DRAFT FOR INFORMAL PUBLIC COMMENT AND DISCUSSION

NOTE: This preliminary discussion draft of the proposed amendments to the Chrome Plating ATCM is provided for review purposes only. The draft is subject to ongoing revisions and refinement.

~~Final~~ Draft Regulation Order 4/15/2022

~~The following is the final regulation order for the Air Resources Board's amendments to title 17, California Code of Regulations~~ Amended sections 93102-93102.16 title 17, California Health and Safety Code:

~~Section headings shown in **bold** are to be bold in Barclays California Code of Regulations. Subsection headings shown in *italics* are to be italicized in Barclays California Code of Regulations.~~

§ 93102. Airborne Toxic Control Measure for Chromium Plating and Chromic Acid Anodizing Facilities.

The Airborne Toxic Control Measure for Chromium Plating and Chromic Acid Anodizing Facilities (ATCM) is contained in sections 93102 through 93102.16. The ATCM is organized asfollows:

Sections 93102 through 93102.3 specify the applicability of the ATCM, exemptions, and definitions. Section 93102.4 sets forth requirements for ~~h~~Hexavalent ~~c~~Chromium facilities that differ depending on whether a ~~f~~Facility is an ~~e~~Existing ~~f~~Facility, a ~~m~~Modified~~f~~Facility, or a ~~n~~New ~~f~~Facility. Section 93102.5 sets forth various new requirements that apply to all facilities beginning ~~October 24, 2007~~January 1, ~~,~~ 2024~~6~~ (i.e., all ~~e~~Existing, ~~m~~Modified, and ~~n~~New ~~f~~Facilities). Section 93102.6 contains special provisions that apply only to enclosed ~~h~~Hexavalent ~~c~~Chromium electroplating facilities and facilities that perform electroplating using a ~~t~~Trivalent ~~c~~Chromium bath.

Sections 93102.7 through 93102.14 contain additional requirements that apply to all facilities, unless an exception is provided in this ATCM. Most of the requirements in sections 93102.7 through 93102.14 have been in effect since 1998. Section 93102.15 sets forth requirements that apply to the manufacture, sale, supply, offer for sale, and use of chromium plating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing kits in California. There are ~~nine~~ eleven appendices to the ATCM; these appendices are contained in section 93102.16.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.1 Applicability.

(a) This regulation shall apply to:

(1) The ~~o~~Owner or ~~o~~Operator of any ~~f~~Facility performing ~~h~~Hard ~~c~~Chromium ~~e~~Electroplating, ~~d~~Decorative ~~c~~Chromium ~~e~~Electroplating,or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing.

(2) Any ~~p~~Person who sells, supplies, offers for sale, uses, or manufactures for sale in California a chromium electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing kit.

~~(b) *Title V Permits.*~~

~~The owner or operator of a major source subject to the requirements of this section is required to obtain a title V permit (See 42 U.S.C. 7401, et seq.) from the permitting authority of the district in which the major source is located.~~

~~(c)~~(b) *Severability.*

Each ~~part~~ provision of this ATCM shall be deemed severable, and in the event that any ~~part~~ provision of this ATCM is held to be invalid, the remainder of this ATCM shall continue in full force and effect.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.2 Exemptions.

~~(a) This regulation shall not apply to process tanks associated with a chromium electroplating or chromic acid anodizing process, but in which neither chromium electroplating nor chromic acid anodizing is taking place. Examples of such tanks include, but are not limited to, rinse tanks, etching tanks, electro stripping tanks and cleaning tanks. Tanks that contain a chromium solution, but in which no electrolytic process occurs, are not subject to this regulation. An example of such a tank is a chromium conversion coating tank where no electrical current is applied.~~

(a) The requirements of sections 93102.4 and 93102.11 do not apply during periods of equipment ~~b~~Breakdown, provided the provisions of the ~~p~~Permitting ~~a~~Agency's ~~b~~Breakdown rule are met (see Appendix 6).

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety

Code; and 40 CFR Part 63 Subpart N.

§ 93102.3 Definitions.

(a) For the purposes of this regulation, the following definitions shall apply:

(1) *"Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device"* means equipment installed in the ventilation system of ~~c~~Chromium ~~e~~Electroplatingand ~~a~~Anodizing ~~t~~Tank(s) for the purposes of collecting and containing chromium emissions from the tank(s).

~~(1)~~(2) "Airlock System" means a transitional space that typically has two doors in a series to separate a controlled environment (Building Enclosures or Permanent Total Enclosures) from another area. The two doors should be interlocked to avoid being opened at the same time and ventilated with filtered supply air, with return or exhaust air to exit.

~~(2)~~(3) *"Air ~~p~~Pollution ~~c~~Control ~~t~~Technique"* means any method, such as an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device, ~~m~~Mechanical ~~f~~Fume ~~s~~Suppressant or a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant, that is used to reduce chromium emissions from ~~c~~Chromium ~~e~~Electroplating and~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tanks.

~~(3)~~(4) *"Ampere-~~h~~Hours*" means the integral of electrical current applied to a plating tank (amperes) over a period of time (hours).

~~(4)~~(5) *"Annual ~~p~~Permitted ~~a~~Ampere-~~h~~Hours"* means the maximum allowable chromium plating or anodizing rectifier production in ~~a~~Ampere-~~h~~Hours, on an annual basis as specified in the ~~p~~Permitting ~~a~~Agency's Permit to Operate for the ~~f~~Facility.

(6) *"Area ~~s~~Source"* means any stationary source of hazardous airpollutants that is not a ~~m~~Major ~~s~~Source as defined in this part.

(7) "Approved Cleaning Method" means cleaning using a wet mop, damp cloth, wet wash, ~~l~~Low ~~p~~Pressure ~~s~~Spray ~~n~~Nozzle, HEPA ~~v~~Vacuum, or other method as approved by the Executive Officer, delegated official, or ~~p~~Permitting ~~a~~Agency.

~~(5)~~(8) "Associated Process Tank" means any tank in the process line of a Tier I, Tier II, or Tier III Hexavalent Chromium

Tank.

(9) *"Base ~~m~~Material"* means the material, typically metal or metal alloy, or plastic, thatcomprises the workpiece, which is subject to Hard Chromium Electroplating, Decorative Chromium Electroplating, or Chromic Acid Anodizing.

~~(6)~~(10) "Barrier" means a physical divider that can be fixed or portable such as a wall, welding screen, plastic strip curtains, etc.

~~(7)~~(11) *"Bath ~~c~~Component"* means the trade or brand name of each component(s) in ~~t~~Trivalent ~~c~~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.~~

(12) *"Breakdown"* means an unforeseeable impairment of an air pollution control equipment or related operating equipment which causes a violation of any ~~e~~Emission ~~l~~Limitation or restriction prescribed by a ~~p~~Permitting ~~a~~Agency's rule or by State law and which: is not the result of neglect or disregard of any air pollution control law, rule, or regulation; is not intentional orthe result of negligence, or improper maintenance; is not a recurrent ~~b~~Breakdown of the same equipment; and, does not constitute a nuisance pursuant to section 41700 of the California Health and Safety Code, with the burden of provingthe criteria of this section placed upon the ~~p~~Person seeking to come under the provisions of this law.

(13) "Building Enclosure" means a permanent building or physical structure, or portion of a building, enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-off), with limited openings to allow access for people, vehicles, equipment, or parts. A room within a Building Enclosure that is completely enclosed with a floor, walls, and a roof would also meet this definition.

~~(8)~~(14) *"Chemical ~~f~~Fume ~~s~~Suppressant"* means any chemical agent that reduces or suppresses fumes or mists at the surface of an ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath; another term for fume suppressant is mist suppressant.

~~(9)~~(15) *"Chromic ~~a~~Acid"* means the common name for chromiumanhydride ($H_2CrO_{~~3~~4}$).

(16) *"Chromic ~~a~~Acid ~~a~~Anodizing"* means the electrolytic process

by which an oxide layer is produced on the surface of a ~~b~~Base ~~m~~Material for functional purposes (e.g., corrosion resistance or electrical insulation) using a ~~c~~Chromic ~~a~~Acid solution. In ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing, the part to be anodized acts as the anode in the electrical circuit, and the ~~c~~Chromic ~~a~~Acid solution, with a concentration typically ranging from 50 to 100 grams per liter (g/L), serves as the electrolyte.

~~(10)~~(17) "Chromic Acid Mist" means the fine droplets of Chromic Acid formed during the electroplating process and emitted from the Chromium Plating Tank.

(18) *"Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank"* *or "Chromium Plating Tank or Anodizing Tank"* means the receptacle or container in which hard or Decorative ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing occurs, along with the following accompanying internal and external tank components needed for ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing. These tank components include, but are not limited to, rectifiers fitted with controls to allow for voltage adjustments, heat exchanger equipment, and circulation pumps.

~~(11)~~(19) *"Chromium Trioxide"* means a chromium oxide composed of a single chromium atom with an oxidation state of +6 bound to three oxygen atoms, chemical formula CrO_3.

(20) *"Composite ~~m~~Mesh-~~p~~Pad ~~s~~System"* means an ~~a~~Add-on ~~a~~Air ~~p~~Pollution~~c~~Control ~~d~~Device typically consisting of several mesh-pad stages to remove particles.

~~(12)~~(21) "Continuous Passivation" means a functional Hexavalent Chromium plating process by which a Base Material is passed through an electrolytic Hexavalent Chromium solution for the purposes of creating a chemically inert surface on the Base Material.

~~(13)~~(22) *"Decorative ~~c~~Chromium ~~e~~Electroplating"* means the process by which a thin layer of chromium (typically 0.003 to 2.5 micrometers) is electrodeposited on a ~~b~~Base ~~m~~Material ~~metal, plastic, or undercoating material~~ 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/m^2) for total plating times ranging between 0.5 to 5 minutes.

~~(14)~~(23) *"Dragout"* means fluid containing ~~h~~Hexavalent ~~c~~Chromium that adheres to parts when they are removed from a tank.

~~(15)~~(24) *"Electroplating or ~~a~~Anodizing ~~b~~Bath"* means the electrolytic solution used as the conducting medium in which the flow of current is accompanied by movement of metal ions for the purpose of electroplating metal out of the solution onto a workpiece or for oxidizing the ~~b~~Base ~~m~~Material.

~~(16)~~(25) *"Emission ~~l~~Limitation"* means, for ~~t~~Trivalent ~~c~~Chromium plating, the concentration of total chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm). For ~~h~~Hexavalent ~~c~~Chromium plating or anodizing, the allowable ~~s~~Surface ~~t~~Tension expressed in dynes per centimeter (dynes/cm) or the milligrams of ~~h~~Hexavalent ~~c~~Chromium per ampere-hour (mg/amp-hr) of electrical charge applied to the ~~c~~Chromium ~~e~~Electroplating or ~~a~~Anodizing ~~t~~Tank, or the concentration of chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm).

~~(17)~~(26) *"Enclosed ~~h~~Hexavalent ~~c~~Chromium ~~e~~Electroplating ~~t~~Tank"* means ahard, decorative or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank using a ~~h~~Hexavalent ~~c~~Chromium solution that is equipped with an enclosing hood and ventilated at half the rate or less than that of a ventilated open surface tank of the same surface area.

(27) *"Enclosed ~~s~~Storage ~~a~~Area"* means any space or structure used to contain material that prevents its contents from being emitted into the atmosphere. This includes cabinets, closets or sheds designated for storage.

~~(18)~~(28) "Enclosure Opening or Building Enclosure Opening" means any opening that is designed to be part of a Building Enclosure or Permanent Total Enclosure, such as passages, doorways, bay doors, vents, roof openings, and windows. The term excludes openings that are designed to accommodate and generally conform to a stack or duct for a Building Enclosure or Permanent Total Enclosure.

~~(19)~~(29) "*Executive Officer"* means the Executive Officer of the California Air Resources Board, or his or her delegate.

~~(20)~~(30) *"Existing ~~f~~Facility"* means a ~~f~~Facility that is in operation before~~October 24, 2007~~January 1, 2024.

~~(21)~~(31) *"Facility"* means the major or ~~a~~Area ~~s~~Source at which

chromium electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing is performed and/or any ~~s~~Source or group of ~~s~~Sources or other contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of way, and are owned or operated by the same ~~p~~Person (or by ~~p~~Persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2, aslast amended September 2, 1997.

~~(22)~~(32) *"Fiber-~~b~~Bed ~~m~~Mist ~~e~~Eliminator"* means an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device that removes particles from a gas stream through the mechanisms of inertial impaction and Brownian diffusion.

~~(23)~~(33) *"Foam ~~b~~Blanket"* means the type of ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant that generates a layer of foam across the surface of a solution when current is applied to that solution. A ~~f~~Foam ~~b~~Blanket does not lower ~~s~~Surface ~~t~~Tension of a liquid.

~~(24)~~(34) *"Fresh ~~w~~Water"* means 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.

~~(25)~~(35) *"Fugitive ~~d~~Dust"* means any solid particulate matter that may contain ~~h~~Hexavalent ~~c~~Chromium that has the potential to become airborne by natural or man-made activities. "Fugitive dust" does not include particulate matter emitted from an exhaust stack.

~~(26)~~(36) *"Hard ~~c~~Chromium ~~e~~Electroplating or Functional Chromium Electroplating or ~~i~~Industrial ~~c~~Chromium ~~e~~Electroplating"* means a process by which a thick layer of chromium (typically greater than 1.0 micrometers) is electrodeposited on a ~~b~~Base ~~m~~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. The ~~h~~Hard ~~c~~Chromium ~~e~~Electroplating process is performed at current densities typically ranging from 1,600 to 6,500 A/m^2 for total plating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness. This definition also includes Continuous Passivation as defined in Section 93104.3(a)(~~19~~20).

~~(27)~~(37) *"Hexavalent ~~c~~Chromium"* means the form of chromium in

avalence state of +6.

(38) *"High Efficiency Particulate ~~Arrestor~~ Air (HEPA) filter"* means filter(s) rated at 99.97 percent or more efficient in collecting particle sizes 0.3 micrometers.

~~(28)~~(39) "HEPA Vacuum" means a vacuum that uses a HEPA filter by design.

~~(29)~~(40) *"Initial ~~s~~Start ~~u~~Up"* means the first time a ~~n~~New ~~f~~Facility begins production or the first time a modified chromium plating or anodizing tank begins operating at a ~~m~~Modified ~~f~~Facility. If suchproduction or operation occurs prior to ~~October 24, 2007~~ January 1, 2024, the date of "Initial Start ~~u~~Up" is ~~October 24, 2007~~ January 1, 2024"Initial Start ~~u~~Up" does not include operation solely for testing of equipment or subsequent startup of permit units following malfunction or shutdown.

~~(30) *"Large, hard chromium electroplating facility"* means a facility that performs hard chromium electroplating and emits greater than or equal to 10 pounds per year (lbs/yr) controlled emissions of hexavalent chromium.~~

(41) *"Leak"* means the release of chromium emissions from any opening in the emission collection system prior to exiting the emission control device.

~~(31)~~(42) "Low Pressure Spray Nozzle" means a water spray nozzle capable of regulating water pressure to 35 pounds per square inch or less.

~~(32)~~(43) *"Major ~~s~~Source"* means any stationary source, or group of stationary sources located within a contiguous area and under common control, that emits, or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant, or 25 tons per year or more of any combination of hazardous air pollutants.

~~(33)~~(44) *"Maximum ~~c~~Cumulative ~~p~~Potential ~~r~~Rectifier C~~c~~apacity"* means the summation of the total installed rectifier capacity associated with the ~~h~~Hard ~~c~~Chromium ~~e~~Electroplating ~~t~~Tanks at a ~~f~~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 24 hours per day, 7 days per week, 50 weeks per year.

~~(34)~~(45) *"Mechanical ~~f~~Fume ~~s~~Suppressant"* means any device, including but not limited to polyballs, that reduces fumes or mist at the surfaces of an ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath by direct contact with the surface of the bath.

~~(35) *"Medium, hard chromium electroplating facility"* means a facility that performs hard chromium electroplating and emits greater than 2 pounds per year (lbs/yr) controlled emissions but less than 10 pounds per year (lbs/yr) controlled emissions of hexavalent chromium.~~

~~(36)~~(46) *"Modification"* means either:

(A) any physical change in, change in method of operation of, or addition to an existing permit unit that requires an application for a permit to construct and/or operate and results in an increase in ~~h~~Hexavalent ~~c~~Chromium emissions. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment, unless previously limited by an enforceable permit condition, shall not include:

1. an increase in the hours of operation; or

2. a change in ownership of a ~~f~~Facility; or

3. an increase in the annual ~~a~~Ampere-~~h~~Hours, unless such increase will cause a ~~f~~Facility to be subject to a different requirement in Table 93102.4 of section 93102.4.

