(Version July 18, 2025)

PROPOSED AMENDED RULE 1469. HEXAVALENT CHROMIUM EMISSIONS FROM CHROMIUM ELECTROPLATING AND CHROMIC ACID ANODIZING OPERATIONS

[Rule Index to be provided after rule adoption]

(a) *Purpose*

The purpose of this rule is to reduce ~~h~~Hexavalent ~~c~~Chromium emissions from ~~f~~Facilities that perform ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing operations and other activities that are generally associated with ~~c~~Chromium ~~e~~Electroplating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing operations.

(b) *Applicability*

This rule shall apply to the owner or operator of any ~~f~~Facility performing ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing.

(c) *Definitions*

For the purposes of this rule, the following definitions shall apply:

(1) ADD-ON AIR POLLUTION CONTROL DEVICE means equipment installed in the ventilation system of any Tier I, Tier II, or Tier III Hexavalent Chromium Tank(s) for the purposes of collecting and containing chromium emissions from the tank(s).

(2) ADD-ON NON-VENTILATED AIR POLLUTION CONTROL DEVICE means equipment installed on any Tier I, Tier II, or Tier III Hexavalent Chromium Tank(s) for the purposes of collecting, containing, or eliminating chromium emissions that is hermetically sealed and does not utilize a ventilation system.

(3) AIR POLLUTION CONTROL TECHNIQUE means any method, such as an A~~a~~dd-on A~~a~~ir P~~p~~ollution C~~e~~ontrol D~~d~~evice, A~~a~~dd-on N~~n~~on-ventilated A~~a~~ir P~~p~~ollution C~~e~~ontrol D~~d~~evice, M~~m~~echanical F~~f~~ume S~~s~~uppressant or a C~~e~~hemical F~~f~~ume S~~s~~uppressant, that is used to reduce chromium emissions from one or more Tier I, Tier II, or Tier III Hexavalent Chromium Tank(s).

(4) AMPERE-HOURS means the integral of electrical current applied to an electroplating tank (amperes) over a period of time (hours).

(5) ANNUAL PERMITTED AMPERE-HOURS means the maximum allowable C~~e~~hromium E~~e~~lectroplating or Chromic Acid ~~a~~Anodizing rectifier production in A~~a~~mpere-hours, on an annual basis as specified in the South

Coast AQMD Permit to Operate, or South Coast AQMD Permit to Construct.

(6) APPROVED CLEANING METHOD means cleaning using a wet mop, damp cloth, wet wash, Llow Ppressure Sspray Nnozzle, HEPA Vvacuum, or other equivalent cleaning method as approved by the Executive Officer.

(7) ASSOCIATED PROCESS TANK means any tank in the process line of a Tier I, Tier II, or Tier III Hexavalent Chromium Tank that is not a Tier I, Tier II, or Tier III Hexavalent Chromium Tank. Associated process tanks may contain Hexavalent Chromium at levels below those of Tier I Hexavalent Chromium Tank.

(8) AUTOMATED LINE means a process line consisting of tanks in which a crane or hoist system moves the Base Materials from tank to tank through a defined path.

(~~8~~9) BASE MATERIAL means the ~~metal, metal alloy, or plastic that comprises the workpiece~~part that is dipped in the Chromium Electroplating or Chromic Acid Anodizing tank for the purposes of Chromium Electroplating or Chromic Acid Anodizing.

(~~9~~10) BARRIER means a physical divider that can be fixed or portable such as a wall, welding screen, plastic strip curtains, etc.

(~~10~~11) BATH COMPONENT means the trade or brand name of each component in Ttrivalent Cchromium Eelectroplating baths, including the chemical name of the Wwetting Aagent contained in that component.

(~~11~~12) 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.

(~~12~~13) CHEMICAL FUME SUPPRESSANT means any chemical agent that reduces or suppresses fumes or mists at the surface of an eElectroplating or aAnodizing bBath; another term for fume suppressant is mist suppressant.

(~~13~~14) CHROMIC ACID means the common name for chromium anhydride (CrO_3).

(~~14~~15) CHROMIC ACID ANODIZING means the electrolytic process by which an oxide layer is produced on the surface of a bBase mMaterial for functional purposes (e.g., corrosion resistance or electrical insulation) using a

~~c~~Chromic ~~a~~Acid solution. In chromic acid 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.

(16) CHROMIUM ELECTROPLATING means the use of Hexavalent Chromium or Trivalent Chromium for Decorative Chromium Electroplating or Hard Chromium Electroplating operations.

(~~15~~ 17) CHROMIUM ELECTROPLATING OR CHROMIC ACID ANODIZING TANK means the receptacle or container in which ~~hard or decorative~~ ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing occurs.

(~~16~~ 18) COMPOSITE MESH-PAD SYSTEM (CMP) means an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device typically consisting of several mesh-pad stages. The purpose of the first stage is to remove large particles. Smaller particles are removed in the second stage, which consists of the composite mesh pad. A final stage may remove any re-entrained particles not collected by the composite mesh pad.

(19) CONTAINMENT DEVICE means a device used to either capture and contain materials that may contain Hexavalent Chromium or capture and return the materials that may contain Hexavalent Chromium back to a tank in the process line.

(20) CONTINUOUS PASSIVATION means a process by which a Base Material is passed continuously through an electrolytic Hexavalent Chromium solution as part of an automated process for the purpose of creating a chemically inert surface on the Base Material.

(~~17~~ 21) DECORATIVE CHROMIUM ELECTROPLATING means the process by which a thin layer of chromium (typically 0.003 to 2.5 microns) is electrodeposited on a base metal, plastic, or undercoating to provide a bright surface with wear and tarnish resistance. In this process, the part(s) serves as the cathode in the electrolytic cell and the solution serves as the electrolyte. Typical current density applied during this process ranges from 540 to 2,400 Amperes per square meter (A/m^2) for total electroplating times ranging between 0.5 to 5 minutes.

