

15A NCAC 2D .1111 "MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY", for the ***(affected source ID entered here)*** the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, reporting and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart WWWW, "National Emissions Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations", including Subpart A "General Provisions."

- a. **Compliance Date** - Pursuant to 40 CFR 63.11506, sources which commenced construction or reconstruction on or before March 14, 2008, must be in compliance with 40 CFR 63, Subpart WWWW by July 1, 2010. Sources that commenced construction or reconstruction after March 14, 2008, must be in compliance with 40 CFR 63, Subpart WWWW by July 8, 2008 or upon initial startup of the affected source, whichever is later.
- b. **Standards and Management Practices** - The Permittee shall comply with the following management practices for affected sources that use or emit plating and polishing metal HAP. Plating and polishing metal HAP means materials containing any compounds of cadmium, chromium, lead, manganese or nickel, or any of these metals in elemental form with the exception of lead. Materials that do not contain cadmium, chromium, lead or nickel in amounts greater than 0.1% by weight and do not contain manganese in amounts greater than or equal to 1.0% by weight are not considered to be plating or polishing metal HAPs.

Plating – Tank Cover

- i. Pursuant to 40 CFR 63.11507(a)(3), the Permittee shall comply with the following management practices for the ***affected source ID entered here***:
 - A. For batch electrolytic processes, the Permittee shall use a tank cover over all the effective surface area of the tank for at least 95% of the electrolytic process operating time.
 - B. For continuous electrolytic processes, the Permittee shall cover at least 75% of the surface of the tank whenever the electrolytic process tank is in operation.

Plating – Flash or Short Term Plating

- i. Pursuant to 40 CFR 63.11507(b), the Permittee shall comply with the following management practices for the ***affected source ID entered here***:
 - A. The Permittee 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. **OR**
 - B. The Permittee shall use a tank cover over all the effective surface area of the tank for at least 95% of the electrolytic process operating time.

Plating – Wetting Agent/Fume Suppressant

- i. Pursuant to 40 CFR 63.11507(a)(1), the Permittee shall comply with the following for the ***affected source ID entered here***:

- A. The Permittee shall use a wetting agent/fume suppressant in the bath of the affected tank according to the following:
 - I. The Permittee shall initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.
 - II. The Permittee shall 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 manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank.

Plating – Cyanide Use in Plating bath

- i. Pursuant to 40 CFR 63.11507(d), the Permittee shall comply with the following for the ***affected source ID entered here:***

- A. The plating bath containing cyanide must be operated at all times with a pH greater than or equal to 12.
 - I. The pH of the tank shall be measured and recorded upon start-up. No additional pH measurements are required.

Plating – Control Device

- i. Pursuant to 40 CFR 63.11507(a)(2), the Permittee shall comply with the following for the ***affected source ID entered here:***

- A. The Permittee shall capture and exhaust emissions from the ***affected source ID entered here*** to one or more of the following control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.
 - I. The Permittee must operate and maintain the control devices according to manufacturer's specifications and operating instructions.
 - II. The Permittee shall keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can easily accessed by the operators.
 - III. Following any malfunction or failure of the capture or control device to operate properly, the Permittee must take immediate corrective action to return the equipment to normal operations according to the manufacturer's specifications.

Dry Mechanical Polishing Operations

- i. Pursuant to 40 CFR 63.11507(e), the Permittee shall comply with the following for the ***affected source ID entered here:***

- A. The Permittee shall capture and exhaust particulate emissions from the ***affected source ID entered here*** to one of the following control devices: cartridge, fabric, or high efficiency particulate air (HEPA) filter.
 - I. The Permittee must operate and maintain the control device according to manufacturer's specifications and operating instructions.
 - II. The Permittee shall keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can easily accessed by the operators.
 - III. Following any malfunction or failure of the capture or control device to operate properly, the Permittee must take immediate corrective action to return the equipment to normal operations according to the manufacturer's specifications.

Thermal Spraying Operations

- i. Pursuant to 40 CFR 63.11507(f), the Permittee shall comply with the following for the ***affected source ID entered here***:
 - A. The Permittee shall capture and exhaust particulate emissions from the ***affected source ID entered here*** to one of the following control devices: water curtain, fabric or high efficiency particulate air (HEPA) filter. (NOTE: New thermal spraying operations cannot utilize a water curtain to comply with this standard.)
 - I. The Permittee must operate and maintain the control device according to manufacturer's specifications and operating instructions.
 - II. The Permittee shall keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can easily accessed by the operators.
 - III. Following any malfunction or failure of the capture or control device to operate properly, the Permittee must take immediate corrective action to return the equipment to normal operations according to the manufacturer's specifications.
- ii. Pursuant to 40 CFR 63.11507(g), the Permittee shall comply with the following applicable management practices for each affected source:
 - A. The Permittee shall minimize bath agitation when removing any parts processed in the tank, as practical except when necessary to meet part quality requirements.
 - B. The Permittee shall maximize the draining of the bath solution back into the tank by extending drip time when removing parts from the tank, using drain boards, or withdrawing parts slowly from the tank.

