

RECEIVED

CHROMIUM ELECTROPLATERS AND ANODIZERS
AIR GENERAL PERMIT EXAMPLE REGISTRATION WORKSHEET AUG 31 2011

DIVISION OF AIR
RESOURCE MANAGEMENT

Facility Identification Number - If known (seven digit number)

0112358

0112358-004

Registration Type

Check one:

INITIAL REGISTRATION - Notification of intent to:

- Construct and operate a proposed new facility.
- Operate an existing permitted facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit). If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. (See "Surrender of Existing Air Operation Permit(s)" below.)
- Operates an existing facility not currently permitted or using an air general permit.

RE-REGISTRATION (for facilities currently using an air general permit) - Notification of intent to:

- Continue operating the facility after expiration of the current term of air general permit use.
- Continue operating the facility after a change of ownership.
- Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C.
- Any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only, if Applicable

All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s):

General Facility Information

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)

CERTIFIED METAL FINISHING, INC.

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a complete registration must be submitted for each.)

N/A

Facility Location (Physical location of the facility, not necessarily the mailing address.)

Street Address: 1420 S.W. 28TH AVENUE

City: POMPAÑO BEACH

County: BROWARD

Zip Code: 33069

4817

Facility Start-Up Date (Estimated start-up date of proposed new facility.)(N/A for existing facility.)

N/A

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
2011 AUG 29 PM 7:11
FACILITY REGISTRATION DIVISION

Facility Contact

Name and Position Title (Plant manager or person to be contacted regarding day-to-day operations at the facility.)
Print Name and Title: LAWRENCE S. KAUFFMAN, GENERAL MANAGER

Facility Contact Telephone Numbers

Telephone: 954-979-0707 Fax: 954-979-4158
Cell phone: (EMERGENCY NUMBER 954-979-1839)
E-mail: LARRY@CERTIFIEDMETALFINISHING.COM

Facility Contact Mailing Address

Organization/Firm: CERTIFIED METAL FINISHING, INC.
Mailing Address: 1420 S.W. 28TH AVENUE Zip Code: 33069 - 4817
City: POMPANO BEACH County: BROWARD

Other Contact/Representative (to serve as additional Department contact)

Name and Position Title
Print Name and Title: DAVID W. SEXTON, JR, PRESIDENT

Other Contact/Representative Telephone Numbers

Telephone: 954-979-0707 Fax: 954-979-4158
Cell phone: EMERGENCY NUMBER 954-979-1839
E-mail: DAVE@CERTIFIEDMETALFINISHING.COM

Other Contact/Representative Mailing Address

Organization/Firm: CERTIFIED METAL FINISHING, INC.
Mailing Address: 1420 S.W. 28TH AVENUE Zip Code: 33069 - 4817
City: POMPANO BEACH County: BROWARD

FLORIDA DEPARTMENT OF
REVENUE
2011 AUG 29 AM 7:11
FINANCIAL SERVICES
ACCOUNTING

Facility Information

1. a. Provide the information below for each hard electroplating machine at the facility. Indicate the type of machine, the date of its purchase, and the date the control device was installed, if applicable.

HARD CHROMIUM PLATING TANKS

DATE PURCHASED	UNIT CLASS (Check one)	DATE CONTROL DEVICE INSTALLED	CONTROL DEVICE (see key)	APPLICABLE STANDARD (see key)
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing		ALL N/A	
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			

Key for Control Device Type

PBS = packed-bed scrubber
 CMP = composite mesh pad
 PBS/CMP = packed-bed scrubber and composite mesh pad
 FS = fume suppressant only
 FS/WA = fume suppressant with a wetting agent
 FM = fiber-bed mist eliminator
 WA = wetting agent

Applicable Standard Key

a = 0.03 mg/dscm
 b = 0.015 mg/dscm
 c = alternative standard for multiple tanks under common control

Is the facility's cumulative potential rectifier capacity greater than 60 million ampere-hours per year?

Yes No

1. b. Provide the information below for each decorative electroplating or anodizing machine at the facility. Indicate the type of machine, the date of its purchase, and the date the control device was installed, if applicable.

DECORATIVE AND ANODIZING TANKS

DATE PURCHASED	UNIT CLASS (Check one)	DATE CONTROL DEVICE INSTALLED	CONTROL DEVICE (see key)	APPLICABLE STANDARD (see key)
12/16/93	<input type="checkbox"/> New <input checked="" type="checkbox"/> Existing	12/16/93	FS/WA	Y
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			
	<input type="checkbox"/> New <input type="checkbox"/> Existing			

2011 AUG 23 AM 7:11
 FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION

Key for Control Device Type

PBS = packed-bed scrubber
CMP = composite mesh pad
PBS/CMP = packed-bed scrubber and composite mesh pad
FS = fume suppressant only
FS/WA = fume suppressant with a wetting agent
FM = fiber-bed mist eliminator
WA = wetting agent

Applicable Standard Key

x = 0.01 mg/dscm
y = 45 dynes/cm
z = records of bath components
(trivalent Cr tanks only)
c = alternative standard for multiple tanks
under common control

2. Indicate how the facility will fulfill the compliance demonstration (check one):

- The facility will conduct an initial performance test
- The facility will use a wetting agent to reduce emissions and will meet the existing surface tension limit in No. 1 above.