(~~18~~ 22) DRAGOUT means fluid containing H~~h~~exavalent C~~e~~hromium that drips from parts, or from equipment used to remove parts from a Tier I, Tier, II, or Tier III Hexavalent Chromium Tank.

(23) DRIP TRAY means a sloped Containment Device installed at or above the tank edge(s) designed to return Dragout back to a tank.

(~~19~~ 24) ELECTROPLATING OR ANODIZING 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.

(~~20~~ 25) EMISSION LIMITATION means the concentration of total chromium allowed to be emitted expressed in milligrams per dry standard cubic meter (mg/dscm), or the allowable S~~s~~urface T~~t~~ension expressed in dynes per centimeter (dynes/cm) for ~~d~~Decorative ~~e~~Chromium ~~e~~Electroplating and ~~e~~Chromic ~~a~~Acid ~~a~~Anodizing tanks; and the milligrams of ~~h~~Hexavalent ~~e~~Chromium per ampere-hour (mg/amp-hr) of electrical current applied to the electroplating tank for ~~h~~Hard or ~~d~~Decorative ~~e~~Chromium ~~e~~Electroplating tanks or ~~e~~Chromic ~~a~~Acid ~~a~~Anodizing tanks, or mass emission rate for a Tier II or Tier III ~~h~~Hexavalent ~~e~~Chromium ~~t~~Tank.

(26) ENCLOSED HEXAVALENT CHROMIUM TANK means a Chromium Electroplating or Chromic Acid Anodizing Tank using Hexavalent Chromium in the Electroplating or Anodizing Bath that is equipped with an enclosing hood and ventilated as specified by the manufacturer.

(~~21~~ 27) ENCLOSED STORAGE AREA is any space or structure used to contain material that prevents its contents from being emitted into the atmosphere.

(~~22~~ 28) ENCLOSURE OPENING is any permanent opening that is designed to be part of a ~~b~~Building ~~e~~Enclosure or ~~p~~Permanent ~~t~~Total ~~e~~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 ~~b~~Building ~~e~~Enclosure or ~~p~~Permanent ~~t~~Total ~~e~~Enclosure.

(~~23~~ 29) EXISTING FACILITY means a ~~f~~Facility that is in operation before October 24, 2007.

(~~24~~ 30) FACILITY means a S~~s~~ource located on one or more contiguous properties within the ~~District~~South Coast AQMD, 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 person (or by persons under common control), or an outer continental shelf (OCS) S~~s~~ource as determined in 40 CFR Section 55.2. Such above-described groups, if noncontiguous, but

connected only by land carrying a pipeline, shall not be considered one facility. Sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.

(~~25~~ 31) FIBER-BED MIST ELIMINATOR means an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device that removes contaminants from a gas stream through the mechanisms of inertial impaction and Brownian diffusion. This device consists of one or more fiber beds and is typically installed downstream of another control device, which serves to prevent plugging. Each bed consists of a hollow cylinder formed from two concentric screens; the fiber between the screens may be fabricated from glass, ceramic, plastic, or metal.

(~~26~~ 32) FOAM 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.

(~~27~~ 33) FRESH 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.

(~~28~~ 34) FUGITIVE EMISSIONS means emissions generated from the operations at a ~~f~~Facility, including solid particulate matter, gas, or mist, potentially containing ~~h~~Hexavalent ~~c~~Chromium that becomes airborne by natural or man-made activities, excluding particulate matter emitted from an exhaust stack.

(35) FUNCTIONAL CHROME PLATING means Hard Chromium Electroplating, Chromic Acid Anodizing, or Continuous Passivation.

(~~29~~ 36) HARD CHROMIUM ELECTROPLATING ~~or INDUSTRIAL CHROMIUM ELECTROPLATING~~ means a process by which a thick layer of chromium (typically greater than 1.0 microns) 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. Hard C~~c~~hromium E~~e~~lectroplating process is performed at current densities typically ranging

from 1,600 to 6,500 A/m^2 for total electroplating times ranging from 20 minutes to 36 hours depending upon the desired plate thickness.

(~~30~~ 37) HEXAVALENT CHROMIUM means the form of chromium in a valence state of +6.

(~~31~~ 38) HIGH EFFICIENCY PARTICULATE ARRESTORS (HEPA) means filter(s) that are individually tested and certified by the manufacturer to have a control efficiency of not less than 99.97 percent on 0.3 micron particles.

(~~32~~ 39) HEPA VACUUM means a vacuum that is both designed for the use of and fitted with a HEPA filter.

(~~33~~ 40) LEAK means the release of chromium emissions from any opening in the emission collection system prior to exiting the emission control device.

(~~34~~ 41) LOW PRESSURE SPRAY NOZZLE means a water spray nozzle capable of regulating water pressure to 35 pounds per square inch or less.

(~~35~~ 42) MAJOR SOURCE means any stationary S~~s~~ource or group of stationary S~~s~~ources 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.

~~(36) MAXIMUM CUMULATIVE POTENTIAL RECTIFIER CAPACITY means the summation of the total installed rectifier capacity associated with the hard chromium electroplating tanks at a facility, expressed in amperes, multiplied by the maximum potential operating schedule of 8,400 hours per year and 0.7, which assumes that electrodes are energized 70 percent of the total operating time. The maximum potential operating schedule is based on operating 24 hours per day, 7 days per week, 50 weeks per year.~~

(~~37~~ 43) MECHANICAL FUME SUPPRESSANT means any physical 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.

