8-15-97

FACT SHEET

PROPOSED AIR TOXICS RULE FOR POLYETHER POLYOLS PRODUCTION

TODAY'S ACTION

- Under authority of the Clean Air Act Amendments of 1990, the Environmental Protection Agency (EPA) is today proposing a regulation to reduce emissions of toxic air pollutants from the manufacture of polyether polyols.

- Polyether polyols are manufactured during the chemical production operations used to make lubricants, adhesives, sealants, cosmetics, soaps, and feedstock polymers for urethanes production. There are several phases of the manufacturing process that can result in emissions of toxic pollutants to the air. EPA's proposal would establish either emission limits or control efficiency requirements for the following phases of the manufacturing process: storage tanks, process vents, equipment leaks, and wastewater treatment systems.

- EPA worked in partnership with major stakeholders, including representatives from industry and State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO), in developing the proposal.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- EPA's proposed rule would reduce emissions of a number of air toxics, including ethylene oxide, propylene oxide, toluene, and hexane. Air toxics are those pollutants that are known or suspected to cause cancer or other serious health effects. Ethylene oxide, for example, is a probable human carcinogen that causes adverse reproductive and developmental effects.

- EPA's proposal would reduce emissions of air toxics from the manufacture of polyether polyols by approximately 2,000 tons annually, representing a 50 percent reduction from current levels. Additionally, many of these toxic chemicals are also “volatile organic compounds,” which contribute to the formation of ground-level ozone, the primary constituent of smog. Therefore, when implemented, this proposed rule would also help reduce ground-level ozone.

BACKGROUND

- Under the Clean Air Act Amendments of 1990, EPA is required to regulate sources of 188 listed toxic air pollutants. (Note that this list originally contained 189 pollutants, but EPA has subsequently removed the chemical caprolactum from the list.) On July 16, 1992, EPA published a list of industry groups (known as source categories) that emit one or more of these air toxics. For listed categories of "major" sources (those that emit 10 tons/year or more of a listed pollutant or 25 tons/year or more of a combination of pollutants), the Clean Air Act requires EPA to develop standards that require the application of stringent air pollution reduction measures known as maximum achievable control technology (MACT).

- EPA's published list source categories to be regulated includes major sources that manufacture polyether polyols. After allowing an opportunity for public comment, and time to analyze these comments, EPA intends to issue the final rule for polyether polyols production in June 1998.

WHAT DOES EPA'S PROPOSED RULE REQUIRE?

- Several phases of the manufacture of polyether polyols can emit toxic pollutants to the air. EPA's proposal would establish either emission limits or control efficiency requirements for the following phases of the manufacturing process: storage tanks, process vents, equipment leaks, and wastewater treatment systems.

- The monitoring, recordkeeping and reporting requirements outlined in the proposed rule are similar to those required for other EPA air toxics regulations. For example, EPA requires facilities to demonstrate compliance with the emission standards by monitoring their control devices and performing daily record keeping.

HOW DOES EPA'S PROPOSAL PROVIDE FLEXIBILITY TO INDUSTRY AND PROMOTE POLLUTION PREVENTION?

- Currently, most facilities control process emissions from polyether polyols manufacturing by installing control devices. Today's action proposes an alternative to this type of control. A process known as "extended cookout" allows facilities to leave their product mixture in the reactor longer, giving certain chemicals time to react with the mixture. If these chemicals do react, they will not appear in a gaseous form in the process vents, and thus will not adversely affect air quality. This promotes the concept of a "pollution prevention" approach because it is a change in process as opposed to an "end-of-the-pipe"control.

WHO WOULD BE AFFECTED BY EPA'S PROPOSED RULE?

- There are about 80 polyether polyols manufacturing facilities nationwide that would be

affected by the proposed rule. About half of these facilities have already installed air pollution controls that will help them meet the requirements of today's action.

HOW MUCH WOULD THE PROPOSED RULE COST?

- In total, EPA estimates the capital cost of the proposal for all affected facilities to be about $10.2 million (approximately $128,000 per facility).

- EPA estimates the total annual cost of the proposal to be about $7.7 million for existing and new facilities (approximately $96,000 per facility).

- EPA expects that the actual cost of compliance would be less than projected because of the potential to use common control devices; upgrade existing control devices; use other less expensive control technologies; and implement pollution prevention technologies.

- The price of polyether polyols products (i.e. lubricants, adhesives, sealants, cosmetics, soaps, and feedstock polymers for urethanes production) for consumers is projected to increase less than one percent.

FOR FURTHER INFORMATION

- Interested parties can download the rule from EPA's web site on the Internet under recently signed rules at the following address: (http://www.epa.gov/ttn/oarpg/rules.html). For further information about the proposal, contact Mr. David Svendsgaard of EPA's Office of Air Quality Planning and Standards at (919) 541-2380.

- 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/).