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I. Introduction and Background

A. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The category of major sources covered by today's final rule was listed on July 16, 1992 (57 FR 31576). Major source under section 112 means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, 10 tpy or more of any one HAP or 25 tpy or more of any combination of HAP.

B. What Criteria Are Used in the Development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP

to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The minimum control level allowed for NESHAP, which we refer to as the "MACT floor," is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that standards are set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on consideration of the cost of achieving the emission reductions, any non-air quality health and environmental impacts, and energy requirements.

C. How Did the Public Participate in Developing the Rule?

Prior to proposal, we met with industry representatives and State regulatory authorities several times to discuss the data and information used to develop the proposed standards. In addition, these and other potential stakeholders, including equipment vendors and environmental groups, had opportunity to comment on the proposed standards.

The proposed rule was published in the **Federal Register** on August 8, 2001 (66 FR 41718). The preamble to the proposed rule discussed the availability of technical support documents, which described in detail the information gathered during the standards development process. Public comments were solicited at proposal, including a specific request for comments with regard to the potential existence of non-slitter adhesive use by major sources.

We received eight public comment letters on the proposed rule. The commenters represent the following affiliations: foam fabricators (2 companies), industrial trade associations (5), and one private

research group. In the post-proposal period, we talked with commenters and other stakeholders to clarify comments and to assist in our analysis of the comments. Records of these contacts are found in Docket OAR-2000-0080 or Docket A-2000-43. All of the comments have been carefully considered, and, where appropriate, changes have been made for the final rule.

D. Description of Source Category

Today's NESHAP apply to the Flexible Polyurethane Foam Fabrication Operations source category. This source category includes operations engaged in cutting, gluing, and/or laminating pieces of flexible polyurethane foam. This includes fabrication operations that are located at foam production plants, as well as those that are located off-site from foam production plants.

We have identified two subcategories under the Flexible Polyurethane Foam Fabrication Operations source category. These subcategories are loop slitter HAP-based adhesive use and flame lamination.

Loop Slitter Adhesive Use: A loop slitter is a large machine used to create thin sheets of foam from the large blocks of foam or "buns" created at a foam production plant. In order to comply with Occupational Health and Safety Administration (OSHA) regulations, loop slitters have converted from a reliance on methylene chloride-based adhesives to other non-HAP alternatives since the mid-1990's. As a result of the OSHA regulations, we believe that the foam fabrication industry has effectively discontinued the use of methylene chloride-based adhesives on loop slitters. Consequently, our estimate of current nationwide HAP emissions from loop slitter adhesive use prior to the development of the NESHAP (referred to as "baseline emissions") is zero.

Flame Lamination: In the flame lamination process, foam is scorched to adhere it to various substrates. This process releases particulates and HAP. We have identified HCN, TDI, and HCl as HAP emitted as a result of flame lamination. Specific HAP released are dependent on the contents of the foam being laminated at a given time. With the exception of HCl, these HAP are generally released in very small amounts.

II. Summary of Changes Since Proposal

In response to comments received on the proposed NESHAP and further analysis, we made two significant changes for the final rule, and a small number of other changes for editorial purposes and clarification.