

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 the final NESHAP, we considered control options that are more stringent than the MACT floor, taking into account consideration of the cost of achieving the emission reduction, any non-air quality health and environmental impacts, and energy requirements. In the final rule, EPA is promulgating standards for both existing and new sources consistent with these statutory requirements.

C. What Are the Primary Sources of Emissions and What Are the Emissions?

The final NESHAP regulate emissions of organic HAP. Available emission data collected during the development of the final NESHAP show that the primary organic HAP emitted from the surface coating of miscellaneous metal parts and products include xylenes, toluene, MEK, phenol, cresols/cresylic acid, glycol ethers (including EGBE), styrene, MIBK, and ethyl benzene. These compounds account for approximately 90 percent of this category's nationwide organic HAP emissions.

The majority of organic HAP emissions from a facility engaged in miscellaneous metal parts and products surface coating operations can be attributed to the application, drying, and curing of coatings. The remaining emissions are primarily from cleaning operations. In most cases, organic HAP emissions from mixing, storage, and waste handling are relatively small. The organic HAP emissions associated with coatings (the term "coatings" includes protective and decorative coatings as well as adhesives) occur at several points. Coatings are most often applied either by using a spray gun in a spray booth or by dipping the substrate in a tank containing the coating. In a spray booth, volatile components evaporate from the coating as it is applied to the part and from the overspray. The coated part then passes through an open (flash-off) area where additional volatiles evaporate from the coating. Finally, the coated part passes through a drying/curing oven, or is allowed to air dry, where the remaining volatiles are evaporated.

Organic HAP emissions also occur from the activities undertaken during

cleaning operations, including paint stripping, where solvent is used to remove coating residue or other unwanted materials. Cleaning in this industry includes cleaning of spray guns and transfer lines (e.g., tubing or piping), tanks, and the interior of spray booths. Cleaning also includes applying solvents to manufactured parts prior to coating application and to equipment (e.g., cleaning rollers, pumps, conveyors, etc.).

Mixing and storage are other sources of emissions. Organic HAP emissions can occur from displacement of organic vapor-laden air in containers used to store HAP solvents or to mix coatings containing HAP solvents. The displacement of vapor-laden air can occur during the filling of containers and can be caused by changes in temperature or barometric pressure, or by agitation during mixing.

D. What Are the Health Effects Associated With Organic HAP Emissions From the Surface Coating of Metal Parts and Products?

The HAP to be controlled with the final rule are associated with a variety of adverse health effects. These adverse health effects include chronic health disorders (e.g., irritation of the lung, eyes, and mucous membranes and effects on the central nervous system) and acute health disorders (e.g., lung irritation and congestion, alimentary effects such as nausea and vomiting, and effects on the central nervous system).

We do not have the type of current detailed data on each of the facilities covered by these emission standards for this source category, and the people living around the facilities, that would be necessary to conduct an analysis to determine the actual population exposures to the organic HAP emitted from these facilities and potential for resultant health effects. Therefore, we do not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, the final rule will reduce emissions and subsequent exposures.

II. Summary of the Final Rule

A. What Source Categories and Subcategories Are Affected by the Final Rule?

The final rule applies to you if you own or operate a miscellaneous metal parts and products surface coating facility that is a major source, or is located at a major source, or is part of a major source of HAP emissions. We

define a miscellaneous metal parts and products surface coating facility as any facility engaged in the surface coating of any miscellaneous metal part or product. If application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these associated activities do not comprise surface coating if the application of coating does not occur. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer is not a coating operation for the purposes of the final rule.

You will not be subject to the final rule if your miscellaneous metal parts and products surface coating facility is located at an area source. An area source of HAP is any facility that has the potential to emit HAP but is not a major source. You may establish area source status by limiting the source's potential to emit HAP through appropriate mechanisms available through your permitting authority.

The final rule does not apply to surface coating or a coating operation that meets any of the criteria listed below:

- A coating operation conducted at a source where the source uses only coatings, thinners and/or other additives, and cleaning materials that contain no organic HAP, as determined according to the procedures in the final rule.
- Surface coating that occurs at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occurs at hobby shops operated for noncommercial purposes.
- Coatings used in volumes of less than 189 liters (50 gallons (gal)) per year, provided that the total volume of coatings exempt does not exceed 946 liters (250 gal) per year at the facility.
- Surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration (NASA), or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State).
- Surface coating where plastic is extruded onto metal wire or cable or metal parts or products to form a coating.