

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

**[EPA-HQ-OAR-2005-0084; FRL- ]**

**RIN 2060-AM37**

**National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** We are issuing national emission standards for control of hazardous air pollutants (HAP) for the plating and polishing area source category. This final rule establishes emission standards in the form of management practices for new and existing tanks, thermal spraying equipment, and mechanical polishing equipment in certain plating and polishing processes. These final emission standards reflect EPA's determination regarding the generally achievable control technology (GACT) and/or management practices for the area source category.

**DATES:** This final rule is effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2005-0084. All documents in the docket are listed in the [www.regulations.gov index](http://www.regulations.gov/index). Although listed in the index, some information is not publicly available, e.g.,

confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the EPA Docket Center, Public Reading Room, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Dr. Donna Lee Jones, Sector Policies and Programs Division, Office of Air Quality Planning and Standards (D243-02), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541-5251; fax number: (919) 541-3207; e-mail address: [jones.donnalee@epa.gov](mailto:jones.donnalee@epa.gov).

**SUPPLEMENTARY INFORMATION:**

Outline. The supplementary information in this preamble is organized as follows:

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**I. General Information**

- A. Does this action apply to me?

The regulated category and entities potentially affected by this final action include:

Category	NAICS code <sup>1</sup>	Examples of regulated entities
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Industry. . .	332813	Area source facilities engaged in any one or more types of nonchromium electroplating; electropolishing; electroforming; electroless plating, including thermal metal spraying, chromate conversion coating, and coloring; or mechanical polishing of metals and formed products for the trade. Regulated sources do not include chromium electroplating and chromium anodizing sources, as those sources are subject to 40 CFR part 63, subpart N, "Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks."
Manufacturing	32, 33	Area source establishments engaged in one or more types of nonchromium electroplating; electropolishing; electroforming; electroless plating, including thermal metal spraying, chromate conversion coating, and coloring; or mechanical polishing of metals and formed products for the trade. Examples include: 33251, Hardware Manufacturing; 323111, Commercial Gravure Printing; 332116, Metal Stamping; 332722, Bolt, Nut, Screw, Rivet, and Washer Manufacturing; 332811, Metal Heat Treating; 332812, Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers; 332913, Plumbing Fixture Fitting and Trim Manufacturing; Other Metal Valve and Pipe Fitting Manufacturing; 332999, All Other Miscellaneous Fabricated Metal Product Manufacturing; 334412, Bare Printed Circuit Board Manufacturing; 336412, Aircraft Engine and Engine Parts Manufacturing; and 339911, Jewelry (except Costume) Manufacturing.

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<sup>1</sup> North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility will be regulated by this action, you should examine the applicability criteria in 40 CFR 63.11475, "Am I subject to this subpart?" of subpart WWWW (National Emission Standards for Hazardous Air Pollutants (NESHAP): Area Source Standards for Plating and Polishing Operations). If you have any questions regarding the applicability of this action to a particular entity, consult either the air permit authority for the entity or your EPA regional representative as listed in §63.13 of the General Provisions to part 63 (40 CFR part 63, subpart A).

B. Where can I get a copy of this document?

In addition to being available in the docket, an electronic copy of this final action will also be available on the Worldwide Web (WWW) through the Technology Transfer Network (TTN). Following signature, a copy of the final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at the following address:

[www.epa.gov/ttn/oarpg/](http://www.epa.gov/ttn/oarpg/). The TTN provides information and technology exchange in various areas of air pollution control.

C. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of these final rules is available only by filing a

petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]. Under section 307(d)(7)(B) of the CAA, only an objection to these final rules that was raised with reasonable specificity during the period for public comment can be raised during judicial review. This section also provides a mechanism for us to convene a proceeding for reconsideration, “[i]f the person raising an objection can demonstrate to EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of this rule.” Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, Environmental Protection Agency, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW., Washington, DC 20004, with a copy to the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20004. Moreover, under section 307(d)(7)(B) of the CAA, only an objection to these final rules that was raised with reasonable specificity during the period for public

comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by these final rules may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

## **II. Background Information for Final Area Source Standards**

Section 112(d) of the CAA requires us to establish NESHAP for both major and area sources of HAP that are listed for regulation under CAA section 112(c). A major source emits or has the potential to emit 10 tons per year (tpy) or more of any single HAP or 25 tpy or more of any combination of HAP. An area source is a stationary source that is not a major source.

Section 112(k)(3)(B) of the CAA calls for EPA to identify at least 30 HAP which, as the result of emissions from area sources, pose the greatest threat to public health in the largest number of urban areas. EPA implemented this provision in 1999 in the Integrated Urban Air Toxics Strategy, (64 FR 38715, July 19, 1999). Specifically, in the Strategy, EPA identified 30 HAP that pose the greatest potential health threat in urban areas, and these HAP are referred to as the "30 urban HAP." Section 112(c) (3) requires EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation. We implemented these requirements through the

Integrated Urban Air Toxics Strategy (64 FR 38715, July 19, 1999). A primary goal of the Strategy is to achieve a 75 percent reduction in cancer incidence attributable to HAP emitted from stationary sources.

Under CAA section 112(d)(5), we may elect to promulgate standards or requirements for area sources "which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants." Additional information on GACT is found in the Senate report on the legislation (Senate Report Number 101-228, December 20, 1989), which describes GACT as:

. . . methods, practices and techniques which are commercially available and appropriate for application by the sources in the category considering economic impacts and the technical capabilities of the firms to operate and maintain the emissions control systems.

Consistent with the legislative history, we can consider costs and economic impacts in determining GACT, which is particularly important when developing regulations for source categories that have many small businesses.

Determining what constitutes GACT involves considering the control technologies and management practices that are generally available to the area sources in the source category. We also consider the standards applicable to major sources in the same industrial sector to determine if the control technologies and management practices are transferable and generally available to



area sources. In appropriate circumstances, we may also consider technologies and practices at area and major sources in similar categories to determine whether such technologies and practices could be considered generally available for the area source category at issue. Finally, as we have already noted, in determining GACT for a particular area source category, we consider the costs and economic impacts of available control technologies and management practices on that category.

We are establishing these national emission standards in response to a court-ordered deadline that requires EPA to issue standards for 11 source categories listed pursuant to section 112(c)(3) and (k) by June 15, 2008 (Sierra Club v. Johnson, no. 01-1537, D.D.C., March 2006). We have already issued regulations addressing one of the 11 source categories. See regulations for Wood Preserving (72 FR 38864, July 16, 2007.) Other rulemakings will include standards for the remaining source categories that are due in June 2008.

### **III. Summary of Final Rule and Changes Since Proposal**

#### **A. Summary of Changes Since Proposal**

##### **1. Applicability**

In response to comments, we made several changes to clarify the applicability of this final rule. Specifically, we have revised the definition of plating and polishing metal HAP to mean any compound of cadmium, chromium, lead, manganese, and nickel.

We further clarified that the term plating and polishing metal HAP includes the elemental form of these metals, with the exception of lead. We also clarified throughout this final rule that this final rule applies only to sources that use the plating and polishing metal HAP (i.e., tanks that contain one or more of the metal HAP, thermal spraying operations that apply one or more of the metal HAP, and dry mechanical polishing operations that emit one or more of the plating and polishing metal HAP).

We have revised §63.11480, "What parts of my plant does this subpart cover?", to clarify that this final rule does not apply to any of the following sources: any source subject to 40 CFR part 63, subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Chromium Electroplating NESHAP); process units used strictly for educational purposes; thermal spraying conducted to repair surfaces; polishing conducted to restore the original finish to a surface; and any plating and polishing processes that do not use any materials that contain cadmium, chromium, lead, or nickel in amounts of at least 0.1 percent by weight, and do not use any materials that contain manganese in amounts of at least 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material. We do not believe that HAP emissions from these activities were part of the inventory that supported the area source listing decision

for this category because the emissions from these activities are very low.

We also corrected an error in §63.11480, "What parts of my plant does this subpart cover?", concerning the definitions of new and existing sources. In the final rule, an existing source is a source for which construction or reconstruction began on or before March 14, 2008 (i.e., the proposal date), and new source is defined as a source for which construction or reconstruction began after March 14, 2008.

## 2. Standards and Compliance Requirements

We have revised the compliance options specified in §63.11490, "What are my standards and management practices?", of the final rule. We have clarified in §63.11490(a) that if wetting agent/fume suppressant (WAFS) is included in the bath chemicals, and the WAFS is added according to the manufacturer's instruction, plants are not required to add more WAFS to the tank. We also have added a third compliance option for affected electrolytic process tanks. In addition to using WAFS or exhausting emissions to a control device, the final rule allows owners and operators of affected tanks to comply by using tank covers. To meet this option for batch process tanks, a tank cover will have to be used during at least 95 percent of the process operating time. As mentioned above, for continuous electrolytic process tanks, covers must be used whenever the

process is operating. We also expanded the definition of tank cover in §63.11490 to clarify that, for continuous process tanks, the tank surface area must be covered at least 75 percent. We have clarified the requirements for tanks that are used both for short-term or "flash" plating and for longer plating operations that do not meet the definition of short-term plating (i.e., "long-term" plating). Section 11490(c), "What are my standards and management practices," of the final rule specifies that owners or operators must comply with the requirements for short-term plating whenever short-term plating is performed in the tank and must comply with the requirements for long-term plating whenever long-term plating is performed.

