

November 22, 1994

FACT SHEET

FINAL AIR TOXICS RULE FOR MAGNETIC TAPE MANUFACTURING INDUSTRY

TODAY'S ACTION...

- ! The Environmental Protection Agency (EPA) is promulgating a rule to reduce air toxics emissions from the magnetic tape manufacturing industry. Air toxics are those air pollutants that are known or suspected of causing cancer or other serious health effects (e.g., reproductive effects or birth defects).

HEALTH AND ENVIRONMENTAL BENEFITS

- ! The rule would reduce emissions of air toxics by 2,300 tons per year (or 2,080 megagrams per year).
- ! Most of the air toxics emissions being controlled are also volatile organic compounds, key components in forming ground-level ozone, or smog. Therefore, the rule would also provide the additional benefit in helping reduce smog.

WHY MAGNETIC TAPE?

- ! Under the Clean Air Act Amendments of 1990, EPA is required to regulate emissions of 189 listed toxic air pollutants. On July 16, 1992, EPA published a list of source categories that emit one or more of these air toxics. For listed categories of "major" sources (those that emit 10 tons/yr or more of a listed pollutant or 25 tons or more of a combination of pollutants), the Act requires EPA to develop standards that will require the application of maximum achievable control technology (MACT).
- ! In its July 16, 1992, published list of industry groups (known as "source categories") to be regulated, EPA identified magnetic tape manufacturing operations as a major source of air toxics.

WHO WOULD BE AFFECTED BY THE RULE?

- ! Of the 25 plants that manufacture magnetic tape, 14 are estimated to be major sources of air toxics, and thus affected by the regulation.
- ! Types of products made by this industry include audio and video cassettes, and computer diskettes.
- ! The industry is geographically widespread across the country.

- ! The air toxic emissions are predominantly solvents used in the coating operation and cleaning of equipment. Some particulate air toxics emissions may occur from the transfer of the magnetic particles to the coating mix.
- ! Any coating line for which the production of magnetic tape is 1 percent or less of total production of the line in any 12-month period would not be affected by the rule.

WHAT DO THE STANDARDS REQUIRE?

- ! All new and existing magnetic tape facilities classified as major sources would be required to meet the following control requirements for the emission points as noted below.
 - For the majority of emission points, achieve 95 percent control of air toxics emitted from each source. Most plants are expected to meet this with a solvent recovery device, such as carbon adsorbers or condensers. Some may use incinerators. This requirement is for the following emission sources: solvent storage tanks, mix equipment, the coating operation, condenser vents in solvent recovery, and waste handling devices. The standards provide procedures for establishing an alternate concentration limit for the control device when the coating operations are not operating.
 - For emissions from the cleaning of removable parts, maintain a 75 percent freeboard ratio in wash sinks or reduce air toxics emissions by 88 percent. The freeboard ratio relates the amount of solvent in the wash sink to the sink size.
 - For the transfer of magnetic particles containing air toxics to the coating mix, use an enclosed particulate transfer device or a fabric filter.
 - For the flushing of lines to clean them, the rule requires it be done in a closed system or control emissions by 95 percent.
 - For wastewater, which is generated from the use of steam to desorb carbon adsorbers, a certain percent removal (specified by compound) of air toxics from the wastewater or an outlet concentration of 50 ppmw total regulated solvents. This could be achieved by steam strippers.
 - An alternate standard would allow the owner or operator to commit to more stringent control of the coating operations in lieu of controlling certain storage tanks.

- Another alternative standard would allow the use of a low-toxics-content coating (no more than 0.18 kilograms of toxic solvents per liter of coating solids) instead of meeting the percent reduction control requirements for coating operations.

! Monitoring Requirements

- The monitoring requirements vary depending on the emission source and the control used.
- The requirements would be used to certify continuous compliance.
- Continuous emission monitors for volatile organic compounds are required for regenerative carbon adsorbers.
- For other controls, the monitoring is primarily parameters, the values of which are determined during the initial compliance test.
- In certain situations, a material balance calculation on solvent recovery devices may be used to demonstrate continuous compliance.

! Limit on Usage of Air Toxics

- The rule contains a mechanism for limiting the potential to emit air toxics from magnetic tape manufacturing via a limit on the usage of air toxics. An owner or operator might choose to use this mechanism in making the source non-major for air toxics, and thus not subject to the control requirements of the rule. Recordkeeping and reporting of air toxics usage would be required.

! Reporting/Recordkeeping

- Records of compliance test data, monitoring results, and results from required tests for assuring quality information would be required to be maintained for at least 5 years.
- Reports include an initial report of pertinent information about the emission sources, and periodic reports of the compliance status. The periodic reports would be semiannual unless an exceedance occurs; then, they would be quarterly.

WHAT WOULD THE RULE COST?

- ! The total annual cost of the rule for existing facilities is \$800,000 per year; this cost includes an annualized capital cost, operation, monitoring, recordkeeping and reporting. This results in a cost effectiveness of \$350 per ton of air toxic emission reduction (or \$390 per megagram reduction).

! The average percent price increase for all products in the magnetic media industry is estimated to be 0.03 percent. The EPA did not estimate price increases for the separate products.

FOR FURTHER INFORMATION

Anyone with a computer and a modem can download the rule from the Clean Air Act board of EPA's electronic TTN bulletin board. For further information about how to access the board, call (919) 541-5384. For further information about the rule, contact Gail Lacy on (919) 541-5261.