Nine Metal Fabrication and Finishing Area Source Categories 40 CFR Part 63 Subpart XXXXXX (6X) NESHAP Questions & Answers Revised June 2020

Introduction

This document combines **Questions & Answers** identified for the Nine Metal Fabrication and Finishing Source Categories Area Source NESHAP promulgation package (40 CFR, part 63, subpart XXXXX) in subsequent conversations between stakeholders and EPA personnel. Although the EPA has tried to include most of the questions that have been asked, there may be some questions that are not identified here. If you have questions that have not been addressed or have additional questions, please contact your state or local regulatory agency for assistance.

There are 84 questions in this document. If you do not see your question within one subcategory, check the other subcategories before you go to your state or local agency. Some questions are relevant to more than one topic but are placed under the topic that appeared most relevant.

Web links to additional Information:

9 Metal Fabrication and Finishing home page: <u>https://www.epa.gov/stationary-sources-air-pollution/metal-fabrication-and-finishing-source-categories-national-emission</u>

All NESHAP home page:

<u>https://www.epa.gov/stationary-sources-air-pollution/national-emission-standards-hazardous-air-pollutants-neshap-9</u>

Area Source NESHAP home page: <u>https://www3.epa.gov/ttn/atw/area/arearules.html#imp</u>

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Applicability - General

1. Q: Would moving a metal working operation to a new location trigger the "new facility" requirements of the rule?

A: Simply moving an entire affected source to a new location would not be considered a (new) construction. In 40 CFR 63.11514(d) it is established:

(d) An affected source is new if you commenced construction or reconstruction of the affected source, as defined in 40 CFR 63.2, of the 'General Provisions' to part 63, on or after April 3, 2008.

Construction is defined at 40 CFR 63.2 as:

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

However, the owner or operator needs to evaluate whether reconstruction (also defined at 40 CFR 63.2) has taken place, which would trigger the new source requirements of the rule. Reconstruction is defined at 40 CFR 63.2 as:

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously unaffected source to such an extent that: (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a state) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

2. Q: Regarding the definition of an "affected source," what constitutes "the collection of all equipment and activities necessary to perform" a specific operation. Assume one has a single closed system dry abrasive blasting machine that has been in place for ten years, an existing affected source under the subpart, and then a second identical closed system dry abrasive blasting machine is added sometime after April 3, 2008. Is the second machine a new affected source or an existing affected source under subpart 6X?

A: The Clean Air Act uses the word "source" to mean the entire facility in terms of the classification of "new" vs. "existing," whereas for the 6X rule what is referred to as the "affected source" is actually one of the processes at the facility. The entire facility, however, is still used to determine new vs. existing for

both the rule and the CAA. So if a facility is an existing source under 6X, they don't need to comply until the date for existing sources (2011), even if they add new processes between now and then. After 2011, if they add a new affected source at their existing facility, the facility should include the new processes in their annual report.

3. Q: The definition (see 40 CFR 63.11522 "What definitions apply to this subpart?") of "Primarily Engaged" describes a 50 percent threshold and utilizes units common to the industry. However, some facilities may do a variety of work, not all of which is related to manufacturing. In such cases, is it acceptable to use revenue generation as the basis of comparison in such cases?

A: Under the definition of "Primarily Engaged," the 50 percent threshold is tied to production quantities established by the volume, linear foot, square foot, or other value suited to the specific industry. "Revenue," which is generally understood to be the amount of income generated from the sale of goods or services, would not generally be a useful proxy for assessing production quantities and thus does not appear to be the type of values provided for in the definition. Revenue also would be difficult to characterize as a "value suited to the specific industry" because it is used by all industries. Whether revenue is an acceptable value for establishing whether a facility is "primarily engaged" in operations of one of the nine listed metal fabrication and finishing source categories may best be determined on a case-by-case basis in the type of situation described.

4. Q: Is there a major source equivalent to the metal fabrication area source NESHAP subpart 6X?A: No, not at this time.

5. Q: A source was a major source until it complied with the metal coating MACT (subpart MMMM). Now its HAP potential to emit (PTE) is very low and so it is an area source for purposes of future NESHAPs. If that source is in one of the 6X source categories, is it subject to 6X?

A: Compliance with a MACT standard by itself does not result in reclassification of a major source to area source status. A major source with an enforceable limit on its PTE may be reclassified as an area source for regulatory purposes, and so would be subject to any applicable area source requirements. The statutory language relevant to this question was discussed in the 01/25/18 memorandum from W. L. Wehrum on "Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act." And in the EPA's proposed rule published on July 26, 2019 (84 FR 36304). Note: a major source is not subject to 6X.

Applicability – SIC/NAICS Code Issues

6. Q: Numerous questions have been asked regarding applicability of the rule to specific industries.

A: For applicability questions, consult the source category descriptions in the preambles to the proposed and final rules or contact your regional EPA authority.¹

¹<u>https://www.epa.gov/aboutepa/mailing-addresses-and-phone-numbers#regional</u>

7. Q: Both the preamble and applicability table show the Fabricated Metal Products category to consist of NAICS codes 332117 and 332999; the applicability table also shows the category limited to SIC code 3499, (Fabricated Metal Products, Not Elsewhere Classified). Does the EPA intend to restrict applicability only to the above SIC/NAICS code components of the Fabricated Metal Products category? If a facility were in the subcategories of NAICS code 332996 and SIC code 3498 (fabricated pipe and pipe fitting manufacturing), would it be considered part of the Fabricated Metal Products category subject to subpart 6X?

A: For applicability questions, consult the source category descriptions in the preambles to the proposed and final rules or contact your regional EPA authority.¹ As explained in the final rule preamble (73 FR 42979), the SIC/NAICS codes that are provided in the preamble and in Table 1 below are not intended to be exhaustive but rather to provide a guide for readers regarding entities likely to be effected by this action.

8. Q: What if a company used an SIC that is not on the list of those covered by the rule, and a "new" NAICS that is covered? Is the applicability determination based on "either-or" or "both"?

A: If a process supports a different product and that product is described under an SIC/NAICS code combination not identified in the SIC/NAICS table that the EPA has provided as a guide, that process may likely not be covered by subpart 6X. However, HAP emissions from other processes are included in calculations to determine whether a facility is a major or area source.

9. Q: What about individual processes under a different SIC/NAICS code combination that are performed at a facility that is otherwise subject to subpart 6X?

A: If a process supports a product that is not included under a SIC/NAICS code combination listed for subpart 6X and is not identified in the SIC/NAICS table that the EPA has provided as a guide, then that process likely may not be covered by subpart 6X. However, HAP emissions from other processes are included in calculations to determine whether a facility is a major or area source.

10. Q: Please confirm that since the regulation is limited to "area sources" and excludes major sources, the rule does not apply to Title V facilities.

A: Not in all cases. Most Title V permit holders are major sources, but that is not always the case so the only certain method to determine applicability is to use the CAA section 112 major and area definitions of 10 tons per year any individual HAP or 25 tons per year total HAP from all operations regardless of rule applicability.

11. Q: A local small business metal fabrication shop is presently classified as an area source At the shop, they have valve pieces shipped in for hand assembly. They do not conduct abrasive blasting, welding, grinding or metal cutting. However, they do surface coat the valves after assembly, and they have addressed Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coat Operations). Since this site does not fabricate or finish the metal on any of the metal parts, will they still need to submit an initial notification? Are they subject to subpart 6X as one of the nine categories of subpart 6X?