We have clarified the requirements for cyanide electroplating tanks in §63.11490(d) of the final rule, "What are my standards and management practices". In §63.11490(f) of the final rule, we have clarified the requirements for thermal spraying operations. The final rule distinguishes between permanent and temporary thermal spraying. The requirements for permanent thermal spraying are the same as in the proposed rule. However, temporary thermal spraying operations are required only to meet the applicable management practices specified in the final rule. We also have added a definition for temporary thermal spraying to §63.11510, "What definitions apply to this subpart?", of the final rule to clarify whether a thermal

spraying operation is temporary or permanent.

In §63.11490(g), "What are my standards and management practices?", of the final rule, we have expanded the list of management practices. We also have clarified that this final rule requires facilities to implement only those listed management practices that are applicable and that the practices are to be implemented as practicable. In addition, we have revised some of the specific practices that were listed in the proposed rule, including the practices for minimizing bath agitation, maximizing drainage of bath liquid from parts as they are removed from the tank, using tank covers, and heating tank baths.

We have made several changes to §63.11495, "What are my compliance requirements?", of the final rule to clarify the requirements for initial and continuous compliance. The changes include adding the compliance requirements for continuous electrolytic process tanks and temporary thermal spraying operations, and clarifying the compliance requirements for cyanide electroplating tanks.

We have also changed the process by which facilities seek approval to use an alternative equipment standard other than those specifically listed in this final rule. In the proposal we indicated that facilities that would like to use equipment other than those listed must seek approval to do so pursuant to the

procedures in §63.6(g) of the General Provisions to part 63. We did not receive any comments on this part of the proposal, nor did any commenters identify any alternative equipment standards that are equivalent to those specified in this final rule. We believe that facilities should be able to request approval to use an alternative equipment standard, and therefore, we have identified two different options available to facilities that would like to use alternative equipment that achieves at least equivalent HAP emission reductions as the controls specified in this final rule: (1) facilities may petition the Agency to amend this final rule pursuant to section 553(e) of the Administrative Procedure Act, or (2) facilities may work with State permitting authorities pursuant to EPA's regulations at 40 C.F.R. Subpart E ("Approval of State Programs and Delegation of Federal Authorities"). Subpart E implements section 112(l) of the CAA which authorizes EPA to approve alternative State/Local/Tribal HAP standards or programs when such requirements are demonstrated to be no less stringent than EPA promulgated standards. We believe that these options are more appropriate mechanisms for area sources subject to section 112(d)(5) rules to obtain approval of alternative equipment standards.

### 3. Reporting and Recordkeeping Requirements

We have revised §63.11500, "What are my notification, reporting, and recordkeeping requirements?", of the final rule to

eliminate the requirement for submitting annual compliance reports. The final rule still requires owners or operators of affected sources to prepare annual compliance certifications and keep the certifications on-site and available for review. However, the certifications need only be submitted if a deviation occurred during the year, in which case the certification and report of deviations must be submitted to your state or local permitting authority. The final rule also specifies the deadline for preparing the certifications as January 31 of the year immediately following the reporting period.

#### 4. Definitions

We have made several changes to the definitions in §63.11510, "What definitions apply to this subpart?", of the final rule and have added definitions for other terms used in the final rule. We added definitions for batch electrolytic process tank, continuous electrolytic process tank, tank cover for continuous process units, and temporary thermal spraying. We have revised the definitions of cyanide plating, dry mechanical polishing, flash electroplating, and plating and polishing metal HAP.

#### 5. Other

We also corrected some typographical errors that appeared in various sections of the proposed rule.

#### B. Summary of Final Rule

## 1. Applicability

The final subpart WWWW applies to new and existing area sources of plating and polishing that use any of the plating and polishing metal HAP (cadmium, chromium,<sup>1</sup> lead, manganese, or nickel) in tanks or thermal spraying processes; and dry mechanical polishing operations used to remove or polish products with these metal HAP after plating. A new source is any affected source where you commenced construction or reconstruction of the affected source after March 14, 2008.

The final rule applies to the following sources: any tank that contains one or more of the plating and polishing metal HAP and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; any thermal spraying operation that applies one or more of the plating and polishing metal HAP; and any dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP. This final rule does not apply to the following sources: process units that are subject to the Chromium Electroplating NESHAP, research and development process units, process units that are used strictly for educational

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<sup>1</sup> Regulated sources do not include chromium electroplating and chromium anodizing sources, as those sources are subject to 40 CFR part 63, subpart N, "Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks."



purposes; thermal spraying conducted to repair surfaces; dry mechanical polishing conducted to restore the original finish to a surface before plating; and any plating or polishing process that only uses materials that do not contain cadmium, chromium, lead, or nickel in amounts of at least 0.1 percent by weight, and do not contain manganese in amounts of at least 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material. As stated above, we believe that HAP emissions from these activities were not part of the inventory that supported the area source listing decision for this category because the emissions from these activities are small.

## 2. Compliance Dates

All existing area source facilities with operations subject to this final rule must comply with the final rule requirements for their existing operations no later than 2 years after the date of publication of the final rule in the **Federal Register**. The owner or operator of a new area source operation must comply with these final rule requirements by the date of publication of the final rule in the **Federal Register** or upon startup, whichever is later.

## 3. Standards

The final rule requires owners or operators of affected non-cyanide plating and polishing tanks to meet one of the following three compliance options, which are described in further detail

below: use WAFS in the tank, capture and control emissions using an emission control device, or use a tank cover. To meet the requirement for WAFS, the owner or operator must use a bath chemistry that includes a WAFS or must add WAFS separately to the bath. In either case, the owner or operator will be required to maintain the level of WAFS in the tank according to manufacturer's specifications and requirements. No additional WAFS needs to be added beyond the manufacturer's specifications and requirements.

To meet the control device option, the owner or operator must install, operate, and maintain a control system that includes a capture device designed to capture the plating and polishing metal HAP emissions from the tank and to transport the metal HAP emissions to a composite mesh pad (CMP), packed bed scrubber (PBS), or mesh pad mist eliminator (MPME).

The tank cover option distinguishes between batch process tanks and continuous process tanks. For batch process tanks, the cover must enclose the entire surface area of the tank and must be in place during at least 95 percent of the process operating time; for continuous process tanks, the tank surface area must be covered at least 75 percent during all periods of process operation.

For short-term or flash plating tanks, the final rule requires owners or operators to limit plating time to no more

than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time, or to use a tank cover during at least 95 percent of the plating time. For affected cyanide plating tanks, owners or operators must perform and record a one-time measurement of pH in the tank bath. In addition to the above requirements, owners or operators of all affected plating and polishing tanks are required to implement, as practicable, the applicable management practices listed in §63.11490(g), "What are my standards and management practices?", and certify that they have implemented the management practices.

For any existing affected permanent thermal spraying processes, the final rule will require a control system that is designed to provide capture of the plating and polishing metal HAP emissions from the thermal spraying operation and transport the metal HAP emissions to a water curtain, fabric filter, or high efficiency particulate air (HEPA) filter. For new permanent thermal spraying operations, the final rule requires owners or operators to install a control system that is designed to provide capture and control of the metal HAP emissions from these sources and that transports the emissions from the affected source to a fabric filter, or HEPA filter. For any temporary thermal spraying operation, the final rule requires owners or operators to document the length of time and location of the temporary thermal spraying, and to meet applicable management practices

listed in §63.11490(g), "What are my standards and management practices?", such as, but not limited to, vacuuming or sweeping following the operation.

For any new and existing affected dry mechanical polishing operation, the final rule requires a control system that is designed to capture the plating and polishing metal HAP emissions from dry mechanical polishing operations and transport the metal HAP emissions to a cartridge, fabric, or HEPA filter.

#### 4. Compliance Requirements

To demonstrate compliance with the final rule, owners or operators of affected new or existing plating and polishing tanks will have to implement one or more of the equipment standards specified in §63.11490, "What are my standards and management practices?", of the final rule and certify that they have implemented the equipment standard.

