

Small Business Environmental Assistance Program

NYS Pollution Prevention Institute

Phone: 585-475-7869 | **Email:** sbeap@rit.edu

Metal & Plastic Surface Coating EPA Requirements (September 2022)

EPA Requirements for Metal & Plastic Surface Coating Operations affects both metal and plastic substrate surface coating operations. This regulation [40 CFR Part 63, Subpart HHHHHH] is commonly referred to as “6H,” or the “6H NESHAP,” and addresses the hazardous metal compounds of lead, cadmium, manganese, nickel and chromium (referred to as target HAPs) that may be components in coatings applied to metal and plastic parts. These target HAPs within the coatings are released into the atmosphere when atomized through spray guns. This fact sheet provides a general overview of the requirements for surface coating operations that coat both metal and plastic substrates.

Who must comply?

Facilities that spray apply coatings that contain > 0.1% by weight of lead, nickel, cadmium or hexavalent chromium, or > 1% by weight of manganese or trivalent chromium, are subject to this regulation. Spray apply means the application of materials using hand-held devices that create an atomized mist or coating. Spray apply does not include the following: hand-held devices with paint cup capacities ≤ 3 fluid ounces, non-refillable aerosol containers, non-atomizing technologies, powder coating or thermal spray operations.

Operations that perform motor vehicle and mobile equipment surface coating are subject to slightly different requirements, which are summarized in the EPA Requirements for Automotive Refinishing Operations fact sheet.

Exemptions

Surface coating of military munitions or military munitions transport equipment; operations that take place at installations owned/operated by the various military and federal administrations; coating performed by individuals on their personal possessions or for others without receiving compensation; research and laboratory activities; quality control activities, and any operations subject to another NESHAP are exempt from the requirements of this regulation.

How can I tell if coatings contain target HAPs?

You can determine if a coating contains target HAPs by either reviewing the coating SDS (Safety Data Sheet), or by contacting the coating manufacturer or supply vendor. If any coating contains target HAPs, you must comply with the requirements listed below.

What if my coatings don't contain any target HAPs?

If you can verify that you do not spray coatings with target HAPs or that you are able to switch to coatings that are free from these compounds, you are not subject to the regulation. Be careful! Switching coatings or using new ones that do contain the target HAPs will make you subject to this regulation. Make sure that new coatings do not contain target

HAPs, or make sure you are following the requirements outlined below upon startup of the coatings with target HAPs.

What are the Requirements?

If you spray apply even one coating with target HAPs, you need to do the following:

1. Perform spray painting operations in an area that has a full roof, at least three (3) complete walls or side curtains and is vented to draw air through the area. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through.
2. Have 98% removal efficient filters on the exhaust of all spray operations. Your vendor or filter manufacturer should be able to provide documentation on the filter's efficiency.
3. Use only high volume, low pressure (HVLP) spray guns, electrostatic application, airless or air-assisted airless spray guns or equivalent technology to spray apply coatings.
4. Use gun cleaning methods that do not atomize the cleaning solvent, unless using a container that captures all of the bounce back spray, or mist.
5. Train and certify all spray painters and re-certify every five years. Training programs must include hands-on and classroom instruction on the proper spray application of coatings. They also must demonstrate, document and provide certification of successful completion of the regulation's training requirements. Refer to the Spray Painter Training & Certification Requirements fact sheet for detailed requirements.
6. Submit a Notification of Compliance Status and maintain a copy. If there are any changes in your compliance status during the calendar year, you need to submit an Annual Notification of Changes Report (by March 1).
7. Have documentation on the spray booth filter efficiency.
8. Have documentation on the spray gun transfer efficiency.
9. All records must be kept for 5 years and maintained at the facility for the first 2 years.
10. Permitting or registration is typically required. Changes will require modifications to the permit.