

EPA Finalizes Rules for Plating and Polishing Area Sources

The Environmental Protection Agency (EPA) promulgated national emission standards for hazardous air pollutants for plating and polishing operations on July 1, 2008 (73 Federal Register 127). This regulation is found in 40 CFR Part 63 Subpart WWWW. This rule will require all sources meeting the applicability requirements within this category to meet best management practices to reduce hazardous air pollutant emissions and submit an initial notification and notification of compliance status forms.

Who needs to comply with this rule?

You are subject to this rule if you own or operate a plating and polishing facility that uses or emits any of the following plating and polishing metal HAPs (compounds of cadmium, *chromium, lead, manganese, or nickel) and is an area source of HAP emissions (has the potential to emit less than 10 tons per year of a single HAP or less than 25 tons per year of combined HAPs)

A plating and polishing facility is a plant site that engages in one of the following activities:

- a. Electroplating other than chromium electroplating
- b. Electroless or non-electrolytic plating.
- c. Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.
- d. Dry mechanical polishing of finished metals and formed products after plating.
- e. Electroforming.
- f. Electropolishing.

* Regulated sources do not include chromium electroplating and chromium anodizing source, as those sources are subject to 40 CFR 63, Subpart N, "Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

What part of my facility is affected by this rule?

- a. Any tanks that contains one or more of the plating and polishing metal HAP (compounds of cadmium, chromium, lead, manganese, or nickel) 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.
- b. Any thermal spraying operation that applies one or more of the plating and polishing metal HAP listed above.
- c. Any dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP listed above.

What operations are exempted from this rule?

1. Regulated sources do not include chromium electroplating and chromium anodizing source, as those sources are subject to 40 CFR 63, Subpart N, "Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.
2. Research and development process units

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 before plating
6. Any plating or polishing process that only uses materials that do not contain cadmium, chromium, lead, manganese, or nickel of at least 0.1 percent by weight, and do not contain manganese in amounts of at least 0.1 percent by weight, as reported on the Material Safety Data Sheet for the material.

When do I have to comply with this rule?

1. **New sources** (commenced construction or reconstruction source after 3/14/08)
 - a. If startup on or before 7/1/08 must comply by July 1, 2008
 - b. If startup is after 7/1/08 must comply upon startup
2. **Existing sources** (commenced construction or reconstruction source on or before 3/14/08)
 - a. Must comply by July 1, 2010

What do I have to do to comply with this rule?

Non-Cyanide Plating and Polishing Tanks

Must meet one of the following compliance options:

1. Use wetting agent/fume suppressants (WAFS) in the tank
 - a. This option requires a bath chemistry be used that includes a WAFS or must add WAFS separately to the bath.
2. Capture and control emissions using an emission control device
 - a. This option requires the installation, operation and maintenance of a control system that includes a capture device designed to capture the plating and polishing metal HAP from the tank and transport the HAP emissions to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.
3. Use a tank cover
 - a. This option distinguishes between batch process tanks and continuous process tanks. Each has a different requirement.

Short-term of Flash Plating Tanks

Must meet one of the following compliance options:

1. Limit plating time to no more than 1 cumulative hour per day
2. Limit plating time to no more than 3 cumulative minutes per hour of plating time
3. Use a tank cover during at least 95% of the plating time

Cyanide Plating Tanks

Perform and record a one-time measurement of pH in the tank bath

All plating and polishing tanks described above in this section must implement the applicable management practices listed in §63.11490(g) and certify that they have implemented the management practices.

Permanent Thermal Spraying Processes

Existing: (commenced construction on or before 3/14/08)

Control system that is designed to provide capture of the plating and polishing metal HAP emissions from the thermal spraying operation and transport the HAP emissions to a water curtain, fabric filter, or high efficiency particulate air (HEPA) filter.

New: (commenced construction after 3/14/08)

Install a control system that is designed to provide capture and control metal HAP emissions and transports the emissions from the source to a fabric filter, or HEPA filter.

Temporary Thermal Spraying Processes

Document the length or time and location of the temporary thermal spraying, and to meet applicable management practices listed in §63.11490(g).

Dry Mechanical Polishing Operations

Control system that is designed to capture the plating and polishing metal HAP emissions from the dry mechanical polishing operations and transport the metal HAP emissions to a cartridge, fabric or HEPA filter.

What notifications are required?

The initial notification and compliance status notifications must be submitted to your local must be submitted to your local air permitting authority and EPA Region VII. Both of these forms are included in this mailing.

1. Initial notification

New sources (startup after July 1, 2008)

- 120 days after becoming subject to this rule

Existing sources

- October 30, 2008

2. Compliance status notification

New sources (construction or reconstruction commenced after March 14, 2008)

- Upon startup or July 1, 2008, whichever is later

Existing sources

- July 1, 2010

Local Air Permitting Authorities:

Omaha: Chester Black, Omaha Air Quality, at (402) 444-6015 ext. 236.

Lancaster County: Harry Leduc, Lincoln-Lancaster County Health at (402) 441-8034.

Located outside Omaha and Lancaster County: Allison Zach, Nebraska Department of Environmental Quality, at (402) 471-4103.

What reports are required?

1. Annual Notification of Changes Report

- a. Only if there have been changes to information sent in a notification or report or there have been deviations from the rule.
- b. Submit March 1st each year, if applicable.

What records are required?

The following equipment types must keep the records specified below:

1. Cyanide electroplating tanks: must keep one-time pH measurement values
2. Non-cyanide electroplating tanks: must keep the amount and frequency of WAFS additions
3. Flash electroplating tanks: daily plating time
4. Electroplating tanks using covers for compliance option: the time the tank is operated with a cover in place
5. Continuous electroplating tanks: the amount of the tank surface covered and the time the tank is operated with a cover in place and maintenance of any required control systems

Where can I read the rule?

A copy of the applicable rule, National Emission Standards for Hazardous Air Pollutants for Area Source Plating and Polishing Operations can be found at the following link:
<http://www.epa.gov/ttn/atw/area/fr01jy08.pdf>.