Owners or operators of affected new or existing non-cyanide electrolytic process tanks that comply with the WAFS requirement must add WAFS to the tank and replenish the WAFS levels in the tank, according to the manufacturer's specifications and operating instructions, and certify that they have done so. Owners or operators of affected new or existing non-cyanide electrolytic process tanks that comply with the control device option must install, operate, and maintain a control system that captures the metal HAP emissions from plating tanks and

transports the emissions to CMP, PBS, or MPME, and certify that they have done so. Owners or operators of affected new or existing non-cyanide electrolytic process tanks that comply using the tank cover option must certify that they have installed the tank cover and are operating the tank with the cover in place, as required by the final rule.

Owners or operators of affected cyanide plating tanks must perform a one-time measurement of pH, record the measurement, and certify that they have done so. The owner or operator of a facility that uses an affected flash electroplating process that chooses to comply by limiting the plating time must demonstrate compliance by operating the affected tank no more than 1 cumulative hour per day or 3 cumulative minutes per hour, and documenting that they have done so.

Owners or operators of affected flash electroplating tanks that choose to comply by using a tank cover must certify that they have installed the tank cover and are operating the tank with the cover in place for at least 95 percent of the plating time. In addition to the above requirements, owners or operators of all affected plating and polishing tanks must demonstrate compliance by implementing the applicable management and pollution prevention practices specified in §63.11490(g), "What are my standards and management practices?", of the final rule, as practicable, maintaining the appropriate records to document

compliance, and certifying that they have implemented the management practices.

The owners or operators of affected new and existing dry mechanical polishing processes must demonstrate compliance by installing, operating, and maintaining an emissions control system according to the manufacturer's specifications and operating instructions that is designed to provide capture of the metal HAP emissions from these sources and to transport these emissions from the affected source to a cartridge, fabric, or HEPA filter. In any case, the owner or operator must also certify that the control system has been installed and is being operated and maintained according to manufacturer's specifications.

Owners or operators of affected existing permanent thermal spraying processes must demonstrate compliance by installing, operating, and maintaining an emissions control system according to the manufacturer's specifications and operating instructions. The control system must be designed to provide capture of the metal HAP emissions from these sources and to transport the emissions from the affected source to a water curtain, fabric filter, or HEPA filter. The owner or operator must also certify that the control system has been installed and is being operated and maintained according to manufacturer's specifications.

Owners or operators of new permanent thermal spraying

processes must demonstrate initial compliance by installing, operating, and maintaining an emissions control system according to the manufacturer's specifications and operating instructions. The control system must be designed to provide capture of the metal HAP emissions from these sources and transport the emissions from the affected source to a fabric or HEPA filter, device. The owner or operator must also certify that the control system has been installed and is being operated and maintained according to manufacturer's specifications.

Owners or operators of affected existing temporary thermal spraying processes must demonstrate compliance by documenting that the thermal spraying occurs for less than one hour per day and is performed in situ; and by implementing the applicable management and pollution prevention practices specified in §63.11490(g), "What are my standards and management practices?", of the final rule, as practicable, maintaining the appropriate records to document compliance, and certifying that they have implemented the management practices.

#### 5. Notification, Recordkeeping, and Reporting Requirements

The owner or operator of a new or existing affected source is required to comply with certain requirements of the General Provisions to part 63, which are identified in Table 1 of the final rule. Each facility is required to submit an Initial Notification and a Notification of Compliance Status according to

the requirements in 40 CFR 63.9 of the General Provisions to part 63. The owner or operator of an affected source is required to prepare and keep on-site an annual compliance certification. If any deviations occurred during the reporting year, the owner or operator will be required to submit the compliance certification along with a report that describes the deviations and the corrective action taken.

Owners and operators also are required to maintain all records that demonstrate initial and continuous compliance with this final rule, including records of all required notifications and reports, with supporting documentation; and records showing compliance with the management and pollution prevention practices. Owners and operators must maintain records of the following, if applicable: for cyanide electroplating tanks, the one-time pH measurement value; for non-cyanide electroplating tanks, the amount and frequency of WAFS additions; for flash electroplating tanks, the daily plating time; for electroplating tanks using covers as a control option, the time the tank is operated with a cover in place; for continuous electroplating tanks, the amount of tank surface covered and the time the tank is operated with a cover in place; and maintenance of any required control systems.

#### **IV. Exemption of Area Source Category from Title V Permitting Requirements**



We did not receive any comments on our proposal to exempt facilities in the Plating and Polishing area source category from title V permitting requirements. Therefore, this final rule does not require facilities in this source category to obtain an operating permit under 40 CFR part 70 or part 71, provided they are not otherwise required to obtain a permit under the part 70 or part 71 regulations

## **V. Summary of Comments and Responses**

The significant comments and responses are summarized and discussed below according to the comment subject.

### **A. Applicability**

#### **1. Delisting**

Comment: One commenter stated that the Plating and Polishing source category should be delisted. The commenter explained that in the past, when EPA has determined that a NESHAP source category was no longer a significant source of the targeted HAPs, it was delisted. The commenter noted that no additional emission reductions are expected as a result of this rule, which is only codifying the voluntary efforts of industry, and that small businesses, such as those affected by the proposed rule, should not be burdened by a rule that provides no environmental benefit.

Response: As noted in the preamble to the proposed rule, Section 112(k)(3)(B) of the CAA requires EPA to identify at least

30 HAP which, as the result of emissions from area sources, pose the greatest threat to public health in urban areas. Section 112(c)(3) requires EPA to list sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the emissions of the 30 urban HAP are subject to regulation. This provision requires that we subject to regulation area source categories representing 90 percent of the emissions of cadmium, chromium, lead, manganese and nickel. See section 112(c)(3). Since plating and polishing is one of the area source categories that we need to meet the section 112(c)(3) requirement, we are issuing regulations for this source category.

The commenter is correct in stating that no additional emissions reductions are expected as a result of the final rule. However, we disagree with the commenter's statement that this rule will result in no environmental benefit. This final rule will help to ensure that future emissions will be limited to the same levels currently achieved; if the source category were to be delisted, as suggested by the commenter, there would be no such limit of future emissions from existing and new plating and polishing sources.

Comment: One commenter explained that in situ thermal spraying is sometimes performed in confined areas in the interior of vessels. The commenter explained that these jobs are of short duration (approximately 1 hour) and infrequent in nature (up to 5

times per year). The commenter noted that setting up a temporary emissions capture system for this type of thermal spray operation is impracticable and economically infeasible because it would take an estimated 32 hours to set up and remove the temporary capture system. As an alternative, the commenter recommended allowing up to 2 pounds per year of metal HAP emissions from uncontrolled thermal spraying if the operation is temporary and capture and control is impractical.

Response: We recognize that temporary in situ thermal spraying operations should not be subject to the same requirements as permanent thermal spraying operations for the reasons outlined by the commenter. To address this type of operation, we have included a definition of short-term thermal spraying in §63.11510, "What definitions apply to this subpart?", of the final rule. We also have revised §63.11490, "What are my standards and management practices?", in the final rule to address thermal spraying in the same manner as another time-limited operation, flashplating, that is subject only to management practices. In addition, we have added sweeping and/or vacuuming as a management practice specifically with short-term thermal spraying operations in mind, but also as a possible management practice for the other plating and polishing operations, to be done "as practicable." Also, as explained above, we believe that repair and maintenance operations were not

part of the source category in the inventory and, therefore, we are not including requirements for these practices in this final rule. Since some of the thermal spraying repair and maintenance operations may also be performed in situ, the number of in-situ thermal spraying operations at a facility affected by this final rule may be reduced.

## 2. Regulated Pollutant

Comment: One commenter recommends that EPA clarify whether elemental metals (other than lead) are considered "Plating and Polishing metal HAP". The commenter explained that in thermal spraying, the metallic coating applied is in the elemental form both before and after application.

Response: We acknowledge that some thermal spraying operations use one of the plating and polishing metal HAP in elemental form. The metal compounds on the HAP list, except for lead, include the elemental form, as per the footnote in the CAA section 112(b)(1) that reads: "For all listings above which contain the word 'compounds' and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure." Moreover, publications by the American Welding Society and the California Air Resources Board state that compounds of metal HAP may form and be emitted from

the thermal spraying process even when the metal used is in its elemental form. Furthermore, elemental metals are emitted from the process as particulate matter (PM), and PM is a surrogate for the metal HAP at issue here. For the above reasons, we have revised the definition of plating and polishing metal HAP in §63.11510, "What definitions apply to this subpart?", of the final to indicate that, with the exception of lead, this final rule also applies to metals in their elemental form.

Comment: One commenter noted that thermal spray operations are sometimes conducted with non-HAP metals that may contain small amounts of one or more of the target HAP metals as impurities. The commenter recommended that EPA revise the definition of Plating and Polishing metal HAP to include those metal HAPs present in quantities greater than 0.1 percent for carcinogens and greater than 1.0 percent for other metal HAP. They also recommend revising the definition of thermal spraying to include the following language: "Only thermal spray materials containing greater than 1 percent (0.1 percent for carcinogens) of Plating and Polishing Metal HAP as reported on a Material Safety Data Sheet are subject to this rule." Another commenter requested that we clarify that this rule does not apply to all plating tanks with cyanide, but only those that contain one or more of the five metal plating HAP.

