

PUGET SOUND CLEAN AIR AGENCY

Additional Notice of Construction Application Requirements for

ELECTROPLATING AND ANODIZING

General

Description of Equipment and its Purpose [*Specify the type of plating (chromic acid anodizing, chromic acid decorative plating, chromic acid hard plating, trivalent chromium decorative plating) and its purpose (manufacture of -, repair of -, research and development where the primary purpose is the development of new processes and products and not the manufacture of products for commercial sale)*]

Identify which of the following categories the project fits into:

1. New Construction (*New construction also includes existing, unpermitted equipment or processes*)
2. Reconstruction (*Reconstruction means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility*)
3. Modification (*Modification means any physical change in, or change in the method of operation of, a source, except an increase in the Hours of Operation or production rates (not otherwise prohibited) or the use of an alternative fuel or raw material that the source is approved to use under an Order of Approval or operating permit, that increases the amount of any air contaminant emitted or that results in the emission of any air contaminant not previously emitted*)
4. Amendment to Existing Order of Approval Permit Conditions

Estimated Hours of Operation (hr/day, day/wk, wk/yr) [*Estimate the hours of operation for the new plating or anodizing equipment - not necessarily the entire facility.*]

Estimated Installation Date [*Estimate the date when the new plating or anodizing equipment will be put into service.*]

Total Installed Rectifier Capacity for the Facility (amps) [*Specify the total amperage of all of the hard chrome plating tanks at the facility combined. Do not include anodizing or decorative plating tanks.*]

Plating Solution Properties

Chromic Acid Concentration (grams per liter) [*Specify the chromic acid concentration used.*]

Estimated Annual Chromic Acid Usage (gal/yr) [*Estimate the amount of chromic acid to be used annually.*]

Mist Suppressant Used [*Specify the mist suppressant (wetting agent) used to reduce the surface tension of the bath.*]

Solution Temperature (°F) *[Specify the bath temperature during plating or anodizing operations.]*

Items to be Plated or Anodized *[Describe the items to be plated or anodized.]*

Design *[Most design information is available from the manufacturer or vendor. Submittal of a brochure, scale drawing or process and instrumentation diagram will facilitate the review of the permit application.]*

Tank Identification Number *[Specify the number or identification you assign to this tank.]*

Rectifier Capacity (amps) *[Specify the rectifier capacity of the new tank.]*

Tank Surface Area (ft²) *[Specify the surface area of the new tank.]*

Air Sparging (yes/no) *[Specify if air sparging will be used in the new tank.]*

Plating or Anodizing Time (minutes) *[Specify the time required to plate or anodize a part.]*

Emissions Estimate (lb/hr, lb/yr) *[Estimate the emissions of each pollutant and include your calculations. Emission factors are available from <http://www.epa.gov/ttn/chief/ap42/index.html>. Emissions may also be estimated using the emission standards in Section 3.01 of PSCAA Regulation III (see <http://www.pscleanair.org/reg3/reg3.pdf>)]*

Stack *[For units without add-on control equipment. Use appropriate permit forms for scrubbers or demisters.]*

Stack Height (ft) *[Specify the height of the top of the stack above ground level - not above the building or sea level.]*

Stack Diameter or Rectangular Cross-Sectional Dimensions (inches) *[Specify the internal dimensions - not the external dimensions.]*

Exhaust Flowrate (acfm) *[Specify the airflow in actual cubic feet per minute.]*

Exhaust Temperature (°F) *[Specify the temperature of the exhaust leaving the stack.]*

Distance to Nearest Property Line (ft) *[Specify the distance from the base of the stack to the nearest property line.]*

Height, Length and Width of Buildings (ft) *[Specify the approximate dimensions of any buildings that are >40% of the stack height and are located within 5 building heights from the stack.]*

Operation and Maintenance

Method Used to Regulate Surface Tension [*Specify the method (tensiometer or stalagmometer) and frequency that the surface tension will be monitored*]

Method Used to Dispose of Wastewater [*Specify the method to be used to dispose of wastewater (sewer, pick-up by hazardous waste hauler, other - be specific).*]

Describe Preventive Maintenance [*Specify the periodic maintenance recommended by the manufacturer and its frequency*]