- C. The Permittee shall optimize the design of barrels, racks, and parts to minimize dragout of batch solution (such as by using slotted barrels and tilted racks or by designing parts with flow-through holes).
- D. The Permittee shall use tanks covers, if already owned and available at the facility.
- E. The Permittee shall minimize or reduce heating of process tanks, as practicable.
- F. The Permittee shall perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources.
- G. The Permittee shall 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.
- H. The Permittee shall maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks.
- I. The Permittee shall perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns.
- J. The Permittee shall minimize spills and overflow of tanks.
- K. The Permittee shall use squeegee rolls in continuous or reel-to-reel plating tanks.
- L. The Permittee shall perform regular inspections to identify leaks and other opportunities for pollution prevention.

c. **Recordkeeping Requirements**

Plating – Tank Cover

- i. Pursuant to 40 CFR 63.11508(d)(6), for batch electrolytic processes, the Permittee shall record the times that the tank is operated and the times that the tank is covered on a daily basis.

Plating – Flash or Short Term Plating

- i. Pursuant to 40 CFR 63.11508(d)(5), the Permittee shall record the times that the tank is operated and/or operated and covered on a daily basis.

Plating – Wetting Agent/Fume Suppressant

- i. Pursuant to 40 CFR 63.11508(d)(3), the Permittee shall record the following:
 - A. The addition of the wetting agent/fume suppressant to the original make up of the tank.
 - B. Each addition of wetting agent/fume suppressant to the tank bath.

Plating – Cyanide Use in Plating bath (No additional recordkeeping requirements for this source category.)

Plating – Control Device

- i. Pursuant to 40 CFR 63.11508(d)(4), the Permittee shall record the following:
 - A. The results of all control system inspection, deviations from proper operation, and any corrective action taken.

Dry Mechanical Polishing Operations

- i. Pursuant to 40 CFR 63.11508(d)(4), the Permittee shall record the following:
 - A. The results of all control system inspection, deviations from proper operation, and any corrective action taken.

Thermal Spraying Operations

- i. Pursuant to 40 CFR 63.11508(d)(4), the Permittee shall record the following:
 - A. The results of all control system inspection, deviations from proper operation, and any corrective action taken.
- ii. Pursuant to 40 CFR 63.11509(e), the Permittee shall maintain the following records on-site:
 - A. A copy of the Initial Notification and Notification of Compliance Status and all supporting documentation.
 - B. The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards.
 - C. The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.
 - D. All required maintenance performed on the air pollution control and monitoring equipment.
 - E. The records required to show continuous compliance with each management practice and equipment standard pursuant to 40 CFR Part 63.11508(d).
- iii. Pursuant to 40 CFR 63.11509(c), the Permittee is required to prepare and maintain an annual certification of compliance report. The report must be prepared no later than January 31 of the year immediately following the reporting period.

- iv. All records shall be maintained for a minimum of five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records shall be kept on-site for two (2) years and made available to DAQ personnel upon request. The records can be maintained off-site for the remaining three (3) years.
- d. **Reporting** - In accordance with 40 CFR 63.11509, the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
 - i. An initial notification including a description of the affected sources and compliance methods shall be submitted in accordance with 40 CFR 63.11509(a). For affected sources that commenced startup before July 1, 2008, the initial notification must be submitted by October 29, 2008. For sources that commenced startup after July 1, 2008, the initial notification must be submitted no later than 120 days after becoming subject to the subpart.
 - ii. A Notification of Compliance Status shall be submitted in accordance with 40 CFR 63.11509(b) by the applicable compliance date as described in 40 CFR 63.11506 and Paragraph A of this condition. The notification should include:
 - A. A list of the affected sources and the metal HAP used in or emitted by the sources.
 - B. The methods used to comply with the applicable management practices or emission standards.
 - C. A description of the capture and emission control systems used to comply with the standards.
 - D. A statement by the owner or operator of the affected source(s) as to whether compliance with the applicable standards or requirements is achieved.
 - iii. An annual certification of compliance, as described in 40 CFR 63.11509(c) and a deviation report, as described in 40 CFR 63.11509(d) shall be submitted by January 31 of each year in which a deviation has occurred during the previous year.