Response: It was not our intent for this rule to apply to

non-HAP materials that contain trace levels of one or more of the plating and polishing metal HAP as impurities. Therefore, we have revised the definition of plating and polishing metal HAP in §63.11510, "What definitions apply to this subpart?", to clarify that this final rule does not apply to materials that contain any of the metal HAP in concentrations less than 0.1 percent for carcinogens and less than 1.0 percent for other metals, as reported in the Material Safety Data Sheet, since these emissions were not part of the 1990 inventory used for the area source category listing.

We also have clarified that this final rule only applies to tanks, including cyanide tanks, that contain or have the potential to emit the five metal plating HAP.

### 3. Thresholds and Exemptions

Comment: One commenter believes EPA should establish a threshold to exclude very small plating and polishing area sources from the applicability of the proposed rule. The commenter noted that, for each of the 2,900 area sources, the number of plating and polishing tanks ranged from 1 to 20 tanks, with an average of 10 tanks, and the number of polishing and thermal spray lines ranged from 1 to 10 lines, with an average of 5 lines. The commenter stated that a threshold for the applicability of the proposed rule would result in no net loss in reductions of metal HAP emissions, would significantly minimize

the regulatory burden on small plating and polishing area sources, and would reduce the administrative burden on federal and state regulatory agencies.

Response: We understand the commenter's concern regarding the potential impact of this final rule on small facilities. However, we cannot establish an applicability threshold for small plating facilities for the following reasons. Plating and polishing is one of the area source categories needed to meet the section 112(c)(3) requirement that we subject to regulation, area source categories representing 90 percent of the emissions of cadmium, chromium, lead, manganese and nickel. See section 112(c)(3). We recognize that the plating and polishing area source category is comprised of a large number of relatively small plating and polishing facilities. Although area sources individually may be considered low-emitting sources, collectively, they are not. The commenter's suggestion fails to address the requirement of section 112(c)(3), and as discussed above, we previously determined that we need the plating and polishing area source category to meet this requirement, which provides that EPA regulate area sources accounting for 90 percent of the emissions of the 30 urban HAP. However, in developing the proposed rule, we attempted to minimize the burden on small facilities while ensuring that this final rule includes sufficient requirements for ensuring compliance. As discussed

more fully below, we have incorporated certain changes in the final rule to further reduce the burden to small facilities. Finally, we are planning various outreach activities specifically for this industry to help affected facilities comply with the final rule to further reduce the overall burden.

Comment: One commenter requested an exemption for maintenance activities that require thermal spraying for repair (e.g., that would take place on an oil rig or platform) and maintenance activities that might involve polishing a plated surface to restore the original finish in order to accomplish its intended task (e.g., a sealing plate or hydraulic cylinder). The commenter explained that the low levels of emissions from these operations justifies exempting them from the proposed rule. Another commenter remarked that EPA should exempt small tanks that are used only for educational purposes. The commenter believes that such an exemption would be consistent with the exemption for research and development process units specified in §63.11480(d), "What parts of my plant does this subpart cover?", of the proposed rule.

Response: The commenter has misconstrued this rule's treatment of research and development process units specified in §63.11480(d), "What part of my plant does this subpart cover?". Research and development process units are not subject to this rule because the source category does not cover these activities.



Similarly, based on reasonable assumptions about the practices included in the 1990 112(k) urban HAP inventory, we have concluded that the processes that contributed to plating and polishing metal HAP emissions most likely did not include thermal spraying operations used for repairing surfaces, polishing operations used to restore original finish, or tanks used strictly for educational purposes. As a result, we have revised §63.11480, "What parts of my plant does this subpart cover?", of the final rule by adding a new paragraph (g) to clarify the scope of the listed source category addressed in this final rule. The new paragraph provides that the plating and polishing area source category does not include thermal spraying operations for repair, polishing operations used to restore original finish, or tanks used strictly for educational purposes.

Comment: One commenter stated that EPA should exempt chromate conversion coating tanks from the plating and polishing rule. The commenter states that the chromium conversion coating process does not utilize an electrical current or apply heat to the tank, so there is nothing to drive emissions from the process. The commenter also pointed out that chromium conversion tanks were exempted from the Chromium Electroplating NESHAP; communication in the docket from OSHA states that employee exposures are very low; and the proposal does not include any emissions estimates for chromium conversion coating.

Response: We disagree with the commenter that chromium conversion tanks should be exempt from this rule. The commenter requests an exemption, but fails to demonstrate that emissions from such tanks were not included as part of EPA's inventory analysis when it listed the area source category. As explained above, we need to regulate the plating and polishing area source category in order to meet the section 112(c)(3) requirement that we subject to regulation area source categories representing 90 percent of the emissions of cadmium, chromium, lead, manganese and nickel.

Moreover, the proposed management practices represent pollution prevention activities for air emissions. Incidentally, these practices also help to prevent pollution associated with water discharges and the chromate conversion process. It is our understanding that these practices, when practicable, also can result in cost savings for many facilities, which thereby reduces the net burden. The lack of emission data is not in itself a reason to exempt sources when other information indicates that HAP emissions from those sources are possible. Likewise, the lack of an electrical current in chromium conversion baths is not a reason to exempt those processes since electroless nickel plating baths also are operated without electrical current applied to the bath, yet the data show that there are metal HAP emissions from electroless nickel plating tanks.

Comment: One commenter stated that EPA should exempt all continuous plating operations from the proposed rule. The commenter reasoned that exemption of continuous plating from this rule is appropriate based on the insignificant number of continuous plating operations and the miniscule amount of potential HAP emissions from the process. The commenter explained that bubbling, which is the primary emissions mechanism for batch plating operations, does not occur in continuous plating. In addition, the commenter stated that the tanks are not agitated and have little surface area compared to the surface area of batch plating tanks. The commenter further stated that most of the surface area of continuous plating operations is covered.

Response: We disagree with the commenter and are not providing the exemption requested. We recognize that the plating and polishing area source category is comprised of a large number of relatively small plating and polishing facilities. Although area sources individually may be considered low-emitting sources, collectively, they are not. HAP emissions from the processes identified by the commenter do occur, and the commenter has not demonstrated that emissions from such processes were not included as part of EPA's inventory analysis when it listed the area source category. As explained above, we need to regulate the plating and polishing area source category to meet the 90 percent

requirement in section 112(c)(3) for emissions of cadmium, chromium, lead, manganese and nickel.

In developing this final rule, we have attempted to minimize the burden on the sources identified by the commenter. At the time of proposal, we had no information on the differences between batch plating processes and continuous plating processes. We acknowledge that the continuous electroplating processes differ significantly from batch plating processes for the reasons identified by this commenter; another commenter also pointed out these differences. To account for the differences between continuous plating operations and batch plating operations, we are including in the final rule separate requirements for continuous plating operations, which should address the commenter's concerns. Under the final rule, continuous plating operations will have three options for complying with the standard. Owners or operators of affected continuous plating tanks can comply by covering at least 75 percent of the tank whenever the process is operating. As discussed more fully below in Section C, this option represents GACT for continuous plating tanks. Owners or operators can also comply by using WAFS in the plating bath or by using controls, either of which is equivalent to GACT for continuous plating tanks. We are also revising the management practices in the final rule by including practices specifically used with continuous plating operations.

## B. Affected Source

Comment: One commenter stated that the definition of dry mechanical polishing in §63.11510, "What definitions apply to this subpart?", is ambiguous and inconsistent with the description of the process in the preamble to the proposed rule. The commenter suggested the following alternative wording: "Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating, using hard-face abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles."

Another commenter noted that the proposed rule does not provide a definition for the term "polishing." The commenter also remarked that the proposed rule appears to apply only to the polishing of metals or finished products after they have been plated, and not to polishing done before plating, or to grinding and machine operations.

Response: We agree with both commenters that the definition of dry mechanical polishing in the proposed rule should be clarified. We are revising the definition of dry mechanical polishing in §63.11510, "What definitions apply to this subpart?", of the final rule, as suggested by the commenters to help clarify which types of operations are subject to this final rule. In light of the revised definition of dry mechanical

polishing in the final rule, we do not believe it is necessary to separately define "polishing." With respect to grinding and machining operations, emissions from these sources are covered under 40 CFR part 63, subpart XXXXXX--National Emission Standards for Hazardous Air Pollutants Area Source Standards for 9 Metal Fabrication and Finishing Source Categories, which we expect to finalize by June 15, 2008.