(B) the addition of any new ~~c~~Chromium ~~p~~Plating or ~~a~~Anodizing ~~t~~Tankat an ~~e~~Existing ~~f~~Facility which increases ~~h~~Hexavalent ~~c~~Chromium emissions; or

(C) the fixed capital cost of the replacement of components exceeding 50 percent of the fixed capital cost that would be required to construct a comparable ~~n~~New ~~f~~Facility.

~~(37)~~(47) *"Modified ~~f~~Facility"* means any ~~f~~Facility which has undergone a ~~m~~Modification.

~~(38)~~(48) *"New ~~f~~Facility"* means any ~~f~~Facility that begins initial operations on or after ~~October 24, 2007~~January 1, 2024. "New Facility" does not include the installation of a new ~~c~~Chromium ~~p~~Plating or ~~a~~Anodizing ~~t~~Tank atan ~~e~~Existing ~~f~~Facility or the ~~m~~Modification of an ~~e~~Existing ~~f~~Facility.

~~(39)~~(49) *"Operating ~~p~~Parameter ~~v~~Value"* means 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 ~~o~~Operating ~~p~~Parameter ~~v~~Values, determines that an ~~o~~Owner or~~o~~Operator is in continual compliance with the applicable ~~e~~Emission ~~l~~Limitation or standard.

~~(40)~~(50) *"Owner or Operator"* means a ~~p~~Person who is the ~~o~~Owner or the ~~o~~Operator of a ~~f~~Facility performing ~~h~~Hard ~~c~~Chromium ~~e~~Electroplating, ~~d~~Decorative ~~c~~Chromium ~~e~~Electroplating, or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing.

(51) *"Packed-~~b~~Bed ~~s~~Scrubber"* means an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control~~d~~Device consisting of a single or double packed-bed that contains packing media on which the ~~c~~Chromic ~~a~~Acid droplets impinge.

(52) "Permanent Total Enclosure" means a permanent building or containment structure, enclosed with a floor, wall, and a roof to prevent exposure to the elements (e.g precipitation, wind, run-off) that has limited openings to allow access for people and vehicles, that is free of breaks or deterioration that could cause or result in fugitive emissions, and has been evaluated to meeting the design requirements set forth in U.S. EPA Method 204 ,or other design approved by the Executive Officer, designated official, or ~~p~~Permitting ~~a~~Agency.

~~(41)~~(53) *"Permitting ~~a~~Agency"* means the local air pollution control or airquality management district.

(54) *"Person"* shall have the same meaning as defined in Health and Safety Code section 39047.

(55) "PFAS" means per- and polyfluoroalkyl substances.~~,~~ PFAS are a group of synthetic chemicals that continue to be released into the environment throughout the lifecycle of manufacturing, processing, distribution in commerce, use, and disposal.

(56) "PFOS" means perflourooctane sulfonic acid (CAS No.1763-23-1).

~~(42)~~(57) "PFOS Compound" means a compound that contains any PFOS.

~~(43)~~(58) *"Responsible ~~o~~Official"* means one of the following:

(A) For a corporation: ~~A~~a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other ~~p~~Person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such ~~p~~Person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

1. The facilities employ more than 250 ~~p~~Persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

2. The delegation of authority to such representative is approved in advance by the Administrator.

(B) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(C) For a municipality, state, Federal, or other public agency: either a principal ~~e~~Executive ~~o~~Officer or ranking elected official. For the purposes of this part, a principal ~~e~~Executive ~~o~~Officer of a Federal agency includes the chief ~~e~~Executive ~~o~~Officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA).

~~(44)~~(59) For ~~s~~Sources (as defined in this part) applying for or subject to a title V permit: "~~r~~Responsible ~~o~~Official" shall have the same meaning as defined in 40 CFR Part 70 or federal titleV regulations in this chapter (42 U.S.C. 7401, et seq.), whichever is applicable.

~~(45)~~(60) "*School ~~u~~Under ~~c~~Construction*" means any property that meets any of the following conditions:

(A) construction of a school has commenced; or

(B) a CEQA Notice for the construction of a school has been issued; or

(C) a school has been identified in an approved local government specific plan.

~~(46)~~(61) *"Sensitive ~~r~~Receptor"* means any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten

through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. A ~~s~~Sensitive ~~r~~Receptor includes long term carehospitals, hospices, prisons, and dormitories or similar live-inhousing.

~~(47) *"Small, hard chromium electroplating facility"* means a facility that performs hard chromium electroplating and emits less than or equal to 2 pounds per year (lbs/yr) controlled emissions of hexavalent chromium.~~

~~(48)~~(62) *"Source"* means any chromium electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing operation and any equipment or materials associated with the selected ~~associated a~~Air ~~p~~Pollution ~~c~~Control ~~t~~Technique used to control emissions from the Chromium Electroplating or Chromic Acid Anodizing operation.

~~(49)~~(63) *"Stalagmometer"* means an instrument used to measure the ~~s~~Surface ~~t~~Tension of a solution by determining the mass of a drop of liquid, by weighing a known number of drops or by counting the number of drops obtained from a given volume of liquid.

~~(50)~~(64) "*Substantial ~~u~~Use*" of ~~an~~a Permitting Agency ~~A~~authority to ~~C~~construct means one or more of the following: (A) the equipment that constitutes the ~~s~~Source has been purchased or acquired; (B) construction activities, other than grading or installation of utilities or foundations, have begun and are continuing; or (C) a contract to complete construction of the ~~s~~Source within one year has been entered into.

~~(51)~~(65) "*Surface ~~t~~Tension*" means the property, due to molecular forces,that exists in the surface film of all liquids and tends to prevent liquid from spreading.

~~(52)~~(66) *"Tank"* means the structure or receptacle containing the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath.

(67) *"Tank ~~o~~Operation"* means the time in which current and/or voltage is being applied to a ~~c~~Chromium ~~e~~Electroplating ~~t~~Tank or a~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank.

~~(53)~~(68) "Tank Process Area" means the area in the Facility within 15 feet of any Tier I, Tier II, or Tier III Hexavalent Chromium Tank(s), or to the nearest wall of a Building Enclosure or Permanent Total Enclosure, whichever is closer.

(69) *"Tensiometer"* means an instrument used to measure the ~~s~~Surface ~~t~~Tension of a solution by determining the amount of force needed to pull a ring from the liquid surface. The amount of force is proportional to the ~~s~~Surface ~~t~~Tension.

(70) "Tier I Hexavalent Chromium Containing Tank" or "Tier I Tank" means a tank permitted as containing a Hexavalent Chromium concentration of 1,000 parts per million (ppm) or greater and that is not a Tier II or Tier III Hexavalent Chromium Tank.

(71) "Tier II Hexavalent Chromium Containing Tank" or "Tier II Tank" means a tank that is operated or permitted to operate ~~by the SCAQMD~~ within the range of temperatures and corresponding ~~h~~Hexavalent ~~c~~Chromium concentrations specified in Appendix 9 and that is not a Tier III Hexavalent Chromium Tank.

(72) "Tier III Hexavalent Chromium Containing Tank" or "Tier III Tank" means a tank that meets any of the following:

(A) Is operated or permitted to operate by the Permitting Agency within the range of temperatures and corresponding Hexavalent Chromium concentrations specified in Appendix 10; or

(B) Contains a Hexavalent Chromium concentration greater than 1,000 ppm, and uses air sparging as an agitation method or is electrolytic; or

~~(54)~~(C) Is a Hexavalent Chromium Electroplating or Chromic Acid Anodizing Tank.

~~(55)~~(73) *"Trivalent ~~c~~Chromium"* means the form of chromium in avalence state of +3.

(74) *"Trivalent ~~c~~Chromium ~~p~~Process"* means the process used forelectrodeposition of a thin layer of chromium onto a ~~b~~Base ~~m~~Material using a ~~t~~Trivalent ~~c~~Chromium solution instead of a ~~c~~Chromic ~~a~~Acid solution.

(75) "Vestibule" means a passage, hall, or room between the Building Enclosures or Permanent Total Enclosures and the rest of the building or the outside.

~~(56)~~(76) "Ultra-Low Particulate Air Filter" or "ULPA Filter" means filter(s) rated at 99.9995 percent or more efficient in collecting particle sizes 0.1 micrometers and larger.

~~(57)~~(77) *"Weekly"* means at least once every seven calendar days.

~~(58)~~(78) *"Wetting ~~a~~Agent"* means the type of ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant that reduces the ~~s~~Surface ~~t~~Tension of a liquid.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§93102.4 Requirements for Existing, Modified, and New Hexavalent Chromium Plating and Chromic Acid Anodizing Facilities.

This section 93102.4 sets forth requirements that apply to all ~~h~~Hexavalent ~~c~~Chromium hard and ~~d~~Decorative ~~c~~Chromium ~~e~~Electroplating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing facilities, except for facilities subject to section 93102.6 (i.e., facilities that perform electroplating using a ~~t~~Trivalent ~~c~~Chromium bath or ~~are~~ facilities with ~~e~~Enclosed ~~h~~Hexavalent ~~c~~Chromium ~~e~~Electroplating ~~t~~Tanks). The requirements differ depending on whether a ~~f~~Facility is an ~~e~~Existing~~f~~Facility, a M~~m~~odified F~~f~~acility or a N~~n~~ew F~~f~~acility. Additional requirements that apply to all facilities (*i.e.*, all ~~e~~Existing, ~~m~~Modified,and ~~n~~New ~~f~~Facilities) are contained in section 93102.5, sections 93102.7 through 93102.14 and section 93102.16.

Subsection (a) contains the requirements for new Hexavalent Chromium electroplating or Chromic Acid anodizing operations. Subsection (b) contains requirements for Existing Facilities that emit Hexavalent Chromium. Subsection (c) contains limits for Existing Facilities that shall remain in effect until the requirements of subsection (b) become effective. ~~Subsection (a) contains the requirements to reduce hexavalent chromium emissions that were in effect before October 24, 2007. The limits in subsection (a) shall remain in effect for a facility until the limits in subsection (b) become effective. Oncethe limits in subsection (b) become effective for an individual facility the limits in subsection (a) no longer apply.~~

~~The limits in subsection (b) are phased in depending on the amount of annual permitted ampere-hours and the distance to the nearest sensitive receptor. Depending on the facility, limitsin subsection (b) become effective on April 24, 2008, October 24, 2009, October 24, 2010, or October 24, 2011.~~

(a) ~~*Requirements that Apply to Existing Hexavalent Chromium Electroplating and Chromic Acid Anodizing Facilities.*~~

~~An existing facility is a facility that is in operation before October 24, 2007.~~

~~In addition to the limits specified in this subsection (a) all facilities (*i.e.*, all existing, modified, and new facilities) must comply with the applicable provisions contained in section 93102.5, sections 93102.7 through 93102.14, and section 93102.16.~~

(1) *Limits that Apply to Existing Hard Chromium Electroplating Facilities Until the Limits in subsection 93102.4(b) Become Effective.*

During tank operation, each owner or operator of an existing, facility shall control hexavalent chromium emissions discharged to the atmosphere from that facility by reducing the hexavalent chromium emissions from the add-on air pollution control device(s) serving the electroplating tank(s) as identified below.

(A) *Limits that Apply Until the Limits in subsection 93102.4(b) Become Effective for Existing Hard Chromium Electroplating Facilities that Began Operations on or before December 16, 1993.*

Facility Size	*Controlled Emissions*[1] *(lbs/yr)*	*Requirement*		
		≤ *60 million amp-hrs*[2]	*> 60 million amp-hrs*[2]	
			Option 1	Option 2[3]
Large	≥ 10 lbs/yr	≤ 0.006 mg/amp-hr	≤ 0.006 mg/amp-hr	≤ 0.006 mg/amp-hr
Medium	< 10 lbs/yr but > 2 lbs/yr	≤ 0.03 mg/amp-hr	≤ 0.006 mg/amp-hr	≤ 0.03 mg/amp-hr and 0.015 mg/dscm
Small	≤ 2 lbs/yr	≤ 0.15 mg/amp-hr	≤ 0.03 mg/amp-hr	≤ 0.15 mg/amp-hr and 0.015 mg/dscm

[1] combined hexavalent or total chromium emissions from hard chromium plating operations

[2] maximum cumulative potential rectifier capacity or usage limit

[3] "Option 2" is an alternative emission limitation for small and medium facilities that elect to demonstrate compliance with both a mg/amp-hr and a mg/dscm requirement

(B) *Limits that Apply Until the Limits in subsection 93102.4(b) Become Effective for Existing Hard Chromium Electroplating Facilities that Began Operations after December 16, 1993, and Before October 24, 2007.*

Facility Size	*Controlled Emissions*[1] *(lbs/yr)*	*Requirement*	
		≤ *60 million amp-hrs*[2]	*> 60 million amp-hrs*[2]
Large	10 lbs/yr	0.006 mg/amp-hr	0.006 mg/amp-hr

	≥	≤	≤
Medium/ Small	< 10 lbs/yr	≤ 0.03 mg/amp-hr	≤ 0.006 mg/amp-hr

[1] combined hexavalent or total chromium emissions from hard chromium plating operations

[2] maximum cumulative potential rectifier capacity or usage limit

(C) *Special Provisions that Apply for some Hard Chromium Electroplating Facilities Using Less than or Equal to 500,000 Ampere-hours per Year Until the Limits in subsection 93102.4(b) Become Effective.*

The permitting agency may approve, on a case-by-case basis, alternative standards for hard chromium electroplating facilities using less than or equal to 500,000 ampere-hours per year. The operation must have been constructed on or before December 16, 1993. At a minimum, the facility must use a chemical fume suppressant containing a wetting agent to lower the surface tension of the plating bath to at least 45 dynes per centimeter (dynes/cm) (3.1×10^{-3} pound-force per foot [lbF/ft]). Effective April 24, 2008, the chemical fume suppressant used by the facility must meet the criteria specified in section 93102.8 and the surface tension shall be maintained below the value specified in Table 93102.8. The permitting agency may require additional emission reduction techniques as necessary to reduce the public health impact of emissions from the operation. The owner or operator must comply with the applicable parameter monitoring [section 93102.9], recordkeeping [section 93102.12], and reporting [section 93102.13] requirements. If an emission reduction technique not identified in this rule is used, the owner or operator must submit a plan to the permitting agency describing the alternative technique and identifying appropriate monitoring, recordkeeping, and reporting requirements. The permitting agency, with U.S. EPA concurrence, shall approve this plan if equivalent results are obtained. Upon approval, the requirements identified in the plan shall be the applicable requirements under this regulation.

(2) *Requirements that Apply to Existing Hexavalent Decorative Chromium Electroplating and Chromic Acid Anodizing Facilities Until the Limits in subsection 93102.4(b) Become Effective.*

During tank operation, each owner or operator of an existing decorative hexavalent chromium electroplating or chromic acid anodizing facility shall control hexavalent chromium emissions discharged to the atmosphere by meeting either of the

~~requirements identified below.~~

Method of Compliance	Requirement
1. add-on air pollution control equipment, or chemical fume suppressants, or mechanical fume suppressants (i.e. polyballs)	≤ 0.01 milligrams per dry standard cubic meter of air (mg/dscm) ($4.4x10^{-6}$ gr/dscf)
2. chemical fume suppressants containing a wetting agent [1]	≤ 45 dynes per centimeter (dynes/cm) ($3.1x10^{-3}$ pound-force per foot [lbF/ft])

[1] Effective April 24, 2008, the chemical fume suppressant used by the facility must meet the criteria specified in section 93102.8 and the surface tension shall be maintained below the value specified in Table 93102.8.

a) Restrictions that apply to New Facilities after January 1, 2024.

(1) No Person shall install or operate a new Hexavalent Decorative Chromium Electroplating Facility or New Hard Hexavalent Chromium Electroplating Facility, or a new Chromic Acid Anodizing Facility after January 1, 2024.

