

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

Source: 73 FR 37741, July 1, 2008, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11504 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 §63.11511, “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]

§ 63.11505 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 §63.11511, “What definitions apply to this subpart?”

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- (1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11511, “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 §63.11511, “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 §63.11511, “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 §63.11511, “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.

§ 63.11506 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 July 1, 2010.

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- (b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.
- (c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.

Standards and Compliance Requirements

§ 63.11507 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 §63.11511, “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 §63.11511, “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 §63.11511, “What definitions apply to this subpart?”, you must use a tank cover, as defined in §63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.

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- (ii) For continuous electrolytic process tanks, as defined in §63.11511, “What definitions apply to this subpart?”, you must cover at least 75 percent of the surface of the tank, as defined in §63.11511, 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 §63.11511, “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 §63.11511, “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 paragraphs (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.

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- (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 §63.11511 “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 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.

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- (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.

§ 63.11508 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 §63.11509(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 §63.11507(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 §63.11507(g), “What are my standards and management practices?”, as practicable.

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- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(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 §63.11507(a), “What are my standards and management practices?”, and you use a control system, as defined in §63.11511, “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 §63.11507(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 §63.11507(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 §63.11511, “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 §63.11507(a), “What are my standards and management practices?”, and you use a tank cover, as defined in §63.11511, 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 §63.11507(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 §63.11507(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 §63.11511, “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 §63.11507(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.

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- (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 §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(g), “What are my standards and management practices?”, as practicable.

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- (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 §63.11507(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 §63.11507(d)(1).
 - (ii) You must implement the applicable management practices specified in §63.11507(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 §63.11507(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 §63.11507(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 §63.11507(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.

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- (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 §63.11507(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 §63.11507(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 §63.11507(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 to the requirements specified in §63.11509(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 §63.11507(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.

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- (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 §63.11507(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 §63.11507(e); or an affected thermal spraying operation that is subject to §63.11507(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 §63.11507(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 §63.11507(a), “What are my standards and management practices?”, or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b),

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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 §63.11507(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 §63.11507(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.

§ 63.11509 What are my notification, reporting, and recordkeeping requirements?

- (a) If you own or operate an affected source, as defined in §63.11505(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 July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.

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- (4) If you start up your new affected source after July 1, 2008, 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 §63.11506, “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 §63.11507(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 §63.11507(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 §63.11507(e); or
 - (iii) Permanent thermal spraying operation that is subject to §63.11507(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 §63.11507(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

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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 §63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in §63.11507(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 §63.11507(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 §63.11507(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 §63.11508(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

§ 63.11510 What General Provisions apply to this subpart?

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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.

§ 63.11511 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

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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

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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

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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.

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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” 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]

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

As required in §63.11510, “What General Provisions apply to this subpart?”, you must meet each requirement in the following table that applies to you.

Citation	Subject
63.1	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.

¹Section 63.11505(e), “What parts of my plant does this subpart cover?”, exempts affected sources from the obligation to obtain title V operating permits.