Comment: One commenter suggested revising the definition of short-term or "flash" electroplating in §63.11510, "What definitions apply to this subpart?", to reflect the full range of compliance options. The commenter noted that doing so would also be consistent with the preamble to the proposed rule. The commenter suggested revising the definition as follows: Short-term or "flash" electroplating means an electroplating process that is used no more than 1 hour per day or 3 minutes per hour in duration, or an electroplating process that has a cover in place 95 percent of the plating time.

Response: We agree with the commenter's suggestion that the definition of short-term or "flash" electroplating in §63.11510, "What definitions apply to this subpart?", should be revised to include the maximum duration of 1 hour per day, and we have revised the definition in the final rule accordingly. We do not agree with the commenter's suggestion that flash electroplating should be defined in terms of tank cover usage since flash

electroplating is different from other electroplating solely on the amount of time it is performed, whereas using tank covers are a control option. However, as explained below, we have revised §63.11490(a), "What are my standards and management practices?", to add paragraph (3), which provides the option of using tank covers during at least 95 percent of the process operating time as a compliance option for long-term plating processes (i.e., for all affected plating processes that are not short-term or flash processes). With this change, all batch electroplating processes, both long-term and short-term, will be allowed to use covers 95 percent of the process operating time to comply with this final rule. We believe this change addresses the commenter's concern.

Comment: One commenter suggested that EPA clarify the requirements for tanks that are used for both flash electroplating and for other electroplating processes that are longer in duration. The commenter suggested such tanks should have to comply by meeting the requirements for the other types of electroplating processes, as specified in §63.11490(a), "What are my standards and management practices?", of the proposed rule.

Response: Our intent in §63.11480, "What parts of my plant does this subpart cover?", of the proposed rule was to define affected source in terms of the plating and polishing process that is performed in the tank and not to define affected source

as the physical tank structure. Therefore, in the case of a tank that is used for both flash plating and for any of the other type of plating process that would be subject to the requirements in §63.11490(a), "What are my standards and management practices?", the requirements for flash plating requirements would apply when the tank is used for short-term plating, and the requirements for the other affected plating processes would apply when those processes are being conducted in the tank. We have revised §63.11490(c) of the final rule to clarify this requirement.

#### C. GACT

Comment: Two commenters commented on how GACT was defined for the proposed rule and the relevance of that definition to continuous plating tanks. The commenters explained that, as proposed, owners or operators of continuous plating operations would be required to use either WAFS or a control device to comply with this rule. However, the commenters stated that the facility they represent does not use WAFS in their continuous nickel electroplating tanks, and that WAFS may not be feasible for the process. One commenter pointed out that for WAFS to be GACT for continuous plating processes, the technology must be commercially available and appropriate considering the economic impacts and technical capabilities. The commenters stated that WAFS are not used in continuous nickel electroplating tanks, and it is unknown if WAFS is a feasible control option for continuous



nickel plating tanks; to make this feasibility determination would require lengthy and expensive trials. The commenters concluded that WAFS is not GACT for continuous nickel electroplating tanks.

The commenters also stated that, as proposed, facilities that cannot use WAFS would have to install a control device, thereby making control devices GACT for such facilities even though EPA states in the preamble to the proposed rule that capture and control technology is cost-prohibitive and therefore not appropriate for GACT.

Both commenters stated that the continuous plating tanks have relatively small surface areas and that emissions are negligible because there is no bubbling in, or agitation of, plating baths. One of the commenters stated that the commenter's facility uses tank covers on their continuous plating tanks, but those covers cover about 80 percent of the surface area which does not meet the definition of tank cover in the proposed rule. The commenter pointed out that covers that totally enclose tanks are practical only for batch operations, and the commenter suggested revising the definition of tank cover to allow for partial covers over most of the open surface of the tank. Both commenters stated that because of the differences in the continuous plating process, continuous plating should not be required to use WAFS or control devices, but should be allowed to

comply only with appropriate management practices.

Response: As a result of these comments, we now recognize that continuous electroplating operations differ significantly from batch electroplating operations, that the use of WAFS may not be appropriate for all continuous electroplating operations, and that control devices should not be the only compliance option for this type of process. By consultation with other facilities that responded to our survey that perform continuous electroplating, we also now recognize that partial tank covers are the generally available technology for continuous electroplating tanks, and that partially covering the surface area of the tank is the most that could be used considering the equipment that is permanently positioned within the continuous plating tanks. Consequently, we have revised this final rule to provide separate requirements for continuous electroplating operations. In the final rule, continuous electroplating operations will be able to comply using tank covers that cover at least 75 percent of the tank surface, or by using WAFS or control devices as alternate compliance options equivalent to GACT. Although the commenter identified tank covers that cover 80 percent of the surface area, we chose 75 percent as GACT based on consultation with other facilities that perform continuous electroplating. This value is also a more practical percentage in terms of an accurate estimation. Finally, we have added the

use of squeegee rolls as a management practice for continuous electroplating operations.

#### D. Equipment Standards

Comment: One commenter requested that EPA clarify that when WAFS are already included in the plating chemicals, the requirement is simply to identify the WAFS in the plating solution and add the plating solution to the tank. The commenter also requested that EPA clarify that when WAFS are added separately plants can comply by adding WAFS as recommended by manufacturer and recording the time and amount of all additions of WAFS. Another commenter requested that EPA clarify the term or requirement for WAFS so that facilities know that if a WAFS is already in use, no additional fume suppressants are necessary to meet the standard. The commenter was concerned that facilities might expand the use of perfluorooctane sulfate (PFOS), a pollutant of concern usually used in chromium plating baths as a fume suppressant.

Response: The commenter is correct regarding the compliance requirements for the use of WAFS in affected tanks. As specified in §63.11495(c)(1) and (d)(3), compliance is demonstrated by adding and maintaining the WAFS in the bath according to manufacturer's specifications and instructions, and documenting that the additions of WAFS to the affected tank, regardless of whether the WAFS is included in the plating chemical solution or

added separately. In regard to the comment with PFOS concerns, this final rule will be clarified to state that if WAFS are already in the bath ingredients, no additional WAFS need to be added unless specified by the manufacturer's instructions.

#### E. Management Practices

Comment: One commenter noted that the proposed rule would require each affected plant to meet all five of the management practices listed in §63.11490(f), "What are my standards and management practices?." The commenter stated that because of the variability inherent in plating and polishing operations, it is not reasonable or practical to implement all five of the management practices listed in the regulation, and that some affected facilities may not be able to implement any of them.

The commenter explained that, while the management practices listed in the proposed rule can be effective in reducing HAP emissions, they are unnecessarily limited in scope and do not reflect the broad range of management practices and pollution prevention techniques that have been implemented since 1990. The commenter stated that there are several other management practices and pollution prevention activities that would be appropriate and would achieve the same objectives as those listed in the proposed rule, and provided lists of those practices. The commenter believes that sources should be allowed to demonstrate compliance with the management practices requirement by

identifying the management practices that it has implemented since 1990, is currently implementing (and will continue to implement), and any management practices that it implements in the future. Another commenter urged EPA to not require affected facilities to meet all five of the listed management practices, some of which would not be appropriate for the commenter's facility.

Response: We have added a number of pollution prevention management practices that were provided to EPA by the commenter. We believe that the revised list of management practices represents the most significant pollution prevention management practices that can be done to eliminate, reduce, or minimize air pollution in the plating and polishing processes regulated by this final rule. We also have emphasized in the revised rule that these pollution prevention management practices need to be done only "as practicable" to the specific plating operation being performed, as explained in this section in response to other comments. However, we are unable to provide the additional flexibility suggested by the commenter that sources be allowed to demonstrate compliance with a site-specific management plan that would identify management practices. Under the commenter's approach, no one, other than the source, would review the site-specific plan. Such an approach would constitute an improper delegation of our rulemaking authority under the Act. We

therefore reject the approach.

Comment: Several commenters stated that one or more of the management practices listed in §63.11490(f), “What are my standards and management practices?”, of the proposed rule are not practical for all affected tanks where the practices would be required. The commenters provided several examples in regard to minimizing bath agitation when removing any parts from the tank; maximizing the dripping or draining of bath solution back into the tank; optimizing the design of barrels, racks, and parts to minimize dragout of bath solution; using tank covers; and minimizing or reducing the heating of process tanks. The comments on these practices are discussed in more detail below.

One commenter stated that the required management practice of maximizing drip time can present problems for some plating operations. The commenter noted that if a part is allowed to drip too long, it can result in a residue pattern that could negatively impact quality. In addition, longer drip times can lower production rates, having negative economic impacts. The commenter noted that slow withdrawal of the part from the plating bath can be far more effective in reducing potential metal HAP emissions, yet this is not listed as a management practice in the proposed rule.