-	EPA Source Category	SIC Description	SIC Code	NAICS Code	NAICS Description
1	Electrical & Electronic Equipment Finishing Ops	Motors and Generators Manufacturing	3621	335312	Motor and Generator Manufacturing
		Electrical Machinery, Equipment, & Supplies, NEC	3699	335999	All Other Misc. Electrical Equipment & Component Mfg.
2	Fabricated Metal Products, NEC	Fabricated Metal Products, NEC	3499	332117	Powder Metallurgy Part Manufacturing
		Fabricated Metal Products, NEC	3499	332999	All Other Miscellaneous Fabricated Metal Product Mfg.
3	Fabricated Plate Work(Boiler Shops)	Fabricated Plate Work and Boiler Shops	3443	332313	Plate Work Manufacturing
				332410	Power Boiler and Heat Exchanger Manufacturing
				332420	Metal Tank (Heavy Gauge) Manufacturing
4	Fabricated Structural Metal Manufacturing	Fabricated Structural Metal Fabrication	3441	332312	Fabricated Structural Metal Manufacturing
5	Heating Equipment, except Electric	Heating Equipment, except electric	3433	333414	Heating Equipment (except Warm Air Furnaces) Mfg.
6	Industrial Machinery &Equipment: Finishing Ops	Construction Machinery Manufacturing	3531	333120	Construction Machinery Manufacturing
		Oil and Gas Field Machinery Equipment Mfg.	3533	333132	Oil and Gas Field Machinery and Equipment Mfg.
		Pumps and Pumping Equipment Mfg.	3561	333911	Pump and Pumping Equipment Manufacturing
7	Iron and Steel Forging	Iron and Steel Forging	3462	332111	Iron and Steel Forging
8	Primary Metals Products Manufacturing	Primary Metals Products Manufacturing	3399	332618	Other Fabricated Wire Product Manufacturing
9	Valves and Pipe Fittings, NEC	Valves and Pipe Fittings, NEC	3494	332919	Other Metal Valve and Pipe Fitting Manufacturing

Table 1. Nine Metal Fabrication and Finishing NESHAP Area Source Categories: Potential SIC/NAICS Codes

Metal Fabrication and Finishing Category	SIC Code	Source Category Description
Electrical and Electronics Equipment	3621	Establishments primarily engaged in manufacturing of motors and generators (except engine starting motors) such as power generators; motor generator sets; railway motors and control equipment; and motors, generators and control equipment for gasoline, electric, and oil-electric buses and trucks.
Finishing Operations	3699	Establishments primarily engaged in manufacturing of electrical machinery, equipment, and supplies, not elsewhere classified such as high energy particle acceleration systems and equipment, electronic simulators, appliance and extension cords, bells and chimes, insect traps, and other electrical equipment and supplies, not elsewhere classified.
Fabricated Metal Products	3499	Establishments primarily engaged in manufacturing fabricated metal products, such as fire or burglary resistive steel safes and vaults and similar fire or burglary resistive products; and collapsible tubes of thin flexible metal. Also included are establishments primarily engaged in manufacturing powder metallurgy products, metal boxes; metal ladders; metal household articles, such as ice cream freezers and ironing boards; and other fabricated metal products not elsewhere classified.
Fabricated Plate Work (Boiler Shops)	3443	Establishments primarily engaged in manufacturing power and marine boilers, pressure and nonpressure tanks, processing and storage vessels, heat exchangers, weldments and similar products
Fabricated Structural Metal Manufacturing	3441	Establishments primarily engaged in fabricating iron and steel or other metal for structural purposes, such as bridges, buildings, and sections for ships, boats, and barges.
Heating Equipment, except Electric	3433	Establishments primarily engaged in manufacturing heating equipment, except electric and warm air furnaces, including gas, oil, and stoker coal fired equipment for the automatic utilization of gaseous, liquid, and solid fuels. Typical products produced in this source category include low-pressure heating (steam or hot water) boilers, fireplace inserts, domestic (steam or hot water) furnaces, domestic gas burners, gas room heaters, gas infrared heating units, combination gas-oil burners, oil or gas swimming pool heaters, heating apparatus (except electric or warm air), kerosene space heaters, gas fireplace logs, domestic and industrial oil burners, radiators (except electric), galvanized iron nonferrous metal range boilers, room heaters (except electric), coke and gas burning salamanders, liquid or gas solar energy collectors, solar heaters, space heaters (except electric), mechanical (domestic and industrial) stokers, wood and coal-burning stoves, domestic unit heaters (except electric), and wall heaters (except electric).

Table 2. Nine Metal Fabrication and Finishing NESHAP Area Source Categories: Source Category Descriptions

Metal Fabrication and Finishing Category	SIC Code	Source Category Description
Industrial Machinery and Equipment Finishing Operations	3531	Establishments primarily engaged in construction machinery manufacturing that includes establishments primarily engaged in manufacturing heavy machinery and equipment of types used primarily by the construction industries, such as bulldozers; concrete mixers; cranes, except industrial plan overhead and truck- type cranes; dredging machinery; pavers; and power shovels. Also included in this industry are establishments primarily engaged in manufacturing forestry equipment and certain specialized equipment, not elsewhere classified, similar to that used by the construction industries, such as elevating platforms, ship cranes and capstans, aerial work platforms, and automobile wrecker hoists.
	3533	Establishments primarily engaged in oil and gas field machinery manufacturing; that includes establishments primarily engaged in manufacturing machinery and equipment for use in oil and gas fields or for drilling water wells, including portable drilling rigs.
	3561	Establishments primarily engaged in pumps and pumping equipment manufacturing that includes establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial, commercial, or household use, except fluid power pumps and motors. This category includes establishments primarily engaged in manufacturing domestic water and sump pumps
Iron and Steel Forging	3462	Establishments primarily engaged in the forging manufacturing process, where purchased iron and steel metal is pressed, pounded or squeezed under great pressure into high strength parts known as forgings. The process is usually performed hot by preheating the metal to a desired temperature before it is worked. The forging process is different from the casting and foundry processes, as metal used to make forged parts is never melted and poured.
Primary Metals Products Manufacturing	3399	Establishments primarily engaged in manufacturing products such as fabricated wire products (except springs) made from purchased wire. These facilities also manufacture steel balls; nonferrous metal brads and nails; nonferrous metal spikes, staples, and tacks; and other primary metals products not elsewhere classified.
Valves and Pipe Fittings	3494	Establishments primarily engaged in manufacturing metal valves and pipe fittings; flanges; unions, with the exception of purchased pipes; and other valves and pipe fittings not elsewhere classified.

Table 2. Nine Metal Fabrication and Finishing NESHAP Area Source Categories: Source Category Descriptions

A: The facility does not sound like they fall under any of the Metal Fabrication and Finishing source categories because they do not fabricate on site. Because the facility is only subject to one rule, either 6H or 6X, if the facility is already complying and reporting under 6H, then there should be no additional action on their part.

12. Q: Should permit writers base their applicability determinations solely on the NAICS codes provided in the rule preamble? The preambles to the proposed and final rule for 6X state that the table is not intended to be exhaustive, but rather provide a guide for readers regarding entities likely to be affected by this action. That being said; why would a source with the NAICS code 3353 (Electrical Equipment Manufacturing) be subject to the NESHAP, and not a source with the NAICS 3351 (Electric Lighting Equipment Manufacturing), if both sources have potential to emit metal fabrication and finishing HAP (MFHAP) through processes identified as having management practices under subpart 6X?

A: Permit writers should use the descriptions of the source categories in the rule for applicability and use the NAICS as a guide. The second question is regarding emissions from sources similar to the Metal Fabrication and Finishing rule. It is correct that there are many other sources with the same operations and the same emissions, but they are not covered by subpart 6X. The explanation for this lies in the history of the statutory requirements for this rule, which are described in the preambles to the proposed and final rules with more detail found in the proposed rule preamble (available at http://www.epa.gov/ttn/atw/area/fr03ap08.pdf). More information on the rule background can be found on the EPA urban air toxics website as well. In 1990, Congress and the EPA identified the primary sources of urban air pollution, and emissions from these 9 metal fabrication sources contributed to emissions in urban areas at that time. Therefore, the EPA was required by law to develop this area source rule. In the 2000's, most sources in the 9 metal fabrication area source categories had begun to control their emissions, either because of OSHA rules, from regulations by states, or from general industry awareness of their impact on the environment. Therefore, there was no net gain in emissions reductions attributed to this rule. Because of this background of the rule, the EPA did not see a need to expand the rule to include similar sources because: (a) we were not required by law to do so; and (b) it is likely that these sources are also similarly controlled.

13. Q: What about facilities that are abrasive blasting job shops? (*i.e.*, abrasive blasting is all these folks do.) If 50 percent of the work performed by such a facility is done on materials/ equipment for other companies that are in the metal fabrication and finishing source categories of subpart 6X, is that job shop considered an affected facility?

A: The job shops are only subject to the rule if their facilities match one of the source categories described in the preambles to the propose and final rules.

14. Q: Source category 7 in 63.11514(a) is "Iron and Steel Forging" and not "Iron or Steel Forging". Just to make sure, would it be correct to assume that this subpart would apply to a facility forging only steel and no iron?

A: Yes. This rule applies both to iron forging and to steel forging, or both if they are both done at the same facility.