(~~38~~ 44) METAL REMOVAL FLUID means a fluid used at the tool and workpiece interface to facilitate the removal of metal from the part, cool the part and tool, extend the life of the tool, and to flush away metal chips and debris, but does not include minimum quantity lubrication fluids used to coat the tool work piece interface with a thin film of lubricant and minimize heat buildup through friction reduction. Minimum quantity lubrication fluids are applied

by pre-coating the tool in the lubricant, or by direct application at the tool work piece interface with a fine mist.

(~~39~~ 45) MODIFICATION means ~~either~~:

(A) Any physical change in, change in method of operation of, or addition to an existing permit unit subject to this rule that requires an application for a South Coast AQMD Permit to Construct and/or Operate and results in an increase in Hh~~h~~exavalent C~~c~~hromium 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:

(i) An increase in the production rate or annual A~~a~~mpere-hours, unless such increases will cause the maximum design capacity of the equipment to be exceeded, or will cause a F~~f~~acility to be subject to a different requirement in Table 1 – Hexavalent Chromium Emission Limits for Hexavalent Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Tanks; ~~or~~

(ii) An increase in the hours of operation; or

(iii) A change in ownership of a S~~s~~ource; or

(B) The addition of any new ~~c~~Chromium ~~e~~Electroplating or Chromic Acid ~~a~~Anodizing tank at a~~n~~ ~~existing f~~Facility which increases Hh~~h~~exavalent ~~c~~Chromium emissions from the Facility; or

(C) The fixed capital cost of the replacement of components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new S~~s~~ource.

(~~40~~ 46) MODIFIED FACILITY means any E~~e~~xisting F~~f~~acility which has undergone a M~~m~~odification on or after October 24, 2007.

(~~41~~ 47) NEW FACILITY means any ~~f~~Facility that begins initial operations on or after October 24, 2007 and before [Date of Adoption]. ~~"~~New Facility~~"~~ does not include the installation of a new ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank at a ~~n existing f~~Facility already subject to this rule or the ~~m~~Modification of that ~~an existing f~~Facility.

(~~42~~ 48) OPERATING PARAMETER VALUE means a minimum or maximum value established to monitor the proper operation of an ~~a~~Air ~~p~~Pollution ~~c~~Control ~~t~~Technique.

(~~43~~ 49) PACKED-BED 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. ~~The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.~~

(~~44~~ 50) PERFLUOROOCTANE SULFONIC ACID (PFOS) BASED FUME SUPPRESSANT means a fume suppressant that contains 1 percent or greater PFOS (CAS No. 1763-23-1) by weight.

(~~45~~ 51) PERMANENT TOTAL ENCLOSURE means a permanent building or containment structure, enclosed with a floor, walls, 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 F~~f~~ugitive E~~e~~missions, and has been evaluated to meet the design requirements set forth in U.S. EPA Method 204, or other design approved by the Executive Officer.

(~~46~~ 52) RESPONSIBLE OFFICIAL means one of the following:

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

(i) The ~~f~~Facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the U.S. EPA 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 executive officer or ranking elected official. For the

purposes of this part, a principal executive officer of a Federal agency includes the chief executive 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).

(D) For S~~s~~ources (as defined in this rule) applying for or subject to a Title V permit: "responsible official" shall have the same meaning as defined in South Coast AQMD's Regulation XXX.

(53) RINSE TANK means any tank where a part is partially or fully submerged into a liquid to remove any residual solution from a Tier I, Tier II, or Tier III Hexavalent Chromium Tank.

(~~47~~ 54) SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the ~~s~~School in kindergarten through grade 12. School also means an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as pre-schools, Early Head Start, Head Start, First Five, and Child Development Centers. A ~~s~~School does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of ~~s~~School property.

(~~48~~ 55) SCHOOL UNDER CONSTRUCTION means any property that meets any of the following conditions:

(A) Construction of a ~~s~~School has commenced; or

(B) A California Environmental Quality Act Notice for the construction of a ~~s~~School has been issued; or

(C) A ~~s~~School has been identified in an approved local government specific plan.

(56) SECONDARY CONTAINMENT means a Containment Device installed or constructed beneath tank(s) designed to capture and contain liquids from tanks.

(~~49~~ 57) SENSITIVE RECEPTOR means any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) ~~s~~Schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. -A ~~s~~Sensitive ~~r~~Receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

(~~50~~ 58) SOURCE means any ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing operation and any equipment or materials associated with the ~~a~~Air ~~p~~Pollution ~~c~~Control ~~t~~Technique.

(59) SPLASH GUARD means a near vertical or vertical Containment Device installed at or above the tank edge(s) designed to capture and return the mixture of rinse and residual tank solution back into a tank.

(~~51~~ 60) STALAGMOMETER means a device used to measure the S~~s~~urface T~~t~~ension 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.

(~~52~~ 61) SUBSTANTIAL USE OF A SOUTH COAST AQMD PERMIT TO CONSTRUCT~~of a SCAQMD Permit to Construct~~ means one or more of the following:

(A) The equipment that constitutes the S~~s~~ource 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~~s~~ource within one year has been entered into.

(~~53~~ 62) SURFACE TENSION means the property, due to molecular forces, that exists in the surface film of all liquids and tends to prevent liquid from spreading.

(~~54~~ 63) TANK OPERATION means the time in which current and/or voltage is being applied to a ~~c~~Chromium ~~e~~Electroplating ~~tank~~ or a ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank.

(~~55~~ 64) TANK PROCESS AREA means the area in the F~~f~~acility within 15 feet of any Tier I, Tier II, or Tier III Hexavalent Chromium Tank(s), or to the nearest wall of a ~~b~~Building ~~e~~Enclosure or ~~p~~Permanent ~~t~~Total ~~e~~Enclosure, whichever is closer.

