

February 28, 2003

FACT SHEET

FINAL RULE TO REDUCE TOXIC AIR POLLUTANT EMISSIONS FROM FLEXIBLE POLYURETHANE FOAM FABRICATION OPERATIONS

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is issuing a final rule to reduce emissions of toxic air pollutants from flexible polyurethane foam fabrication operations. The foam fabrication industry includes facilities engaged in cutting, glueing, and/or laminating pieces of flexible polyurethane foam.
- ! Toxic air pollutants, or air toxics, are those pollutants known, or suspected, to cause cancer and other serious health problems.
- ! Today's final rule focuses on reducing air toxics emitted from two foam fabrication emission sources: 1) loop slitter adhesive processes, which use adhesives to bond foam to foam or to other substrates and then cut the foam using a loop slitter; and 2) flame lamination, which is the bonding of foam to other substrates (i.e., cloth, foam, plastic, and other materials) using scorched or melted foam.
- ! **Today's rule will require facilities that use loop slitter adhesive processes** to comply with the rule by using adhesives that do not contain air toxics. However, EPA estimates that current air toxic emissions from loop slitter adhesive users are essentially zero as the result of changes in adhesive composition required by the Occupational Health and Safety Administration (OSHA). EPA has identified approximately 40 loop slitter sources.
- ! **New or reconstructed facilities that use flame lamination processes** will be required to reduce air toxic emissions by 90 percent. EPA estimates 3 flame lamination facilities will be newly built or reconstructed within the next 3 years. Only one of these facilities is estimated to be a major source - that is have high enough emissions to be subject to the rule's requirements. **Existing sources using flame lamination** are required to submit an initial notification to EPA to identify themselves. They are not required to further reduce their air toxic emissions. As many as eight existing facilities fall into this category.

BACKGROUND

- ! The Clean Air Act of 1990 requires EPA to identify source categories that emit one or more of the 188 listed toxic air pollutants

- ! This final rule applies to all new and existing foam fabrication facilities that are considered major sources of air toxic emissions. The Clean Air Act defines major sources as those that emit 10 tons a year or more of a single toxic air pollutant, or 25 tons or more of a combination of toxic air pollutants.

HEALTH AND ENVIRONMENTAL BENEFITS

- ! EPA estimates that each typical new or reconstructed flame lamination operation would reduce its air toxic emissions by 6.5 tons per year as a result of the final rule. This is a 90 percent reduction over current emission levels.
- ! The final rule targets air emissions of hydrochloric acid (HCl) and hydrogen cyanide (HCN). These compounds are associated with a variety of health problems. For example, HCl is corrosive to the eyes, skin, and mucous membranes. Chronic (long-term) occupational exposure to HCl has been reported to cause digestive and respiratory problems. HCl has also caused skin problems in workers. Chronic exposure to HCN may damage the central nervous system and may even cause death. This action will also preclude the use of methylene chloride.

COST OF THE FINAL RULE

- ! EPA estimates there will be no capital costs for facilities that use loop slitters and existing facilities using flame laminators to comply with the final rule. These sources are only subject to reporting and recordkeeping costs.
- ! New or reconstructed facilities that use flame laminators will incur capital costs to purchase and install air pollution control devices (e.g., scrubber) and monitoring equipment. EPA estimates this cost to be approximately \$65,000 (per facility), for an average annualized cost of approximately \$63,000, including annualized capital costs for a control device and monitoring equipment; labor costs associated with monitoring, reporting, and recordkeeping requirements; and the operation and maintenance of the required control equipment.
- ! Given that only one source per year would likely be affected and the cost of control is a very small portion of industry revenues, the economic impacts associated with this rule are virtually negligible.

FOR MORE INFORMATION

- ! To download a copy of the final rule, go to EPA's World Wide Web site at <http://www.epa.gov/ttn/oarpg/> under recent actions.
- ! For further information about the final rule, contact Maria Noell of EPA's Office of Air Quality

Planning and Standards at (919) 541-5607 or noell.maria@epa.gov.

- ! 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>.