<u>https://www.epa.gov/stationary-sources-air-pollution/metal-fabrication-and-finishing-source-categories-national-emission</u> Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your state or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in this NESHAP

15. Q: A facility has reviewed Table 1 in the preamble from the July 23, 2008 Federal Register, and believes that this rule would not apply to them because they fall under an NAICS code not listed in the Table 1 in the preamble. They recently discussed their NAICS code with the Census Department, and they believe that NAICS 331210 (Iron and steel pipe and tube manufacturing) would be a more accurate NAICS code than the one they had previously used which was NAICS 333132 (Oil and gas field machinery). NAICS 331210 is not explicitly noted in the preamble Table 1, while NAICS 333132 is explicitly noted. This particular company purchases iron or steel with manganese concentrations greater than 1 percent by weight and chromium concentrations greater than 0.1 percent by weight. They bore out the center of a 30 foot long iron or steel round blank to make drill pipe for oil and gas well drilling. They perform machining on the bored out pipe and fabricate accessories out of similar iron and steel that go onto the drill pipe. Dry Grinding and Dry Polishing, and Welding are also among the operations conducted on the iron and steel. It seems that they are conducting covered activities on materials containing MFHAP. Do you agree?

A: Applicability to the rule is a separate issue from being subject to any of the individual standards in the rule. Applicability is determined by the type of work performed by the facility compared to the source category description in the preambles to the proposed and final rules. If the only clients of the company are in the oil and gas field machinery industry (NAICS 333132), then sounds like the facility would fall under the rule. If the oil and gas machinery industry is only one of their clients and is less than 50 percent of their business, then they likely would not fit as "primarily" under the oil and gas field machinery industry source category. As far as similar processes, the 6X rule is not a process rule. There are many other industries outside of these nine that perform the same process operations but are not subject to this rule.

16. Q: Is remanufacturing included in the EPA's understanding of "manufacture, fabricate, or forge" in the definition of "primarily engaged"?

A: You should use the source category descriptions in the rule to determine applicability. If remanufacturing falls within one of the source categories, then the facility would be considered the same as manufacturing.

17. Q: 40 CFR 63.11514(b) of the rule refers to use of materials that "contain or have potential to emit" metal fabrication or finishing metal HAP (MFHAP). Please clarify the use of the phrase "potential to emit".

A: The definitions in question are found in 40 CFR 63.11522 "What definitions apply to this subpart?". *Metal fabrication and finishing HAP (MFHAP)* means any compound of the following metals: Cadmium, chromium, lead, manganese, or nickel, or any of these metals in the elemental form, with the exception of lead. *Material containing MFHAP* means a material containing one or more MFHAP. Any material that contains cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and contains manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as shown in formulation data provided by the manufacturer or supplier, such as the Material Safety Data Sheet for the material, is considered to be a material containing MFHAP. The phrase "potential to emit" here simply means if a source uses these materials as defined in the rule, they are subject to it.

18. Q: Assuming that a facility is one of the ones subject to the rule, how does one determine whether the steel being used by the facility contains MFHAP at levels sufficient to require compliance with the rule?

A: That information should be contained in the Material Safety Data Sheet available from the material vendor. In general, stainless steel contains chromium, and dry abrasive blasting, machining, dry grinding and polishing with machines, and welding operations on stainless steel will require compliance with the standards in the rule, if otherwise subject.

Applicability – MFHAP Content of Materials

19. Q: With regard to the definition of MFHAP content in materials - consider a situation where the welding wire contains less than these levels, as per the MSDS, and the steel being welded may contain more. What should be considered, just the welding consumables (i.e., welding rod or wire), or the welded steel as well?

A: You should just consider the welding rod, because only the consumable welding material during application to the steel has the potential to be emitted. The MFHAP in the base metal (steel) is not considered to have the potential to be emitted in this situation.

20. Q: When determining whether a facility "*uses materials that contain MFHAP*... *or has the potential to emit MFHAP*", should the composition of (specifically the weight percent MFHAP) the following be considered: (a) blasting grit, (b) welding rod, (c) the material of the part being welded, blasted, machined, ground, polished, etc?

A: Yes. All but welding material should be considered. For welding, only the MFHAP content of the welding consumable (rod or wire) should be considered. The key is to identify which component has the potential to emit MFHAP. For painting, only the paint has the potential for emitting MFHAP, not the substrate or metal part being painted. Thus, for painting, only the paint needs to be analyzed for MFHAP to determine applicability to 6X. Similarly for welding, only the consumable wire or rod needs to be analyzed for MFHAP. In most cases the MFHAP content of the consumable welding wire/rod matches the MFHAP content of the material being welded. For blasting, the substrate AND the blast material have the potential for being emitted since the purpose of the blasting is to remove the surface material on the part being blasted; so in this case both the blasting material and the part being blasted should be analyzed. However, because most blast material doesn't contain MFHAP, it typically is just the item being blasted which is relevant. The same applies for machined items, since during machining portions of the metal substrate are being removed.

21. Q: With regard to the definitions of "Material containing MFHAP" and "Metal fabrication and finishing HAP (MFHAP)" in 40 CFR 63.11522: (1) the definition of MFHAP includes metal compounds. When determining whether a material contains MFHAP, should the weight percent of the compound be multiplied by the ratio of the metal molecular weight (MW) to the compound MW to obtain percent by weight (as the metal)? (2) Is it correct to assume that the "and" in the second sentence of the "Material containing MFHAP" definition is ambiguous and should actually be understood as "or" so that the material does not need to contain manganese "and" another metal to meet the definition?

A: (1) Yes, that is the correct means of calculating percent by weight of the metal only and not the weight of the total metal compound. (2) Yes, this is also correct. If a material contains any of the listed MFHAP at the listed levels (0.1 percent by weight for cadmium, chromium, lead, or nickel; 1.0 percent by weight for manganese), it is a "Material containing MFHAP".

22. Q: This question is regarding dry abrasive blasting being performed within a vented enclosure using an abrasive consisting of glass beads that do not contain any MFHAP. The substrates being blasted are stainless steel and mild steel. Since these substrates may contain chromium, what regulations apply to the type of substrates being used (i.e., applicable testing requirements to determine MFHAP content) and the emissions from the blasting of these substrates? Section 63.11514(b) (1) of the rule specifies that a dry abrasive blasting operation is an affected source if it "*uses materials that contain MFHAP or has the potential to emit MFHAP*." For this particular facility, MFHAPS are not being used to perform the dry abrasive blasting; however, the abrasive blasting operation upon the substrate (stainless steel) has the potential to emit MFHAPs. Therefore, is this an affected source because the substrate has the potential to emit MFHAPs from undergoing dry abrasive blasting? Or, is the rule only applicable to the use of MFHAPs upon a substrate?

A: It is an affected source because the materials used by the source contain MFHAP as defined in the rule and are being broken down and dislodged by the blast material, we would assume that these materials have the potential to emit HAP.

23. Q: A facility plans to use no more than 10 gallons per year of a target HAP-containing coating. The MSDS says it contains 0-5 percent HAP by weight. The amount used is less than the 0.1 percent limit in the definition of material containing MFHAP. So, is the EPA's intent to include all paints above the 0.1 percent limit no matter the usage at the facility?

A: Yes. However, note that subpart 6X is only applicable to spray painting performed with spray guns (see 40 CFR 63.11522, "What definitions apply to this subpart?"). Therefore, if this paint is "touch up" paint applied with brushes, the painting process does not fall under subpart 6X. We found that facilities that used small quantities of paint did not apply these paints with spray guns.

24. Q: Regarding the OSHA carcinogen classification under subpart 6X: The rule defines an MFHAP threshold based on the OSHA classification of a carcinogen. So any carcinogen as per OSHA has a threshold of 0.1 percent, and noncarcinogens have a threshold of 1 percent. After looking up the list of carcinogens from OSHA, I was unable to find lead as a listed carcinogen. I would like to know if the thresholds in this subpart apply only based on the classification by OSHA. It seems like lead and nickel are not carcinogens as per OSHA and should be subject to the 1 percent threshold instead of 0.1 percent. The regulatory language from the subpart is:

A: Both NIOSH and OSHA define nickel as a potential carcinogen or a chemical that reasonably can be anticipated to be a human carcinogen (based on a combination of human and animal studies). See http://www.cdc.gov and http://www.osha.gov/. The "lead" that the EPA regulates in 40 CFR part 63 is actually "lead compounds" since elemental lead is regulated through another part of the Clean Air Act and is not a HAP. Lead compounds, based on outdoor exposures, were found by the EPA to be a potential carcinogen from animal studies and is considered a HAP.

See http://yosemite.epa.gov/r10/airpage.nsf/.

