

### *C. How Did We Select the Affected Source?*

In selecting the affected source(s) for emission standards, our primary goal is to ensure that MACT is applied to HAP-emitting operations or activities within the source category or subcategory being regulated. The affected source also serves to determine where new source MACT applies under a particular standard. Specifically, the General Provisions in subpart A of 40 CFR part 63 define the terms "construction" and "reconstruction" with reference to the term "affected source" and provide that new source MACT applies when construction or reconstruction of an affected source occurs. The collection of equipment and activities evaluated in determining MACT (including the MACT floor) is used in defining the affected source.

When an emission standard is based on a collection of emission sources or total facility emissions, we select an affected source based on that same collection of emission sources, or the total facility, as well. That approach for defining the affected source broadly is particularly appropriate for industries where a plantwide emission standard provides the opportunity and incentive for owners and operators to utilize control strategies that are more cost-effective than if separate standards were established for each emission point within an affected source.

*Selection of Affected Source.* The affected source for the proposed standards is broadly defined for each subcategory. It includes all metal can surface coating operations and associated ancillary equipment within each of the four subcategories. Those operations include all coating application equipment, all coating and thinner storage containers and mixing vessels, all equipment and containers used for conveying coatings and thinners, and all storage containers and conveyance equipment for waste materials generated by a metal can surface coating operation.

Since a facility may have coating operations in more than one subcategory and, thus, be subject to separate emission limits for each subcategory, we have defined all the coating-related equipment in each subcategory as the affected source. In selecting the affected source, we considered, for each operation, the extent to which HAP-containing materials are used and the amount of HAP that are emitted. Coating application, flash-off, and curing/drying operations account for the majority of HAP emission and are included in the affected source.

We were not able to obtain data to adequately quantify HAP emissions from storage, mixing, cleaning, waste handling and wastewater treatment. However, solvents that are added to coatings as thinners, for example, may be emitted during mixing and storage. The level of emissions depends on the type of mixing and the type of storage container and the work practices used at the affected source. The magnitude of emissions from cleaning depends primarily on the type, amount, and HAP content of cleaning materials used. Emissions from waste handling operations depend on the type of system used to collect and transport organic-HAP-containing waste materials in the affected source. The HAP emissions from wastewater treatment depend on the quantity and types of HAP discharged to the wastewater treatment operation and the subsequent wastewater treatment processes, *e.g.*, treatment by aeration or by biodegradation. Mixing, storage, cleaning, waste handling, and wastewater treatment operations are included in the affected source.

A broad definition of the affected source was selected to provide maximum flexibility in complying with the proposed emission limits for organic HAP. In planning its total usage of HAP-containing materials, each affected source can select among available coating, printing, thinning, and cleaning materials, as well as use of emission capture systems and add-on controls for coating operations, to maximize emissions reductions in the most cost-effective manner.

Additional information on the metal can surface coating operations selected for regulation and other operations are included in the docket for the proposed standards.

### *D. How Did We Determine the Basis and Level of the Proposed Standards for New or Reconstructed Affected Sources and Existing Affected Sources?*

The sections below present the rationale for determining the MACT floor, regulatory alternatives beyond the floor, and selection of the proposed standards for new or reconstructed and existing affected sources.

How did we determine the MACT floor? After we identify the specific source categories or subcategories of sources to regulate under section 112 of the CAA, we must develop emission standards for each category and subcategory. Section 112(d)(3) establishes a minimum baseline or floor for standards. For new or reconstructed affected sources in a category or subcategory, the standards cannot be

less stringent than the emission control achieved in practice by the best-controlled similar source for which we have emission information. The standards for existing affected sources can be less stringent than standards for new or reconstructed sources, but they cannot be less stringent than the average emission control achieved by the best-performing 12 percent of existing sources (or the best-performing five existing sources for categories or subcategories with fewer than 30 sources) for which we have emission information.

In the metal can surface coating industry, organic HAP emission control for surface coating operations is accomplished through the use of low- or no-HAP coatings and thinners and add-on capture and control systems. While various emission control techniques have achieved broad use in the industry, different facilities use various combinations of low- or no-HAP materials and add-on control equipment for different types of surface coating operations. For example, the continuous linear configuration of sheetcoating operations make them more amenable to emissions reduction with add-on control equipment, while the nature of side seam stripe coating applications make add-on emission control impractical.

Thus, the most reasonable approach to establishing a MACT floor is the evaluation of a source's organic HAP emissions for each type of coating operation and each coating type segment it includes. To account for differences in coating volumes used in different types of operations and differences in production levels from one source to another, we normalized the organic HAP emission rate by the volume of coating solids used.

We used information obtained from industry survey responses to estimate the organic HAP emission rate for each subcategory and coating type segment included in each facility. We calculated total organic HAP emissions by assuming that 100 percent of the volatile components in all coatings and thinners are emitted. Sources used for determining the MACT floor emission limits included those facilities that listed major source or synthetic minor source as their title V status on their responses to questionnaires we sent to them and that used at least 5,700 liters/yr (1,500 gal/yr) of coatings in metal can surface coating operations. Other sources were included if their data indicated that they have the capacity to increase their organic HAP emissions to at least 9.1 Mg/yr (10 tpy), even though