(b) Conditions that apply to all Existing Facilities After January 1, 2024

(1) An Owner or Operator of a hexavalent Hard Chromium Electroplating, or Chromic Acid Anodizing Facility may modify an Existing Facility after January 1, 2024 as long as:

(A) Permitted Annual Ampere-Hours do not exceed levels for the Existing Facility as of January 1, 2024; and

(B) Any additional hexavalent Hard Chromium Electroplating Tank, Chromic Acid Anodizing electroplating tank, or other Tier I, II, or III Hexavalent Chromium containing tank meet all applicable requirements of Sections 92302.4 – 92301.16

~~(3)~~(2) No Owner or Operator shall operate a decorative Hexavalent Chromium electroplating tank that emits any Hexavalent Chromium after January 1, 2026.

(A) An extension of up to one year may be granted by the Permitting Agency, if the Permitting Agency determines that the Facility needs more time to complete permitting or construction.

~~(4)~~(3) No Owner or Operator shall operate a hard Hexavalent Chromium Electroplating Tank that emits any Hexavalent Chromium after January 1, 2039.

(4) No Owner or Operator shall operate a Chromic Acid Anodizing Tank that emits any Hexavalent Chromium after January 1,

2039.

(5) Technology Review: CARB staff will assess the progress made in development of replacement technologies for Hard Hexavalent Chromium Electroplating and Chromic Acid Anodizing per the process outlined in Appendix 11. If staff finds that the deadlines in Section 93104.2(b)(3) – (4) need to be adjusted forward or backward in time, staff will make a recommendation to initiate development of necessary regulatory amendments.

(6) The Owner or Operator of any Hard Hexavalent Chromium Electroplating Tank or Chromic Acid Anodizing Tank in operation after January 1, 2026 must meet a 0.00075 mg/ampere-hr emission limit for each tank measured after Add-on Air Pollution Control Device(s).

~~(b)~~(c) *Limits that ~~a~~Apply to ~~A~~all Existing ~~Hexavalent Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing~~ Facilities ~~B~~before ~~R~~requirements in §93102.4(b) Take Effect.~~After October 24, 2007.~~*

(1) During tank(s) operation, each ~~o~~Owner or ~~o~~Operator of an existing ~~h~~Hexavalent ~~c~~Chromium ~~f~~Facility shall control

Sensitive Receptor Distance [1]	Annual Permitted Ampere-Hours	Emission Limitation	~~Effective Date~~
≤ 330 feet	≤ 20,000	Use Chemical Fume Suppressants as specified in section 93102.8 [2]	~~April 24, 2008~~
≤ 330 feet	> 20,000 and ≤ 200,000	0.0015 milligrams/ampere-hour as measured after Add-on Air Pollution Control Device(s)	~~October 24, 2010~~
≤ 330 feet	> 200,000	0.0015 milligrams/ampere-hour as measured after add-on air pollution control device(s) [3]	~~October 24, 2009~~
> 330 feet	≤ 50,000	Use Chemical Fume Suppressant as specified in section 93102.8 [2]	~~April 24, 2008~~
> 330 feet	> 50,000 and ≤ 500,000	0.0015 milligrams/ampere-hour	~~October 24, 2011~~
> 330 feet	> 500,000	0.0015 milligrams/ampere-hour as measured after add-on air pollution control device(s) [3]	~~October 24, 2009~~

~~h~~Hexavalent~~c~~Chromium emissions discharged to the atmosphere by meeting the requirements identified below.

Table 93102.4: Hexavalent Chromium Limits for existing Tanks

[1] Distance shall be measured as specified in section 93102.4(b)(2)(A).

[2] Alternatively, a ~~f~~Facility may install an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device(s) that controlsemissions to below 0.0015 milligrams per ampere-hour.

[3] When annual emissions exceed 15 grams a site~~-~~-specific risk analysis must be conductedby the ~~o~~Owner or ~~o~~Operator in accordance with the ~~p~~Permitting ~~a~~Agency's procedures, unless a site~~-~~-specific risk analysis has already been conducted and approved by the ~~p~~Permitting ~~a~~Agency.The analysis shall be submitted to the ~~p~~Permitting ~~a~~Agency.

(2) *Demonstrating Compliance with the Emission Limitation in Table 93102.4*

(A) Distance to the nearest sensitive receptor shall be submitted to the permitting agency within 30 days of January 1, 2024. The measurement shall be provided to the permitting agency within 30 days of October 24, 2007.

1. For facilities that do not have an Aadd-on Aair Ppollution Ccontrol Ddevice on October 24, 2007, the measurement shall be the distance, rounded to the nearest foot, from the edge of the Hhexavalent Cchromium Pplating or AanodizingTtank nearest the sensitive receptor to the property line of the nearest sensitive receptor that exists on October 24January 1, 20072024.

2. For facilities with an Aadd-on Aair Ppollution Ccontrol Ddevice on October 24, 2007, the measurement shall be the distance, rounded to the nearest foot, from the centroid ofthe stack to the property line of the nearest sensitive receptor that exists on October 24, 2007January 1, 2024.

(B) Facilities located within 330 feet of a sensitive receptor and with Aannual Ppermitted Aampere-Hhours greater than 20,000, and facilities beyond 330 feet of a sensitive receptor with more than 500,000 Aannual Ppermitted Aampere-Hhours must use an Aadd-on Aair Ppollution Ccontrol Ddevice(s) to control hexavalent chromium emissions and demonstrate compliance with the Eemission Llimitation of 0.0015 milligrams/ampere-hour as measured after the Aadd-on Aair Ppollution Ccontrol Ddevice.

(3)(2) *Requirements for Facilities Demonstrating Compliance by an Alternative Method or Methods*

As provided in Health and Safety Code Section 39666(f), the oOwner or oOperator of a fFacility may submit to the pPermitting aAgency an alternative method, or methods, that will achieve anequal, or greater amount of reduction in hHexavalent eChromium emissions and an equal, or greater reduction in risk than would be achieved by direct compliance with the requirementsof per section 93102.4(b)(1)-(b)(3) and (b)(2) and 93012.4(c)(1) and (c)(2).

(A) The information contained in Appendix 98 of

section 93102.16 must be submitted to the ~~p~~Permitting ~~a~~Agency.

(B) To be approved by the ~~p~~Permitting ~~a~~Agency the ~~o~~Owner or ~~o~~Operator must demonstrate that the alternative method(s) is enforceable, provides an equal, or greater ~~h~~Hexavalent ~~c~~Chromium emission reduction, and provides an equal, or greater risk reduction than would direct compliance with the requirements of section 93102.4(b)(1)-(b)(3) and 93012.4(c)(1) and (c)(2)~~93102.4(b)(1) and (b)(2).~~

(C) Upon approval of the method(s) the ~~o~~Owner or ~~o~~Operator must implement the approved method(s) within the time periods specified of section 93102.4(b)(1)-(b)(3) and 93012.4(c)(1) and (c)(2) ~~(C) section 93102.4(b)(1).~~

(D) A ~~f~~Facility operating under an approved alternative method(s) must comply with the requirements set forth in sections 93102.5, 93102.7, and 93102.9 through 93102.14, and 93102.16.

(d) *Requirements that Apply to All Existing Hexavalent Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Facilities Before Requirements in §93102.4(b) Take Effect.*

(1) Air sparging of a Hexavalent Chromium Electroplating or Chromic Acid Anodizing Tank shall occur only when electroplating or anodizing is occurring;

(2) Operate any Tier I, Tier II or Tier III Hexavalent Chromium Tank within a Building Enclosure beginning January 1, 2026; and

(3) *Operate any Tier II or Tier III Hexavalent Chromium Tank within a Building Enclosure that meets the requirements of Section 93102.4(e)*

(4) *Operate any Tier I Hexavalent Chromium Tank within a Building Enclosure, according to the implementation schedule in Appendix 11– Implementation Schedule, such that the following are met:*

(A) The Building Enclosure Openings that are open to the exterior and on opposite ends of the Building Enclosure shall not be simultaneously open except during the passage of vehicles, equipment, or people by using one or more of the following at one of the

openings to prevent the passage of air:

1. A door that automatically closes;

2. Overlapping plastic strip curtain;

3. A Vestibule;

4. An Airlock System;

5. A Barrier or obstruction, such as a large piece of equipment, that prevents air from passing through any Tank Process Area: or

6. An alternative method to minimize the release of fugitive emissions from the Building Enclosure that is approved by the Executive Officer.

(B) Except during the movement of vehicles, equipment, or people, close any Building Enclosure Openings by using one or more of the methods listed in sections 93102.4(d)(4)(A)(1) through 93102.4(d)(4)(A)(6) that directly faces and opens towards the nearest:

1. Sensitive Receptor, with the exception of a school, that is located within 1,000 feet, as measured from the property line of the Sensitive Receptor to the Building Enclosure Openings: and

2. School that is located within 1,000 feet, as measured from the property line of the school to the Building Enclosure Openings.

(e) Requirements for Building Enclosures for Tier II and Tier III Hexavalent Chromium Tanks

(1) Beginning January 1, 2026, the Owner or Operator of a Facility that operates Tier II or Tier III Hexavalent Chromium Tank(s) shall operate those Tank(s) within a Building Enclosure that meets the following requirements:

(A) The combined area of all Enclosure Openings shall not exceed 3.5% of the Building Enclosure envelope, which is calculated as the total surface area of the Building Enclosure's exterior walls, floor, and horizontal projection of the roof on the ground. All values used in the calculation for the Building Enclosure envelope as well as the locations and dimensions of openings that are

counted towards the applicable building envelope opening allowance, shall be provided in the compliance status reports required in Section 93102.13(b). Openings that close or use one or more of the following methods for the ~~e~~Enclosure ~~o~~Opening shall not be counted towards the combined area of all ~~e~~Enclosure ~~o~~Openings:

1. Door that automatically closes; or

2. Overlapping plastic strip curtains that cover the entire opening; or

3. Vestibule; or

4. Airlock system; or

5. Alternative method to minimize the release of fugitive emissions from the Building Enclosure that the Owner or Operator of a Facility can demonstrate to the Executive Officer is an equivalent or more effective method(s) to minimize the movement of air within the Building Enclosure.

(B) Ensure that any Building Enclosure Openings that open to the exterior and are on opposite ends of the Building Enclosure where air can pass through are not simultaneously open except during the passage of vehicles, equipment or people, not to exceed two hours per operating day, by using one or more of the following:

1. A method specified in Section 93102.4(e)(A)(1) through 9310.24(e)(A)(5) for the Enclosure Opening(s) on one of the opposite ends of the Building Enclosure; or

2. Utilize a Barrier, such as large piece of equipment, that restricts air from moving through the Building Enclosure.

(C) Except during the movement of vehicles, equipment, or people, close any Building Enclosure Openings by using one or more of the methods listed in sections 93102.4(e)(A)(1) through 93102.4(e)(A)(5) that directly faces and opens towards the nearest:

1. Sensitive Receptor, with the exception of a school, that is located within 1,000 feet, as measured from the property line of the Sensitive Receptor to the Building Enclosure Openings: and

2. School that is located within 1,000 feet, as measured from the property line of the school to the Building Enclosure Openings.

(D) Close all Enclosure Openings in the roof that are located within 15 feet from the edge of any Tier II or Tier III Hexavalent Chromium Tank except Enclosure Openings in the roof that:

1. Allow access for equipment or parts:

2. Provide intake or circulation air for a Building Enclosure which does not create air velocities that impact the collection efficiency of a ventilation system for an Add-on Air Pollution Control Device verified via a smoke test; or

3. Are equipped with a HEPA filter or other air pollution control device that fully overs the opening.

(E) Repair any breach in a Building Enclosure located within 15 feet from the edge of any Tier II or Tier III Hexavalent Chromium Tank within 72 hours of discovery of the breach. The Owner or Operator of a Facility may request an extension by contacting their Permitting Agency. The Permitting Agency may approve a request for an extension beyond the 72-hour limit if the request is submitted before the 72-hour time limit has expired and the Owner or Operator of a Facility provides information that substantiates:

1. The repair will take longer than 72 hours, or the equipment, parts, or materials needed for the repair cannot be obtained within 72 hours;

2. Temporary measures are implemented that ensure no fugitive emissions result from a breach.

~~(c)~~(f) Requirements for Modified Hexavalent Chromium Electroplating or Chromic Acid Anodizing Facilities

(1) During ~~t~~Tank ~~o~~Operation, each ~~o~~Owner or ~~o~~Operator of a ~~m~~Modified ~~f~~Facility shall, upon ~~i~~Initial ~~s~~Start-~~u~~Up, control ~~h~~Hexavalent ~~c~~Chromiumemissions discharged to the atmosphere from that ~~f~~Facility by reducing the ~~h~~Hexavalent ~~c~~Chromium emissions from the electroplating or anodizing tank(s) by:

(A) Using an add-on air pollution device(s) to control ~~h~~Hexavalent ~~c~~Chromium emissions, and

(B) Meeting an emission limit of 0.00075~~0015~~ milligrams perampere-hour or less.

(2) Prior to ~~i~~Initial ~~s~~Start-~~u~~Up of a ~~m~~Modified ~~f~~Facility, ~~when annual emissions of hexavalent chromium are expected to exceed 15 grams per year,~~ the ~~o~~Owner or ~~o~~Operator shall conduct a site-specific risk analysis in accordance with the ~~p~~Permitting ~~a~~Agency's procedures. The analysis shall be submitted to the~~p~~Permitting ~~a~~Agency.

(3) A ~~f~~Facility is not required to comply with section 93102.4(c)(1)~~(A)~~ if the ~~f~~Facility is implementing an alternative method or methods that have been approved by the ~~p~~Permitting~~a~~Agency as provided in section 93102.4(~~b~~c)(3) and Health and Safety Code section 39666(f).

(g) Emission Limits For Tier III Hexavalent Chromium Tanks (Excluding Chromium Electroplating and Chromic Acid Anodizing Tanks subject to 93104.4(c)) applicable beginning on January 1, 2026

(1) The Owner or Operator of a Facility shall collect and vent Hexavalent Chromium emissions from any Tier III Hexavalent Chromium Tank, excluding Chromium Electroplating and Chromic Acid Anodizing Tanks subject to section 93102.4(c)(1), to an Add-on Air Pollution Control Device, or an approved alternative compliance method, that meets the following Hexavalent Chromium emission limits as demonstrated by source test requirements under Section 93102.7

(A) 0.00075 mg/amp-hr, for Existing or Modified Facilities, if any tank(s) vented to an air pollution control device are electrolytic

(B) 0.20 mg/hr, if all tanks vented to the Add-on Air Pollution Control Device are not electrolytic and the ventilation system has a maximum exhaust rate of 5,000 cfm or less; or

(C) 0.004 mg/hr-ft2, with the applicable surface area based on the surface area of all Tier III Hexavalent Chromium Tank(s) and other tanks required to be vented to an add-on air pollution control device with a Permit to Operate, provided all tanks are not electrolytic, if the ventilation system has a maximum exhaust rate of greater

than 5,000 cfm

(2) The Owner or Operator of Tier III Tanks listed in Section 93102.4(g) shall:

(A) Apply for a permit with the Permitting Agency for the air pollution control device prior to January 1, 2026

(B) Conduct a source test on the Tier III Tanks prior to issuance of permit form Permitting Agency.

(C) Beginning no later than July 1, 2024 and until the Add-on Air Pollution Control Device specified in section 93104.4(g)(3) has been installed, cover the entire surface area of the tank no later than 30 minutes after ceasing operation of the tank. Tank covers shall be free of holes, tears, and gaps and made out of a durable material. ~~The Owner or Operator of a facility shall~~

~~Install Aadd-on Aair Ppollution Ccontrol Ddevices to meet the requirements of section 93104.4(g)(1) no later than 12 months after an Authority to Construct has been issued for the Aadd-on Aair Ppollution Ccontrol Ddevice by the permitting agency.~~

~~Implement the alternative compliance method to meet the requirements of section 93104.4(g)(1) based on the specific time frame approved in the alternative compliance method.~~

(3) The Owner or Operator of a Facility shall not be subject to the requirement of section 93104.4(g)(1) to vent a Tier III Hexavalent Chromium Tank to an Add-on Air Pollution Control Device if the uncontrolled Hexavalent Chromium emission rate of the tank is less than 0.2 mg/hr, as demonstrated by a source test approved by the Permitting Agency.

