

Exemptions and Other Information Related to Metal Fabrication (Subpart 6X)

Attachment C

The following information covers exemptions from the metal fabrication rule and from permitting. In addition, the information covers the relationship between the spray coating requirement in the 6H rule and those in the 6X rule.

In a nutshell:

Remember that there are always two determinations that need to be made:

1) Does the rule apply to the facility?

- a. If no, the facility does not need a permit
- b. If yes, the facility must comply with the rule, but may not need a permit

2) Ok, so the rule applies, but does the source need a permit?

Some sources will be subject to the rule and will need to comply with the rule, but because of the activities they perform or their size they do not need a permit.

Example 1:

- The 6X rule applies but the facility does no shielded metal arc welding (SMAW) and
- The facility uses less than 100 lbs per year of welding wire or rod that contains any of the five metal HAPs

If both of these criteria are met, then a permit would not be required, even though the rule applies and they must comply with the requirements in the rule.

Example 2:

The rule applies, but the facility does not perform any of the activities that would require a permit such as; dry machining, dry grinding or dry polishing.

If a facility has these affected processes, then the rule applies but a permit is not required.

6X Rule Exemptions:

- Facilities that produce products that are not part of one of the nine affected categories
- Facilities where the production of products and/or the activities associated with metal fabrication (minus sales and marketing) account less than 50% of the total production and/or activities performed at the facility?
- Fabrication of other non-metal parts (i.e., plastic)
- Wet processes (those using fluids or water for lubrication or cooling)
- Machining, grinding or polishing with hand held devices
- Bench top grinding and polishing
- Use of materials (such as welding rod and/or wire) without the five metal HAPs

6X and 6H Rule Exemptions

- Spray application of coatings that do not contain any of the five target metal HAPs, **or** that contain any of the five target metals in the following amounts: For chromium, cadmium, lead or nickel, the quantity of metal must be 0.1 percent or less. For manganese the quantity of metal must be 1.0 percent or less.
 - For 6H CR+3 can be at 1% or less
- Surface coating application that fall under one or more of the following:
 - Powder coating
 - Hand held non-refillable aerosol containers
 - Non-atomizing technology including , but not limited to:
 - paint brushes
 - rollers

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- hand wiping
 - flow coating
 - dip coating
 - electrodeposition coating
 - web coating
 - coil coating
 - touch-up markers, and 'marking pens
- Activities that meet the definition of “tool or equipment repair operations,” “facility maintenance,” “quality control activities” or “research and laboratory facilities”
 - Affected processes performed as part of facility maintenance or to repair equipment used at the facility are exempt, and should not be used when determining 50% or more
 - Operations performed on site at installations owned or operated by the United States Armed Forces, the National Aeronautics and Space Administration, or the National Nuclear Security Administration
 - Operations that produce military munitions or equipment directly and exclusively used for the purposes of transporting military munitions

6X Permitting Exemptions.

A permit for 6X is not required if:

- The 6X rule does not apply
- The 6X rule applies, but the facility does not have any of the following affected processes:
 - dry abrasive blasting
 - surface coating
 - welding
- The 6X rule applies, but the materials being used do not contain any of the five target metal HAPs
- The 6X rule applies but the following criteria are met:
 - No shielded metal arc welding is performed
 - The use of welding wire or rod containing any of the five metal HAPs is less than 100 lbs per year
 - Records of the amount of wire and rod used must be kept on site as proof

How paint stripping and surface coating affects the metal fabrication rule:

The painting requirements found in 6X or the requirements of 6H (Paint Stripping and Surface Coating) may apply to metal fabricators who perform spray applied painting activities at their facility. This activity would fall under miscellaneous surface coating because of the spraying of coatings onto misc. parts and or products made of metal and/or plastic.

The 6X rule defines paint rather than coatings. The definition of paint in the 6X rule is:

A material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, coatings, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer are not considered paints according to this rule.

Here is how painting activities factor into the 6X rule:

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The requirements for painting in the 6X rule may apply if a facility is applying paint that contains .1% or less of chromium, cadmium, lead or nickel and 1% or less of manganese.

Here are the scenarios that could be present at a facility:

- 6X applies and a facility spray applies coatings that contain one or more of the five metal HAPs, **or** MeCl is being used to strip coatings from **any** substrate:
 - A permit is required for 6X
 - Compliance with the rule requirements for painting in the 6X rule is required
 - These requirements would be found in the permit if applicable
 - The 6H rule does not apply
- 6X applies and a facility spray applies coatings that do not contain any of the five metal HAPs and no MeCl is in use
 - A permit for 6X may be required based on other activities performed
 - The requirements for painting in 6X do not apply
 - Records showing that the coatings applied do not contain any of the five metal HAPs must be kept on site as proof
 - The 6H rule does not apply

Here is how the 6H rule factors into the 6X rule:

The requirements for painting in the 6H rule may apply, even if the 6X rule does not apply.

Here are the scenarios that could be present at a facility:

- 6X does not apply **and** the facility does not spray apply any coatings or perform any stripping using MeCl
 - The facility does not need to comply with the requirements found in 6X or 6H
 - No permit is required for either 6X or 6H
- 6X does not apply but a facility **is** spray applying coatings that contain one or more of the five metal HAPs, **or** MeCl is being used to strip coatings from **any** substrate:
 - 6H applies
 - The facility must comply with the requirements of the 6H rule
 - A permit for 6H is required
 - If a facility is only using exempted activities then 6H does not apply
- 6X does not apply and the facility **does not** spray applying coatings that contain any of the five metal HAPs, **and** no MeCl is being used to strip coatings from **any** substrate:
 - 6H does not apply
 - Records showing that the coatings applied do not contain any of the five metal HAPs must be kept on site as proof
 - The facility does not need to comply with the requirements found in 6X or 6H
 - No permit is required for either 6X or 6H

6H Permitting Exemptions as They Apply to Miscellaneous Surface Coaters:

- The 6H rule does not apply and therefore a permit is not required
- The 6H rule applies but the facility uses less than 20 gallons of paint per year
 - Records of paint usage must be kept on site

Table 1: How the painting requirements of 6X and 6H differ

6X Requirements	6H Requirements
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Paint is defined(similar, but some pieces are missing)	Coating is defined (more elaborate)
Exempt paint cups must be less than 3 oz.	Exempt coating cups must be 3 oz or less
Cannot atomize gun cleaning solvent or paint residue unless solvent does not contain any HAPS	Cannot atomize solvent or paint residue regardless of content
Spray booths or spray rooms are required to have a full roof, at least two complete walls and one or two complete side curtains or other barrier material so that all four sides are covered	Spray booths and prep stations must have a full roof and at least three complete walls or complete side curtains
Any CR+3 in materials used must be .1% or less	Any CR+3 in materials used must be 1% or less