April 29, 1994

FACT SHEET

PROPOSED RULE FOR CONTROLLING EPICHLOROHYDRIN EMISSIONS FROM THE MANUFACTURE OF BASIC LIQUID EPOXY RESINS AND NON-NYLON POLYAMIDE RESINS

TODAY'S ACTION...

- Epichlorohydrin (EPI) is one of the hazardous air pollutants listed under the Clean Air Act Amendments of 1990. The proposed rule would control emissions of EPI from the manufacture of basic liquid epoxy resins and non-nylon polyamide or wet strength resins.

- Basic liquid epoxy resins are used in the production of glues, adhesives, plastic parts and surface coatings. Non-nylon polyamide or wet strength resins are used to improve the strength of paper.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- The proposed rule would reduce emissions of EPI, a probable human carcinogen that may cause adverse reproductive and developmental effects, such as birth defects.

- Annual reductions of EPI would equal 110 tons.

WHO MUST COMPLY WITH THE PROPOSED REGULATION?

- There are 3 facilities that manufacture basic liquid epoxy resins and 17 facilities that manufacture non-nylon polyamide or wet-strength resins that will be affected by this rule.

- The proposed regulation covers two of the twenty-seven source categories listed under the polymers and resins industry that may be regulated under the air toxics provisions of the Clean Air Act.

WHAT ARE THE RECOMMENDED CONTROL REQUIREMENTS?

- Existing basic liquid epoxy resin manufacturing facilities would be required to emit less than 130 lb of hazardous air pollutants from vents, tanks and wastewater, per million pounds of basic liquid epoxy resin produced, and both new and existing facilities would be required to implement the leak detection and repair (LDAR) program specified in the negotiated regulation for HON equipment leaks.

- New basic liquid epoxy resin facilities would be required to route process vents and storage tank vents to a common water scrubber achieving a minimum removal of 99 percent for hazardous air pollutants. Wastewater from these vent scrubbers would be required to be recirculated back through the process. An overall 99 percent removal efficiency for hazardous air pollutants would be required for all wastewater exiting the process.

- Existing wet strength resin facilities would be required to either emit less than 10 lb of hazardous air pollutants from process vents, storage tank vents, and wastewater, per million pound of wet strength resin production, or to implement the LDAR program specified in the proposal.

- New wet strength resin facilities would be required to use a condenser on the batch reactor vent yielding an exit gas temperature of 25 ° Celsius, use no hydrochloric acid, and generate no methanol by-product. Facilities could also choose to implement the LDAR program specified in the proposal as an alternative means of compliance with the standard.

Monitoring Requirements

- All owners or operators must conduct initial performance tests on the emission sources to demonstrate compliance with the emission limits and in some cases, to establish values for operating parameters that are subsequently monitored on a daily basis to ensure continuous compliance.

Reporting/Recordkeeping

- Initial notification and notification of compliance

status is required by the air toxics General Provisions rule (40 CFR Part 63). Additionally, reporting requirements associated with monitoring of the sources include the maintenance of site-specific monitoring parameters. These site-specific monitoring parameters are dependent on the type of control device used to achieve the standards and are established during the initial performance test. Recordkeeping requirements include the maintenance of control device operating data, as well as actual emissions data on hazardous air pollutants.

HOW MUCH WOULD THE PROPOSED RULE COST?

- For basic liquid epoxy resin facilities, the total nationwide capital cost is projected to be $400,000 and the nationwide annualized cost is estimated to be $140,000. For wet strength resin facilities, the total nationwide capital cost is projected to be $500,000 and the nationwide annualized cost is estimated to be $500,000.

- The proposed rule is expected to increase prices by no more than 1.25 percent.

FOR FURTHER INFORMATION

Anyone with a computer and a modem can download the rule from the Clean Air Act board of EPA's electronic Technology Transfer Network bulletin board by calling (919) 541-5742. For further information about how to access the board, call (919) 541-5384. For further information about the rule, contact Randy McDonald at (919) 541-5402.

FACILITIES NATIONWIDE AFFECTED BY THE POLYMERS AND RESINS II MACT

Basic Liquid Epoxy Resin Facilities
Dow Chemical - Freeport, Texas
Shell Chemical - Deer Park, Texas
Ciba Geigy - McIntosh, Alabama

Non-Nylon Polymide Resin Facilities
Borden Chemicals - Demopolis, Alabama
Hercules - Savannah, Georgia
Hercules - Portland, Oregon
Hercules - Milwaukee, Wisconsin
Callaway Chemical - Columbus Georgia
Callaway Chemical - Shreveport, Louisiana
Georgia Pacific - Crossett, Arkansas
Georgia Pacific - Peachtree City, Georgia
Georgia Pacific - Grayling, Michigan
Georgia Pacific - Columbus, Ohio
Georgia Pacific - Eugene, Oregon
Henkel Chemicals - Charlotte, North Carolina
Pioneer Plastics - Auburn, Maine

Borden Chemicals - Sheboygan, Wisconsin
Hercules - Hattiesburg, Mississippi
Hercules - Chicopee, Massachusetts
Akzo Chemical - Baxley, Georgia