(h) Requirements for Tier II Hexavalent Chromium Containing Tanks

(1) The Owner or Operator of a Facility shall control Hexavalent Chromium emissions from a Tier II Hexavalent Chromium Tank by:

(A) Utilizing a tank cover, Mechanical Fume Suppressant, or other method approved by the Executive Officer, no later than July 1, 2024

(B) Meet the requirements for Tier III tanks in Section 93102.4(g)

~~(3)~~

~~Requirements for New Hexavalent Chromium Electroplating and Chromic Acid Anodizing Facilities Beginning October 24, 2007.~~

~~No person shall operate a new facility unless it is located outside of an area that is zoned for residential or mixed use and is located, as determined by the permitting agency, at least 1,000 feet from (A) the boundary of any area that is zoned for residential or mixed use, or (B) any school or school under construction.~~

~~A new facility shall be deemed to meet the requirements specified in this subsection (d)(1) if one of the following criteria is met, even if the facility does not meet the requirement at the time of initial startup (e.g., because of a zoning change that occurs after the authority to construct isissued):~~

~~The requirements specified in this subsection (d)(1) aremet at the time it is issued an authority to construct by the permitting agency, and substantial use of the authority to construct takes place within one year after itis issued; or~~

~~The requirements specified in this subsection (d)(1) are met at the time it is issued an authority to construct by the permitting agency, and substantial use of the authority to construct takes place before any zoning change occurs that affects the operation's ability to meetthe requirement at the time of initial startup.~~

~~During tank operation, each owner or operator of a new facility shall control hexavalent chromium emissions discharged to the atmosphere from that facility by reducing the hexavalent chromium emissions from the electroplating or anodizing tank(s) by installing a HEPA add-on air pollution control device. The measured emission rate of hexavalent chromium shall be no more than 0.0011 milligrams per ampere-hour as measured after the HEPA add-on air pollution control device.~~

~~Prior to initial start-up the owner or operator of each new facility shall conduct a site specific risk analysis in accordance with the permitting agency's procedures. The analysis shall be submitted to the permitting agency.~~

~~Prior to initial startup, each new facility shall demonstrate to the permitting agency that the new facility meets the requirements specified in this subsection (d) of this section 93102.4A facility is not required to comply with the requirement in section 93102.4(d)(2) to install a HEPA add-~~

on air pollution control device if the facility is implementing an alternative method or methods that have been approved by the permittingagency as provided in section 93102.4(b)(3) and Health and Safety Code section 39666(f).

Notification Requirements for New and Modified Facilities

Notification of Construction Reports

No person may construct or modify a facility, such that it becomes a facility subject to sections 93102 to 93102.16,without submitting a notification of construction or modification to the permitting agency and receiving approval in advance to construct or modify the facility.

The contents of the Notification of Construction Reportshall include the information contained in Appendix 4.

Alternative Notification Requirements: Instead of complying with the requirements in subpart (ei)(1)(A) of this subsection, afacility may fulfill these requirements by complying with the permitting agency's "New Source Review" requirements, provided similar information is obtained.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.5 Requirements that Apply to Existing, and Modified, and New Hexavalent Chromium Plating or Chromic Acid AnodizingFacilities Beginning October 24, 2007January 1, 2024.

Each eOwner or eOperator of a hHexavalent eChromium plating or eChromic aAcid aAnodizing fFacility shall comply with the followingrequirements on or after the dates specified below:

(a) *Removal of Add-on Pollution Control Device(s).* No add- -on air pollution control device(s) installed before October 24, 2007January 1, 2024, shall be removed or rendered inoperable unless it is replaced by an add-on air pollution control device(s) meeting an emission rate of 0.0015075 milligrams per ampere-hour or less as measured after at the exhaust of the aAdd-on aAir pPollution eControl dDevice or unless the fFacility is operating under an approved alternative method as provided in section 93102.4(b)(3) and Health and Safety Code section 39666(f).

(b) *Environmental Compliance Training.* No later than October 24, 2009, and within eEvery two years thereafter, the

~~o~~Owner or ~~o~~Operatorof a ~~f~~Facility shall ensure that chromium plating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing operations are conducted under the direction of the ~~o~~Owner or ~~o~~Operator or current employee who is onsite and who has completed the California Air Resources Board (CARB) Compliance AssistanceTraining Course pertaining to chromium plating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing.

(1) ~~On or after October 24, 2009, e~~Environmental compliance and recordkeeping required by this ATCM shall be conducted onlyby ~~p~~Persons who completed an CARB Compliance Assistance Training Course.

(2) In the event that all ~~p~~Persons who have completed the ARB training class are no longer associated with a ~~f~~Facility, the ~~o~~Owner or ~~o~~Operator may be responsible for environmental compliance and recordkeeping required by this ATCM for a period of time not to exceed two years. The ~~o~~Owner or ~~o~~Operatorshall ensure that as soon as practicable, but not longer than two years, personnel complete the training specified in subsection 93102.5(b).

(3) Environmental compliance training conducted by the South Coast Air Quality Management District pursuant to Rule 1469 shall fulfill the requirements of this subpart.

(4) Nothing in this subsection 93102.5(b) shall absolve an ~~o~~Owneror ~~o~~Operator from complying with sections 93102-93102.16.

(c) Housekeeping requirements effective until July 1, 2024. Housekeeping practices shall be implemented to reduce potential fugitive emissions of Hexavalent Chromium. At a minimum, the following practices shall be implemented

(1) Chromic Acid powder or flakes, or other substances that may contain Hexavalent Chromium, shall be stored in a closed container in an Enclosed Storage Area;

(2) Chromic Acid powder or flakes shall be transported from an Enclosed Storage Area to the Electroplating or Anodizing Bath(s) in a closed container;

(3) Any liquid or solid material that may contain Hexavalent Chromium that is spilled shall be cleaned up or contained within one hour after being spilled.

(4) Dragout from the tank(s) shall be minimized by implementing the following practices:

(A) Facilities with automated lines. Drip trays shall be installed between tanks so that the liquid does not fall through the space between tanks. Trays shall be placed such that the liquid is returned to the tank(s).

(B) Facilities without automated lines.

1. Each electroplated or anodized part must be handled so that Chromic Acid is not dripped outside the electroplating tank.

2. Each Facility spraying down parts over the electroplating or anodizing tank(s) to remove excess Chromic Acid shall have a splash guard installed at the tank to minimize overspray and to ensure that any Hexavalent Chromium laden liquid is returned to the electroplating or anodizing tank.

(5) Surfaces within the Enclosed Storage Area, open floor area, walkways around the electroplating or anodizing tank(s), or any surface potentially contaminated with Hexavalent Chromium, that accumulates or potentially accumulates dust shall be cleaned at least once every seven days in one or more of the following manner: HEPA Vacuumed, or hand wiped with a damp cloth, or wet mopped, or otherwise cleaned as approved by the Permitting Agency, or shall be maintained with the use of non-toxic chemical dust suppressants.

(6) Buffing, grinding, or polishing areas within a Facility shall be separated from the electroplating or anodizing operation by installing a physical Barrier. The Barrier may take the form of plastic strip curtains.

(7) Chromium or chromium-containing wastes generated from housekeeping activities shall be stored, disposed of, recovered, or recycled using practices that do not lead to Fugitive Dust and in accordance with hazardous waste requirements.

~~(c)~~(d) *Housekeeping Requirements.* Effective ~~April 24, 2008~~July 1, 2024, ~~h~~Housekeeping practices shall be implemented to reduce potential fugitive emissions of ~~h~~Hexavalent ~~c~~Chromium. At a minimum, the following practices shall be implemented:

(1) Chromic ~~a~~Acid powder or flakes, or other substances that maycontain ~~h~~Hexavalent ~~c~~Chromium, shall be stored in a closed container in an ~~e~~Enclosed ~~s~~Storage ~~a~~Area;

(2) Chromic ~~a~~Acid powder or flakes shall be transported from an~~e~~Enclosed ~~s~~Storage ~~a~~Area to the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath(s) in a closed container;

(3) Clean, using an Approved Cleaning Method, or contain, using a drip tray or other containment device, any liquid or solid material that may contain Hexavalent Chromium that is spilled immediately and no later than one hour after being spilled;

(4) Clean, using an Approved Cleaning Method, surfaces within the Enclosed Storage Area, open floor area, walkways around a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, or any surface potentially contaminated with Hexavalent Chromium or surfaces that potentially accumulate dust Weekly;

(5) Store, dispose of, recover, or recycle chromium or chromium-containing wastes generated from housekeeping activities of this subdivision using practices that do not lead to fugitive emissions. Containers with chromium-containing waste material shall be kept closed at all times except when being filled or emptied;

(6) Beginning July 1, 2024, use an Approved Cleaning Method to clean floors within a 20 foot radius of any buffing, grinding, or polishing workstation(s) on days when buffing, grinding, or polishing are conducted;

(7) According to the implementation schedule in Appendix 10 – Implementation Schedule, store the following materials in a closed container or in an Enclosed Storage Area;

(A) Cleaning equipment and supplies used for housekeeping in subdivision (f) when not in use;

(B) Reusable tank covers used with a Tier I, Tier II, or Tier III Hexavalent Chromium Tank when not on the tank;

(C) Reusable hangers used with a Tier I, Tier II, or Tier III Hexavalent Chromium Tank when not being used to hold a part; and

(D) Anodes and Cathodes used with a Tier I, Tier II, or Tier III Hexavalent Chromium Tank when not in the tank;

(e) Best Management Practices

(1) The Owner or Operator of a Facility shall minimize Dragout from a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, according to the implementation schedule in Appendix 11 – Implementation Schedule, by containing the liquid as follows:

(A) For an automated line, install a drip tray, or other containment device between a Tier I, Tier II, or Tier III Hexavalent Chromium Tank such that liquid does not fall through the space between tanks. The tray(s) shall capture and return the liquid to the tank(s), and be cleaned such that there is no accumulation of visible dust or residue on the drip tray or other containment device potentially contaminated with Hexavalent Chromium.

(B) For a non-automated line, handle each part, or equipment used to handle these parts, so that liquid containing chromium or Chromic Acid is not dripped outside a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, or Associated Process Tank, unless the liquid is captured by a drip tray or other containment device. Facilities spraying down parts over the Chromium Electroplating or Chromic Acid Anodizing Tank(s) to remove excess Chromic Acid shall have a splash guard installed at the tank to minimize overspray and to ensure that any Hexavalent Chromium laden liquid is captured and returned to the Chromium Electroplating or Chromic Acid Anodizing Tank. Splash guards shall be cleaned such that there is no accumulation of visible dust potentially contaminated with Hexavalent Chromium.

(2) According to the implementation schedule in Appendix 10 – Implementation Schedule, the Owner or Operator or an employee of a Facility that conducts chromium electroplating or Chromic Acid Anodizing operations shall not spray rinse parts or equipment that were previously in a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, unless the parts or equipment are fully lowered inside a tank where the liquid is captured inside the tank.

(A) As an alternative to this method, the Owner or Operator or employee of a Facility may ensure that any liquid containing chromium is captured and returned to the tank by meeting the following conditions when rinsing above a tank:

1. Installing a splash guard(s) on the tank that is free of holes, tears, or openings. Splash guards shall be cleaned weekly with water; or

2. For tanks located within a process line utilizing an overhead crane system that would be restricted by the installation of splash guards, use a Low Pressure Spray Nozzle in a manner where the water flows off of the part or equipment directly into the tank~~;~~.

(3) Beginning July 1, 2024, the Owner or Operator of a Facility shall maintain clear labeling of each tank within the Tank Process Area with a tank number or other identifier, Permitting Agency permit number, bath contents, maximum concentration (ppm) of Hexavalent Chromium, operating temperature range, any agitation methods used, and designation of whether it is a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, if applicable.

(4) Beginning January 1, 2026, the Owner or Operator of a Facility shall conduct all buffing, grinding, and polishing operations within a Building Enclosure

(5) According to the implementation schedule in Appendix 10 – Implementation Schedule, the Owner or Operator of a Facility shall install a Barrier to prevent the migration of dust from buffing, grinding, or polishing areas to a Tier I, Tier II, or Tier III Hexavalent Chromium Tank.

(6) The Owner or Operator of a Facility shall not conduct compressed air cleaning or drying operations within 15 feet of any Tier II or Tier III Hexavalent Chromium Tank(s) unless:

(A) A Barrier separates the compressed air cleaning or drying operation from the Tier II or Tier III Hexavalent Chromium Tank(s). A tank wall may function as the Barrier provided the parts being air cleaned or dried are below the lip of the tank;

~~(2)~~

~~(3) Any liquid or solid material that may contain hexavalent chromium that is spilled shall be cleaned up or contained within one hour after being spilled.~~

~~(4) Dragout from the tank(s) shall be minimized by implementing the following practices:~~

(A) Facilities with automated lines. Drip trays shall be installed between tanks so that the liquid does not fall through the space between tanks. Trays shall be placed such that the liquid is returned to the tank(s).

(B) *Facilities without automated lines.*

1. Each electroplated or anodized part must be handled so that chromic acid is not dripped outside the electroplating tank.

2. Each facility spraying down parts over the electroplating or anodizing tank(s) to remove excess chromic acid shall have a splash guard installed at the tank to minimize overspray and to ensure that any hexavalent chromium laden liquid is returned to the electroplating or anodizing tank.

(5) Surfaces within the enclosed storage area, open floor area, walkways around the electroplating or anodizing tank(s), or any surface potentially contaminated with hexavalent chromium, that accumulates or potentially accumulates dust shall be cleaned at least once every seven days in one or more of the following manner: HEPA vacuumed, or hand wiped with a damp cloth, or wet mopped, or otherwise cleaned as approved by the permitting agency, or shall be maintained with the use of non-toxic chemical dust suppressants.

(6) Buffing, grinding, or polishing areas within a facility shall be separated from the electroplating or anodizing operation by installing a physical barrier. The barrier may take the form of plastic strip curtains.

(7) Chromium or chromium-containing wastes generated from housekeeping activities shall be stored, disposed of, recovered, or recycled using practices that do not lead to fugitive dust and in accordance with hazardous waste requirements.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.6 Special Provisions that Apply Only to Facilities that Perform Electroplating Using a Trivalent Chromium Bath or Enclosed Hexavalent Chromium Electroplating Tanks.

(a) *Provisions that Apply to All Facilities that Perform Electroplating*

Using a Trivalent Chromium Bath.

(1) During ŧTank ɵOperation, each ɵOwner or ɵOperator of an ɵExisting, ṁModified, or ṅNew fFacility shall control total chromium emissionsdischarged to the atmosphere by meeting either of the requirements identified below.

Method of Compliance	Requirement
add-on air pollution control equipment,or ɵChemical fFume sSuppressants, or ṁMechanical fFume sSuppressants (i.e. polyballs)	≤0.01 mg/dscm ($4.4x10^{-6}$ gr/dscf)
ɵChemical fFume sSuppressants containinga ẇWetting aAgent	use ẇWetting aAgent as bath ingredientand comply with recordkeeping and reporting provisions of sections 93102.12(i) and 93102.13(e).

(2) New fFacilities that perform electroplating using a ŧTrivalent ɵChromium bath must conduct a fFacility wide site--specific risk analysis in accordance with the þPermitting aAgency's procedures. The analysis shall be submitted to the þPermittingaAgency.

(3) An ɵOwner or ɵOperator that performs electroplating using a ŧTrivalent ɵChromium bath and complying through use of a ɵChemical fFume sSuppressant containing a ẇWetting aAgent shall not be required to comply with the requirements of sections 93102.4, 93102.5, 93102.7, 93102.8, 93102.9(b) through (f),93102.10, 93102.11, 93102.12(a) through (f), and 93102.12(h).

(4) An ɵOwner or ɵOperator that performs electroplating using a ŧTrivalent ɵChromium bath and complying with the 0.01 mg/dscm limit shall not be required to comply with the requirements of sections 93102.4, 93102.5, and 93102.8.

(5) If a fFacility has ḥHexavalent ɵChromium tanks in addition to ŧTrivalent ɵChromium tanks, the ḥHexavalent ɵChromium tanks mustcomply with all of the requirements of the ATCM relating to ḥHexavalent ɵChromium facilities that do not have enclosed tanks.

(b) *Requirements for Enclosed Hexavalent Chromium Electroplating Tanks.*

(1) The ɵOwner or ɵOperator of a ḥHexavalent ɵChromium electroplating fFacility with enclosed ḥHexavalent ɵChromium þPlating ŧTank(s) shall control ḥHexavalent ɵChromium emissionsfrom the electroplating tank(s) by:

(A) Achieving a ~~h~~Hexavalent ~~c~~Chromium ~~e~~Emission ~~l~~Limitation of 0.015 mg/dscm from each tank as measured after the add-on air pollution control device(s); or

(B) Using a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant specified in section 93102.8, and maintaining the ~~s~~Surface ~~t~~Tension of the plating bath solution at a value specified in section 93102.8; or

(C) Not allowing the mass rate of the total chromium to exceed the maximum allowable mass emission rate determined by using the calculation procedure specified in Appendix 7.

(2) The ~~o~~Owner or ~~o~~Operator of an ~~e~~Existing ~~f~~Facility that has only enclosed ~~h~~Hexavalent ~~c~~Chromium ~~p~~Plating ~~t~~Tank(s) must comply with all applicable requirements of this ATCM except for the requirementsset forth in section 93102.4.

(3) If a ~~f~~Facility has ~~h~~Hexavalent ~~c~~Chromium ~~p~~Plating ~~t~~Tanks that are notenclosed in addition to enclosed ~~h~~Hexavalent ~~c~~Chromium tanks, the ~~h~~Hexavalent ~~c~~Chromium tanks that are not enclosed must comply with all the requirements of the ATCM related to ~~h~~Hexavalent ~~c~~Chromium facilities that do not have enclosed tanks.

~~(4) New facilities with enclosed hexavalent chromium plating tanks must comply with section 93102.4(d)(1).~~

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.7 ~~Performance~~ Source Test Requirements and Test Methods.

(a) ~~*Performance*~~ *Source test requirements*.

(1) ~~The following~~All ~~h~~Hexavalent ~~c~~Chromium and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing facilities must conduct ~~a performance~~ an initial source test on all ~~t~~Tier III T~~t~~anks to demonstrate compliance with the ~~h~~Hexavalent ~~c~~Chromium emission rate as specified in section 93102.4, unless the ~~f~~Facility is subject to Section 93102.4(b)(1)~~,~~ by January 1, 2026.~~:~~

~~(A) Existing facilities demonstrating compliance with a milligrams per ampere-hour emission limitation specified in Table 93102.4.~~
~~Facilities that undergo a modification after October 24, 2007.~~

~~New hexavalent chromium facilities complying with section 93102.4(d)(2) or section 93102.6(b)(1)(A) or (C).~~

~~Facilities that submit an alternative compliance method or methods for approval as provided in section 93102.4(b)(3).New or modified facilities must conduct the performance testrequired by this section 93102.7 no later than 60 days after initial start-up.~~

~~(2) Existing facilities must conduct the performance test required by this section 93102.7 no later than the applicable effective date contained in Table 93102.4.~~

(2) All Hexavalent Chromium and Chromic Acid Anodizing facilities must conduct an ongoing source test on all Tier III Tanks every 2 calendar years after the date of the previous source test conducted to satisfy the requirements of section 93102.7(a)(1).

(3) The performance test must be conducted using one of the approved test methods specified in subsection 93102.7(bc). The hHexavalent cChromium emission rate shall be multiplied bythe fFacility aAnnual pPermitted aAmpere-hHour usage to determine the annual emissions of hHexavalent cChromium for the fFacility.

~~(4) Facilities do not need to conduct a performance test if the facility's annual permitted ampere-hour usage is ≧0,000 and the facility is located within 330 feet of a sensitive receptor or the facility's annual permitted ampere-hour usage is ≦0,000 and the facility is located more than 330 feet from a sensitive receptor that exists on October 24, 2007, and the facility is using chemical fume suppressants.~~

~~(5)~~(4) Trivalent cChromium plating facilities meeting the mg/dscm emission rate specified in section 93102.6(a)(1) must conduct a ~~performance~~ source test to demonstrate compliance with the total chromium emission rate upon fFacility startup.

~~(b) *Use of previously conducted performance test.*~~

~~*A performance test conducted after January 1, 2000 may be used to satisfy the requirements of this section 93102.7, so long as all of the following criteria are m*~~

~~The test demonstrated compliance with the applicable hexavalent chromium emission rate specified in Table 93102.4of section 93102.4 for hexavalent chromium plating or chromic acid anodizing facilities, or 0.01 mg/dscm or less total chromium emission rate for trivalent chromium plating facilities, or 0.015 mg/dscm hexavalent chromium emission rate for facilities with enclosed hexavalent chromium electroplating tanks complying with section 93102.6(b)(1)(A), and~~

~~The performance test was approved by the permitting agency,and~~

~~The test is representative of the method to control emissionscurrently in use as of October 24, 2007, and~~

~~The performance test was conducted using one of the approved test methods specified in subsection 93102.7(c).~~

~~(c)~~(b) *Approved test methods*

(1) Emissions testing shall be conducted with a minimum of three test runs in accordance with one of the following test methods:

(A) California Air Resources Board Test Method 425, last amended July 28, 1997, (section 94135, Title 17, California Code of Regulations (CCR); or

(B) U.S. EPA Method 306, (40 CFR 63 Appendix A) with or without ~~h~~Hexavalent ~~c~~Chromium option (Method 306, Section 2.2.3) provided that, if the total chromium option is used, the total chromium measurement must be assumed to be all ~~h~~Hexavalent ~~c~~Chromium; or

(C) South Coast Air Quality Management District Method 205.1.

(2) Smoke Test to Verify the Seal Integrity of Covers Designed to Reduce Chromium Emissions from Electroplating and Anodizing Tanks (See Appendix 5).

(3) Surface ~~t~~Tension using a ~~t~~Tensiometer shall be measured in accordance with U.S. EPA Method 306B (40 CFR 63 Appendix A). Surface ~~t~~Tension using a ~~s~~Stalagmometer shall bemeasured using the procedure set forth in Appendix 8, or an alternative procedure approved by the ~~p~~Permitting ~~a~~Agency.

~~(d)~~(c) *Pre-Test protocol.* Facilities subject to the provisions of section 93102.7(a) must submit a pre-test protocol to the ~~p~~Permitting ~~a~~Agency at least 60 days prior to conducting a performance test. The pre-test protocol shall include the performance test criteria of the end user and all assumptions, required data, and calculated targets for testing the source target chromium concentration, the preliminary chromium analytical data, and the planned sampling parameters. In addition, the pre-test protocol shall include information on equipment, logistics, personnel, and other resources necessary for an efficient and coordinated test.

~~(e)~~(d) *Test all emission points.* Each emission point subject to the

requirements of this regulation must be tested unless a waiver is granted by U.S. EPA and approved by the ~~p~~Permitting ~~a~~Agency.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.8 Chemical Fume Suppressants.

Chemical ~~f~~Fume ~~s~~Suppressants used to comply with sections 93102.4 and 93102.6(b)(1)(B) shall meet the criteria specified in this section 93102.8.

(a) One or more of the ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants listed in Table 93102.8 shall be used to reduce the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath(s) below the ~~s~~Surface ~~t~~Tension valuelisted in Table 93102.8. The ~~s~~Surface ~~t~~Tension value may be measured using either a ~~s~~Stalagmometer or a ~~t~~Tensiometer. The approved use of each fume suppressant is indicated in parenthesis.

Table 93102.8: Chemical Fume Suppressants Approved for Use at Specified Surface Tensions

Chemical Fume Suppressant and Manufacturer	Stalagmometer Measured Surface Tension (dynes/centimeter)	Tensiometer Measured Surface Tension (dynes/centimeter)
~~Benchbrite CR 1800® Benchmark Products~~	~~< 40~~	~~< 35~~
~~Clepo Chrome® MacDermid~~	~~< 40~~	~~< 35~~
~~Fumetrol 140® Atotech U.S.A.~~	~~< 40~~	~~< 35~~
~~HCA-6.2® Hunter Chemical LLC~~	~~< 32~~	~~< 28~~
~~HCA-4® Hunter Chemical LLC~~	~~< 32~~	~~< 28~~
Fumetrol 21 LF2® Atotech U.S.A (hard plating)	≤ 30	≤ 27
Dicolloy CRPF® ProCom LLC (Decorative plating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing)	≤ 32	≤ 29
HCA 8.4® Hunter Chemical LLC (Decorative plating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing)	≤ 25	≤ 22
HCA 8.4® Hunter Chemical LLC (Hard plating)	≤ 33	≤ 30

Chemical Fume Suppressant and Manufacturer	Stalagmometer Measured Surface Tension (dynes/centimeter)	Tensiometer Measured Surface Tension (dynes/centimeter)
Macuplex STR NPFX® MacDermid Enthone Industrial Solutions (Decorative plating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing)	≤ 32	≤ 30

(b) *Alternative ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants.* Chemical ~~f~~Fume ~~s~~Suppressants not listed in Table 93102.8 may be used upon approval by the Executive Officer. The Executive Officer shall approve the use of an alternative ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant if thefollowing criteria are met:

(1) The Chemical Fume Suppressant does not contain PFOS

(2) The ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant has been ~~performance~~ source testedunder conditions that are representative of normal operations in a ~~h~~Hexavalent ~~c~~Chromium ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath anddemonstrated to reduce the ~~h~~Hexavalent ~~c~~Chromium emissions below 0.01 milligrams per ampere hour; and

(3) In the ~~performance~~ source testing, the ~~h~~Hexavalent ~~c~~Chromium emissionrate of 0.01 milligrams per ampere-hour was achieved under conditions in which the ~~s~~Surface ~~t~~Tension did not exceed
45 dynes/cm, as measured by a ~~s~~Stalagmometer
or 35 dynes/cm, as measured by a ~~t~~Tensiometer.

(c) A ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant that is listed in subsection 93102.8(a)or that has been approved under subsection 93102.8(b) may no longer be used if the Executive Officer determines that the ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant is no longer able to reduce the ~~h~~Hexavalent ~~c~~Chromium emission rate below 0.01 milligrams per ampere-hour under conditions in which the ~~s~~Surface ~~t~~Tension does not exceed 45 dynes/cm, as measured by a ~~s~~Stalagmometer or 35 dynes/cm, asmeasured by a ~~t~~Tensiometer.

(d) New Fume Suppressant certification. The following certification criteria must be met in order to certify a Fume Suppressant not already approved in table 93102.8:

(1) The Fume Suppressant must not contain any PFOS compounds.

(2) New Fume Suppressants will be reviewed by the Office of Environmental Health Hazard Assessment (OEHHA) for their toxicity.

(3) A source test on the Fume Suppressant must be performed to establish the Surface Tension measured by Stalagmometer or Tensiometer that yields a Hexavalent Chromium emission rate below 0.01 milligrams per ampere-hour.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety

Code; and 40 CFR Part 63 Subpart N.

§ 93102.9 Parameter Monitoring Requirements.

(a) *Ampere-~~h~~Hours.* Each electroplating or anodizing tank, or group of electroplating or anodizing tanks, shall have installed a continuous recording, non resettable, ampere-hour meter that operates on the electrical power lines connected to the tank or group of tanks. A separate meter shall be hard-wired for each rectifier.

(b) *Pressure drop.* The ~~o~~Owner or ~~o~~Operator shall continuously monitorthe pressure drop across an add-on control device such as a C~~c~~omposite ~~m~~Mesh-~~p~~Pad (CMP), ~~p~~Packed-~~b~~Bed ~~s~~Scrubber (PBS), a CMP/PBS, ~~f~~Fiber-~~b~~Bed ~~m~~Mist ~~e~~Eliminator, and a High Efficiency Particulate Air~~restor~~ (HEPA) filter with a mechanical gauge. The gauge shall be located so that it can be easily visible and in clearsight of the operation, or maintenance personnel. The pressure drop shall be maintained within plus or minus 2 inches of water of the value established during the performance test to demonstrate compliance with the ~~e~~Emission ~~l~~Limitation for CMP, PBS, a CMP/PBS,and a ~~f~~Fiber-~~b~~Bed ~~m~~Mist ~~e~~Eliminator. The pressure drop shall be maintained within - ½ times to +2 times the inches of water of the value established during the performance test to demonstrate compliance with the ~~e~~Emission ~~l~~Limitation for HEPA filters.

(c) *Inlet velocity pressure.* The ~~o~~Owner or ~~o~~Operator shall continuously monitor the inlet velocity pressure of a ~~p~~Packed-~~b~~Bed ~~s~~Scrubber with amechanical gauge. The gauge shall be located so that it can be easily visible and in clear sight of the operation, or maintenance personnel. The inlet velocity pressure shall be maintained within plus or minus 10 percent of the value established during the performance test to demonstrate compliance with the ~~e~~Emission ~~l~~Limitation.

(d) *Surface ~~t~~Tension.*

(1) The ~~o~~Owner or ~~o~~Operator of a ~~f~~Facility that is required to use a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant as specified in section 93102.8 to comply with section 93102.4 shall measure and monitor the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating~~,~~ or ~~a~~Anodizing ~~b~~Bath(s) that contains a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant listed in Table 93102.8 of section 93102.8 with either a ~~s~~Stalagmometer using the procedure in Appendix 8 of section 93102.16 or a procedure approved by the ~~p~~Permitting ~~a~~Agency, or with a ~~t~~Tensiometer using U.S. EPA Method 306B (40 CFR part 63, Appendix A). The ~~s~~Surface ~~t~~Tension shall be maintained below the value required by section 93102.8. Surface ~~t~~Tension shall be measured daily for 20

operating days, and ~~w~~Weekly thereafter as long as there is no violation of the surface ~~t~~Tension requirement. If a violation occurs, the measurement frequencyshall return to daily for 20 operating days, and ~~w~~Weekly thereafter.

(2) The ~~o~~Owner or ~~o~~Operator of a ~~f~~Facility using a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant containing a ~~w~~Wetting ~~a~~Agent that is not required touse a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant listed in Table 93102.8 of section 93102.8 shall measure and monitor the ~~s~~Surface ~~t~~Tension of the chromium electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~T~~tank bath(s) with either a ~~s~~Stalagmometer using the procedure in Appendix 8 of section 93102.16 or a procedure approved by the ~~p~~Permitting ~~a~~Agency, or with a ~~t~~Tensiometer using U.S. EPA Method 306B (40 CFR part 63, Appendix A).If the ~~s~~Surface ~~t~~Tension is measured with a ~~s~~Stalagmometer the ~~s~~Surface ~~t~~Tension shall be maintained below 45 dynes/centimeter. If the ~~s~~Surface ~~t~~Tension is measured with a~~t~~Tensiometer, the ~~s~~Surface ~~t~~Tension shall be maintained below35 dynes/centimeter. Surface ~~t~~Tension shall be measured dailyfor 20 operating days, and ~~w~~Weekly thereafter as long as there is no violation of the ~~s~~Surface ~~t~~Tension requirement. If a violationoccurs, the measurement frequency shall return to daily for 20 operating days, and ~~w~~Weekly thereafter.

(3) Facilities with an approved alternative method of compliance as specified in section 93102.4(b)(3) and using chemical fume suppressants as all or partial control of ~~h~~Hexavalent ~~c~~Chromium emissions must measure and monitor the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath daily. The ~~s~~Surface ~~t~~Tensionmust be maintained at or below the ~~s~~Surface ~~t~~Tension measuredduring the performance test.

(e) *Foam ~~b~~Blanket thickness.* The ~~o~~Owner or ~~o~~Operator shall monitor the ~~f~~Foam ~~b~~Blanket thickness across the surface of the ~~e~~Electroplating~~,~~ or ~~a~~Anodizing ~~b~~Bath(s). The ~~f~~Foam ~~b~~Blanket thickness shall be maintainedconsistent with the requirements established during the performance test to demonstrate compliance with the ~~e~~Emission ~~l~~Limitation. Foam thickness shall be measured hourly for 15 operating days, and daily thereafter as long as there is no violationof the foam thickness requirement. If a violation occurs, the measurement frequency shall return to hourly for 15 operating days, and daily thereafter.

(f) *Mechanical ~~f~~Fume ~~s~~Suppressants.* The ~~o~~Owner or ~~o~~Operator shall visually inspect the ~~e~~Electroplating~~,~~ or ~~a~~Anodizing ~~b~~Bath(s) for coveragecomparable to the coverage during the performance test daily.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.10 Inspection and Maintenance Requirements.

(a) Hexavalent ~~c~~Chromium electroplating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizingfacilities shall comply with the applicable inspection and maintenance requirements listed in Table 93102.10.

Table 93102.10 -- Summary of Inspection and Maintenance Requirements

Control Technique/Equipment	Inspection and Maintenance Requirements	Frequency
Composite ~~m~~Mesh-~~p~~Pad (CMP) ~~s~~System, Packed-~~b~~Bed ~~s~~Scrubber(PBS), or PBS/CMP	1. Visually inspect device to ensure that there is proper drainage, no unusual ~~c~~Chromic ~~a~~Acid buildup on the pads, and/or packed beds and no evidence of chemical attack that affectsthe structural integrity of the device.	1. 1/quarter.
	2. Visually inspect back portion of themesh pad closest to the fan to ensurethere is no breakthrough of ~~c~~Chromic ~~a~~Acid ~~m~~Mist, and/or back portion of the chevron mist eliminator to ensure it isdry and there is no breakthrough of ~~c~~Chromic ~~a~~Acid ~~m~~Mist.	2. 1/quarter.
	3. Visually inspect ductwork from tank to the control device to ensure thereare no ~~l~~Leaks.	3. 1/quarter.
	4. Perform washdown and/or add fresh makeup water to the packed bed when it is needed.	4. Per manufacturer.
Fiber-~~b~~Bed ~~m~~Mist ~~e~~Eliminator[A]	Same as number 1 for CMP/PBS.	1. 1/quarter.
	Same as number 3 for CMP/PBS.	2. 1/quarter.
	Same as number 4 for CMP/PBS.	3. Per manufacturer.
High Efficiency Particulate Air~~rrestor~~ (HEPA) filter	1. Look for changes in the pressuredrop.	1. 1/week.
	2. Replace HEPA filter.	2. Per manufacturer's specifications, or ~~p~~Permitting ~~a~~Agency's requirement.

Control Technique/Equipment	Inspection and Maintenance Requirements	Frequency
Chromium tank covers [facilities complying with subsection 93102.6(b)]	1. Drain the air-inlet (purge air) valvesat the end of each day that the tank is in operation.	1. 1/day.
	2. Visually inspect tank access door seals and membranes for integrity.	2. 1/week.
	3. Drain the evacuation unit directly into the plating tank or into the rinse tanks (for recycle into the plating tank).	3. 1/week.
	4. Visually inspect membranes for perforations using a light source that adequately illuminates the membrane (e.g., Grainger model No. 6X971 Fluorescent Hand Lamp).	4. 1/month.
	5. Visually inspect all clamps for proper operation; replace as needed.	5. 1/month.
	6. Clean or replace filters on evacuation unit.	6. 1/month.
	7. Visually inspect piping to, piping from, and body of evacuation unit toensure there are no Lleaks and no evidence of chemical attack.	7. 1/quarter.
	8. Replace access door seals, membrane evacuation unit filter, and purge air inlet check valves in accordance with the manufacturer's recommendations.	8. Per manufacturer.
Pitot tube	Backflush with water, or remove from the duct and rinse with fFresh wWater. Replace in the duct and rotate 180 degrees to ensure that the same zero reading is obtained. Check pitot tube ends for damage. Replace pitot tube if cracked or fatigued.	1/quarter.
Ampere-hour meter	Install and maintain per manufacturer's specifications.	Per manufacturer.
Stalagmometer/ Tensiometer	Calibrate and maintain per manufacturer’s specifications.	Per manufacturer.

[A] Inspection and maintenance requirements for the control device installed upstream of the fFiber-bBed mMist eEliminator to prevent plugging do not apply as long as the inspection and maintenance requirements for the fiber-bed unit are followed.

(b) Add-on aAir pPollution cControl dDevice(s) that is custom designed for aspecific operation shall develop operating and maintenance requirements. The requirements shall be submitted to the

pPermitting aAgency for review and approval. The requirements andfrequency of inspection must be sufficient to ensure compliance.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.11 Operation and Maintenance Plan (O & M Plan) Requirements.

(a) *Prepare the O & M plan.* The oOwner or oOperator subject to the inspection and maintenance requirements of subsection 93102.10(a) and (b) shall prepare an operation and maintenance plan. For mMajor sSources, the plan shall be incorporated by reference into the source's title V permit. The plan shall incorporatethe inspection and maintenance requirements for that device, or monitoring equipment, as identified in Table 93102.10, or subsection 93102.10(b) of this ATCM and include the following elements:

(1) A standardized checklist to document the operation and maintenance of the fFacility, the aAdd-oOn aAir pPollution cControldDevice, and the process and control system monitoring equipment; and

(2) Procedures to be followed to ensure that equipment is properly maintained. [To satisfy the inspection and maintenance requirements of this subsection, the oOwner or oOperator may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this subsection.]

(b) *Retain the O & M plan.* The oOwner or oOperator shall keep thewritten operation and maintenance plan on record after it is developed to be made available for inspection, upon request,during normal working hours.

(c) *Changes to the O & M plan.* Any changes made by the oOwner or oOperator should be documented in an addendum to the plan. In addition, the oOwner or oOperator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, during normal working hours, for a period of 5 years after each revision to the plan.

(d) *Revisions to the O & M plan to address ~~b~~Breakdowns.* The operation and maintenance plan shall be revised as necessary to minimize ~~b~~Breakdowns.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.12 Recordkeeping Requirements.

(a) *Inspection records*. The ~~o~~Owner or ~~o~~Operator shall maintain inspection records to document that the inspection and maintenance requirements of section 93102.10 and Table 93102.10, and the provisions of the operation and maintenance plan required by section 93102.11 have been met. The record can take the form of a checklist and shall identify:

(1) the device inspected,

(2) the date and time of inspection,

(3) a brief description of the working condition of the device during the inspection,

(4) maintenance activities performed on the components of the air pollution control system (i.e. duct work replacement, filter pad replacement, fan replacement, etc.), and

(5) actions taken to correct deficiencies found during the inspection.

(b) *Performance test records.* The ~~o~~Owner or ~~o~~Operator shall maintaintest reports documenting the conditions and results of all performance tests.

(c) *Monitoring data records.* The ~~o~~Owner or ~~o~~Operator shall maintain records of monitoring data required by section 93102.9 that are used to demonstrate compliance, including the date and time thedata are collected.

(1) *Cumulative rectifier usage records.* Record the actual cumulative rectifier usage expended during each month of the reporting period, and the total usage expended to date.

(2) *Pressure drop.* The ~~o~~Owner or ~~o~~Operator shall record thepressure drop once a week.

(3) *Inlet Velocity Pressure.* The ~~o~~Owner or ~~o~~Operator shall recordthe inlet velocity pressure ~~w~~Weekly.

(4) *Surface ~~t~~Tension.*

(A) For ~~F~~ffacilities that are required to use a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant asspecified in section 93102.8 to comply with section 93102.4:~~.~~

The ~~o~~Owner or ~~o~~Operator shall record the ~~s~~Surface ~~t~~Tension daily for 20 operating days, and ~~w~~Weekly thereafter as long as there is no violation of the ~~s~~Surface ~~t~~Tension requirement.If the ~~s~~Surface ~~t~~Tension of the plating or ~~a~~Anodizing ~~b~~Bath exceeds levels specified in section 93102.8, the ~~o~~Owner or ~~o~~Operator shall again record the ~~s~~Surface ~~t~~Tension daily for 20operating days, and ~~w~~Weekly thereafter.

(B) For ~~F~~ffacilities that are not required to use a ~~c~~Chemical ~~f~~Fume ~~suppressant specified s~~Suppressant as specified in section 93102.8 to comply with section 93102.4:~~.~~

The ~~o~~Owner or ~~o~~Operator shall record the ~~s~~Surface ~~t~~Tension daily for 20 operating days, and ~~w~~Weekly thereafter as long as there is no violation of the ~~s~~Surface ~~t~~Tension requirement.If the ~~s~~Surface ~~t~~Tension of the plating or ~~a~~Anodizing ~~b~~Bath exceeds 45 dynes/centimeter as measured with a ~~s~~Stalagmometer or exceeds 35 dynes/centimeter as measured with a ~~t~~Tensiometer, the ~~o~~Owner or ~~o~~Operator shall again record the ~~s~~Surface ~~t~~Tension daily for 20 operating days, and ~~w~~Weekly thereafter.

(C) Facilities with an approved alternative method of compliance as specified in section 93102.4(b)(3) and using ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants as all, or partial control of ~~h~~Hexavalent ~~c~~Chromium emissions must record the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating~~,~~ or ~~a~~Anodizing ~~b~~Bath daily. The ~~s~~Surface ~~t~~Tension must be maintained at or below the ~~s~~Surface~~t~~Tension measured during the performance test.
~~(C)~~

(5) *Mechanical ~~f~~Fume ~~s~~Suppressants.* Facilities with an approved alternative method of compliance as specified in section 93102.4(~~c~~b)(3) and using ~~m~~Mechanical ~~f~~Fume ~~s~~Suppressants as all or partial control of ~~h~~Hexavalent ~~c~~Chromium emissions must record the coverage on the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath daily. Coverage shall be

reported as a percentage of bath surface area.

(6) *Foam thickness.* The ~~o~~Owner or ~~o~~Operator shall record the foam thickness hourly for 15 operating days, and daily thereafter as long as there is no violation of the foam thickness requirement.If a violation occurs, the measurement frequency shall return to hourly for 15 operating days, and daily thereafter.

(d) *Breakdown records*. The ~~o~~Owner or ~~o~~Operator shall maintain recordsof the occurrence, duration, and cause (if known) and action takenon each ~~b~~Breakdown.

(e) *Records of excesses.* The ~~o~~Owner or ~~o~~Operator shall maintain records of exceedances of the ~~e~~Emission ~~l~~Limitations in section 93102.4, the monitoring parameter values established under section 93102.9, or any site-specific operating parameters established for alternative equipment. The records shall include the date of the occurrence, the duration, cause (if known), and, where possible, the magnitude of any excess emissions.

~~(f) *Records demonstrating facility size*. Facility size for determining the applicable emission limitation in subsection 93102.4(a) is determined by the maximum cumulative potential rectifier capacity. However, a facility with a maximum cumulative potential rectifier capacity of 60 million amp-hr/yr or more may, at the option of the owner or operator, be considered small or medium if the actual cumulative rectifier usage is less than 60 million amp-hr/yr as demonstrated by using either of the following procedures:~~

~~(1) *Annual actual cumulative rectifier capacity.* Show by records that the facility's previous annual actual cumulative rectifier capacity was less than 60 million amp-hr/yr, by using nonresettable ampere-hour meters and keeping monthly records of actual ampere-hour capacity for each 12-month rolling period following the compliance date. The actual cumulative rectifier capacity for the previous 12-month rolling period shall be tabulated monthly by adding the capacity for the current month to the capacities for the previous 11 months; or~~

~~(2) *Maximum cumulative potential rectifier usage limit.* By accepting a limit on the maximum cumulative potential rectifier usage of a hard chromium electroplating facility through a title V permit condition or a permitting agency operating permit condition and by maintaining monthly records in accordance with subsection 93102.12(c)(1) to demonstrate that the limit has not been exceeded.~~

~~(g)~~(f) *Records of annual ampere-hour use.* Facilities shall maintain monthly records of total ampere-hour use per calendar year. The record shall be submitted to the ~~p~~Permitting ~~a~~Agency as part of theirInitial and Ongoing Compliance Status Reports, as specified in Appendix 2 and 3.

~~(h)~~(g) *Records of ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant additions.* For facilities using ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants to comply with the standards, orrequirements, the ~~o~~Owner or ~~o~~Operator shall maintain records of the date, time, approximate volume, and product identification of the ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant that is added to the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath.

~~(i)~~(h) *Records of ~~t~~Trivalent ~~c~~Chromium ~~p~~Process components.* For facilities complying with subsection 93102.6(a) using the ~~t~~Trivalent ~~c~~Chromium~~p~~Process, the ~~o~~Owner or ~~o~~Operator shall maintain records of the ~~b~~Bath ~~c~~Components purchased, with the ~~w~~Wetting ~~a~~Agent clearly identified asa bath constituent contained in one of the components.

~~(j) *New/modified source review information.* The owner or operator shall maintain records supporting the notifications and reports required by the permitting agency's new source review provisions and/or subsection 93102.4(e).~~

~~(k)~~(i) *Housekeeping records.* The ~~o~~Owner or ~~o~~Operator shall maintain records demonstrating compliance with housekeeping requirements, as required by section 93102.5, including the dates on which specific activities were completed, and records showing that chromium or chromium-containing wastes have been stored, disposed of, recovered, or recycled using practices that do not lead to ~~f~~Fugitive ~~d~~Dust emissions.

~~(l)~~(j) *Records retention.* All records shall be maintained for five years, at least two years on site.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.13 Reporting Requirements.

(a) ~~*Performance*~~ *Source test documentation.*

(1) *Notification of ~~performance~~ Source test.*

(A) The ~~o~~Owner or ~~o~~Operator of a ~~f~~Facility shall notify the ~~p~~Permitting~~a~~Agency of his or her intention to conduct a ~~performance~~source

test at least 60 calendar days before the performance test is scheduled.

(B) ~~The provisions in subsection 93102.13(a)(1)(A), above, do not apply if the performance test was conducted prior to July 24, 1997, was used to demonstrate compliance with subsection 93102.4(a) or subsection 93102.6(a), and was approved by the permitting agency and the U.S. EPA.~~

(2) *Reports of performance test results.* The ~~o~~Owner or ~~o~~Operatorshall report performance test results to the ~~p~~Permitting ~~a~~Agency. Reports of performance test results shall be submitted no later than 90 days following the completion ofthe required performance test, and shall be submitted as part of the notification of compliance status required by subsection (b) of this section.

(3) The content of performance test reports shall contain the information identified in Appendix 1.

~~(b) *Initial compliance status report.* An initial compliance status report is required each time that a Ffacility becomes subject to the requirements of this ATCM. The Oowner or Ooperator shall submit tothe Ppermitting Aagency an initial compliance status report, signed bythe Rresponsible Oofficial who shall certify its accuracy, attesting to whether the Ffacility has complied with this rule.~~

~~(1) The initial compliance status report shall be submitted to the permitting agency no later than April 24, 2008 for existing facilities, or at start-up for new facilities.~~

~~(2) The content of the initial compliance status report shall contain the information identified in Appendix 2.~~

~~(c)~~(b) *Ongoing compliance status reports.* The ~~o~~Owner~~,~~ or ~~o~~Operator shall submit a summary report to the ~~p~~Permitting ~~a~~Agency to document theongoing compliance status.

(1) Ongoing compliance status reports shall be submitted to the ~~p~~Permitting ~~a~~Agency on or before February 1 annually for all facilities, and shall include information for the preceding calendar year (January 1 through December 31).

(2) The content of ongoing compliance status reports shall include the information identified in Appendix ~~3~~2.

~~(d)~~(c) *Reports of ~~bB~~Breakdowns.* The ~~oO~~wner or ~~oO~~perator shall report ~~bB~~reakdowns as required by the ~~pP~~ermitting ~~aA~~gency's ~~bB~~reakdown rule.

~~(e)~~(d) *Reports associated with the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess.*

(1) *Facilities currently using the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess.*

(A) Owners or ~~oO~~perators electroplating with the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess using a ~~wW~~etting ~~aA~~gent are not subject tosubsections (a), (b), and (c) of this section 93102.13, but shall submit to the ~~pP~~ermitting ~~aA~~gency the following information ~~no later than November 24, 2007~~ no later than July 1, 2024 unless previously submitted:

1. The name and address of each ~~fF~~acility subject to this paragraph;

2. A statement that a ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess that incorporates a ~~wW~~etting ~~aA~~gent will be used to comply withthese requirements; and

3. The list of ~~bB~~ath ~~cC~~omponents that comprise the ~~tT~~rivalent ~~cC~~hromium bath, with the ~~wW~~etting ~~aA~~gent clearly identified.

(B) An ~~oO~~wner or ~~oO~~perator electroplating with the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess and complying with the ~~eE~~mission ~~lL~~imitation option in subsection 93102.6(a) shall submit theinformation contained in subsections (a) and (b) of this section 93102.13. The report shall be submitted in accordance with the schedules identified in those paragraphs.

(2) *Facilities changing to the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess.* Within30 days of a change to the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess, the ~~oO~~wner or ~~oO~~perator shall submit to the ~~pP~~ermitting ~~aA~~gency a report that includes:

(A) Facilities electroplating with the ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocessusing a ~~wW~~etting ~~aA~~gent shall submit the following information:

1. The name and address of each ~~fF~~acility subject to thisparagraph; and

2. A statement that a ~~tT~~rivalent ~~cC~~hromium ~~pP~~rocess that incorporates a ~~wW~~etting ~~aA~~gent will be used to comply

withthese requirements; and

3. The list of ~~b~~Bath ~~c~~Components that comprise the ~~t~~Trivalent ~~c~~Chromium bath, with the ~~w~~Wetting ~~a~~Agent clearly identified;and

4. A description of the manner in which the process has been changed.

(B) Facilities electroplating with the ~~t~~Trivalent ~~c~~Chromium ~~p~~Processand complying with the ~~e~~Emission ~~l~~Limitation option in section 93102.6(a) shall submit the information contained in subsections (a) and (b) of this section 93102.13. The report shall be submitted in accordance with the schedulesidentified in those paragraphs.

~~(f)~~(e) *Adjustments to the timeline for submittal and format of reports.* A ~~p~~Permitting ~~a~~Agency may adjust the timeline for submittal of periodic reports, allow consolidation of multiple reports into a single report, establish a common schedule for submittal of reports, or accept reports prepared to comply with other State, or local requirements.Prior to allowing an adjustment, the ~~p~~Permitting ~~a~~Agency must find that the adjustment will provide the same information and will not alter the overall frequency of reporting.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.14 Procedure for Establishing Alternative Requirements.

(a) *Request Approval of an Alternative Requirement*. Any ~~p~~Person mayrequest approval of an alternative requirement. The ~~p~~Person seeking such approval shall submit the proposed alternative requirement to the ~~p~~Permitting ~~a~~Agency for approval. The request must include the proposed alternative requirement, the reason for requesting the alternative requirement, and information demonstrating that the criteria for approval identified in Table 93102.14 are met.

(b) *Approval of an Alternative Requirement.* A ~~p~~Permitting ~~a~~Agency mayapprove an alternative requirement if it determines that applicationof the alternative requirement meets the criteria for approval, identified in Table 93102.14, and the ~~p~~Permitting ~~a~~Agency has received concurrence by the ARB and U.S. EPA, where concurrence is required.

(c) *Concurrence for an Alternative Requirement.* For those requirements identified in Table 93102.14 as requiring concurrence

by the U.S. EPA and ARB, the ~~p~~Permitting ~~a~~Agency shall submit the alternative requirement to the concurring agency prior to final actionby the ~~p~~Permitting ~~a~~Agency.

(d) *Reports of Approved Alternative Requirements to U.S. EPA and ARB*. The ~~p~~Permitting ~~a~~Agency shall provide the U.S. EPA and ARB with copies of all approved alternative requirements. The information shall be provided at a mutually agreed upon frequency.

(e) *Approval Criteria.* Nothing in this section prohibits the ~~p~~Permitting ~~a~~Agency from establishing approval criteria more stringent than thatrequired in Table 93102.14.

(f) *Alternatives Approved by U.S. EPA.* Waivers obtained from U.S. EPA prior to October 24, 2007, shall remain in effect until the effective dates of the specified requirements become effective.

Table 93102.14 -- Requirements for Approval of Alternatives

Section or Subsection	Requirement	Criteria for Approval	Approving Agency	Concurring Agency [(1)]
93102.1	Applicability	equivalent type and size of ~~f~~Facility regulated	District	
93102.4	Limits and requirements	equal or greater emission reductions	District	U.S. EPA
93102.7(a)	Performance test requirements	equivalent means of determining compliance	District	
93102.7(b)	Use of previously conducted performance tests	overall existing tests provide a similar level of compliance assurance	District	
93102.7(c)	Alternative test method	provides a similar level of accuracy and precision	District for Minor[2] and Intermediate[3] Changes	U.S. EPA, for Major[4] Changes, and ARB
93102.7(d)	Amendments to the pre-test protocol	equivalent means of determining compliance	District	
93102.7(e)	Test all emission points	equivalent means of determining compliance	District	
93102.9	Parameter monitoring	equivalent means of determining and assuring compliance	District for Minor[5] and Intermediate[6] Changes	U.S. EPA for Major[7] Changes
93102.10	Inspection maintenance requirements	equivalent means of assuring compliance	District	
93102.11	Operation and maintenance plans	equivalent means of assuring compliance	District	
93102.12(a) through (f) and (h) through (j)	Record-keeping	equivalent means of assuring compliance	District for Minor[8] Changes	U.S. EPA for Major[9] Changes
93102.12(l)	Retention of records	assure historical records available for up to 5 years	District for Minor[8] Changes	U.S. EPA for Major[9] Changes
93102.13	Reporting	equivalent means of assuring compliance	District for Minor[8] Changes	U.S. EPA for Major[9] Changes

1. U.S. EPA, or the implementing agency, in accordance with any delegation ofauthority to approve alternatives from the U.S. EPA.

2. Minor change to test method means: (1) A ~~m~~Modification to a federally enforceable test method that: (i) Does not decrease the stringency of the ~~e~~Emission ~~l~~Limitation or standard; (ii) Has no national significance (e.g., does not affect implementation of the applicable regulation for other affected ~~s~~Sources, does not set anational precedent, and individually does not result in a revision to the test method); and (iii) Is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected ~~s~~Source. (2) Examples of minor changes to a test method include, but are not limited to: (i) Field adjustments in a test method's sampling procedure, such as a modified sampling traverse or location to avoid interference from an obstruction in the stack,increasing

the sampling time or volume, use of additional impingers for a high moisture situation, accepting particulate emission results for a test run that was conducted with a lower than specified temperature, substitution of a material in thesampling train that has been demonstrated to be more inert for the sample matrix; and (ii) Changes in recovery and analytical techniques such as a change in qualitycontrol/quality assurance requirements needed to adjust for analysis of a certain sample matrix.

3. Intermediate change to test method means a within-method ~~m~~Modification to a federally enforceable test method involving “proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated ~~e~~Emission ~~l~~Limitation or standard. Though site-specific, an intermediate change may seta national precedent for a source category and may ultimately result in a revision to the federally enforceable test method. In order to be approved, an intermediate change must be validated according to U.S. EPA Method 301 (40 CFR Part 63, Appendix A) to demonstrate that it provides equal or improved accuracy and precision. Examples of intermediate changes to a test method include, but are not limited to: (i) Modifications to a test method's sampling procedure including substitution of sampling equipment that has been demonstrated for a particular sample matrix, and use of a different impinger absorbing solution; (ii) Changes in sample recovery procedures and analytical techniques, such as changes to sample holding times and use of a different analytical finish with proven capability for the analyte of interest; and (iii) “Combining" a federally required method with another proven method for application to processes emitting multiple pollutants.

4. Major change to test method means a ~~m~~Modification to a federally enforceable test method that uses “unproven technology or procedures" (not generally accepted by the scientific community) or is an entirely new method (sometimes necessary when the required test method is unsuitable). A major change to a test method may be site-specific, or may apply to one or more sources or source categories, and will almost always set a national precedent. In order to be approved, a major change must be validated according to EPA Method 301 (40 CFR Part 63, Appendix A). Examples of major changes to a test method include, but are not limited to: (i) Use of an unproven analytical finish; (ii) Use of a method developed to fill a test method gap; (iii) Use of a new test method developed to apply to a control technology not contemplated in the applicable regulation; and (iv) Combining two or more sampling/analytical methods (at least one unproven) into one for application toprocesses emitting multiple pollutants.

5. ~~-~~Minor change to monitoring means: (1) A ~~m~~Modification to federally required monitoring that: (i) Does not decrease the stringency of the compliance and enforcement measures for the relevant standard; (ii) Has no national significance (e.g., does not affect implementation of the applicable regulation for other affected sources, does not set a national precedent, and individually does not result in a revision to the monitoring requirements); and (iii) Is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected source. Examples of minor changes to monitoring include, but are not limited to: (i) Modifications to a sampling procedure, such as useof an improved sample conditioning system to reduce maintenance requirements; (ii) Increased monitoring frequency; and (iii) Modification of the environmental shelter to moderate temperature fluctuation and thus protect the analytical instrumentation.

6. Intermediate change to monitoring means a ~~m~~Modification to federally required monitoring involving “proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated ~~e~~Emission ~~l~~Limitation or standard. Though site-specific, an intermediate change may set a national precedent for a source category and may ultimately result in a revision to thefederally required monitoring. Examples of intermediate changes to monitoring include, but are not limited to: (i) Use of a continuous emission monitoring system (CEMS) in lieu of a parameter monitoring approach; (ii) Decreased frequency for non-continuous parameter monitoring or physical inspections; (iii) Changes to qualitycontrol requirements for parameter monitoring; and (iv) Use of an electronic data reduction system in lieu of manual data reduction.

7. Major change to monitoring means a ~~m~~Modification to federally required monitoringthat uses “unproven technology or procedures" (not generally accepted by the scientific community) or is an entirely new method (sometimes necessary when the required monitoring is unsuitable). A major change to monitoring may be site-specificor may apply to one or more source categories and will almost always set a national precedent. Examples of major changes to monitoring include, but are not limited to: (i) Use of a new monitoring approach developed to apply to a control technology not contemplated in the applicable regulation; (i) Use of a predictive emission monitoringsystem (PEMS) in place of a required continuous emission monitoring system (CEMS); (iii) Use of alternative calibration procedures that do not involve calibration gases or test cells; (iv) Use of an analytical technology that differs from that specifiedby a performance specification; (v) Decreased monitoring frequency for a continuous emission monitoring system, continuous opacity monitoring system, predictive emission monitoring system, or continuous parameter monitoring system; (vi) Decreased monitoring frequency for a ~~l~~Leak detection and repair program; and (vii) Useof alternative averaging times for reporting purposes.

8. Minor change to recordkeeping/reporting means: (1) A ~~m~~Modification to federally required recordkeeping or reporting that: (i) Does not decrease the stringency of the compliance and enforcement measures for the relevant standards; (ii) Has no national significance (e.g., does not affect implementation of the applicable regulationfor other affected sources, does not set a national precedent, and individually does not result in a revision to the recordkeeping or reporting requirement); and (iii) Is site-specific. Examples of minor changes to recordkeeping or reporting include, but are not limited to: (i) Changes to recordkeeping necessitated by alternatives to monitoring; (ii) Increased frequency of recordkeeping or reporting, or increased record retention periods; (iii) Increased reliability in the form of recording monitoring data, e.g., electronic or automatic recording as opposed to manual recording of monitoring data; (iv) Changes related to compliance extensions granted pursuant to 40 CFR Part 63 Section 63.6(i); (v) Changes to recordkeeping for good cause shownfor a fixed short duration, e.g., ~~f~~Facility shutdown; (vi) changes to recordkeeping or reporting that is clearly redundant with equivalent recordkeeping/reporting requirements; and (vii) Decreases in the frequency of reporting for ~~a~~Area ~~s~~Sources to noless than once a year for good cause shown, or for ~~m~~Major ~~s~~Sources to no less than twice a year as required by title V, for good cause shown.

9. Major change to recordkeeping/reporting means: (1) A ~~m~~Modification to federally required recordkeeping or reporting that: (i) May decrease the stringency of the required compliance and enforcement measures for the relevant standards; (ii) May have national significance (e.g., might affect implementation of the applicable regulation for other affected sources, might set a national precedent); or (iii) Is not site-specific. Examples of major changes to recordkeeping and reporting include,but are not limited to: (i) Decreases in the record retention for all records; (ii) Waiver of all or most recordkeeping or reporting requirements; (iii) Major changes to the contents of reports; or (iv) Decreases in the reliability of recordkeeping or reporting(e.g., manual recording of monitoring data instead of required automated or electronic recording, or paper reports where electronic reporting may have been required).

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511,

Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.15 Requirements Relating to Chromium Electroplating or Chromic Acid Anodizing Kits.

(a) ~~Except as provided in subsection (b), n~~No ~~p~~Person shall sell, supply,offer for sale, or manufacture for sale in California, any chromiumelectroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing kit.

~~(b) The provisions of subsection (a) do not apply to any Pperson that sells, supplies, offers for sale, or manufactures for sale in California a chromium electroplating or Cchromic Aacid Aanodizing kit to the Qowner or Qoperator of a permitted Ffacility at which chromium electroplating or Cchromic Aacid Aanodizing is performed.~~

~~(c) No Pperson in California shall use a chromium plating or Cchromic Aacid Aanodizingkit to perform chromium electroplating or Cchromic Aacid Aanodizing unless these activities are performed at a permitted Ffacility that complies with the requirements of this ATCM.~~

~~(d) For the purposes of this section, "chromium electroplating or Cchromic Aacid Aanodizing kit" means chemicals and associated equipment for conducting chromium electroplating or Cchromic AacidAanodizing including, but not limited to, internal and external tank components.~~

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, and 39666, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, and 39666, Health and Safety Code; and 40 CFR Part 63 Subpart N.

§ 93102.16 Appendices 1 through ~~9~~11

This section 93102.16 contains Appendices 1 through ~~9~~ 11 to the ATCM for Chromium Plating and Chromic Acid Anodizing Facilities.

Appendix 1 - Content of ~~Performance~~ Source Test Reports

~~Performance~~ Source test reports required by section 93102.13 shall contain the followinginformation:

1. A brief process description;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any ~~m~~Modificationsto standard procedures;
4. Test results in mg/amp-hr;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Original data for field sampling and field and laboratory analyses;
8. Documentation of calculations; and
9. Any other information required by the test method.

Note: Test reports consistent with the provisions of California Air Resources Board Method 425 will fulfill the above performance test report content requirement.

Appendix 2 - Content of Initial Compliance Status Reports

Initial compliance status reports required by subsection 93102.13(b) shall contain the following information:

1. Company Information: Facility name, address, Oowner/Ooperator name, telephone number, and the measured distance to the property boundary of the nearest Ssensitive Rreceptor. For facilities that do not have an Aadd-on Aair Ppollution Ccontrol Ddevice the measurement shall be the distance, rounded to the nearest foot, from the edge of the plating or anodizing tank nearest the Ssensitive Rreceptor to the property line of the nearest Ssensitive Rreceptor that exists on October 24, 2007. For facilities with an Aadd-on Aair Ppollution CcontrolDdevice the measurement shall be the distance, rounded to the nearest foot, from the centroid of the stack to the property line of the nearest Ssensitive Rreceptor that exists on October 24, 2007;

2. The applicable requirements from section 93102.4 and the methods that were used to determine compliance. A description of the Aair Ppollution Ccontrol Ttechnique for each emission point;

3. If a Ffacility is using add-on controls to comply provide the following:

   a) Description of add-on controls and a performance test report documenting the results of the performance test, which contains the elements listed in Appendix 1;

   b) If the Ffacility is a Hhexavalent Cchromium Ffacility, the actual HhexavalentCchromium emissions of the Ffacility in pounds per year calculated by multiplying the emission rate with the actual Aampere-Hhours for the preceding calendar year.

   c) For monitored parameters 93102.9(b) and (c), the specific OoperatingPparameter Vvalue, or range of values, that corresponds to compliancewith the applicable emission limit; and

   d) A statement that the Oowner or Ooperator has completed and has on filethe operation and maintenance plan as required by section 93102.11.

4. If a Ffacility is using in-tank controls to comply, provide the following:

   a) Description of in-tank controls including name of in tank controls, name of chemical fume suppressant, Ssurface Ttension of the electroplating or anodizing bath; and

b) For monitored parameters 93102.9(d), (e), and (f) the specific Ooperating Pparameter Vvalue where applicable, or range of values, that correspondsto compliance.

5. The actual cumulative ampere-hour usage expended during the preceding calendar year;

6. For facilities complying with section 93102.4(a), if the Oowner or Ooperator is determining Ffacility size based on actual cumulative rectifier usage, records to support that the Ffacility is small or medium. For Eexisting Ffacilities, recordsfrom any 12-month period preceding the compliance date shall be used or adescription of how operations will change to meet a small or medium designation shall be provided. For Nnew Ffacilities, records of projected rectifier usage for the first 12-month period of Ttank Ooperation shall be used;

7. A statement that the Oowner or Ooperator, or personnel designated by theOowner or Ooperator, has completed Environmental Compliance Training pursuant to 93102.5(b); and

8. A statement by the Oowner or Ooperator as to whether the facilities havecomplied with the provisions of sections 93102 through 93102.16.