Helpful Definitions

"Add-on Air Pollution Control Device" - Equipment installed in the ventilation system of chromium electroplating and anodizing tanks for the purpose of collecting and containing chromium emissions from the tank(s).

"Air Pollution Control Technique" - Any method, such as an add-on air pollution control device or a chemical fume suppressant, that is used to reduce chromium emissions from chromium electroplating and chromium anodizing tanks.

"Base Metal" - The metal or metal alloy that comprises the workpiece.

"Bath Component" - The trade or brand name of each component(s) in trivalent chromium plating baths. For trivalent chromium baths, the bath composition is proprietary in most cases. Therefore, the trade or brand name for each component(s) can be used; however, the chemical name of the wetting agent contained in that component must be identified.

"Chemical Fume Suppressant" - Any chemical agent that reduces or suppresses fumes or mists at the surface of an electroplating or anodizing bath; another term for fume suppressant is mist suppressant.

"Chromic Acid" - The common name for chromium anhydride (CrO₃).

"Chromium Anodizing" - The electrolytic process by which an oxide layer is produced on the surface of a base metal for functional purposes (e.g., corrosion resistance or electrical insulation) using a chromic acid solution. In chromium anodizing, the part to be anodized acts as the anode in the electrical circuit, and the chromic acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

"Chromium Electroplating or Chromium Anodizing Tank" - The receptacle or container in which hard or decorative chromium electroplating or chromium anodizing occurs.

"Composite Mesh-pad System" - An add-on air pollution control device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any retrained particles not collected by the composite mesh pad.

"Construction" - The fabrication (on-site), erection, or installation of a chromium electroplating or anodizing unit.

"Decorative Chromium Electroplating" - The process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 amperes per square meter (A/m²) for the total plating periods of 0.5 to 30 minutes.

FLORIDA DEPARTMENT OF
REVENUE
DIVISION OF
REGISTRATION
0111/11/29 PM 7:11

"Electroplating or Anodizing Bath" - The electrolytic solution used as the conducting medium in which the flow of current is accompanied by movement of metal ions for the purposes of electroplating metal out of the solution onto the workpiece or for oxidizing the base metal.

"Emission Standard" - For the purposes of this permit, the concentration of total chromium allowed to be emitted expressed in milligrams per dry cubic meter (mg/dscm) of air, or the allowable surface tension expressed in dynes per centimeter (dynes/cm).

"Emissions Unit" - Any part or activity of a facility that emits or has the potential to emit any air pollutant.

"Existing" - Any chromium electroplating or chromium anodizing tank the construction or reconstruction of which was commenced on or before December 16, 1993. An existing chromium electroplating or anodizing tank moved within a contiguous facility or to another facility under the same ownership will continue to be regulated as an existing tank.

"Facility" - The major or area source at which chromium electroplating or chromium anodizing is performed. Facility also includes all of the emissions units which are located on one or more contiguous or adjacent properties, and which are under the control of the same person (or persons under common control).

"Fiber-bed Mist Eliminator" - An add-on air pollution control device that removes contaminants from a gas stream through the mechanisms of inertial impaction and Brownian diffusion. These devices are typically installed downstream of another control device, which serves to prevent plugging, and consists of one or more fiber beds. Each bed consists of a hollow cylinder formed from two concentric screens; the fiber between the screens may be fabricated from glass, ceramic, plastic, or metal.

"Foam Blanket" - A type of chemical fume suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution.

"Fresh Water" - Water, such as tap water, that has not been previously used in a process operation or, if the water has been recycled from a process operation, it has been treated and meets the effluent guidelines for chromium wastewater.

"Hard Chromium Electroplating or Industrial Electroplating" - A process by which a thick layer of chromium (typically 1.3 to 760 microns) is electrodeposited on a base material to provide a surface with functional properties such as wear resistance, a low coefficient of friction, hardness, and corrosion resistance. In this process, the part serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Hard chromium electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m² for total plating periods of 20 minutes to 36 hours, depending upon the desired plate thickness.

"Hexavalent Chromium" - The form of chromium in a valence state of +6.

"Large, Hard Chromium Electroplating Facility" - A facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity greater than or equal to 60 million ampere-hours per year (A-hr/yr).

