

Instruction Sheet

DEP7007T Metal Plating and Surface Treatment Operations

This form provides a detailed description of all metal plating and surface treatment operations.

Source Name: Enter the name of the facility.

KY EIS (AFS) #: Enter the Kentucky Emissions Inventory Section identification number of the facility. The KY EIS number follows the format: 21-____-_____. A new facility will not have a KY EIS number.

Permit #: Enter the permit number of the permitted facility. This number is found on the front page of the permit. A new facility will not have a permit number.

Agency Interest (AI) ID: Enter the agency interest number of the facility. This number can be found on the front page of the permit. A new facility will not have an agency interest number.

Date: Enter the date the form was completed. If the form is being revised, enter the date the form was revised.

Section T.1: Process Information

Plating Line Name: Enter the name and provide a description of the plating line that both a company official and division personnel can understand.

Proposed/Actual Start Date of Construction: Enter the date the emission unit was constructed, reconstructed, altered, or modified. Identify when construction started, even if it has already occurred. Otherwise, project when construction will start.

Type of Operation: Indicate the type of operation that is to occur by marking “continuous”, “batch”, “open”, “enclosed”, “flash”, or “short-term.”

Operating Schedule: Enter the operating schedule in hours per day, days per week, and weeks per year.

Describe Type of Material being Plated or Treated: Describe the type of material, or substrate, being plated or treated at the facility.

Type of Process: Indicate the type of process that is used by marking “hard chrome”, “decorative chrome”, “chromium anodizing”, “trivalent chromium plating”, “nickel”, “cadmium”, “zinc”, or “other.”

Describe Process: Enter the process description, and give the generally accepted name for the process. Attach a flow diagram. Include all chemical reactions taking place.

Describe Pre-treatment Steps: Describe the pre-treatment steps for plating or treating a substrate. Steps may include, but are not limited to, polishing, grinding, and degreasing. If degreasing is used, complete DEP7007M form.

Describe Intermediate Steps: Describe the intermediate treatment steps before plating substrate. Steps may include alkaline cleaning, acid dipping, chromic acid anodic treatment, or strike plating of copper. Identify and provide SDS for all cleaning, dipping, and anodic treatment solutions.

Describe Plating/Coating Process: Provide additional details about plating process, such as a sequence of tanks and description of process.

Describe Finishing Steps: Describe the finishing steps required for the plating or coating process.

Describe the Final Product: Describe the final product that was plated or treated.

For Curing Ovens: Indicate whether curing ovens were used by checking “yes” or “no”. If “yes”, complete DEP7007B for each curing oven.

Section T.2: Process Tank Information

Plating Line Name: Enter the plating line name.

Emission Unit #/Process Tank ID: Enter the name or the number of the process tank.

Is the tank charged?: Indicate whether the tank is charged by marking “yes” or “no.”

SCC Code: Enter the SCC code.

SCC Units: Enter the SCC units.

Liquid Density: Record the liquid density for the plating line in pounds per cubic feet (lb/ft³).

Bubbles Radius: Enter the bubbles radius.

Surface Tension: Record the surface tension in pounds feet per foot (lbs_f/ft).

Raw Materials

Bath Component/surfactant: Enter the name of the bath component/surfactant.

Bath Concentration: Enter the concentration of the bath component in pounds per gallon (lb/gal).

Maximum Hourly Make-up Rate: Enter the maximum hourly make up rate in specific units per hour (specify the units).

Tank Design:

Tank Temperature: Enter the temperature of the tank under normal operating conditions in degrees Fahrenheit.

Tank Volume: Record the tank volume in gallons.

Tank Surface Area: Record the tank surface area in square feet (ft²).

Rectifier Capacity: Record the rectifier capacity of the tank in ampere-hours.

Hood Flow: Record the hood flow in dry standard cubic feet.

Control Device/Stack #: Enter the number of the stack through which the emissions generated at this emission point enter the atmosphere.

Section T.3: Emission Factor Information

*Provide all SDS or Technical Sheets that identify the pollutant content in each raw material. Use a separate line for each pollutant. Provide references if using AP-42 Compilation of Air Pollutant Emission Factors. If other sources are used, identify as such. Attach additional information to support alternative emission factor sources.

Plating Line Name: Enter the plating line name.

Emission Unit #/Process Tank ID: Enter the name or number of the process tank.

Bath Component: Enter the name of the bath component.

Pollutant: Enter the name of the pollutant. List all regulated pollutants for which a requirement, standard, restriction, limitation, or exemption exists or is proposed.

CAS #: Enter the CAS number for Hazardous Air Pollutants.

Emission Factor:

Value: Enter the emission factor value for the pollutant in terms of pounds of pollutant emitted per SCC Unit.

SCC Units: Enter the SCC units.

Source of Emission Factor: Enter the source of emission factor.

Section T.4: Notes, Comments, and Explanations

Use this sheet provide additional notes, comments, or explanations on the information provided in Sections T.1, T.2, and T.3.