While OSHA and the EPA have many similarities in their treatment of chemical exposures, OSHA bases their studies on mostly indoor 8-hour exposures to human workers whereas the EPA has a broader reach to all of the environment and for longer exposure periods. The intention of this aspect of the rule is not to debate the merits of OSHA vs. the EPA but to give some relief to facilities that use only small amounts of HAP since it is likely that these small sources of HAP did not contribute to the HAP inventory in 1990 on which the Urban Air Toxic program was based. OSHA's material content limits used in the 6X rule and other EPA HAP rules were found to be a useful metric since the limits had already been established by OSHA and also because there was no comparable metric readily available within the EPA. This metric s also used in the 40 CFR part 63 subpart 6H rule (Miscellaneous Coating) that was developed prior to subpart 6X and is now also used in other EPA rules.

25. Q: Please verify that MFHAP determination is triggered under subpart 6X by the concentration of the metal rather than the concentration of the compound containing the metal? If so, it would seemingly make subpart 6X significantly less stringent than 6H (Miscellaneous Surface Coating), which is triggered by the concentration of the compound rather than the metal it contains. Why would the rule differ from the focus in Clean Air Act 112(b) on compounds as the HAPs to be regulated?

40 CFR 63.11180 (Subpart 6H): Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd). Target HAP containing coating means a spray-applied coating that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA)— defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual target HAP compound.

A: Both rules address the same HAP. However, the 6X standard normalized the amount of HAP between various compound forms that the metal HAP may take to determine the level of toxicity and, subsequently, the applicability to individual standards in the rule. The OSHA standards and OSHA health thresholds from which the cited toxicity threshold limits were developed are based on the individual metals because the metals are what cause the negative health effects and not the other chemical (ligand) that is combined with the metal in the metal compounds. If the whole compound weight was used, a compound with more of the toxic metal might be excluded and a compound with less metal included if the compound with less metal is combined with a heavier ligand and the compound with more metal has a lighter ligand.

Applicability – Exemptions

26. Q: Please clarify the military exemptions listed in subpart 6X. Several facilities have military contracts to perform various surface coating and metal fabrication processes. They do not necessarily handle munitions, but some potentially could. A good example is a facility that fabricates and coats containers for the military, which are used in various operations like kitchens, latrines, and weapons storage on battlefields. Another facility might coat trailers used to haul various products for the military, which may include weapons. Is the intent of this rule to include those operations, or wait and cover them under the future military NESHAP? We understand the

exclusion of surface coating performed at military installations, but do not understand the specific exclusion of surface coating of equipment used for transporting munitions performed at non-military facilities.

A: This exemption would not cover those activities you describe if the containers are generic containers that could be used with any business. However, if there are containers that are built specifically and exclusively for transporting munitions then these would be exempt as defined in 40 CFR 63.11522, "What definitions apply to this subpart?" "...manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such state), or equipment directly and exclusively used for the purposes of transporting military munitions."

27. Q: In the preamble to subpart 6X, there are multiple references specifically stating that aerospace facilities are not covered by the rule. However, there is no specific exemption for aerospace facilities within the rule itself. However, in 40 CFR 63.11519, "aerospace components" are listed as an example of operation type. This seems contradictory to statements in the preamble. Can you clarify whether aerospace facilities are intended to be covered by subpart 6X?

A: Subpart 6X only covers the nine listed source categories. The references to aerospace facilities in the preamble are there in response to specific comments received on the proposal, and are not codified in the rule text, since we do not list the categories not covered, only the ones that are covered by the rule and are in the nine source categories. Aerospace manufacturing facilities are not one of the nine source categories. However, facilities that fabricate or finish aerospace components are not exempted from the rule since they could potentially be classified in one of the 9 affected source categories.

28. Q: With regard to the (removed) requirement for visual emissions testing for welding operations at facilities using less than 2,000 pounds per year (lb/yr) of welding rod containing MFHAP, our facility only uses welding rod for maintenance operations, while our production welding uses more than 2,000 lb/yr of welding wire. Does the rule say that as long as you use less than 2,000 lb of welding rod, tiered visual monitoring is not required, even for metal inert gas (MIG) welding, i.e., gas metal arc welding (GMAW), with wire?

A: Maintenance welding is not regulated, as per the exemptions set out in the rule in 40 CFR 63.11514 (f). For production operations, "wire" and "rod" are considered to be the same (i.e., a consumable welding material), and would be covered by the rule, including the monitoring requirements if the consumable welding material (wire or rod) contains MFHAP (as defined in the rule in 40 CFR 63.11522) and is used in quantities more than 2,000 lb/yr.

29. Q: Please clarify the intent of the phrase "primary operation." Example: if a business primarily sells motors, but occasionally performs repairs including dry polishing (or another affected activity) does the rule apply to the facility? Are there any exemptions and/or threshold limits that would help explain rule intent?

A: All of your answers can be found directly in the rule. Below are rule excerpts relevant to your questions (underlining added here only):

40 CFR 63.11514 Am l subject to this subpart?(f) This subpart does not apply to tool or equipment <u>repair operations</u>, facility maintenance, or quality control activities as defined in 40 CFR 63.11522,

"What definitions apply to this subpart."40 CFR 63.11522 What definitions apply to this subpart? <u>Primarily engaged</u> means the manufacturing, fabricating, or forging of one or more products listed in one of the nine metal fabrication and finishing source category descriptions in Table 1, "Description of Source Categories Affected by this Subpart," where this production represents at least 50 percent of the production at a facility, and where production quantities are established by the volume, linear foot, square foot, or other value suited to the specific industry. The period used to determine production should be the previous continuous 12 months of operation. Facilities must document and retain their rationale for the determination that their facility is not "primarily engaged" pursuant to 40 CFR 63.1 0(b)(3) of the part 63 "General Provisions."

Applicability – Process-Specific

30. Q: If a facility has a painting operation that only uses spray cans, is the spray painting rule applicable?

A: 40 CFR 63.11522 states (underlining added here only):

For the purposes of this subpart, spray-applied painting does <u>not</u> include (1) Paints applied from a hand-held device with a paint cup capacity that is less than 3.0 fluid ounces (89 cubic centimeters). (2) Surface coating application using powder coating, hand-held, nonrefillable <u>aerosol containers</u>, or nonatomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.

31. Q: If a facility subject to subpart 6X paints uses MFHAP-free paints, but uses welding wire that contains one or more of the MFHAPs, will that facility then be subject to all the requirements of the rule, including those associated with painting?

A: If they are not using paints containing MFHAP, then they are not required to comply with the requirements found in 40 CFR 63.11516(d), "What are my standards and management practices?", they would have to document the HAP content of the paint in their annual reporting under the rule.

32. Q: How are subparts 6H (paint stripping and miscellaneous. surface coating) and 6X applicable to metal coating operations? There seem to be some differing opinions about which rule applies when painting something that's not a motor vehicle or mobile equipment at non-manufacturing facilities, such as reconditioning aluminum boats, propane tanks, dumpsters, etc.

A: If a facility is subject to the 6X rule, the rule covers any painting at the facility. The paints may have metals in the pigments but are not considered "metal coatings." "Metal coating" is a common industry term for applying almost pure metal that adheres irreversibly to a surface. However, there is another rule that *does* cover metal coating, "plating and polishing", subpart 6W. If the metal coating is not electrolytic (i.e., is not electroplating) or thermal or flame (i.e., hot) metal spraying, then the requirements for metal coating are just work practices and reporting. The compliance date for this rule

has already passed (July 2010). Subpart 6W also has control requirements for dry mechanical polishing after coating/ plating/ thermal spraying, similar to those in 6X.

33. Q: If a facility only uses welding wire for welding operations, instead of welding rod as described in the rule, does this affect applicability of the rule?

A: For the purposes of the rule, welding "wire" is the same as welding "rod" referred to throughout this rule (i.e., the consumable welding material). Therefore, if any consumable welding material contains MFHAP, the rule applies to your facility.

34. Q: A company has a manufacturing location whose primary operations come under subpart 6X and the facility does considerable welding, but it is all spot welding. Spot welding does not generate "welding fumes"; the smoke that is generated during spot welding is actually oxidized rust preventative oil (which the steel mill applied at the mill to prevent the metal from oxidizing or rusting). Therefore there are no actual metal fumes in the smoke (assuming there were no metals in the rust preventative oil). It appears that because no welding rods are used in any manufacturing operations at this facility that the regulation does not apply to welding at this facility. Is this correct?

A: If the spot welding uses no consumables, i.e., welding rod or wire, then this type of welding is not covered by the rule because if there are no consumables there will not be any MFHAP emissions from the consumables, which is the basis for applicability of the welding requirements under the rule. However, there may be other processes at the facility that have the potential to emit MFHAP and are subject to the other rule requirements.

35. Q: Does subpart 6X cover the use of laser welders to do spot welding and cutting? At the facility in question, the laser welder melts the two pieces of metal to join them, there are no fillers or consumables employed. The same welder is also used to cut metal, which does not seem to match any definition of "machining" as defined in the rule. Is laser cutting a covered process under the rule? It technically meets the definition of "machining" in that it is a dry process in which metal is cut. However, it is not typically considered machining. It is closer to welding with the application of heat to the metal, but clearly does not meet the definition of welding.

A: The processes as described would not be covered by the rule.

36. Q: Is abrasive blasting using CO2 (either pelletized or using the "snow blower" process) considered dry abrasive blasting under subpart 6X?

A: No, it is not. See 40 CFR 63.11522 What definitions apply to this subpart?

"Dry abrasive blasting means cleaning, polishing, conditioning, removing or preparing a surface by propelling a stream of abrasive material..." "Dry abrasive" and "Material" apply to solid matter which can break up into particulate matter, a regulated criteria pollutant. Carbon dioxide (CO2), either pelletized or otherwise, would not apply.

37. Q: Please clarify the definition of "Machining." In the initial list shearing is mentioned but forming is not. As the definition progresses, there is a definition of what forming includes. Are forming operations included in this definition?

A: Machines must be operated by some power supply to qualify as a "machine" operation. Also, the machining process specifically excludes hand-held devices. Forming operations are included in the definition but only to the extent that it is not done by hand and does not involve employing fluids for lubrication or cooling. Outside of these situations, forming and machining are considered synonymous under the rule (see 40 CFR 63.11522, "What definitions apply to this subpart?").

38. Q: Please clarify whether the regulation covers strictly dry machining, or both wet and dry machining.

A: The definition of machining provided in the rule specifically excludes processes "*employing fluids for lubrication or cooling*".

39. Q: The definition of "Dry Grinding and Polishing" refers to "large stationary machines". Does this mean that hand grinders are not covered under this NESHAP?

A: Yes. In 40 CFR 63.11522 "What definitions apply to this subpart?" The definition for "dry grinding and dry polishing with machines" specifically states that "*Hand grinding, hand polishing, and bench top dry grinding and dry polishing are not included under this definition.*"

40. Q: Are dry grinders defined by subpart 6X as "bench-scale devices" or as "fixed/stationary devices." The grinders in question are mounted on pedestals and have 6- to 10-inch diameter grinding wheels. The pedestal grinders can be picked up and moved but they remain stationary during operation. Do they meet the following exclusion: "Dry grinding and dry polishing with machines operations do not include dry grinding and dry polishing operations performed with hand-held or bench-scale devices."

A: This equipment is full size, and not bench-scale. Bench-scale refers to small handheld devices used on a counter (or bench.) Also, "bench top" is interpreted in the industry as the "ability" to be on a bench, not that it has to be on the bench when being used, since being on the bench is not what has an effect on the environment, only its size, which relates to the ability to be hand held.

Notifications, Reports, and Compliance Dates

41. Q: Section 63.11519 states that existing sources must submit the Initial Notification no later than July 25, 2011. Is this date correct? Usually the initial notification is within a few months of the promulgation date. This has the Initial Notification due on the compliance date.

A: This is correct. The additional time is to allow the states to identify all the facilities subject to the rule. 42. Q: Is there a requirement for an "Initial Notification of Applicability" for existing sources in 40 CFR 63.9 or FR 42978? Please note that the question is not related to the "Initial Notification of Compliance"

requirement, due July 25, 2011 for existing sources. Several earlier NESHAPs had such a requirement so the state permitting agencies could incorporate the NESHAP compliance requirements in an existing air permit.

A: This "Initial Notification" is the same as "Initial Notification of Applicability." There are two notices due for the rules, as required by the "General Provisions" to part 63 (63.9(b) and (h)):

Initial Notification — must be submitted by July 25, 2011 for existing sources and 120 days after startup for new sources. This must be submitted by every facility in one of the nine source categories whether or not any process at the facility is subject to the standards and management practices. Notification of Compliance Status report — must be submitted by November 22, 2011 for existing sources and 120 days after initial startup for new sources.

43. Q: Please confirm the initial notification date for existing sources subject to subpart 6X. The proposed rule had April 3, 2009 as the date for initial submitting notifications, while the final rule has the initial notification date as July 25, 2011, the same date as the compliance date. Is this correct?

A: Yes, the correct date is July 25, 2011. For EPA rules, the final rule ALWAYS supersedes the proposed rule.

44. Q: An existing facility is considering installing a new process. If the facility is subject to subpart 6X and the proposed new process includes affected sources under subpart 6X (e.g., dry abrasive blasting), those proposed affected sources would need to be in compliance with subpart 6X at startup (rather than the July 25, 2011 compliance date for existing sources). Is this correct?

A: It is the facility that is relevant to whether the "source", i.e., facility, is existing or new, not the process. So your new process does not have to be included until the existing source start date.

45. Q: So to confirm, the facility can install and operate the new equipment before the July 25, 2011 compliance date for subpart 6X (assuming all other applicable permitting requirements are met). However, the new affected sources would not need to be in compliance with subpart 6X until July 25, 2011, the same compliance date for the currently existing sources.

A: Yes.

46. Q: What are the required submission dates for the initial notification and notification of compliance status?

A: The existing source must submit a notification of compliance status by November 22, 2011. See 40 CFR 63.11515 and 63.11519(a). A new source is required to meet the compliance requirements upon startup, or by July 23, 2008, whichever is later. The new source must submit the initial notification and notification of compliance status within 120 days of startup, or by November 20, 2008, whichever is later. See 40 CFR 63.11514(d) for the definition of new source. An existing source is required to submit an initial notification and meet the compliance requirements by July 25, 2011. Also see http://www.epa.gov/ttn/atw/area/metfabb.pdf for a useful rule summary. There are examples of both of these forms on the EPA website at http://www.epa.gov/ttn/atw/area/metfabb.pdf for a useful rule summary.

47. Q: Do the annual reporting requirements apply only to new sources or to existing sources as well? The rule appears to apply to both new and existing; however, there is a brochure on the EPA's website which indicates it is only for new sources

A: In 40 CFR 63.11519(b), we indicate that each affected source must submit the report. This would include new and existing affected sources. When in doubt, the text of the rule always takes precedence.

40 CFR 63.11519(b): (1) Annual certification and compliance reports. You must prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of this section. The annual certification and compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (b)(3) of this section.

48. Q: On the EPA's website there are sample documents for the initial applicability notification and the initial compliance notification. It appears as if these notifications are sent only to the state agency when that state has been delegated and accepted authority to administer the regulation. On the other hand, the annual certification and compliance reports must be sent to the delegated state and the EPA Regional Office according to the part 63 "General Provisions" in 40 CFR 63.10(a), as referenced in 40 CFR 63.11519 (b)(2). Is my interpretation correct? The source must submit the initial notifications only to the state and the annual compliance report to the state AND the EPA Regional Office?

A: The notifications should be sent to the entity that has direct authority for both cases (state, if accepting authority).

49. Q: The annual certification and compliance report must contain the information in paragraphs (b)(4)(i) through (iii) of 40 CFR 63.11519, and the information specified in paragraphs (b)(5) through (9) of 40 CFR 63.11519 that is applicable to each affected source. None of the items (b)(5) through (9) apply to a welding affected source that is complying with the standard by limiting welding rod usage to less than 2000 pounds per year (lbs/yr). A direct reading of paragraphs (b)(4)(i) through (iii), would then indicate that the company must submit only the company name and address, and the dates of the compliance period in the annual compliance report. To the contrary, reading paragraph (b)(3)(ii) of that same section would indicate that an exceedance of the 2000 lbs/yr welding rod usage limit must be reported. Would it also be then appropriate to include in the annual report the amount of welding rod usage even if the source is below 2000 lbs/yr? This would allow such companies to certify something more meaningful than the date and address.

A: While not required, it would be useful for both the EPA and the source to include that information.

50. Q: Please provide clarification of notification requirements for subpart 6X for a Fabricated Structural Metal Manufacturing facility primarily producing materials for building construction, with some painting. The facility only uses carbon steel in fabrication (*i.e.*, containing no MFHAP) and the paints do not contain any MFHAP. Do they still have to submit an initial and compliance notification for the facility?

A: As per 40 CFR 63.11519, if the facility is an area source of HAP under subpart 6X, they must submit an initial notification. Their status as an area source is contingent on whether they emit ANY HAP. Then,

<u>https://www.epa.gov/stationary-sources-air-pollution/metal-fabrication-and-finishing-source-categories-national-emission</u> Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your state or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in this NESHAP

if they are an affected source (e.g., they are one of the nine metal fabrication source categories and also they use any materials containing MFHAP), then they must also submit a notification of compliance status. So all facilities in the regulated SIC/NAICS code combinations that emit HAP must submit an initial notification, but if they do not use any materials containing MFHAP, that is all they are required to do. In such a case, they should be sure that the initial notification includes the fact that they do not use any materials containing MFHAP. Although the paints they use today do not contain MFHAP it is possible that they might switch in the future. If notification is not required now, then there might be difficulties with applying the rule to them later. If they have a permit, which they may not, there could be a stipulation that they only use non-HAP paint. Another alternative would be for the owner to certify that they don't use HAP paints now and will not use them in the future without notifying state or local agencies.

Impacts of the Rule

51. Q: Please tell me how the HAP/VOC emissions/reductions for the rule were calculated. We were wondering if the NESHAP process developed improved methods to calculate or estimate emissions (and the reductions) from these emission categories. Any information would be helpful.

A: We did not calculate the HAP emissions reductions resulting from this rule because the rule mostly codifies the status quo, since most facilities are already doing the practices required. Any VOC reductions that may occur with this rule or that have occurred since 1990 are a result of co-control of HAP with nonHAP air pollutants and were not required to be controlled by this or any other HAP rule. However, we do know that since the 1990 urban HAP inventory was developed, these nine source categories have reduced their emissions by 122 tons of MFHAP, as compared to more recent HAP emissions inventories.

Control Devices

52. Q: The rule requires the use of a "filtration control device" for several types of sources, including dry abrasive blasting. The definition of filtration control devices is fairly broad ("*a control device that utilizes a filter to reduce the emissions of MFHAP and other PM*"). Would a wet scrubbing system meet this definition? If not, why did the EPA limit the use of acceptable control technologies?

A: If the wet scrubber can be demonstrated to achieve 95 percent overall capture and control of PM, then this device would be equivalent. The rationale for filtration is detailed in the preamble to the proposed rule – briefly, no one reported using a scrubber for dry particle control (See the proposed rule here: http://www.epa.gov/ttn/atw/area/fr03ap08.pdf).

53. Q: Can you provide a reference to any Spray paint Booth Filter manufacturers/vendors that are presently marketing 98 percent PM control filter media that is compliant with subpart 6X?

A: Another EPA rule that preceded 6X may be of help to you. Below is an excerpt from the rule. You will need to look in the docket for this other rule to find more information on vendors, etc. *Docket ID No.*

<u>https://www.epa.gov/stationary-sources-air-pollution/metal-fabrication-and-finishing-source-categories-national-emission</u> Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your state or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in this NESHAP

EPA-HQ-OAR-2005-0526 at <u>www.regulations.gov</u> National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (subpart 6H) From Federal Register / Vol. 72, No. 179 / Monday, September 17, 2007 / Proposed Rules 52967:

An EPA study entitled "Comparative Study of Spray Booth Filter System Efficiency", which is provided in the public docket for this rulemaking, determined that fiberglass and polyester fiber filters had superior performance, relative to other filter types, such as polystyrene foam and cardboard baffle filters, in controlling the heavy metals found in paint overspray and which are the target HAP for these source categories. Therefore, based on our findings during the site visits, information provided by the industry on the most commonly used filters, and the EPA study on filter effectiveness and the cost-effectiveness we have determined that these fiberglass and polyester fiber filters represent generally available control technology (GACT) for controlling the heavy metals present in paint overspray. This rule would allow for the use of other types of paint overspray filters, but they would be required to achieve 98-percent filter efficiency. This alternative was included since the EPA did not test all types of filters used in spray booths; therefore the market may already provide for filters that are as equally efficient which were not available or not tested in the EPA study, but nevertheless representative of GACT. The EPA study on filter effectiveness and filter efficiency data provided by filter vendors formed the basis for the 98-percent filter efficiency. The limit represents a performance level that separates the fiberglass and polyester fiber filters from baffle type filters. The baffle type filters were shown in the EPA study to have poor performance in controlling fine particulate that can contain heavy metals.

54. Q: How can I determine whether filter media will comply with subpart 6X?

A: For painting, the requirements in the rule for Metal Fabrication and Finishing (subpart 6X), are to comply with two equipment standards: (1) the use of lower-emitting and pollution-preventing spray gun technology; and (2) the use of spray booths or spray rooms equipped with PM filters. The paint filters must achieve 98 percent control of airborne metals (lead, chromium, cadmium, nickel, lead, and manganese) as follows:

Spray Booth PM Control Requirement. The spray booths or spray rooms are to be fitted with fiberglass or polyester fiber filters or other comparable filter technology that has been demonstrated to achieve at least 98 percent control efficiency of paint overspray (also referred to as "arrestance"). For spray booths or spray rooms equipped with a PM filter, the procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, "Gravimetric and Dust- Spot Procedures for Testing Air- Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992" (incorporated by reference, see 40 CFR 63.14). The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a copy from the ASHRAE at 1791 Tullie Circle, NE. Atlanta, GA 30329 or by electronic mail at orders@ashrae.org. You may inspect a copy at the NARA. For information on the availability of this material at NARA, call 202- 741-6030, or go to: http://www.archives.gov/federal register/code of federal regulations/ibr loca tions.html.

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<u>https://www.epa.gov/stationary-sources-air-pollution/metal-fabrication-and-finishing-source-categories-national-emission</u> Note: While these questions and answers constitute the best available information at this time, the EPA recommends that you consult your state or local air pollution control agency for any final determinations. State and local agencies may implement provisions that are more stringent than those contained in this NESHAP

Compliance with the filter efficiency standard also can be demonstrated through data provided by the filter manufacturer. The test paint for measuring filter efficiency must be a high-solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air atomized spray gun operating at 40 pounds per square inch air pressure (psi); the air flow rate across the filter shall be 150 feet per minute. Affected facilities may use published filter efficiency data provided by filter vendors to demonstrate compliance with the 98 percent efficiency requirement and would not be required to perform this measurement.

Management Practices: General

55. Q: Many sections of the subpart 6X standard require facilities to operate equipment according to manufacturer's instructions. Two questions: (1) What if you have older equipment and no longer have and cannot obtain the manufacturer's instructions (e.g., the manufacturer has gone out of business)? (2) What if after years of running the equipment, you have found that preventive maintenance schedules that differ from what the manufacturer's specifications specify are acceptable?

A: (1) In this case, you could use instructions for a similar piece of equipment or your facility's standard operating plan. (2) In this case, if the schedules are documented in a facility operating plan AND the equipment gives no indication of not operating properly AT ANY TIME, you would have a good case that you are doing something BETTER than the manufacturer's instructions. You would need to be able to justify why you deviated from the manufacturer's instructions, if asked. The worst case scenario would be that something happens due to operation of this piece of equipment that is very noticeable and/or has very negative and noticeable consequences and an inquiry shows that the recommendations in the rule had not been followed. Legally, you would have to show that your actions did not contribute to the failure. So, you are taking a risk by deviating from the instructions, but if your facility has years of experience, as you say, the risk should be low. Also, most EPA rules, including subpart 6X, say that alternative controls can be used if approved by the administrator, as provided in 40 CFR 63.6(g) of the "General Provisions" to part 63. A facility should start the process by submitting a request to their state agency to consider an alternate control. Management Practices: Painting.

56. Q: A vendor asked what he could do to obtain the EPA certification for his painter training classes, stating that his classes meet the requirements of the NESHAP.

A: The EPA does not endorse nor require specific programs for training. The training required by the rule is stated in the rule as being hands-on, in-house, or external classroom instruction.

57. Q: A manager wants to know if Subpart 6H painter certification would also cover subpart 6X requirements. There seems to be considerable overlap in both requirements.

A. You are correct that the training requirements in 40 CFR 63.11173(f)(2) (the 6H rule) are very similar to the training requirements in 40 CFR 63.11516(d)(6)(ii) (the 6X rule). Generally, if you are providing certification to an owner or operator that a person has completed the training under 40 CFR 63.11173(f)(2) (the 6H rule) it would appear that they would also have satisfied the training requirements under 40 CFR 63.11516(d)(6)(ii) (the 6X rule). Ultimately, though the owner or operator needs to assure

that all required training elements have been satisfied. The subpart 6X rule, at 40 CFR 63.11516(d)(6), requires that each owner or operator of an affected spray painting affected source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply paints are trained in the proper application of paints. Under subpart 6X, the training program must include, at a minimum the items listed in 40 CFR 63.11516(d)(6)(i) through (iii). Please note that the owner or operator alone bears responsibility for certifying training completion. The owner or operator may send painters to a vendor for training, and obtain the vendors' certify that the vendor-provided training included all required training elements. To the extent that the vendor did not provide training in all required elements, the owner or operator must supplement the training to ensure completion prior to certification.

Management Practices: Welding

58. Q: 40 CFR 63.11516(f)(2) states:

You must implement one or more of the management practices specified in paragraphs (f)(2)(i) through (v) of this section to minimize emissions of MFHAP, as practicable, while maintaining the required welding quality through the application of sound engineering judgment. (i) Use welding processes with reduced fume generation capabilities; (ii) Use welding process variations which can reduce fume generation rates; (iii) Use welding filler metals, shielding gases carrier gases, or other process materials which are capable of reduced welding fume generation; (iv) Optimize welding process variables to reduce the amount of welding fume generated and (v) Use a welding fume capture and control system.

The management practices are clear except item (v). Are there specific guidelines/ requirements/engineering parameters available for the welding fume capture and control system?

A: For use of the welding fume capture and control system management practice, you are required to obtain the manufacturer's specifications for the system, and to operate the system according to those specifications. The manufacturer's specifications and the instructions they contain would be the source of the guidelines, requirements, and engineering practices that you need to follow. There are many different systems available, and the EPA avoids recommending specific brand names. An internet search using the terms "welding fume control" will locate several options.

59. Q: Does the rule require all of those management practices be implemented?

A: No. To be clear, the rule language at 40 CFR 63.11516(f)(2) specifies "one or more...as practicable" with regard to the required management practices. Each of the specified practices is sufficient in and of itself, although more control is required where "practicable," and may be especially needed if visible emissions are detected. A facility would need to be prepared to explain why any of the practices are not practicable if they are not in use at the facility.

60. Q: At what point is it required that a company implement additional management practices to reduce fume generation?

A: When they experience problems with their visible emissions monitoring, and must implement additional management practices to avoid failing the test.

61. Q: Does a facility have to prepare a site-specific welding plan from the date of compliance?

A: No, the site-specific welding plan is only required when opacity exceeding 20 percent has been found, while the facility is in Tier 3 of the monitoring schedule. See 40 CFR 63.11516(f)(7)(ii). This is made clearer in the flowcharts 5 and 6 prepared for subpart 6X (see http://www.epa.gov/ttn/atw/area/metal_fab_flowcharts.pdf).

62. Q: The rule seems to be silent on outdoor welding. My question is as follows: assuming that the management practices are implemented as practicable, is it reasonable to infer that the visible emissions limits and evaluations required by this section therefore only apply to confined welding operations (e.g., one where a stack vent, or other discrete conveyance for emission exists)?

A: We do not expect there to be much outdoor welding operations at sources affected by the rule since the nine metal fabrication and finishing categories are large manufacturing facilities doing precision work. The act of welding a large volume of products and also avoiding contamination during the welding does not easily lend itself to outdoor welding. The exception would be situations, as in the fabricated structural metal manufacturing category, where objects are so large that they are often handled in open air structures. In the case of outdoor process or those performed in semi enclosed buildings, we recommend the same treatment as for abrasive blasting which is to perform the test at the fenceline of the property (40 CFR 63.11516 (a)(3)(ii)(A)). For abrasive blasting of objects greater than 8 feet (2.4 meters) in any one dimension that is performed outdoors, you must perform visual determinations of fugitive emissions at the fence line or property border nearest to the outdoor dry abrasive blasting operation. This does not preclude ding testing in the vicinity of the welding, since performing the test closer to the source would be more conservative. Most visible emissions (VE) testing is actually done outside but for stacks, so it's not the outside part that is the issue, it is the fact that the source is fugitive.

63. Q: In Section 63.11516(f), Standards for Welding — if you use < 2,000 lb/yr of welding rod with any of the MF HAP'S; do you still have to follow 63.11516(f)(1) and (f)(2)? In other words, say a facility uses 1,000 lb/yr of MF HAP — do they have to follow one of the (5) choices of Management Practices in (f)(2)?

A: The rule language is clear. All welding operations using welding consumables containing MFHAP must comply with 63.11516(f)(1) and (2). Those using more than 2,000 lb/yr of welding consumables containing MFHAP must also comply with paragraphs (f)(3) through (8). See below (underlining added here only):

Federal Register/Vol. 73, No. 142 /Wednesday, July 23, 2008 /Rules p.42997. Specifically, this final rule requires that welding operations that annually use 2,000 pounds or more of welding rod

containing one or more MFHAP perform visual determinations. Welding operations that use less than this amount of welding rod are subject only to the GACT management practices.

Federal Register/Vol. 73, No. 142 /Wednesday, July 23, 2008 /Rules and Regulations 43003. (f) Standards for welding. If you own or operate a new or existing welding affected source, you must comply with the requirements in paragraphs (f)(1) and (2) of this section for each welding operation that uses materials that contain MFHAP, as defined in 40 CFR 63.11522, "What definitions apply to this subpart?", or has the potential to emit MFHAP. If your welding affected source uses 2,000 pounds or more per year of welding rod containing one or more MFHAP (calculated on a rolling 12-month basils), you must demonstrate that management practices or fume control measures are being implemented by complying with the requirements in paragraphs (f)(3) through (8) of this section. The requirements in paragraphs (f)(1) through (8) of this section do not apply when welding operations are being performed that do not use any materials containing MFHAP or do not have the potential to emit MFHAP.

64. Q: If a welder emits to a room, where is the "visible determination of welding fugitive emissions" to be conducted to satisfy 40 CFR 63.11516(f)(3)? What if there is a filter system which is vented to the room? Does the rule expect the outlet of the filter to be assessed at the nearest doorway or HVAC vent to the outdoors? Is the rule intended to exclude sources which vent indoors?

A: You should measure at the exit of the building closest to the room. Sources vented indoors are not excluded, but are not likely to result in visible emissions measured at the building exit. We assume that OSHA regulations would oversee the venting of exhaust inside buildings.

Monitoring

65. Q: For facilities with many large exhaust points for the same process, where should visual monitoring using Method 22 be performed? Should a company choose one emission point and consider that 'representative' of all operations?

A: If the process is contained within a building, then the exit stack from the building is the best choice; otherwise, use the most representative point.

66. Q: Does 40 CFR 63.11517, Monitoring Requirements, paragraphs (c) and (d) relate to NON-Fugitive Emissions? (Paragraphs (a) and (b)(1) thru (b)(4) indicate they are for Fugitive Emissions and Method 22.) Paragraphs (c) and (d)(1) thru (d)(5) all deal with Method 9. So, is this indicating that paragraphs (c) and (d) deal with a process with a stack or vent?

A: Both Method 22 (VE) and Method 9 (opacity) are to be used with the same source, as required by the rule. Both methods can apply to fugitive emissions or stack emissions, although stack emissions may be easier. See Method 9: there is nothing that states that only stacks are to be observed. '*The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions*...' Note that there is an "if,- then" relationship as well: Method 9 is only required IF Method 22 yields a positive result.

67. Q: In the Monitoring section of the rule (40 CFR 63.11517(d)(5)) it says, "*If, after two consecutive months of testing*... "This section is talking about the graduated schedule of Method 9 testing; it seems that the word "*months*" should be "*quarters*". Please clarify this.

A: The first part is talking about the AVERAGE of the results and the second is talking about two consecutive readings where BOTH are below 20 percent. These two sections are actually set up for two different groups. The ones that use the AVERAGE of the quarter are the ones who want to continue to use Method 9, but less frequently. The TWO consecutive months are for facilities that want to return to Method 22.

68. Q: For abrasive blasting of large objects greater than 8 feet always done inside of a blast booth vented through a control device, there is no mention of visual monitoring in 40 CFR 63.1151 6(a)(2), but it is required in 40 CFR 63.1151 6(a)(3). Are companies subject to 40 CFR 63.11516(a)(3) when blasting objects over 8 feet? If all blasting occurs in a vented enclosed booth would they only be subject to the requirements in 40 CFR 63.11516(a)(2)?

A: The criterion for blasting objects over 8 feet (ft) in any one dimension is only with regard to large objects being blasted without a control device. There is no size limit with regard to blasting which is vented to a control device, and would therefore include objects over 8 ft, and no visual monitoring would be required as long as the blasting operation is vented to a control device. The lack of control device is the key factor, not the size.

Reporting and Recordkeeping

69. Q: In the required submittal information under Notification of compliance status requirements, 40 CFR 63.11519(a)(2)(iii) states, "If you operate any spray painting affected sources, [submit] the information required by 40 CFR 63.11516(e)(3)(vi)(C), "Compliance demonstration," or 40 CFR 63.11516(e)(4)(ix)(C), "Compliance demonstration," or 40 CFR 63.11516(e)(4)(ix)(C), "Compliance demonstration," as applicable;"..., with the noted problem being 40 CFR 63.11516(e) is "reserved." Why is this reserved?