(~~56~~ 65) TENSIOMETER means a device used to measure the ~~s~~Surface ~~t~~Tension of a solution by measuring the force necessary to pull a filament, plate, ring, or other South Coast AQMD approved object from the surface of a liquid.

(~~57~~ 66) TIER I HEXAVALENT CHROMIUM TANK means a tank, excluding a Tier II or Tier III Hexavalent Chromium Tank, that meets one or more of the following: ~~permitted as containing a hexavalent chromium concentration of~~

~~1,000 parts per million (ppm) or greater and is not a Tier II or Tier III Hexavalent Chromium Tank.~~

(A) Operates with a Hexavalent Chromium concentration of 1,000 parts per million (ppm) or greater; or

(B) With a Permit to Operate that allows the tank to operate with a Hexavalent Chromium concentration of 1,000 parts per million (ppm) or greater.

(~~58~~ 67) TIER II HEXAVALENT CHROMIUM TANK means a tank, excluding a Tier III Hexavalent Chromium Tank, that meets one or more of the following:~~is operated or permitted to operate by the SCAQMD within the range of temperatures and corresponding hexavalent chromium concentrations specified in Appendix 10 and is not a Tier III Hexavalent Chromium Tank.~~

(A) Operates within the range of temperatures and corresponding Hexavalent Chromium concentrations specified in Appendix 10 for a Tier II Hexavalent Chromium Tank; or

(B) With a Permit to Operate that allows the tank to operate within the range of temperatures and corresponding Hexavalent Chromium concentrations specified in Appendix 10 for a Tier II Hexavalent Chromium Tank.

(~~59~~ 68) TIER III HEXAVALENT CHROMIUM TANK means a tank that meets ~~any~~ one or more of the following:

(A) Operates:~~Is operated or permitted to operate by SCAQMD within the range of temperatures and corresponding hexavalent chromium concentrations specified in Appendix 10; or~~

(i) Within the range of temperatures and corresponding Hexavalent Chromium concentrations specified in Appendix 10 for a Tier III Hexavalent Chromium Tank;

(ii) With a Hexavalent Chromium concentration greater than 1,000 ppm and is equipped to be air sparged or rectified; or

(iii) As a Electroplating or Chromic Acid Anodizing Tank using Hexavalent Chromium; or

(B) With a Permit to Operate for the tank allows the tank to operate:~~Contains a hexavalent chromium concentration greater than 1,000 ppm, and uses air sparging as an agitation method or is electrolytic; or~~

(i) Within the range of temperatures and corresponding Hexavalent Chromium concentrations specified in Appendix 10 for a Tier III Hexavalent Chromium Tank;

(ii) With a Hexavalent Chromium concentration greater than 1,000 ppm and equipped to be air sparged or rectified; or

(iii) As a Chromium Electroplating or Chromic Acid Anodizing Tank using Hexavalent Chromium.

(~~60~~ 69) TRIVALENT CHROMIUM means the form of chromium in a valence state of +3.

(~~61~~ 70) TRIVALENT CHROMIUM ELECTROPLATING~~PROCESS~~ means the process used for electrodeposition 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.

(~~62~~ 71) WEEKLY means at least once every seven calendar days.

(~~63~~ 72) WETTING AGENT means the type of ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant that reduces the S~~s~~urface T~~t~~ension of a liquid.

(d) *Requirements*

The owner or operator of a F~~f~~acility shall:

(1) Equip each ~~rectified~~ Chromium Electroplating and Chromic Acid Anodizing ~~t~~Tank with a continuous recording, non-resettable, ~~a~~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 tank;

(2) Only use ~~w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants certified pursuant to subdivision (l) in hexavalent ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank(s);

(3) Not air sparge a hexavalent ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank when electroplating or anodizing is not occurring, or while ~~c~~Chromic ~~a~~Acid is being added;

(4) Operate any Tier I, Tier II, or Tier III Hexavalent Chromium Tank within a ~~b~~Building ~~e~~Enclosure beginning January 31, 2019; ~~and~~

(5) Operate any Tier II or Tier III Hexavalent Chromium Tank within a ~~b~~Building ~~e~~Enclosure that meets the requirements of subdivision (e)~~.~~; and

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

(A) The building ~~e~~Enclosure ~~o~~Openings that are open to the exterior and on opposite ends of the ~~b~~Building ~~e~~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:

(i) A door that automatically closes;

(ii) Overlapping plastic strip curtain;

(iii) A vestibule;

(iv) An airlock system;

(v) A B~~b~~arrier or obstruction, such as a large piece of equipment that prevents air from passing through any ~~t~~Tank ~~p~~Process ~~a~~Area; or

(vi) An alternative method to minimize the release of F~~f~~ugitive E~~e~~missions from the ~~b~~Building ~~e~~Enclosure that is approved by the Executive Officer.

(B) Except during the movement of vehicles, equipment, or people, close any ~~b~~Building ~~e~~Enclosure opening by using one or more of the methods listed in clauses (d)(6)(A)(i) through (d)(6)(A)(iv) and (d)(6)(A)(vi) that directly faces and opens towards the nearest:

(i) Sensitive ~~r~~Receptor, with the exception of a ~~s~~School, that is located within 1,000 feet, as measured from the property line of the ~~s~~Sensitive ~~r~~Receptor to the ~~b~~Building ~~e~~Enclosure opening; and

(ii) School that is located within 1,000 feet, as measured from the property line of the ~~s~~School to the ~~b~~Building ~~e~~Enclosure opening.