"Major Source" - Any affected source which emits or has the potential to emit 10 or more tons per year of any hazardous air pollutant or 25 or more tons per year of any combination of hazardous air pollutants.

"Maximum Cumulative Potential Rectifier Capacity" - The summation of the total installed rectifier capacity associated with all hard chromium electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the total operating time. The maximum potential operating schedule is based on operating 8,400 hours per year.

"New" - Any chromium electroplating or chromium anodizing tank the construction or reconstruction of which commenced after December 16, 1993.

"Operating Parameter Value" - A minimum or maximum value established for a control device or process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator is in continuous compliance with the applicable emission limitation or standard.

"Owner" or "Operator" - Any person or entity who or which owns, leases, operates, controls or supervises an emissions unit or facility.

"Packed-bed Scrubber" - An add-on air pollution control device consisting of a single or double packed bed that contains packing media on which the chromic acid droplets impinge. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section

"Reconstruction" - The replacement of a chromium electroplating or anodizing tank; or replacement of any components of a chromium electroplating or anodizing system to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new system.

"Research or Laboratory Operation" - An operation whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and that is not involved in the manufacture of products for commercial sale in commerce, except in a de minimus manner.

"Small, Hard Chromium Electroplating Facility" - A facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity less than 60 million A-hr/yr.

"Source" - Each chromium electroplating or anodizing facility.

"Stalagmometer" - A device used to measure the surface tension of a solution.

"Surface Tension" - The property, due to molecular forces, that exists in the surface film of all liquids and tends to keep the liquid from spreading.

"Tank Operation" - The time during which current and/or voltage is being applied to a chromium electroplating tank or chromium anodizing tank.

"Tensiometer" - A device used to measure the surface tension of a solution.

"Trivalent Chromium" - The form of chromium in a valence state of +3.

"Trivalent Chromium Process" - The process used for electrodeposition of a thin layer of chromium onto a base material using a trivalent chromium solution instead of a chromic acid solution.

"Wetting Agent" - A type of chemical fume suppressant that reduces the surface tension of a liquid.

"Year or Yearly" - Any consecutive 12-month period of time.

FLORIDA DEPARTMENT OF
REVENUE
2011 AUG 29 AM 7:11
FRUITLAND ACCOUNTING
REVENUE

CHROMIUM ELECTROPLATERS AND ANODIZERS

Air General Permit Example Registration Worksheet

The Department of Environmental Protection (“Department” or “DEP”) has established an “air general permit” at Florida Administrative Code (“F.A.C.”) Rule 62-210.310(5)(i) for chromium electroplating and anodizing operations. An air general permit is an authorization by rule to construct or operate a specific type of air pollutant emitting facility. Use of such authorization by any individual facility does not require action by the Department. The terms and conditions of the air general permit are set forth in the rule, rather than in a separately issued air construction or air operation permit.

If you are the owner or operator of an eligible facility comprising one or more chromium electroplating and anodizing operations, you may register to use the air general permit at Rule 62-210.310(5)(i), F.A.C., by following the general procedures given at subsections 62-210.310(2) and 62-210.310 (3), F.A.C. To register, use the Department’s electronic registration system (currently under development) or submit all the information specified in the above rules to either of the following addresses, along with the air general permit registration processing fee (\$100.00), payable to FDEP.

Regular USPS Mail Delivery

Department of Environmental Protection
Receipts
Post Office Box 3070
Tallahassee, Florida 32315-3070

or

Overnight Delivery (FedEx, UPS, DHL, etc.)

Department of Environmental Protection
3800 Commonwealth Blvd.
Mail Station 77
Tallahassee, Florida 32399

If you properly register to use an air general permit, and are not denied use of the air general permit by the Department, you are authorized to construct and operate the facility in accordance with the general terms and conditions of Rule 62-210.310, F.A.C., and the specific terms and conditions of Rule 62-210.310(5)(i), F.A.C. Your facility may vary, so be sure your registration describes the operations at your facility in sufficient detail to demonstrate the facility’s eligibility for use of the air general permit and to provide a basis for tracking any future equipment or process changes. Your registration should describe all air pollutant-emitting processes and equipment at the facility, and it should identify any air pollution control measures or equipment used.

The rules do not require any specific format for the registration. This worksheet, however, has been designed to assist owners and operators. Using it as a template for a general permit registration will help ensure that all necessary information is submitted.

Additional information can be found on the Department’s air general permit program website (http://www.floridadep.org/air/emission/air_gp.htm) or by calling the Small Business Environmental Assistance Program Hotline at 1-800-SBAP-HLP (1-800-722-7457).

RECEIVED

AUG 31 2011

DIVISION OF AIR
RESOURCE MANAGEMENT

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

2011 AUG 29 AM 7:11

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION