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FACT SHEET

AIR TOXICS REGULATION FOR THE FLEXIBLE POLYURETHANE FOAM INDUSTRY

TODAY'S ACTION...

- The Environmental Protection Agency (EPA) is today issuing a final regulation to reduce emissions of toxic air pollutants from the flexible polyurethane foam industry. Air toxics, also known as hazardous air pollutants, are those pollutants known or suspected of causing cancer and/or other serious health effects.

- EPA's regulation covers three distinct segments of this industry: slabstock, molded, and rebond polyurethane foam production. Slabstock foam products are primarily used in furniture seat cushions and bedding materials; molded foam is used in automotive seats, packaging, and a wide range of specialty products; and rebond foam is used as carpet padding and cushions for school bus seats. Air toxics are released from the solvents, equipment cleaners, and other chemicals used in the manufacturing process.

- EPA developed today's rule in close partnership with major stakeholders, including industry representatives and state and local agencies.

WHAT ARE THE HEALTH AND ENVIRONMENTAL BENEFITS?

- EPA's regulation will primarily reduce emissions of the toxic air pollutant methylene chloride from the flexible foam industry. Methylene chloride is a pollutant strongly suspected of causing cancer and can have adverse effects on the respiratory and nervous systems. Flexible foam facilities also emit very small amounts of another harmful air pollutant, toluene diisocyanate.

- Today's rule will reduce emissions of air toxics, primarily methylene chloride, from slabstock foam producers by about 11,500 tons annually, representing a 68 percent reduction from current levels. The regulation will also reduce air toxic emissions from molded foam production by approximately 2,300 tons annually, a 98 percent reduction from current levels for affected facilities. EPA believes that all rebond foam manufacturers are already complying with the requirements outlined in the final rule.

- Today's action demonstrates EPA's commitment to making pollution prevention an integral part of regulatory actions whenever possible. Most of the control requirements outlined in the regulation are based on cost-effective pollution prevention techniques. EPA's rule will eliminate the use of methylene chloride from molded foam and rebond foam production, while providing a variety of options for meeting the regulation's requirements.

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 caprolactam from the list.) On July 16, 1992, EPA published a list of industrial 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 controls, known as maximum achievable control technology (MACT).

- EPA's published list of industry categories to be regulated includes major sources that produce flexible polyurethane foam.

WHO WILL BE AFFECTED BY EPA'S RULE?

- There are approximately 78 slabstock foam facilities and 98 molded foam facilities nationwide that will be affected by today's rule. The rule would also apply to any similar facilities built in the future. EPA believes that the 21 rebond foam facilities are already in compliance with the emission standards and therefore should not have to implement additional controls.

WHAT DO THE STANDARDS REQUIRE?

Introduction

- In producing slabstock polyurethane foam, varying amounts of methylene chloride are required depending on the desired characteristics of the foam. For example, larger quantities of methylene chloride help increase a "blowing" action that produces lighter, softer foam. Manufacturers need to produce foam products with a wide range of softness and weight in order to serve varied markets.

- EPA's rule provides flexibility to industry by providing a choice of compliance options and compliance schedules that promote cost-effective, pollution prevention-based alternatives.

- EPA's final rule has been amended from the proposed rule to include a section that more clearly outlines what constitutes a violation of the standards.

- Monitoring, recordkeeping, and reporting requirements are outlined in the rule.

Slabstock Foam

- For slabstock foam production, EPA's rule sets emissions limits for blowing agents, leaking equipment, storage vessels, and cleaning operations. The foam blowing process constitutes 95 percent of the methylene chloride emissions from slabstock foam production.

- A unique feature of the slabstock foam requirements allows facilities to avoid controlling emissions of methylene chloride in equipment cleaning, equipment leaks, and storage, in exchange for using less methylene chloride as a blowing agent. Methylene chloride emissions can be reduced through a variety of pollution prevention techniques or by installing add-on control equipment.

Molded Foam

- EPA's rule requires the elimination of methylene chloride-based equipment flushes and foam release agents from molded foam production. Relatively low cost water-based cleaners and equipment substitutions are already being used by some facilities to eliminate methylene chloride emissions.

Rebond Foam

- Today's action will require the elimination of methylene chloride during production and cleaning processes at rebond foam facilities. EPA believes that all rebond foam manufacturers are already complying with the applicable requirements.

HOW MUCH WILL EPA'S RULE COST?

- The total annualized cost of today's rule for the entire industry is estimated to be roughly $8 million, most of which will result from slabstock foam production compliance. The actual cost of the rule is expected to be less than $8 million because slabstock foam producers are likely to choose an emission control alternative, which will eliminate costs for controlling emissions from storage tanks, equipment leaks, and equipment cleaning.

FOR FURTHER INFORMATION...

- Interested parties can download the rule from EPA's web site on the Internet under "recent actions" at the following address: (*http://www.epa.gov/ttn/oarpg*). For further information about today's rule, 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*.