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

Beginning May 1, 2019, the owner or operator of a ~~f~~Facility shall operate Tier II or Tier III Hexavalent Chromium Tank(s) within a ~~b~~Building ~~e~~Enclosure that meets the following requirements:

(1) The combined area of all ~~e~~Enclosure ~~o~~Openings shall not exceed 3.5% of the ~~b~~Building ~~e~~Enclosure envelope, which is calculated as the total surface area of the ~~b~~Building ~~e~~Enclosure's exterior walls, floor, and horizontal projection of the roof on the ground. Information on calculations for the ~~b~~Building ~~e~~Enclosure envelope, including locations and dimensions of openings that are counted towards the applicable building envelope allowance, shall be provided in the ongoing compliance status and emission reports required in paragraphs (p)(2) and (p)(3). Openings that close or use one or more of the following methods for the ~~e~~Enclosure ~~o~~Opening shall not be counted toward the combined area of all ~~e~~Enclosure ~~o~~Openings:

(A) Door that automatically closes; or

(B) Overlapping plastic strip curtain; or

(C) Vestibule; or

(D) Airlock system; or

(E) Alternative method to minimize the release of F~~f~~ugitive E~~e~~missions from the ~~b~~Building ~~e~~Enclosure that the owner or operator of a ~~f~~Facility can demonstrate to the Executive Officer is an equivalent or more effective method(s) to minimize the movement of air within the ~~b~~Building ~~e~~Enclosure.

(2) Ensure that any building ~~e~~Enclosure ~~o~~Openings that open to the exterior and are on opposite ends of the ~~b~~Building ~~e~~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:

(A) A method specified in subparagraphs (e)(1)(A) through (e)(1)(E) for the ~~e~~Enclosure ~~o~~Opening(s) on one of the opposite ends of the ~~b~~Building ~~e~~Enclosure; or

(B) Utilize a B~~b~~arrier, such as large piece of equipment that restricts air from moving through the ~~b~~Building ~~e~~Enclosure.

(3) Except for the movement of vehicles, equipment or people, close any building ~~e~~Enclosure ~~o~~Opening or use any of the methods listed in subparagraphs (e)(1)(A) through (e)(1)(E), that directly faces and opens towards the nearest:

(A) Sensitive ~~r~~Receptor, with the exception of a ~~s~~School, that is located within 1,000 feet, as measured from the property line of the ~~s~~Sensitive ~~r~~Receptor to the ~~b~~Building ~~e~~Enclosure opening; and

(B) School that is located within 1,000 feet, as measured from the property line of the ~~s~~School to the ~~b~~Building ~~e~~Enclosure opening.

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

(A) Allow access for equipment or parts; or

(B) Provide intake or circulation air for a ~~b~~Building ~~e~~Enclosure and does not create air velocities that impact the collection efficiency of a ventilation system for an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device; or

(C) Are equipped with a HEPA filter or other air pollution control device.

(5) Repair any breach in a ~~b~~Building ~~e~~Enclosure located within 15 feet from the edge of any Tier II or Tier III Hexavalent Chromium Tank within 72 hours of discovery. The owner or operator of a ~~f~~Facility may request an extension by calling 1-800-CUT-SMOG. The Executive Officer 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 ~~f~~Facility provides information that substantiates:

(A) The repair will take longer than 72 hours, or the equipment, parts, or materials needed for the repair cannot be obtained within 72 hours; and

(B) Temporary measures are implemented that ensure no F~~f~~ugitive E~~e~~missions result from a breach.

(6) The owner or operator of a F~~f~~acility shall notify the Executive Officer if any of the requirements specified in paragraphs (e)(1) through (e)(4) cannot be complied with due to conflicting requirements set forth by the federal Occupational Safety and Health Administration (OSHA), California Division of Occupational Safety and Health (CAL-OSHA), or other municipal codes or agency requirements directly related to worker safety. A Building Enclosure Compliance Plan shall be submitted to the Executive Officer for review and approval no later than December 2, 2018 for facilities existing before November 2, 2018, and prior to initial start-up for all other facilities. The Building Enclosure Compliance Plan shall be subject to plan fees specified in Rule 306 and include:

(A) An explanation as to why the provision(s) specified in paragraphs (e)(1) through (e)(4) is in conflict with the requirements set forth by

OSHA or CAL-OSHA, or other municipal codes or agency requirements directly related to worker safety; and

(B) Alternative compliance measure(s) that will be implemented to minimize the release of Ff~~f~~ugitive Ee~~e~~missions to the outside of the Bb~~b~~uilding Ee~~e~~nclosure.

(7) The Executive Officer shall notify the owner or operator of a Ff~~f~~acility in writing whether the Building Enclosure Compliance Plan is approved or disapproved.

(A) If the Building Enclosure Compliance Plan is disapproved, the owner or operator of a Ff~~f~~acility shall submit a revised Building Enclosure Compliance Plan within 30 calendar days after notification of disapproval of the Building Enclosure Compliance Plan. The revised Building Enclosure Compliance Plan shall include any information to address deficiencies identified in the disapproval letter.

(B) The Executive Officer will either approve the revised Building Enclosure Compliance Plan or modify the Building Enclosure Compliance Plan and approve it as modified. The owner or operator may appeal the Building Enclosure Compliance Plan modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.

(8) The owner or operator of a Ff~~f~~acility shall implement the Building Enclosure Compliance Plan specified in paragraphs (e)(6) and (e)(7), as approved by the Executive Officer, no later than 90 days after receiving notification of approval for facilities existing before November 2, 2018, and prior to initial start-up for all other facilities. Compliance with the approved alternative compliance measures shall constitute compliance with the applicable provisions of paragraphs (e)(1) through (e)(4).

