

FACT SHEET

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

TODAY'S ACTION

- ! The Environmental Protection Agency (EPA) is proposing a rule to reduce emissions of toxic air pollutants from flexible polyurethane foam fabrication operations.
- ! Toxic air pollutants, or air toxics, are those pollutants known, or suspected, to cause cancer and other serious health problems.
- ! Today's proposal focuses on reducing air toxics emitted from two foam fabrication emission sources: 1) loop slitter adhesive use, which includes processes that 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 proposal would enforce an existing industry trend to use non-air toxic based adhesives in loop slitter applications. It would also require newly built businesses that intend to use flame lamination to install controls to reduce their hydrochloric acid (HCl) and hydrogen cyanide (HCN) air emissions by at least 90 percent.
- ! EPA will accept public comment on the proposal through 60 days after publication in the *Federal Register*. After carefully reviewing and considering all comments, EPA plans to issue the final rule by May 2002.

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
- ! The Foam Fabrication industry includes facilities engaged in cutting, glueing, and/or laminating pieces of flexible polyurethane foam.
- ! The proposed rule would apply 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.

- ! EPA worked with major stakeholders, including representatives from industry and state and local air pollution control agencies, to develop this proposal.

WHAT THE PROPOSED RULE REQUIRES

- ! The proposed rule requires air toxics reductions from two different kinds of businesses that use foam fabrication processes. In each case, only major sources as defined by the Clean Air Act are affected.
 - < **Facilities that use loop slitter adhesive processes** would be required to comply with a ban on the use of adhesives containing 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's permissible exposure limit for methylene chloride. EPA has identified approximately 40 loop slitter sources. Under the proposed rule, these sources would be required to establish that they meet the OSHA standards and therefore do not emit air toxics.
 - < **New or reconstructed facilities that use flame lamination processes** would be required to reduce air toxic emissions by 90 percent. EPA estimates that one existing facility per year would be subject to this requirement. **Existing sources using flame lamination** would only be subject to initial notification requirements and will not be required to achieve further air toxic emission reductions. As many as eight existing facilities fall into this category.

HEALTH AND ENVIRONMENTAL BENEFITS

- ! EPA estimates that a typical new or reconstructed flame lamination operation would reduce its air toxic emissions by 6.5 tons per year as a result of the proposed rule. This is a 90 percent reduction over current emission levels.
- ! The proposed rule does not require existing major sources that use flame lamination processes to further reduce their air toxic emissions; it only requires that they submit an initial notification to the Agency to identify themselves.
- ! The proposed rule requires new and existing facilities that are major sources and use loop slitters to cease the use of adhesives containing air toxics.
- ! The proposed 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.

COST OF THE PROPOSED RULE

- ! EPA estimates no capital costs for facilities that use loop slitters and existing facilities using flame laminators to comply with the proposed rule. These sources are only subject to reporting and recordkeeping costs.
- ! New or reconstructed facilities that use flame laminators would 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 annualized capital cost of approximately \$9,300.
- ! The total industry revenues in 1997 were approximately \$6.7 billion. 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 proposed rule, go to EPA's World Wide Web site at <http://www.epa.gov/ttn/oarpg/> under recent actions.
- ! For further information about the proposal, contact Maria Noell of EPA's Office of Air Quality Planning and Standards at (919) 541-5607 or noell.maria@epa.gov.
- ! Send any comments on the proposed rulemaking (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention: Docket No. A-2000-43, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. You may also submit comments and data by electronic mail (e-mail) to: A-and-R-Docket@epamail.epa.gov. Submit electronic comments as an ASCII file to avoid the use of special characters and encryption problems or in WordPerfect® version 5.1, 6.1, or Corel® 8 file format. Electronic comments and data must note the docket number. You may file electronic comments online at many Federal Depository Libraries. Do not submit confidential business information (CBI) by e-mail. See the *Federal Register* notice for more information on how to handle the submittal of CBI.
- ! 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>.