The same commenter noted that the management practice specified §63.11490(f)(3), “What are my standards and management

practices?", is problematic. This practice requires facilities to "optimize the design of barrels, racks, and parts to minimize dragout of bath solution, such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank." The commenter stated that part design is controlled by the customer, not the plating facility; to the extent that plants have already redesigned barrels, racks, and parts, the metal HAP emissions associated with that process have already been reduced and will continue to be reduced. The commenter also stated that replacing barrels and racks can be very expensive, and if required, EPA would have to revise its economic impact analysis for the proposed rule.

Two commenters expressed concern about the management practice to minimize bath agitation when removing parts from the tank, as specified in §63.11490(f)(1), "What are my standards and management practices?", of the proposed rule. One commenter stated that minimizing agitation as parts are removed could adversely affect compliance with the customer specifications for the part that is being plated. The commenter suggested revising the language to the following: "Minimize bath agitation when removing any parts processed in the tank, except when necessary to meet part quality requirements." The other commenter noted that replacing air agitation with eductors to reduce emissions

can be very expensive if it requires replacing or reconfiguring tanks. The commenter also noted that EPA needs to reword the phrase "when removing tank parts" to "when removing parts from the tank." In addition, the commenter pointed out that air agitation is not only an issue when parts are removed from the tank, and cites this as another example of how the management practices as written are unduly limited and restrictive.

Another commenter stated that the requirement in §63.11490(f)(4), "What are my standards and management practices?", to use tank covers is ambiguous with respect to when using covers is feasible and when using covers is not feasible. The commenter pointed out that, as specified in the proposed rule, this requirement may drive using covers when it is unwise to do so. The commenter suggested either eliminating this requirement for tank covers or eliminating the phrase "(i.e., not during lifting or lowering)," because that implies there are no other times when tank covers are impracticable.

Two commenters commented on the management practice that addresses the heating of affected tanks, specified in §63.11490(f)(5), "What are my standards and management practices?", of the proposed rule. One commenter remarked that it may not be practical to adjust tank temperature unless the tank will be down for an extended period. Doing so could adversely affect bath stability, which can take a long time to



reach. The commenter suggested revising this practice to specify that it is required only when practical. The other commenter explained that tanks must be maintained at the proper temperature due to the quality requirements for the parts being plated. The commenter also stated that changes in bath temperature interrupt production, adversely affect product quality, and can generate additional waste. The commenter recommended defining the term "not in use" to mean when the shop is not operating, and not when the shop is operating, but tanks or process lines are idled.

Another commenter requested that EPA clarify the management practices specified in the proposed rule as they relate to continuous plating operations. As an example, the commenter stated that EPA should clarify if the management practice related to dripping and drainage in §63.11490(f)(2), "What are my standards and management practices?", can be addressed by using squeegee rolls in continuous plating.

Response: As discussed above, we have expanded the list of potential management practices to include additional practices used in the industry and also changed this final rule to reaffirm that the listed management practices are meant to be applied "as practicable." The expanded list of management practices also includes practices that are more appropriate for continuous plating operations, such as the use of squeegee rolls. In addition, we have reworded specific management practices for

clarity, as suggested by the commenters.

#### F. Compliance Demonstrations

Comment: One commenter requested that EPA confirm that pH measurement of cyanide baths is required only at startup. The commenter noted that a single pH measurement taken when the bath is initially made up makes sense and is adequate because cyanide baths are by nature self-regulating and can last for years if properly maintained. The initial pH measurement could then be reported in the facility's annual compliance certification.

Response: To clarify that pH measurements of affected tanks with cyanide plating baths are required only at startup, we have revised §63.11490(d), "What are my compliance requirements?", to state that a pH measurement is required in such tanks only at startup.

#### G. Burden

Comment: Several commenters expressed concern about the burden that the proposed rule would impose. One commenter remarked that, in addition to imposing an unnecessary burden on industry, the proposed rule would impose a significant burden on states to provide even a minimal level of assistance and outreach. The commenter stated that, given the minimal level of funding available for states to spread across all the area source categories, their efforts could be better spent on a rule that would actually achieve some additional emissions reductions. The

same commenter suggested replacing the annual certification with notification of change as per §63.11176 (40 CFR part 63, subpart HHHHHH, NESHAP for Paint Stripping and Miscellaneous Coating Operations). The commenter believes this may reduce the burden on small facilities.

Another commenter stated that the burden that would be imposed on the industry justifies exempting small facilities from this rule. Such an exemption would also reduce the administrative burden on regulatory agencies.

Another commenter stated that the proposed requirements are more extensive than needed for such low-emitting facilities. The commenter stated that the proposed notification, reporting and recordkeeping requirements would be extremely burdensome for small businesses and especially for small businesses not previously subject to NESHAP. The commenter urged EPA to minimize the requirements for facilities that pose minimum risk. The commenter also urged EPA to provide adequate compliance assistance and outreach. The commenter requested that the outreach be provided well in advance of rule implementation to allow time for training; otherwise, affected plants could be vulnerable to enforcement action. This same commenter stated that EPA has underestimated burden that would result from the proposed rule. The commenter stated that understanding all of the proposed requirements "could take a facility a minimum of one

week's worth of work..." The commenter stated that EPA needs to recalculate the costs of this rule to accurately reflect the burden for notification, reporting, and recordkeeping.

Response: As explained above, we need to regulate the plating and polishing area source category to meet the 90 percent requirement in section 112(c)(3) for emissions of cadmium, chromium, lead, manganese and nickel. In developing the proposed rule, we attempted to minimize the burden on small facilities, while ensuring that this final rule includes sufficient requirements for ensuring compliance. This final rule imposes no testing or emission monitoring requirements. We also have incorporated certain changes in the final rule to further reduce the burden to affected facilities by eliminating the requirement for submission of the annual compliance certifications. With respect to recordkeeping, our understanding is that the required records are already maintained at most facilities as part of routine procedures. Therefore, the recordkeeping requirements do not represent any significant burden on these facilities. Regarding the comment about our estimates of the burden, we based those estimates of the burden on past experience with similar rules. Finally, because we recognize that many of the facilities that will be subject to this final rule are likely to need assistance in understanding what is required to comply, we have already chosen this source category for implementation support.

This support will include a plain language summary of this final rule and items such as examples of the "Initial Notification" and "Notification of Compliance Status." As an example of this type of compliance assistance, for the Chromium Electroplating NESHAP, we developed the publication, "A Guidebook on How to Comply with the Chromium Electroplating and Chromium Anodizing National Emission Standards for Hazardous Air Pollutants" (EPA-453/B-95-001) following promulgation of that rule. The Guidebook, which is available on our website, at <http://www.epa.gov/ttn/atw/chrome/chromepg.html>, provides an overview of that rule, an explanation of compliance dates and how to comply, and other information to help affected facilities understand what is required of them.

#### H. Miscellaneous

Comment: One commenter, who represents a company that performs continuous nickel plating, pointed out that the company was not included in the list of recipients for the Information Collection Request (ICR) and was not given the opportunity to provide input in the rulemaking process. The commenter explained that the company's plating process differs significantly from batch plating processes that appear to be the focus of the proposed rule.

Response: When developing the list of recipients for the ICR, we attempted to identify all companies that potentially

would be affected by the plating and polishing rule. We contacted trade associations and accessed the available information on company websites and on-line databases. We also contacted state and local permitting agencies for information on facilities that might be affected. We recognized that our facility list did not account for all facilities in operation. However, we believed that the facilities identified through this process would be representative of the types of plating and polishing facilities in operation. For those companies that were not included in this information gathering effort, the public comment process offers the opportunity to let their concerns be acknowledged and addressed, and we appreciate the fact that the commenter took advantage of this process to submit these comments on the proposed rule.

We acknowledge that the continuous electroplating process differs from batch plating processes for the reasons identified by this commenter and another commenter. To address this issue, we are including in the final rule separate requirements for continuous plating operations that we believe address the commenter's concerns.

Comment: One commenter pointed out typographical errors in §§63.11500(c), "What are my notification, reporting, and recordkeeping requirements?", and 11512(c), "Who implements and enforces this subpart?"

Response: We appreciate the commenter bringing the errors to our attention. We have made these corrections in the final rule.

Comment: One commenter agreed with EPA's proposed exemption of affected facilities from Title V requirements.

Response: We appreciate the commenter's support of our exemption for affected facilities from title V permitting requirements.

#### I. Non-Significant Comments

A few comments addressed minor clarifications to this rule or other issues that we did not consider to be significant. Those comments and the responses to those comments are summarized in a memorandum that is included in the docket for this final rulemaking (Docket ID No. EPA-HQ-OAR-2005-0084).

### **VI. Impacts of the Final Area Source Standards**

#### A. What are the air impacts?

Since 1990, the plating and polishing industry has reduced their air impacts by voluntary controls that were likely motivated by concerns for worker safety. These controls have reduced approximately 20 tons of the metal HAP (cadmium, chromium, lead, manganese, and nickel) attributed to this industry in the 1990 urban HAP inventory. Although there are no additional air emission reductions as a result of this rule, we believe that this rule will assure that the emission reductions

made by the industry since 1990 will be maintained.

