

Supplemental Questions for Industries that Perform Metal Finishing

1. Was the facility constructed after August 31, 1982? (circle yes or no below)

No – construction **started before August 31, 1982.** The company is an Electroplater unless they own more than 50 % of the metal they perform metal finishing on.

Yes – construction **began after August 31, 1982.** The company is a Metal Finisher regardless what percent of the metal they own.

3. Does your company own more than 50% of the metal that undergoes a metal finishing process in a calendar year? Yes ~ No (If yes the company is regulated under 40 CFR 433)

4. Which of the following metal finishing process operations does your company perform?

_____ Electroplating

_____ Electroless Plating

_____ Anodizing

_____ Chemical Etching and Milling

_____ Printed Circuit Board Manufacturing (PCBM)

_____ Coatings such as:

- phosphating

- alodine (chromating)

- passivating (example: nitric acid applied to stainless steel)

- metal coloring

5. Does your company discharge more than 10,000 gallons per day of waste water to the sanitary sewer from any of the metal finishing operations listed above?

Yes ~ No

If the company is regulated under 40 CFR 413 as a job shop electroplater there are 2 sets of discharge limits that will be used based on the number of gallons of wastewater discharged each day from the regulated processes listed in number 4 (above). If a job shop electroplater performs precious metals electroplating then the industry will have to comply with a discharge limit for silver as well if they discharge greater than 10,000 gallons per day.

[Industrial waste from metal finishing operations is wastewater or a chemical solution that was used in any one of the 6 core operations listed above. Typically it is wastewater from cleaning and / or rinsing metal that will or has undergone a metal finishing process.]

Indicate which of the following metal finishing processes are performed at the facility:

1. Electroplating of any of the following metals:

___ Cadmium

___ Chromium

___ Copper

___ Gold (precious metal)

___ Nickel

___ Platinum (precious metal)

___ Silver (precious metal)

___ Tin

___ Zinc

___ Other metal electroplating or combination of metals – list below

List any electroplating process that has cyanide in a plating bath or uses cyanide:

List any other process that uses cyanide: _____

2. Electroless plating? Yes ~ No If yes indicate the type of electroless plating:

___ Copper ___ Nickel Other _____

3. Anodizing? Yes ~ No If yes indicate which of the following acids are used to anodize:

___ Sulfuric Acid ___ Chromic Acid

4. Coating? Yes ~ No If yes indicate which of the following process is performed:

___ Phosphating ___ Chromating (Alodine)

___ Passivating (acid on stainless steel) ___ Metal Coloring

Page 3 - Supplemental Questions Continued

5. Chemical Etching Yes ~ No

Chemical Milling? Yes ~ No

6. Printed Circuit Board Manufacturing? Yes ~ No

7. Does the facility perform metal cleaning? Yes ~ No

If yes which of the following metal cleaning is performed?

Alkaline Cleaning Caustic Cleaning Acid Cleaning Stripping

8. Does the facility have a pretreatment system? Yes ~ No

If yes, answer the following questions:

a. Does the firm treat for hexavalent chromium? Yes ~ No

What reducing agent used to treat for hexavalent chrome? _____

b. Does the firm treat for cyanide? Yes ~ No

What is the name of the oxidizing agent? _____

c. Does the treatment system have a flocculation step? Yes ~ No

d. Does the treatment system have a precipitation step? Yes ~ No

e. Does the treatment system have a pH adjustment step? Yes ~ No

f. Is a sludge generated? Yes ~ No

Name the type of drying method used for sludge _____

9. Check if the firm discharges wastewater to the sewer from any of the following operations:

- Cleaning
- Machining
- Grinding
- Polishing
- Tumbling
- Burnishing
- Impact Deformation
- Pressure Deformation
- Shearing
- Heat Treating
- Thermal Cutting
- Welding
- Brazing
- Soldering
- Flame Spraying
- Sand Blasting
- Other Abrasive Jet Machining
- Electric Discharge Machining
- Electrochemical Machining
- Electron Beam Machining
- Laser Beam Machining
- Plasma Arc Machining
- Ultrasonic Machining
- Sintering
- Laminating
- Hot Dip Coating
- Sputtering
- Vapor Plating
- Thermal Infusion
- Salt Bath Descaling
- Solvent Degreasing,
- Paint Stripping
- Painting
- Electrostatic Painting
- Electropainting
- Vacuum Metalizing
- Assembly
- Calibration
- Testing
- Mechanical Plating