Compliance Checklist for National Emission Standards for Hazardous Air Pollutants:

Area Source Standards for Plating and Polishing Operations

40 CFR 63 subpart WWWWWW (6W)

Section 1: General management practices
Section 2: Non-cyanide electroplating, electroforming, or electropolishing
Section 3: Short-term or flash electroplating
Section 4: Electroplating tank that uses cyanide
Section 5: Dry mechanical polishing
Section 6: Thermal spraying

Below are the requirements for a facility to be in compliance for each type of operation that might be at a facility and is affected by the 6W rule. The General Management practices in Section 1apply to all facilities. The specific processes are outlined in Sections 2 through 6 in the form of a checklist of the different options available to achieve compliance for a specific process. This checklist is provided as one method of helping to determine your facility's compliance with the 6W rule and what sections are applicable to the processes at your facility.

Section 1: General Management practices

The following applicable management practices are to be used at all facilities, as practicable:

- ☐ Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
- ☐ 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.
- ☐ 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.
- ☐ Use tank covers, if already owned and available at the facility, whenever practicable.
- ☐ Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
- ☐ Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
- ☐ 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.
- ☐ Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
- ☐ Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.
- ☐ Minimize spills and overflow of tanks, as practicable.
- ☐ Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
- ☐ Perform regular inspections to identify leaks and other opportunities for pollution prevention.

Section 2: Non-cyanide electroplating, electroforming, or electropolishing

If you operate a non-cyanide electroplating, electroforming, or electropolishing tank (electrolytic process tank) that operates at a pH of less than 12, there are three options for compliance. Note which method your facility uses and follow the related requirements.

☐ You use a wetting agent/fume suppressant.

a. Initially, you must add the wetting agent/fume suppressant in the amount recommended by the manufacturer for the specific type of electrolytic process.
b. You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath.
c. 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 agents/fume suppressants.

☐ You capture and exhaust emissions from the tank to a control device.
Indicate which type of control device is used:
Manufacturer of control device: _____
Model of device: _____
Type of device:
☐ Composite Mesh Pad
☐ Packed Bed Scrubber
☐ Mesh Pad Mist Eliminator

For all control devices, the following applies:

a. Operate all capture and control devices according to manufacturer's specifications and operating instructions
b. Keep manufacturer's specifications and instructions at the facility in a location where they can be easily accessed by all operators.

☐ You use a tank cover to control emissions.
Requirements differ based on whether the process is a batch or continuous process.
☐ For batch electrolytic process tanks, the tank cover must cover all of the effective surface area of the tank for at least 95 percent of the process operating time.
☐ For continuous process tanks, you must cover at least 75% f the surface of the tank whenever the process tank is in operation.

Section 3: Short-term or flash electroplating

There are two options to comply with the rule for short-term process tanks.

☐ Limit process time to no more than 1 hour cumulative hour per day or 3 cumulative minutes per hour of plating time or,
☐ Use a tank cover that covers completely the surface of the tank for at least 95 percent of the plating time.

Section 4: Electroplating tank that uses cyanide

For tanks that use cyanide and operate at a pH greater than or equal to 12, the following applies:

☐ Must measure and record the pH of the tank upon start-up.

Section 5: Dry mechanical polishing

Dry mechanical polishing processes must operate a capture system to control particulate matter (PM).

☐ You capture and exhaust emissions from the tank to a control device.
Indicate which type of control device is used:
Manufacturer of control device: _____

Model of device: _____
Type of device:
☐ Cartridge filter
☐ Fabric filter
☐ High Efficiency Particulate Air (HEPA) filter

For all control devices, the following applies:

a. Operate all capture and control devices according to manufacturer's specifications and operating instructions
b. Keep manufacturer's specifications and instructions at the facility in a location where they can be easily accessed by all operators.

Section 6: Thermal spraying

There is a slight difference in requirements based on whether the thermal spraying operation is considered a permanent existing, permanent new, or temporary operation. Permanent existing operations are those that are permanently in place and construction or reconstruction began on or before March 14, 2008. Permanent new operations are those that are permanently in place and construction or reconstruction began after March 14, 2008. Temporary operations are those in use no more than 1 hour per day and is conducted in situ. If a dedicated booth or structure is used, it is not considered temporary.

☐ Permanent Existing Thermal Spraying operation
You must capture and exhaust PM emissions from the operation to a control device
Indicate which type of control device is used:
Manufacturer of control device: _____
Model of device: _____
Type of device:
☐ Water Curtain
☐ Fabric filter
☐ High Efficiency Particulate Air (HEPA) filter

For all control devices, the following applies:

a. Operate all capture and control devices according to manufacturer's specifications and operating instructions
b. Keep manufacturer's specifications and instructions at the facility in a location where they can be easily accessed by all operators.

☐ Permanent New Thermal Spraying operation
You must capture and exhaust PM emissions from the operation to a control device.
Indicate which type of control device is used:
Manufacturer of control device: _____
Model of device: _____
Type of device:
☐ Fabric filter
☐ High Efficiency Particulate Air (HEPA) filter

For all control devices, the following applies:

a. Operate all capture and control devices according to manufacturer's specifications and operating instructions
b. Keep manufacturer's specifications and instructions at the facility in a location where they can be easily accessed by all operators.

☐ Temporary Thermal Spraying operation
You must document the amount of time and where the thermal spraying is conducted.
Amount of time per day: _____
Location: _____