~~(9) The owner or operator of a facility that has applied for an SCAQMD permit to install or is required to install an add-on air pollution control device to control either a Tier II or Tier III Hexavalent Chromium Tank(s) shall be exempt from paragraphs (e)(1) and (e)(4) until the add-on air pollution control device has been installed and commenced normal operation.~~

(f) *Housekeeping Requirements*

An owner or operator of a ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~f~~Facility shall:

(1) Store ~~c~~Chromic ~~a~~Acid powder or flakes, or other substances that may contain ~~h~~Hexavalent ~~c~~Chromium, in a closed container in an ~~e~~Enclosed ~~s~~Storage ~~a~~Area when not in use;

(2) Use a closed container when transporting ~~c~~Chromic ~~a~~Acid powder or flakes, or other substances that may contain ~~h~~Hexavalent ~~c~~Chromium from an ~~e~~Enclosed ~~s~~Storage ~~a~~Area to a Tier I, Tier II, or Tier III Hexavalent Chromium Tank;

(3) For any liquid or solid material that may contain Hexavalent Chromium that is spilled, either redirect the material back into a tank or capture the material with a Containment Device, unless an ~~using an a~~Approved ~~c~~Cleaning ~~m~~Method(s)~~, or contain, using a drip tray or other containment device,~~ is used to clean up the material ~~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 ~~a~~Approved ~~c~~Cleaning ~~m~~Method, surfaces within the ~~e~~Enclosed ~~s~~Storage ~~a~~Area, open floor area, walkways around a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, Containment Devices, or any surface potentially contaminated with ~~h~~Hexavalent ~~c~~Chromium or surfaces that potentially accumulate dust W~~w~~eekly;

(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 F~~f~~ugitive E~~e~~missions. Containers with chromium-containing waste material shall be kept closed at all times, except when being filled or emptied, and stored in an Enclosed Storage Area;

(6) Beginning December 2, 2018, use an A~~a~~pproved C~~c~~leaning M~~m~~ethod to clean floors within 20 feet of a buffing, grinding, or polishing workstation on days when buffing, grinding, or polishing are conducted; and

(7) Beginning December 2, 2018, eliminate all flooring on walkways in the T~~t~~ank P~~p~~rocess A~~a~~reas that is made of fabric, such as carpets or rugs, where H~~h~~exavalent C~~c~~hromium containing materials can become trapped.

(8) *Abatement of Hexavalent Chromium Prior to Performing any Cutting Activities of Roof Surfaces*

~~The owner or operator a facility shall:~~

(A) No earlier than 48 hours prior to cutting into a Building Enclosure roof, ~~C~~clean all roof surface areas that will be affected by any cutting

activities ~~surface areas~~ using a HEPA V~~v~~acuum and wet wiping with a damp cloth ~~prior to cutting into a building enclosure roof~~;

(B) Minimize F~~f~~ugitive E~~e~~missions during roof cutting activities using method(s) such as a temporary enclosure and/or HEPA vacuuming; and

(C) Notify the Executive Officer at least 48 hours prior to the commencement of any roof cutting activities into a B~~b~~uilding E~~e~~nclosure by calling 1-800-CUT-SMOG.

(9) Ensure that if a HEPA V~~v~~acuum is used, that the HEPA filter is free of tears, fractures, holes or other types of damage, and securely latched and properly situated in the vacuum to prevent air leakage from the filtration system.

(10) According to the implementation schedule in Appendix 11 – Implementation Schedule, store in a closed container or in an E~~e~~nclosed S~~s~~torage A~~a~~rea :

(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.

(g) *Best Management Practices*

(1) The owner or operator of a ~~f~~Facility shall minimize ~~d~~Dragout from a Tier I, Tier II, or Tier III Hexavalent Chromium Tank, according to the implementation schedule in Appendix 11 – Implementation Schedule, for:

(A) An Automated Line, between each Tier I, Tier II, or Tier III Hexavalent Chromium Tank:

(i) Install and maintain a Drip Tray:

(I) Such that Dragout does not fall outside a tank or does not fall through the space between the tank; and

(II) Cleaned on a Weekly basis, such that there is no accumulation of visible residue dust, or pooling liquid on the Drip Tray potentially contaminated with Hexavalent Chromium; or

(ii) Install and maintain a Containment Device, excluding a Drip Tray or Secondary Containment, that is part of the process line and meets the requirement specified in subclause (g)(1)(A)(i)(I); and

(B) A non-Automated Line:

(i) Handle each part, Base Material, or equipment used to handle a part or Base Material, so that Dragout 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 Dragout is captured by a Drip Tray or other Containment Device, excluding a Secondary Containment; and

(ii) If spraying down parts or Base Material over the Chromium Electroplating or Chromic Acid Anodizing Tank(s) to remove excess Chromic Acid:

(I) Install a Splash Guard at the tank that captures and returns any Hexavalent Chromium laden liquid to the Chromium Electroplating or Chromic Acid Anodizing Tank; and

(II) Maintain the Splash Guard free of accumulation of visible residue, dust, or liquid potentially contaminated with Hexavalent Chromium.

~~(A) An automated line by installing 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 trays 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 containment device potentially contaminated with hexavalent chromium.~~

~~(B) A non-automated line by handling 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 11 – Implementation Schedule, the owner or operator of a ~~f~~Facility that conducts ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~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. The owner or operator of a ~~f~~Facility may alternatively ensure that any liquid containing chromium is captured and returned to the tank by meeting the following conditions when rinsing above a tank:

(A) Installing a ~~s~~Splash ~~g~~Guard(s) at the tank that is free of holes, tears, or openings. Splash ~~g~~Guards shall be cleaned W~~w~~eekly with water; or

(B) For tanks located within a process line utilizing an overhead crane system that would be restricted by the installation of ~~s~~Splash ~~g~~Guards specified in subparagraph (g)(2)(A), use a L~~l~~ow P~~p~~ressure S~~s~~pray N~~n~~ozzle in a manner where water flows off of the part or equipment and into the tank.

