-sized bioreactor landfill. Timely control will also result in capture of higher quality landfill gas for use as an alternative fuel.

### **HOW MUCH WILL TODAY'S RULE COST?**

- ! EPA estimates that the average annual operating and maintenance costs for the industry's recordkeeping and reporting will average \$13,128 per facility, with a total annual cost to the industry of \$2.1 million.
- ! EPA anticipates no capital costs for landfills complying with the final rule, because the rule does not require installation of additional controls.

### **BACKGROUND**

- ! The Clean Air Act requires EPA to identify categories of industrial sources that emit one or more of the listed 188 toxic air pollutants. Municipal solid waste landfills emit approximately 30 of the 188 listed toxic air pollutants.
- ! Major sources are those that emit 10 tons per year or more of a single air toxic or 25 tons per year or more of a combination of air toxics. For major sources within each source category, the Clean Air Act requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) facilities.
- ! Approximately 10 percent of the landfills established since 1987 are potentially major sources of toxic air emissions. Existing regulations require those facilities to install collection and control systems.
- ! Smaller, so-called "area sources", include those landfills that do not emit enough to meet the "major" source criteria. The Clean Air Act requires EPA to list those area sources that represent 90 percent of the area source emissions of 30 "urban air toxics." The 30 urban air toxics are those that present the greatest threat to public health in the largest number of urban areas. Municipal solid waste landfills emit approximately 13 of the 30 hazardous air pollutants in urban areas.
- ! 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. These limits are

generally more stringent than emission guidelines set for preexisting facilities already in operation.

- ! EPA promulgated new source performance standards/emission guidelines for landfills on March 12, 1996. The emission guidelines for existing landfills and new source performance standards for new landfills require large new and existing landfills to collect and control landfill gas emissions. When non-methane air emissions reach at least 50 megagrams per year, the facility is required to install a gas collection and control system within 30 months for closed areas of the landfill where waste is at least 2 years of age, and for active areas of the landfill where waste is at least 5 years of age.

### **FOR MORE INFORMATION**

- ! Interested parties can download the final rule from EPA's web site at: <http://www.epa.gov/ttn/oarpg>. For additional information, contact JoLynn Collins of the EPA's Office of Air Quality Planning and Standards at (919) 541-5671 or by e-mail at [collins.jolynn@epa.gov](mailto:collins.jolynn@epa.gov).
- ! EPA's Office of Air and Radiation home page, <http://www.epa.gov/oar/>, contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues.