Example of Changes EPA made to 40 CFR Part 63 Subpart WWWWWW

1. **Clarified issues on the whether certain plating and polishing operations were "affected" by or "exempted" from Sub 6Ws.**

- **Clarified that the dry mechanical polishing of thermally plated parts was subject to Sub 6Ws**

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10.1.1.1.4 Dry mechanical polishing of finished metals ~~or~~ and formed ~~products~~ parts after plating or thermal spraying.

- **Clarified that "bench-scale operations" were NOT subject to Sub 6Ws**

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"Bench-scale" means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

"Plating and polishing operation" means an operation that uses or emits any of the plating and polishing metal HAPs and is engaged in one or more of the following:

- Non-chromium electroplating;
- Electroforming;
- Electropolishing;
- Electroless plating;
- Other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating;
- Thermal spraying; or
- Dry mechanical polishing of finished metals ~~or~~ and formed ~~products~~ parts after plating or thermal spraying.

Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to ~~an object~~ a part. Plating and polishing does not include any bench-scale ~~processes~~ operations.

- **Clarified that spray of coating at room temperature was NOT subject to Sub 6Ws**

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"Thermal spraying" means a process that uses or emits any of the plating and polishing metal HAPs in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly used thermal spraying methods include high velocity oxy-fuel spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures. This process is also called metal spraying ~~or flame spraying~~.

- **Clarified that plating & polishing operations undertaken to repair surfaces or equipment were NOT subject to Sub 6Ws**

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10.1.6.4 Plating, polishing, coating, or ~~Thermal~~ thermal spraying operations conducted to repair surfaces or equipment.

- **[Allegedly] clarified that plating & polishing operations undertaken for maintenance were NOT subject to Sub 6Ws**

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"Maintenance" ~~is~~ means any process at a plating and polishing ~~facility~~ operation that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products. ***Is this it???***

2. **Clarified how to determine the concentration of P&PM HAPs**

- Clarified that determination of concentration of P&PM HAPS was not limited to just MSDS information.

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10.1.6.6 Any plating or polishing operation that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1% or more by weight (as the metal) or does not use any material that contains manganese in amounts of 1.0% or more by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing ~~process~~ operation may include information ~~as~~ reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents "as used" to plate or to polish.

"Metal HAP content of material used in plating and polishing" ~~is~~ means the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution, in the case of electroplating, metal coating, or electropolishing; or the HAP content of the metal coating being applied in the case of thermal spraying. Material Safety ~~d~~Data ~~s~~Sheet ~~(SDS)~~ information may be used in lieu of testing or engineering estimates but is not required to be used.

- Clarified that determination of concentration of P&PM HAPS in a tank path was may be determined on the "as used" tank bath concentration.

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10.1.6.6 Any plating or polishing operation that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1% or more by weight (as the metal) or does not use any material that contains manganese in amounts of 1.0% or more by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing ~~process~~ operation may include information ~~as~~ reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents "as used" to plate or to polish.

3. **Clarified the proper "replenishment" of WA/FS in the tank bath**

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10.4.1.1.2 When replenishing the tank bath, the owner or operator shall add the wetting agent/fume suppressant to the other bath chemistry ingredients in the same proportion as in the original make-up of the tank bath or in proportions such that the tank bath contents are returned to that of the original make-up of the tank bath.

10.7.3.2.1 When replenishing the tank bath, the owner or operator shall add the wetting agent/fume suppressant to the other bath chemistry ingredients in the same proportion as in the original make-up of the tank bath or in proportions such that the tank bath contents are returned to that of the original make-up of the tank bath.

4. **Clarified the meaning of "startup" for measuring the pH for cyanide electroplating tanks**

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"**Startup of the tank bath**" ~~is~~ means when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the tank bath does not include events where only the tank's heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

10.4.4 The owner or operator of an affected cyanide electrolytic process tank shall measure and record the pH of the tank bath upon startup of the tank bath. No additional pH measurements are required.

5. **Added use of cartridge filter as accepted control technology for thermal spraying operations**

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10.4.5 The owner or operator of an affected dry mechanical polishing operation shall operate a capture system that collects particulate matter (PM) emissions from the affected dry mechanical polishing operation and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter in compliance with the requirements in 10.4.5.1 and 10.4.5.2 of this regulation.

10.4.6.1 For existing permanent thermal spraying operations, the owner or operator shall operate a capture system that collects PM emissions from the affected thermal spraying operation and transports the PM emissions to a water curtain, cartridge filter, fabric filter, or HEPA filter in compliance with the requirements in 10.4.6.1.1 and 10.4.6.1.2 of this regulation.

10.4.6.2 For new or reconstructed permanent thermal spraying operations, the owner or operator shall operate a capture system that collects PM emissions from the affected thermal spraying operation and transports the PM emissions to a cartridge, fabric, or HEPA filter in compliance with the requirements in 10.4.6.2.1 and 10.4.6.2.2 of this regulation.

10.6.9.1 The owner or operator shall install a control system that is designed to ~~collect~~ capture PM emissions from the thermal spraying operation and transport the PM emissions to a water curtain, cartridge filter, fabric filter, or HEPA filter.

10.6.10.1 The owner or operator shall install a control system that is designed to ~~collect~~ capture PM emissions from the thermal spraying operation and transport the PM emissions to a cartridge, fabric, or HEPA filter.

6. **Clarified applicable recordkeeping requirements for tank covers and for limiting operating time**

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*** * EPA made no recordkeeping changes * ***

Federal Sub 6Ws **2009**

(d)(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?", or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

(d)(6)(2) The owner or operator shall record the times that the process tank is operated and the times that the tank cover is in place on a daily basis.

Federal Sub 6Ws **2011**

(d)(6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?" or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply with §11507(a), (b) or (c) of this section by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.

Delaware Section 10 **2010**

10.7.5 The owner or operator of an affected batch electrolytic process tank, who uses a tank cover to comply with 10.4.1.3.1 of this regulation, shall demonstrate continuous compliance according to 10.7.5.1 through 10.7.5.5 of this regulation.

10.7.6 The owner or operator of an affected continuous electrolytic process tank, who uses a surface cover to comply with 10.4.1.3.2 of this regulation, shall demonstrate continuous compliance according to 10.7.6.1 through 10.7.6.4 of this regulation.

10.7.8 The owner or operator of an affected flash electrolytic process tank, who uses a tank cover to comply with 10.4.2.2 of this regulation, shall demonstrate continuous compliance according to 10.7.8.1 through 10.7.8.5 of this regulation.

7. **Corrected the initial notification submittal date for new sources**

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10.8.1.4 The owner or operator of ~~an~~ new or reconstructed affected source that started up after July 1, 2008 shall submit an initial notification ~~not later than 120 calendar days after~~ upon startup of the affected source or November 11, 2009, whichever is later.

8. **Added requirement to amend Notification of Compliance Status IF the source changes the control technology (say from using a "tank cover" to using a "WA/FS")**

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10.8.2.3 If ~~a facility~~ the owner or operator makes a change to any items in ~~(b)(2)(i)~~ 10.8.2.2.1, ~~iii~~ 10.8.2.2.3, ~~and (iv)~~ or 10.8.2.2.4 of this ~~section~~ regulation that does not result in a deviation, an amended ~~N~~notification of ~~C~~compliance ~~S~~status ~~should~~ shall be submitted within 30 days of the change.

9. **Clarified that the "management practices" were applicable to ALL affected source**

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10.9.1.11 The owner or operator of an affected process tank or other affected plating and polishing operation that is subject to the management practices in 10.4.7 of this regulation shall state in the annual compliance certification report that the applicable management practices have been implemented.

10. **Updated the Startup, Shutdown &Malfunction provisions consistent with the 12/19/08 D.C. District Court decision on Sierra Club vs. EPA**

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Table 10-1 - Applicability of 3.0 to 10.0 of this Regulation

General Provision Reference	Applies to 10.0	Comment
3.6.5 - 3.6.5.1	~~Yes~~ No	
3.6.5.2	No	Reserved.
3.6.5.3	~~Yes~~ No	However, 10.4.8 of this regulation specifies the minimum contents of the startup, shutdown, and malfunction plan for sources using a capture system and control device to comply with the 10.4 of this regulation.
3.6.6 ~~– 3.6.6.2.2~~	Yes	
3.6.6.1	No	Standards apply at all times, including during startup, shutdown, and malfunction events.
3.6.6.2 - 3.6.6.2.2	Yes	
3.6.6.2.3	No	10.0 of this regulation does not require performance testing.
3.6.6.2.4 - 3.6.6.3	Yes	
3.6.7	Yes	
3.6.8	No	10.0 of this regulation does not contain any opacity or visible emission standards.