(3) Beginning January 1, 2019, the owner or operator of a ~~f~~Facility shall maintain clear labeling of each tank within the T~~t~~ank P~~p~~rocess A~~a~~rea with a tank number or other identifier, South Coast AQMD permit number, bath contents, maximum concentration (ppm) of H~~h~~exavalent C~~c~~hromium, 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 31, 2019, the owner or operator of a F~~f~~acility shall conduct all buffing, grinding, and polishing operations within a ~~b~~Building ~~e~~Enclosure.

(5) According to the implementation schedule in Appendix 11 – Implementation Schedule, the owner or operator of a ~~f~~Facility shall install a B~~b~~arrier 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 ~~f~~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 B~~b~~arrier 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 B~~b~~arrier provided the parts being air cleaned or dried are below the lip of the tank; or

(B) Compressed air cleaning or drying operations are conducted in a P~~p~~permanent T~~t~~total E~~e~~nclosure.

(7) The owner or operator of the Facility electing to comply with paragraph (g)(1) by maintaining a Drip Tray shall:

(A) Not walk or stand on a Drip Tray unless:

(i) Prior to walking or standing on the Drip Tray, clean the Drip Tray using an Approved Cleaning Method such that there is no accumulation of visible residue, dust, or liquid potentially contaminated with Hexavalent Chromium; and

(ii) When walking or standing on the Drip Tray the process line containing the Drip Tray is not processing parts.

(B) Maintain the Drip Tray clear of all objects, except during maintenance or housekeeping activities provided the process line containing Drip Tray is not processing parts.

(h) *Air Pollution Control Technique Requirements*

(1) The owner or operator of a ~~f~~Facility shall not remove or render inoperable ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device(s) for ~~h~~Hard or ~~d~~Decorative ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing tanks using Hexavalent Chromium unless it is replaced by ~~a~~Air ~~p~~Pollution ~~c~~Control ~~t~~Techniques meeting the requirements in Table 1 - Hexavalent Chromium Emission Limits for Hexavalent Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Tanks, or the ~~f~~Facility is operating under an approved alternative compliance method pursuant to subdivision (i).

(2) *Emission Standards for Hexavalent Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Facilities*

(A) The owner or operator of a ~~f~~Facility shall control ~~h~~Hexavalent ~~c~~Chromium emissions discharged to the atmosphere by meeting the

requirements identified below in Table 1 - Hexavalent Chromium Emission Limits for Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Tanks. Alternatively, a ~~f~~Facility can choose to comply by operating under an approved alternative compliance method pursuant to subdivision (i).

Table 1: Hexavalent Chromium Emission Limits for Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Tanks

Facility Type	Distance to Sensitive Receptor (feet)	Annual Permitted Amp-Hrs	Hexavalent Chromium Emission Limit* (mg/amp-hr)	Minimum Air Pollution Control Technique
Existing Facility	≤ 330[1]	≤ 20,000	0.01	Use of Certified Chemical Fume Suppressant at or below the certified Ssurface Ttension.[3]
Existing Facility	≤ 330[1]	> 20,000	0.0015[2]	Add-on Aair Ppollution Ceontrol Ddevice(s) or Aadd-on Nnon-ventilated Aair Ppollution Ceontrol Ddevice(s).
Existing Facility	> 330[1]	≤ 50,000	0.01	Use of Certified Chemical Fume Suppressant at or below the certified Ssurface Ttension.[3]
Existing Facility	> 330[1]	> 50,000 and ≤ 500,000	0.0015[2]	Use of an Aair Ppollution Ceontrol Ttechnique that controls Hhexavalent Cehromium.
Existing Facility	> 330[1]	> 500,000	0.0015[2]	Add-on Aair Ppollution Ceontrol Ddevice(s) or Aadd-on Nnon-ventilated Aair pollution Ceontrol Ddevice(s).
Modified Facility	Any	Any	0.0015[2]	Using an Aadd-on Aair Ppollution Ceontrol Ddevice(s), or an approved alternative method pursuant to subdivision (i).
New Facility	Any	Any	0.0011[2]	Using a HEPA Aadd-on Aair Ppollution Ceontrol Ddevice, or an approved alternative method pursuant to subdivision (i).

* Functional Chrome Plating tanks subject to more stringent requirements beginning January 1, 2026 in subdivision (x)

[1] Distance shall be measured, rounded to the nearest foot, from the edge of the Cehromium Eelectroplating or Cehromic Aacid Aanodizing Ttank nearest the Ssensitive Rreceptor (for facilities without Aadd-on Aair Ppollution Ceontrol Ddevices), or from the stack or centroid of stacks (for facilities with Aadd-on Aair Ppollution Ceontrol Ddevices), to the property line of the nearest Ssensitive Rreceptor. The symbol ≤ means less than or equal to. The symbol > means greater than.

[2] As demonstrated by source test requirements under subdivision (k).

[3] Alternatively, a Ffacility may install an Aadd-on Aair Ppollution Ceontrol Ddevice(s) or Aadd-on Nnon-ventilated Aair Ppollution Ceontrol Ddevice(s) that controls Hhexavalent Cehromium emissions to below 0.0015 mg/amp-hr as demonstrated through source test requirements under subdivision (k).

Interim Requirements for New Facilities using Hexavalent Chromium

(B) The owner or operator of a ~~n~~New ~~f~~Facility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating shall:

(i) Demonstrate in its South Coast AQMD permit application that the ~~n~~New ~~f~~Facility is not located in an area that is zoned for residential or mixed use; and

(ii) Demonstrate in its South Coast AQMD permit application that the ~~n~~New ~~f~~Facility is not located within 1,000 feet from the boundary of a ~~s~~Sensitive ~~r~~Receptor, a ~~s~~School under ~~c~~Construction, or any area that is zoned for residential or mixed use.