Appendix ~~3~~2 - Content of Ongoing Compliance Status Reports

Ongoing compliance status reports required by section 93102.13(c) shall contain the following information:

1. Company Information: ~~f~~Facility name, address, ~~o~~Owner/~~o~~Operator name, telephone number, and the measured distance to the property boundary of the nearest ~~s~~Sensitive ~~r~~Receptor. For facilities that do not have an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device the measurement shall bethe distance, rounded to the nearest foot, from the edge of the platingor anodizing tank nearest the ~~s~~Sensitive ~~r~~Receptor to the property line ofthe nearest ~~s~~Sensitive ~~r~~Receptor. For facilities with an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device the measurement shall be the distance, rounded to the nearest foot, from the centroid of the stack to the property line of the nearest ~~s~~Sensitive ~~r~~Receptor;
2. The relevant requirements for the ~~f~~Facility, and the ~~o~~Operating ~~p~~Parameter ~~v~~Value, or range of values, that correspond to compliance as specified in the notification of initial compliance status required byAppendix 2;
3. The actual cumulative ampere-hour usage expended during the reporting period, on a month-by-month basis, for the reporting period January 1 through December 31;
4. The actual ~~h~~Hexavalent ~~c~~Chromium emissions of the ~~f~~Facility during thereporting period in pounds per year calculated by multiplying the emission rate with the actual ampere-hour usage for the reporting period;
5. A summary of any excess emissions or exceeded monitoring parameters as identified in the records required by subsection 93102.12(e);
6. A certification by a ~~r~~Responsible ~~o~~Official that the inspection and maintenance requirements in section 93102.10 were followed in accordance with the operation and maintenance plan for the ~~f~~Facility;
7. If the operation and maintenance plan required by section 93102.11 was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emissions and/or monitoring parameter excesses are believed to have occurred, and a copy of the record(s) required by subsection 93102.12(a) documenting that the operation and maintenance plan was not followed;
8. A description of any changes in monitoring, processes, or controls since the last reporting period;
9. A statement that the ~~o~~Owner or ~~o~~Operator, or personnel designated bythe ~~o~~Owner or ~~o~~Operator, has, within the last 2 years, completed Environmental Compliance Training pursuant to 93102.5(b);
10. The name, title, and signature of the ~~r~~Responsible ~~o~~Official

who iscertifying the accuracy of the report; and

11. The date of the report.

Appendix 43 - Notification of Construction Reports

Notification of Construction Reports required by subsection 93102.4(e) shall contain the following information:

1. The oOwner or oOperator's name, title, and address;
2. The address (i.e., physical location) or proposed address of the fFacility if different from the oOwner's or oOperator's;
3. A notification of intention to construct a NnNew FfFacility and certificationthat all of the criteria specified in subsection 93102.4(d) are met;
4. A notification of intention to make any physical or operational changes to a fFacility that may meet or has been determined to meetthe criteria for a mModification;
5. The expected commencement and completion dates of the construction or mModification;
6. The anticipated date of (iInitial) sStart-uUp of the fFacility;
7. The type of process operation to be performed (hard or dDecorativecChromium eElectroplating, or cChromic aAcid anodizing);
8. A description of the aAir pPollution cControl tTechnique to be used to control emissions, such as preliminary design drawings and designcapacity if an aAdd-on aAir pPollution cControl dDevice is used; and
9. An estimate of emissions from the fFacility based on engineering calculations and vendor information on control device efficiency, expressed in units consistent with the emission limits of this ATCM. Calculations of emission estimates should be in sufficient detail to permit assessment of the validity of the calculations.

Note: A fFacility can fulfill these report content requirements by complying with the pPermitting aAgency's new source review rule or policy, provided similar information is obtained.

Appendix ~~5~~4 - Smoke Test for Chrome Tank Covers

SMOKE TEST TO VERIFY THE SEAL INTEGRITY OF COVERS DESIGNED TO REDUCE CHROMIUM EMISSIONS FROM ELECTROPLATING AND ANODIZING TANKS

~~1.~~ Applicability and Principle

~~2.~~1. Applicability. This alternative method is applicable to all Hhard ~~c~~Chromium~~e~~Electroplating and anodizing operations where a chrome tank cover is used on the tank for reducing chromium emissions.

~~3.~~2. Principle. During chromium electroplating or anodizing operations, bubbles of hydrogen and oxygen gas generated during the process rise to the surface of the tank liquid and burst. Upon bursting, tiny droplets of chromic acid (chromium mist) become entrained in the air above the tank. Because the chrome tank cover completely encloses the air above the tank, the chromium mist either falls back into the solution because of gravity or collects on the inside walls of the chrome tank cover and runs back into the solution. A semi-permeable membrane allows passage of the hydrogen and oxygen out of the chrome tank cover. A lit smoke device is placed inside the chrome tank cover to detect ~~l~~Leaks at the membrane, joints, or seals.

~~4.~~ Apparatus

~~5.~~3. Smoke device. Adequate to generate 500 to 1000 ft^3 of smoke/20 ft^2 of tank surface area (e.g., Model #1A=15 SECONDS from Superior Signal, New York).

~~6.~~4. Small container. To hold the smoke device.

~~7.~~ Procedure

5. Place the small container on a stable and flat area at center of the chrome tank cover (you can use a board and place it on the buss bars). Place the smoke device inside the container. After lighting the smoke device, quickly close the access door to avoid smoke from escaping. Let smoke device completely burn; entire space under the chrome tank cover will now be filled with the smoke. Observe for ~~l~~Leaksof smoke from each seal, joint, and membrane of the chrome tank cover. Record these observations including the locations and a qualitative assessment of any ~~l~~Leaks of smoke.

When all seals, joints, and membranes have been observed, evacuate the unit to remove the smoke from the chrome tank cover.

Appendix ~~6~~5 - Air Pollution Control or Air Quality Management DistrictBreakdown Rules.

DISTRICT	RULE #	RULE NAME
Amador	516	Upset and Breakdown Conditions
Antelope	430	Breakdown Provisions
Bay Area	1	General Provisions and Definitions
Butte	275	Reporting Procedures for Excess Emissions
Calaveras	516	Upset and Breakdown Conditions
Colusa	1.13	Equipment Breakdown
El Dorado	516	Upset and Breakdown Conditions
Feather River	9.6	Equipment Breakdown
Glenn	95.2	Malfunction of Equipment
Great Basin	403	Breakdown
Imperial	111	Equipment Breakdown
Kern	111	Equipment Breakdown
Lake	Chapter III, ArticleII	Malfunction
Lassen	2:15	Equipment Breakdown
Mariposa	516	Upset and Breakdown Conditions
Mendocino	R1-5-540	Equipment Breakdown
Modoc	2.12	Equipment Breakdown
Mojave	430	Breakdown Provisions
Monterey Bay	214	Breakdown Condition
North Coast	3-4-540	Breakdown and Violation Reporting
North Coast	1-5-540	Equipment Breakdown
Northern Sierra	516	Upset and Breakdown Conditions
Northern Sonoma	1-5-540	Equipment Breakdown
Placer	404	Upset Conditions Breakdown. Scheduled Maintenance
Sacramento	602	Breakdown Conditions: Emergency Variance
San Diego	98	Breakdown Conditions: Emergency Variance
San Joaquin	1100	Equipment Breakdown
San Luis Obispo	107	Breakdown or Upset Conditions and Emergency Variances
Santa Barbara	505	Breakdown Conditions
Santa Barbara	506	Emergency Variances for Breakdowns
Shasta	3:10	Excess Emissions
Siskiyou	2.12	Equipment Breakdown (Siskiyou)

DISTRICT	RULE #	RULE NAME
South Coast	430	Breakdown Provisions
Tehama	4:17	Upset or Breakdown Conditions
Tuolumne	516	Upset and Breakdown Conditions
Ventura	32	Breakdown Conditions; Emergency Variances
Yolo Solano	5.2	Upset/Breakdown Conditions: Emergency Variance

Appendix ~~7~~6 – Alternative Requirements for Enclosed Hexavalent ChromiumElectroplating Facilities – Mass Emission Rate Calculation Procedure

Mass Emission Rate shall be calculated using the following equation:

MAMER = ETSA x K x 0.015 mg/dscm

Where:

MAMER = the alternative emission rate for ~~e~~Enclosed ~~h~~Hexavalent ~~c~~Chromium~~e~~Electroplating ~~t~~Tanks in mg/hr.

ETSA = the ~~h~~Hexavalent ~~c~~Chromium electroplating tank surface area in squarefeet (ft^2).

K = a conversion factor, 425 dscm/(ft^2x hr).

Appendix ~~8~~7 – Surface Tension Procedure for a Stalagmometer

The ~~s~~Stalagmometer must first be properly cleaned before being used for the firsttime and after a period of storage. Properly clean the ~~s~~Stalagmometer using the following procedure:

1. Set up ~~s~~Stalagmometer in stand in a fume hood.

2. Place a clean 150 mL beaker underneath the ~~s~~Stalagmometer then fillwith reagent grade concentrated nitric acid. Immerse bottom tip (approximately ½") of ~~s~~Stalagmometer into the beaker.

3. Squeeze rubber bulb and pinch at the arrow up (1) position to collapse. Place bulb end securely on top end of ~~s~~Stalagmometer. Carefully draw the nitric acid by pinching the arrow up (1) position until the level is above the top etched line.

4. Allow nitric acid to remain in ~~s~~Stalagmometer for 5 minutes and thencarefully remove the bulb allowing the acid to completely drain.

5. Fill a clean 150 mL beaker with distilled or deionized water. Using the rubber bulb per the instructions in Step #3, rinse and drain ~~s~~Stalagmometerwith deionized or distilled water until the inside is "water break" free.

6. Fill a clean 150 mL beaker with isopropyl alcohol. Again using the rubber bulb per Step #3, rinse and drain ~~s~~Stalagmometer twice with isopropyl alcohol and allow the ~~s~~Stalagmometer to dry completely.

7. Take a sample of the solution to be tested and adjust the solution to room temperature. Measure the specific gravity and record reading.

8. Fill a clean 150 mL beaker with solution to be tested. Immerse bottom end of ~~s~~Stalagmometer into the beaker. Fill the ~~s~~Stalagmometer per instructions in Step #3, making sure that the solution level is above the top etched line.

9. Raise the ~~s~~Stalagmometer so that the bottom end is completely out ofsolution. Remove bulb and immediately place a finger on the top end ofthe ~~s~~Stalagmometer. Carefully use the finger to bring the solution level down to the top etched line. Do not release finger at this time.

10. "Wipe" the excess solution on the lower tip by touching it against the side of the beaker.

11. Release fingertip to allow solution to drain and count number of drops until the level reaches the bottom etched line.

Calculations for Surface Tension

$$\text{Surface Tension (dynes/cm)} = \frac{Sw * Nw * D}{N * Dw}$$

Sw = Surface Tension of water at 25°C or 77°F (72.75 dynes/cm)Nw = water drop number etched on instrument
D = measured specific gravity (g/ml)
N = # of solution drops
Dw = water density (1.0 g/mL)

PRECAUTIONS:

1. Make sure the Stalagmometer is clean (no sludge or film)
2. No chips, cracks, etc.
3. Vertical placement
4. No vibration
5. 20 drops per minute rate (10 dynes/cm) +/- 1 drop per minute
6. Performance checked with water. The number of drops etched on the instrument shall be verified with deionized water to +/- 1 drop. If the number of drops are not within 1 drop, then the Stalagmometer shall be cleaned. If the cleaning process does not bring the drop count within 1 drop of the etched number on the instrument, then the Operator shall:
    a) Purchase a new Stalagmometer; or
    b) Use the number of drops recorded for the distilled water run as (Nw) in the equation instead of the number of drops etched on the Stalagmometer
7. Sample at room temperature

Appendix ~~9~~8--Information to be Submitted to the Permitting Agency when Demonstrating an Alternative Method or Methods of Compliance Pursuant to section 93102.4(~~c~~b)(3)

The ~~o~~Owner or ~~o~~Operator of a ~~f~~Facility applying for approval of an alternative methodof compliance must submit to the ~~p~~Permitting ~~a~~Agency the following information:

1. A performance test as specified in Section 93102.7. The test shall have been conducted in a manner consistent with normal electroplating or anodizing operations.

2. A demonstration that the alternative method achieves an equal or greater amount of reductions in ~~h~~Hexavalent ~~c~~Chromium emissions thanwould be achieved with direct compliance with the applicable emission rate in Table 93102.4.

3. Calculations based on scientifically valid risk assessment methodologies demonstrating that the alternative method results in reducing risk equally or greater than the risk reduction that would be achieved by direct compliance with the applicable emission rate in Table 93102.4. A ~~f~~Facility using in-tank controls only must be modeledas a volume source and the resulting risk compared to the same ~~f~~Facility modeled as a point source.

4. Documentation which demonstrates that the method is enforceable, including an operation and maintenance plan, an inspection and maintenance schedule, and a recordkeeping plan.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, and 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39665, 39666, and 41511, Health and Safety Code; and 40 CFR Part 63 Subpart N.

Appendix 9 – Tier II and Tier III Hexavalent Chromium Tank Thresholds

1. Tier II Tank ~~h~~Hexavalent ~~c~~Chromium concentrations shall remain in the concentration range for the specified temperature and be required to comply with Section 93102.4(h)). Tanks that exceed the ~~h~~Hexavalent ~~c~~Chromium concentration for a corresponding temperature for Tier II Tanks shall be considered a Tier III Tank and shall be required to comply with section 93102.4(g).

Temperature (° F)	Tier II Tank Hexavalent Chromium Concentration (ppm)	Tier III Tank Hexavalent Chromium Concentration (ppm)
140 to <145° F	5,200 to <10,400	≥10,400
145 to <150° F	2,700 to <5,500	≥5,500
150 to <155° F	1,400 to <2,900	≥2,900
155 to <160° F	700 to <1,600	≥1,600
160 to <165° F	400 to <800	≥800
165 to <170° F	180 to <400	≥400
≥170° F	≥100 to <200	≥200

2. Electrolytic tanks, such as ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tanks, with ~~h~~Hexavalent ~~c~~Chromium concentration greater than 1,000 ppm shall be considered a Tier III tank regardless of operating temperature.

3. Air sparged tanks with a ~~h~~Hexavalent ~~c~~Chromium concentration greater than 1,000 ppm shall be considered a Tier III tank regardless of operating temperature.

4. The ~~o~~Owner or ~~o~~Operator of a ~~f~~Facility shall not be subject to the requirement to vent a Tier III Hexavalent Chromium Tank to an ~~a~~Add-~~o~~On ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device for one tank at a ~~f~~Facility if the tank meets the following requirements:
   a) The surface area is less than or equal to four (4) square feet;
   b) The ~~h~~Hexavalent ~~c~~Chromium concentration is less than or equal to 11,000 ppm;
   c) The tank is operated and permitted at less than or equal to 210° F;
   d) The tank is operated at a temperature between 170-210° F for less than or equalto two and one-half (2.5) hours per week; and
   e) The tank complies with the tank cover requirements in section 93102.4(h) and ~~the~~temperature data logger must log the duration of time and temperature of the tank to demonstrate compliance with (d) above.

Appendix 10 – Implementation Schedule

Requirement	Affected Tanks	Implementation Date
93102.4(d)(4)	Tier I Hexavalent Chromium Tank	Beginning January 1, 2026
93102.5(c)(7)	Tier I, Tier II, or Tier III Hexavalent Chromium Tank	Beginning January 1, 2026
93102.5(d)(1)	Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank	Beginning January 1, 2025
	Tier I or Tier II Hexavalent Chromium Tank or Tier III Hexavalent Chromium Tank (except ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tanks)	Beginning January 1, 2026
~~(~~93102.5(d)(2)	Tier II or Tier III Hexavalent ChromiumTank	Beginning January 1, 2025
	Tier I Hexavalent Chromium Tank	Beginning January 1, 2026
93102.5(d)(5)	Chromium E~~e~~lectroplating or C~~c~~hromic A~~a~~cid A~~a~~nodizing T~~t~~ank	Beginning January 1, 2025
	Tier I or Tier II Hexavalent Chromium Tank or Tier III Hexavalent Chromium Tank (except C~~c~~hromium E~~e~~lectroplating or C~~c~~hromic A~~a~~cid A~~a~~nodizing T~~t~~anks)	Beginning January 1, 2026

Appendix 11 – Technology Review Process Outline

The following steps will be taken to develop the technology review for this ATCM. The review will be used to inform CARB on actions needed to affirm or amend the phase out date for hard Hhexavalent Cchromium plating and Cchromic Aacid Aanodizing.

(1) Develop a general plan by January 1, 2029 for the first and second technology review. The plan should include at the minimum:

(a) The technology assessment shall include a detailed description of the tests for new technology, including the reasons the technology will work or will not work. A summary of the technology with supporting data should be included. A timeline for implementation of the technology, including equipment costs, should also be included.

(b) An assessment of the chrome plating industry in California including at a minimum:

(i) Current plating requirements, including legacy equipment;.

(ii) Future plating requirements, including legacy equipment.; and

(iii) Current and future contract obligations for facilities.

(c) Timeline for completion of technology review.

(d) Involvement of stakeholders

(2) Complete first technology review by January 1, 2032.

(3) Complete second technology review by January 1, 2036.

(4) If determined necessary by the technology review, revise the ATCM to extend the phase out date of January 1, 2039 to a later date.