Along with the HAP described above, there is an undetermined amount of PM that has been co-controlled in thermal spraying and mechanical polishing processes that contributed to criteria pollutant emissions in 1990.

B. What are the cost impacts?

All facilities are expected to be achieving the level of control required by the final standard; therefore, no additional air pollution control devices or systems are required. Many of the management and pollution prevention practices are expected to provide a cost savings for facilities, as reported by facilities in the 2006 EPA survey. Therefore, no capital costs are associated with this rule. No operation and maintenance costs are associated with this rule because facilities are already following the manufacturer's instructions for operation and maintenance of pollution control devices and systems.

We estimate the only impact to affected sources is the labor burden associated with the reporting and recordkeeping requirements. We estimated that the cost associated with recordkeeping and reporting requirements for the final rule are \$713 per facility starting in the third year, or less than 0.04 percent of revenues. Costs for initial notifications in the first year are estimated at \$380 per facility, for a total of \$1,094 per facility over the first 3 years for all costs. In the



final rule, we also eliminated the submission of the annual compliance reports unless deviations of the standards occurred during the year. Although not included in the above estimates, the effect of this change can only reduce these costs further, albeit a small amount. Detailed information on our impact estimates for the affected sources is available in the docket. (See Docket Number EPA-HQ-OAR-2005-0084.)

C. What are the economic impacts?

This final standard is estimated to impact a total of 2,900 area source facilities. We estimate that more than 2,600 of these facilities are small entities. Our analysis indicates that this rule will not impose a significant adverse impact on any facilities, large or small. The economic impacts are estimated to be less than 0.04 percent of revenues.

D. What are the non-air health, environmental, and energy impacts?

No detrimental secondary impacts are expected to occur because all facilities are currently achieving the GACT level of control. Therefore, no facilities are required to install and operate new or additional control devices or systems. In addition, no facilities are required to install and operate monitoring devices or systems. Therefore, no additional solid waste will be generated as a result of the PM and metal HAP emissions collected. There also are no additional energy impacts

associated with operation of control devices or monitoring systems.

Because some of the management practices we have required in this rule also have the potential co-benefit of reducing water pollution, there will be a beneficial effect of the final rule to reduce water pollution. However, today's final regulatory changes will not: (1) increase the amount of discharged wastewater pollutants at the industry or facility levels; or (2) interfere with the ability of facilities in the plating and polishing area source category to comply with the Clean Water Act requirements (e.g., Metal Finishing Effluent Guidelines, 40 CFR Part 433).

## **VII. Statutory and Executive Order Reviews**

### **A. Executive Order 12866: Regulatory Planning and Review**

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under the EO.

### **B. Paperwork Reduction Act**

The information collection requirements in this final rule will be submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. The information collection requirements are not enforceable until OMB approves them.

The recordkeeping and reporting requirements in this final rule are based on the requirements in EPA's NESHAP General

Provisions to part 63. This final NESHAP requires plating and polishing area sources to submit an Initial Notification and a Notification of Compliance Status according to the requirements in 40 CFR 63.9 of the General Provisions to part 63.

Records will be required to demonstrate compliance with good operation and maintenance of capture systems and control devices, use of wetting agents and fume suppressants, plating time, use of tank covers, and other management practices. The owner or operator of a plating and polishing facility also is subject to notification and recordkeeping requirements in 40 CFR 63.9 and 63.10 of the General Provisions to part 63. Annual compliance reports are required to be prepared instead of the semiannual excess emissions reports required by the General Provisions to part 63; these reports are only required to be submitted if any violations of the standard occurred during the year.

The average annual burden for this information collection, averaged over the first 3 years of this ICR, is estimated to total 33,290 labor hours per year at a cost of \$1,048,976, which is less than 0.02 percent of revenues. The average annual reporting burden is 6.9 hours per response, with less than one average response per facility for the 2,900 facilities. The only costs attributable to the final standards are associated with the monitoring, recordkeeping, and reporting requirements. There are no capital, operating, maintenance, or purchase of services costs

expected as a result of this final rule. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection requirements contained in this final rule.

#### C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that this final rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

For the purposes of assessing the impacts of this final rule on small entities, small entity is defined as: (1) a small business that meets the Small Business Administration size standards for small businesses found at 13 CFR 121.201 (less than 500 employees for NAICS codes 332813); (2) a small governmental

jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule is estimated to impact a total of 2,900 area source plating and polishing facilities; more than 2,600 of these facilities are estimated to be small entities. We have determined that small entity compliance costs, as assessed by the facilities' cost-to-sales ratio, are expected to be approximately 0.14 percent. The analysis also shows that of the more than 2,600 small entities, no small entities will incur economic impacts exceeding three percent of its revenue. Although this final rule contains requirements for new area sources, we are not aware of any new area sources being constructed now or planned in the next three years, and consequently, we did not estimate any impacts for new sources. Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this final rule on small entities. The standards represent practices and controls that

are common throughout the sources engaged in plating and polishing. The standards also require minimal amount of recordkeeping and reporting needed to demonstrate and verify compliance. These standards were developed in consultation with small business representatives on the state and national level and the trade associations that represent small businesses.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of this final rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other

than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

This final rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector. This final rule is not expected to impact State, local, or tribal governments. Thus, this final rule is not subject to the requirements of sections 202 and 205 of the UMRA. EPA has determined that this final rule contains no regulatory requirements that might significantly or uniquely affect small governments. This final rule contains no requirements that apply to such governments, and impose no obligations upon them. Therefore, this final rule is not subject to section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This final rule does not impose any requirements on State and local governments. Thus, Executive Order 13132 does not apply to this final rule.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process



to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This final rule does not have tribal implications, as specified in Executive Order 13175. This final rule imposes no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this final rule.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

EPA interprets EO 13045 (62 F.R. 19885, April 23, 1997) as applying to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This action is not subject to EO 13045 because it is based solely on technology performance.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law No. 104-113 (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards

in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this final rule will not have

disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. The nationwide standards will reduce HAP emissions and thus decrease the amount of emissions to which all affected populations are exposed.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of Congress and to the Comptroller General of the United States. The EPA will submit a report containing these final rules and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final rules in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This final rule will be effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL

REGISTER].

**National Emission Standards for Hazardous Air Pollutants: Area  
Source Standards for Plating and Polishing Operations  
Page 69 of 114**

**List of Subjects for 40 CFR Part 63**

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

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Dated:

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Stephen L. Johnson,  
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

**PART 63--[AMENDED]**

1. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 et seq.

2. Part 63 is amended by adding subpart WWWW to read as follows:

**Subpart WWWW--National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations**

Sec.

**Applicability and Compliance Dates**

63.11475 Am I subject to this subpart?  
 63.11480 What parts of my plant does this subpart cover?  
 63.11485 What are my compliance dates?

**Standards and Compliance Requirements**

63.11490 What are my standards and management practices?  
 63.11495 What are my compliance requirements?  
 63.11500 What are my notification, reporting, and recordkeeping requirements?

**Other Requirements and Information**

63.11505 What General Provisions apply to this subpart?  
 63.11510 What definitions apply to this subpart?  
 63.11512 Who implements and enforces this subpart?  
 63.11513 [Reserved]

**Tables to Subpart WWWW of Part 63**

Table 1 to Subpart WWWW of Part 63--Applicability of General Provisions to Plating and Polishing Area Sources

**Subpart WWWW--National Emission Standards for Hazardous Air  
Pollutants: Area Source Standards for Plating and Polishing  
Operations**

**Applicability and Compliance Dates**

§63.11475 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.

(1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.

(i) Electroplating other than chromium electroplating (*i.e.*, non-chromium electroplating).

(ii) Electroless or non-electrolytic plating.

(iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

(iv) Dry mechanical polishing of finished metals and formed products after plating.

(v) Electroforming.

(vi) Electropolishing.

(2) An area source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.

(3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in §63.11510, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.

(b) [Reserved]

§63.11480 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in §63.11510, "What definitions apply to this subpart?"

(1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11510, "What definitions apply to this subpart?", and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such



as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

(2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in §63.11510, "What definitions apply to this subpart?"

(3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in §63.11510, "What definitions apply to this subpart?"

(b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.

(c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14, 2008.

(d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.

(1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

(2) Research and development process units, as defined in §63.11510, "What definitions apply to this subpart?"

(3) Process units that are used strictly for educational purposes.

(4) Thermal spraying conducted to repair surfaces.

(5) Dry mechanical polishing conducted to restore the original finish to a surface to apply to restoring the original finish.

(6) Any plating or polishing process that does not use any material that contains cadmium, chromium, lead, or nickel in amounts of 0.1 percent or more by weight, or that contains manganese in amounts of 1.0 percent or more by weight, as reported on the Material Safety Data Sheet for the material.

(e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

§63.11485 What are my compliance dates?

(a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than [INSERT DATE 2 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) If you own or operate a new affected source for which the initial startup date is on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must achieve compliance

with the provisions of this subpart no later than [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(c) If you own or operate a new affected source for which the initial startup date is after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

### **Standards and Compliance Requirements**

#### §63.11490 What are my standards and management practices?

(a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in §63.11510, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must use a wetting agent/fume suppressant, as defined in §63.11510, "What definitions apply to this subpart?", in the bath of the affected tank according to paragraphs (a)(1)(i) through (iii) of this section.

(i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for

the specific type of electrolytic process.

(ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank.

(iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.

(2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.

(i) For batch electrolytic process tanks, as defined in §63.11510, "What definitions apply to this subpart?", you must use a tank cover, as defined in §63.11510, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

(ii) For continuous electrolytic process tanks, as defined in §63.11510, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in §63.11510, whenever the electrolytic process tank is in operation.

(b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in §63.11510, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.

(1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(2) You must use a tank cover, as defined in §63.11510 "What definitions apply to this subpart?", for at least 95 percent of the plating time.

(c) If you own or operate an affected new or existing

process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.

(d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraph (d)(1) and (2) of this section:

(1) You must measure and record the pH of the tank upon start-up. No additional pH measurements are required.

(2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.

(e) If you own or operate an affected new or existing dry mechanical polishing equipment that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.

(1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.

(2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.

(1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric

or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.

(i) You must operate all capture and control devices according to the manufacturer's specifications and instructions.

(ii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(3) For temporary thermal spraying operations, as defined in §63.11510 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) You must document that the amount of time the thermal spraying occurs each day, and where it is conducted.

(ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.

(g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.

(2) Maximize the draining of bath solution back into the



tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

§63.11495 What are my compliance requirements?

(a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §63.11500(b) of "What are my notification, reporting, and recordkeeping requirements?"

(b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.

(c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a wetting agent/fume

suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.

(i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.

(ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a control system, as defined in §63.11510, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.

(i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.

(3) If you own or operate an affected batch electrolytic process tank, as defined in §63.11510, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a tank cover, as defined in §63.11510, to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(iii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(4) If you own or operate an affected continuous electrolytic process tank, as defined in §63.11510, "What definitions apply to this subpart?", that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you cover the tank surface to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.

(i) You must cover at least 75 percent of the surface area of the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.

(iii) You must implement the applicable management

practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(5) If you own or operate an affected 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 §63.11490(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

(i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.

(ii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(6) If you own or operate an affected 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 §63.11490(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.

(i) You must install a tank cover on the affected tank.

(ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.

(iii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11490(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.

(i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at start-up, according to the requirements of §63.11490(d)(1).

(ii) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where



they can be easily accessed by the operators.

(9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.

(i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, fabric filter, or HEPA filter.

(ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.

(i) You must install and operate a control system that is

designed to capture PM emissions from the thermal spraying operation and exhaust them to a fabric or HEPA filter

(ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.

(iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(f)(3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.

(i) You must implement the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.

(d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in

paragraphs (d)(1) through (8) of this section.

(1) You must always operate and maintain your affected source, including air pollution control equipment.

(2) You must prepare an annual compliance certification according the requirements specified in §63.11500(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.

(3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.

(i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.

(ii) For tanks where the wetting agent/fume suppressant is a separate purchased ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.

(A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added

to replenish the tank bath, as in the original make-up of the tank.

(B) You must record each addition of wetting agent/fume suppressant to the tank bath.

(iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to §63.11490(e); or an affected thermal spraying operation that is subject to §63.11490(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.

(i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.

(ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating

instructions.

(iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

(v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

(5) If you own or operate an affected 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 §63.11490(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.

(i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(ii) You must record the times that the affected tank is operated each day.

(iii) You must state in your annual compliance certification that you have limited short-term or flash

electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(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 §63.11490(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 §63.11490(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.

(i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.

(ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.

(iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you cover your tanks to comply with

this subpart, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.

(i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.

(ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.

(8) If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11490(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.

(i) You must implement the applicable management practices during all times that the affected tank or process is in operation.

(ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

§63.11500 What are my notification, reporting, and recordkeeping requirements?

(a) If you own or operate an affected source, as defined in §63.11480(a), "What parts of my plant does this subpart cover?", you must submit an Initial Notification in accordance with

paragraphs (a)(1) through (4) of this section by the dates specified.

(1) The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) of the General Provisions of this part.

(2) The Initial Notification must include a description of the compliance method (*e.g.*, use of wetting agent/fume suppressant) for each affected source.

(3) If you start up your affected source on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(4) If you start up your new affected source after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) and (2) of this section.

(1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in §63.11485, "What are my compliance dates?"

(2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this



section.

(i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.

(ii) Methods used to comply with the applicable management practices and equipment standards.

(iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.

(iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.

(c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.

(1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11490(a)(1), "What are my standards and management practices?", you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

(2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.

(i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11490(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;

(ii) Dry mechanical polishing operation that is subject to §63.11490(e); or

(iii) Permanent thermal spraying operation that is subject to §63.11490(f)(1) or (2).

(3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in §63.11490(b), "What are my standards and management practices?", and you comply with this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.

(4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of §63.11490(a) or a flash or short-term electroplating tank that is subject to

the requirements in §63.11490(b), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.

(5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of §63.11490(a), "What are my standards and management practices?", and you comply by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.

(6) If you own or operate an affected tank that is subject to the management practices specified in §63.11490(g), "What are my standards and management practices?", you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

(7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.

(d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.

(e) You must keep the records specified in paragraphs (e) (1) through (3) of this section.

(1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.

(2) The records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

(3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in §63.11495(d), "What are my compliance requirements?"

(f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

#### **Other Requirements and Information**

§63.11505 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

§63.11510 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

Batch electrolytic process tank means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

Bath means the liquid contents of a tank that is used for electroplating, electroforming, electropolishing, or other metal coating processes at a plating and polishing facility.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds,

plenums, and fans.

Cartridge filter means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Composite mesh pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous electrolytic process tank means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

Control device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control system means the combination of a capture system and

a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (*i.e.*, the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Cyanide plating means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (*e.g.*, cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or

equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or

(3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating with any of the plating and polishing metal HAP, as defined in this section, using hard-faced



abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles.

Electroforming means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

Electroless plating means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Electrolytic plating processes means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

Electroplating means an electrolytic process that uses or

emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

Electropolishing means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing.

Fabric filter means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

Flash electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

General Provisions of this part (40 CFR part 63, subpart A) means the section of the Code of Federal Regulations (CFR) that

addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

HAP means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called "air toxics." The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

High efficiency particulate air (HEPA) filter means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal coating operation means any process performed either in a tank that contains liquids or as part of a spraying operation that applies one or more plating and polishing metal HAP, as defined in this section, to parts and products used in manufacturing. These processes include but are not limited to: non-chromium electroplating; electroforming; electropolishing;

other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.

New source means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: electroplating processes other than chromium electroplating (*i.e.*, non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight, and does not contain manganese in amounts greater than or equal to 1.0 percent by weight, as reported on the Material Safety Data Sheet for the material, is not

considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: electroplating processes other than chromium electroplating (i.e., non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include thermal spraying or dry polishing with machines.

PM means solid or particulate matter that is emitted into the air.

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a *de minimis* manner.

Short-term plating means an electroplating process that uses

or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Tank cover for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting molten or semi-molten metal particles onto a substrate. Commonly-used thermal

spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying.

Water curtain means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

§63.11512 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State,



local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.

(2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.

(3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in §63.90.

(4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A "major change to monitoring" under is defined in §63.90.

(5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in §63.90.

§63.11513 [Reserved]

### **Tables to Subpart WWWW of Part 63**

Table 1 To Subpart WWWW of Part 63. Applicability of General Provisions to Plating and Polishing Area Sources

As required in §63.11505, "What General Provisions apply to this subpart?", you must meet each requirement in the following table that applies to you.

Citation	Subject
63.1 <sup>1</sup>	Applicability..... .
63.2	Definitions..... .
63.3	Units and abbreviations.....
63.4	Prohibited activities.....
63.6(a), (b)(1)-(b)(5), (c) (1), (c)(2), (c)(5), (j)	Compliance with standards and maintenance requirements
63.10(a), (b)(1), (b)(2)(i)- (iii), (xiv), (b)(3), (d)(1), (f)	Recordkeeping and reporting.....
63.12	State authority and delegations..
63.13	Addresses of State air pollution control agencies and EPA regional offices
63.14	Incorporation by reference.....
63.15	Availability of information and confidentiality

<sup>1</sup> Section 63.11480(e), "What parts of my plant does this subpart cover?", exempts affected sources from the obligation to obtain title V operating permits.