A: 40 CFR 63.11516(e) was used for VOC standards that were in the proposal but were removed from the final rule at the very end of the rule review process. It was easier and also less likely to result in renumbering errors in the rest of the rule to just leave this section number in but remove the text. You can ignore any reference to this section anywhere in the rule. If an amendment is ever done for this rule, this error will be corrected.

70. Q: In 40 CFR 63.11519(b)(1), the EPA address annual certification and compliance reports. In 40 CFR 63.11519 (b)(2)(ii), the EPA states:

"Each subsequent annual certification and compliance report must cover the subsequent semiannual reporting period from January 1 through December 31".

Should "semiannual" be annual? In 40 CFR 63.11519 (b)(2)(iii) the EPA states:

"Each annual certification and compliance report must be prepared and submitted no later than January 31 and kept in a readily accessible location for inspector review. If an exceedance has occurred during the year, each annual certification and compliance report must be submitted along with the exceedance reports..."

Is the intent of this for facilities to submit the annual reports each January that includes the visual emissions described in $63.1151 \ 9(b)(5)$ through (b)(7) and then if there are exceedances, (b)(8) through (14) would also be included as applicable? Therefore, I will expect all subject facilities to submit annual reports that include the visual emissions statements. If the facility had no visible emissions, do they need to submit a statement to that effect for (b)(5)? Since (b)(6) would only apply if there were visible emissions, no statement would need to be made addressing that issue unless there were an incidence of fugitive emissions, correct?

A: You are correct in both cases.

71. Q: In 40 CFR 63.11516, under the Standards for Welding, (f)(1) reads as follows: "(1) You must operate all equipment, capture, and control devices associated with welding operations according to manufacturer's instructions. You must demonstrate compliance with this requirement by maintaining a record of the manufacturer's specifications for the capture and control devices, as specified by the requirements in 40 CFR 63.11519(c)(4), "Notification, recordkeeping, and reporting requirements."" As stated the compliance demonstration for this is that the source keeping manufacturers' records only of the capture and control devices are optional if other management practices of (f)(2) are followed. Therefore, it seems as if a source cannot demonstrate compliance with (f)(1) unless capture and control are used. Shouldn't the compliance demonstration for (f)(1) include keeping records of the manufacturers' instructions for the welding equipment too, or maybe even records of any of the management practices selected and used as required by (f)(2)?

A: Records of instructions can be just the instructions themselves. Yes, records of management practices would support the annual report but were not required due to the increased burden it may impose.

72. Q: 40 CFR 63.11519 (b), reads as follows:

"(b) What reports must I prepare or submit? – (1) Annual certification and compliance reports. You must prepare and submit annual certification and compliance reports for each affected source according to the requirements of paragraphs (b)(2) through (7) of this section."

Should this be (b)(2) through (9)? A: Correct. This is a typographical error.

73. Q: 40 CFR 63.11519 (b)(4), reads as follows:

"(4) General requirements. The annual certification and compliance report must contain the information specified in paragraphs (b)(4)(i) through (iii) of this section, and the information specified in paragraphs (b)(5) through (7) of this section that is applicable to each affected source."

Should this be (b)(2) through (9)?

A: Yes, you are correct. This is a typographical error.

74. Q: 40 CFR 63.11519 (c)(1), reads as follows:

"What records must I keep? You must collect and keep records of the data and information specified in paragraphs (c)(1) through (13) of this section, according to the requirements in paragraph (c)(14) of this section".

Should the records specified in paragraphs (c)(1) through (14), be according to the requirements in paragraph (c)(15)?

A: Yes, you are correct. This is a typographical error.

75. Q: 40 CFR 63.11519 (c)(15), reads as follows:

"(15) Your records must be maintained according to the requirements in paragraphs (c)(14)(i) through (iii) of this section."

Should this be (c)(15)(i) through (iii) instead?

A: Yes, you are correct. This is a typographical error.

76. Q. How long should I keep records?

A. As per 40 CFR 63.10: General recordkeeping requirements.

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

77. Q: Subpart 6X only refers to the requirement for maintaining records on-site. Will these ever need to be sent to any agency?

A: The state or the EPA regional office (depending on who accepts delegation of this rule in your area) could request that you send it to them, especially if an exceedance is indicated in your annual report. Generally, you should maintain the reports on-site for 5 years unless notified otherwise.

78. Q: How do existing facilities prove their compliance with the rule? Specifically, if a facility already has 98 percent PM control on their spray painting operation, but their permit only lists them as having to meet 85 percent control in their reports, what should they include in reports or notifications to the EPA?

A: Document and maintain records of how the 98 percent control is determined. Only manufacturer's statements or source testing would be acceptable. Contact your equipment manufacturer if you do not currently have documentation. The permit should be amended to reflect the rule requirement for 98 percent control in the next permit renewal process.

79. Q: It appears there might be a typographical error in 40 CFR 63.11519(c) (15) regarding recordkeeping. The paragraph says to follow the requirements in (c) (14) (i) through (iii) :

Your records must be maintained according to the requirements in paragraphs (c) (14) (i) through (iii) of this section. (i) Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10 (b) (1) "General Provisions." Where appropriate, the records may be maintained as electronic spreadsheets or as a database. (ii) As specified in 40 CFR 63.10(b) (1), "General Provisions," you must keep each record for 5 years following the date of each occurrence, measurement, corrective action, report, or record. (iii) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, corrective action, report, or record according to 40 CFR 63.10(b) (1), "General Provisions." You may keep the records off-site for the remaining 3 years."

I think it should be (c) (15) (i) through (iii). Is the EPA aware of this and will there be a correction issued?

A: Yes, you are correct that there is an error here. We will note this error in case corrections are published, although none are currently planned. Because the current incorrect reference points to sections that don't exist and would be on a totally different subject if it did (e.g., for welding rod usage), and also that the correct section follows immediately after the current introductory sentence with the referencing error, there should not be any enforcement issues with this interpretation of the correct section to be referenced. Note that this section simply repeats the same subject matter from the 40 CFR part 63 "General Provisions," so if needed, agencies can refer to the General Provisions section.

Implementation

80. Q: Does the EPA have any suggestions for the states on how to locate unpermitted affected sources?

A: Some states are using business licenses to locate sources. There may be differences in how they are catalogued in city and county records, however. There are also business databases such as Dun and Bradstreet which can be accessed for a fee.

81. Q: Will this rule require the opening of existing facility air permits?

A: This is a state issue and depends on the state. It is possible that you might only have to add your new compliance status under this new rule when your state permit is up for renewal, unless your state contacts you otherwise. Check your permit and see whether it says that you must contact the state or amend the permit if you are subject to a new rule.

82. Q: Has the EPA prepared a list of sources in the Metal Fabrication and Finishing source categories for implementation purposes?

A: The EPA generally does not usually prepare source lists for area source rules, unless the number of facilities is very small. Lists can be prepared using the list of SIC/NAICS codes in the rule, filtering out any facilities that do not fit the source category descriptions. Facilities may also be identified using Dun and Bradstreet[®] database listings, which must be purchased. There are over 8,000 facilities expected to be affected by the rule.

83. Q: 40 CFR 63.11517(b)(2) states that if no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests for 10 work days you may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). However, if a facility is on a seven day work week schedule it can become confusing to keep track of the testing schedule. Is it permissible to follow a normal weekly testing schedule in this case?

A: Yes, if a facility is open 6 or 7 days a week then they should follow "weekly" as defined for their facility and not every five days. The schedules mentioned in this section (63.11517) for both Method 22 and Method 9, assumed a 5 day work week and the resultant subsections for weekly, monthly and quarterly testing maintained that assumption. Obviously, when a facility operates on a longer work week the provisions in these sections of the rule are slightly different. Therefore, you should follow the weekly, monthly and quarterly schedules that make sense for your facility's situation and use the standard definitions of week, calendar month, and quarter year (three months).

84. Q: Section 63.11517(d)(4) having to do with quarterly visible emissions testing using Method 9 states that you may decrease the frequency of EPA Method 9 testing to once per every 120 days of operation of the process. Is this a typographical error?

A: Yes, 120 days was incorrect and to be consistent with a 5-day work week assumption, the testing frequency would be reduced to every 60 days for quarterly testing. However, as stated above in answer to Question 83, you should follow the weekly, monthly and quarterly schedules that make sense for your situation. The quarterly testing frequency could be reduced to once every calendar quarter.