(C) A ~~n~~New ~~f~~Facility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating shall be deemed to meet the requirements specified in clauses (h)(2)(B)(i) and (h)(2)(B)(ii) if one of the following criteria is met, even if the F~~f~~acility does not meet the requirement at the time of initial start-up:

(i) The requirements specified in clauses (h)(2)(B)(i) and (h)(2)(B)(ii) are met at the time a~~n~~ South Coast AQMD Permit to Construct is issued, and ~~s~~Substantial ~~u~~Use of the South Coast AQMD Permit to Construct takes place within one year after it is issued; or

(ii) The requirements specified in clauses (h)(2)(B)(i) and (h)(2)(B)(ii) are met at the time a~~n~~ South Coast AQMD Permit to Construct is issued, and ~~s~~Substantial ~~u~~Use of the South Coast AQMD Permit to Construct occurs before any zoning change that affects the operation's ability to meet the requirement at the time of initial start-up.

(D) Prior to initial start-up, the owner or operator of a ~~n~~New ~~f~~Facility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating shall meet the requirements specified in paragraph (h)(2).

(3) *Decorative Chromium Electroplating Tanks Using a Trivalent Chromium Bath*

During T~~t~~ank O~~o~~peration, the owner or operator of a F~~f~~acility using Trivalent Chromium for Decorative Chromium Electroplating shall control

chromium emissions discharged from the Chromium Electroplating Tank using Trivalent Chromium to the atmosphere by meeting one or more of the requirements identified below.

Method of compliance	Requirement
Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device, or ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants forming a ~~f~~Foam ~~b~~Blanket, or ~~m~~Mechanical ~~f~~Fume ~~s~~Suppressants (e.g. polyballs)	≤ 0.01 milligrams of total chromium per dry standard cubic meter of air (mg/dscm) (4.4x10-6 gr/dscf) as demonstrated with an initial source test using an approved method pursuant to paragraph (k)(3~~2~~)
Chemical ~~f~~Fume ~~s~~Suppressants containing a ~~w~~Wetting ~~a~~Agent that is not a PFOS based fume suppressant	Use, per manufacturer instructions, W~~w~~etting A~~a~~gent as B~~b~~ath C~~c~~omponent and comply with recordkeeping and reporting provisions of paragraphs (o)(10) and (p)(~~5~~4)

(4) *Tier III Hexavalent Chromium Tanks (Excluding Chromium Electroplating and Chromic Acid Anodizing Tanks)*

(A) The owner or operator of a ~~f~~Facility shall collect and vent ~~h~~Hexavalent ~~c~~Chromium emissions from any Tier III Hexavalent Chromium Tank, excluding C~~c~~hromium E~~e~~lectroplating and C~~c~~hromic A~~a~~cid A~~a~~nodizing T~~t~~anks subject to paragraph (h)(2), to an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device, or an approved alternative compliance method pursuant to subdivision (i), that meets the following ~~h~~Hexavalent ~~c~~Chromium emission limits as demonstrated by source test requirements under subdivision (k):

(i) 0.0015 mg/amp-hr, for ~~e~~Existing or ~~m~~Modified ~~f~~Facilities, if any tank(s) vented to an air pollution control device are electrolytic;

(ii) 0.0011 mg/amp-hr, for ~~n~~New ~~f~~Facilities, if any tank(s) vented to an air pollution control device are electrolytic;

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

(iv) 0.004 mg/hr-ft^2, 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 ~~a~~Add-on ~~a~~Air

~~p~~Pollution ~~c~~Control ~~d~~Device with a South Coast AQMD Permit to Operate, provided all tanks are not electrolytic, if the ventilation system has a maximum exhaust rate of greater than 5,000 cfm.

(B) For Tier III Hexavalent Chromium Tanks specified in subparagraph (h)(4)(A) existing prior to November 2, 2018, the owner or operator of a ~~f~~Facility shall submit complete South Coast AQMD permit applications for ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Devices to the Executive Officer as specified below:

Table 2: Permit Submittal Schedule for Add-on Air Pollution Control Devices for Previously Existing Tier III Hexavalent Chromium Tanks[1]

Electrolytic Process at the Facility	Compliance Date for South Coast AQMD Permit Application Submittal for Add-on Air Pollution Control Device
Chromic Acid Anodizing	May 1, 2019
Hard Chromium Electroplating	November 2, 2019
Decorative Chromium Electroplating	April 30, 2020

[1] For multiple electrolytic processes at a ~~f~~Facility, the owner or operator shall comply with the earliest compliance date.

(i) The owner or operator of a ~~f~~Facility shall conduct a source test prior to the issuance of a South Coast AQMD Permit to Operate.

(ii) Beginning no later than December 2, 2018 until the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device specified in subparagraph (h)(4)(C) has been installed, cover the tank no later than 30 minutes after ceasing operation of the tank. Tank covers shall be free of holes, tears, and gaps.

(C) The owner or operator of a ~~f~~Facility shall:

(i) Install an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device to meet the requirements under subparagraph (h)(4)(A) no later than 12 months after a Permit to Construct for the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device has been issued by the Executive Officer;

(ii) Implement the alternative compliance method to meet the requirements under subparagraph (h)(4)(A) based on the

timeframe specified in the approved alternative compliance method; or

(iii) No later than two years after approval, implement an approved Hexavalent Chromium Phase-Out Plan pursuant to subdivision (u).

(D) The owner or operator of a ~~f~~Facility shall not be subject to the requirement of subparagraph (h)(4)(A) to vent a Tier III Hexavalent Chromium Tank to an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device if the uncontrolled ~~h~~Hexavalent ~~c~~Chromium emission rate of the tank is less than 0.2 mg/hr, as demonstrated by a South Coast AQMD approved source test. The source test shall be conducted pursuant to the Technical Guidance Document for *Measurement of Hexavalent Chromium Emissions from Chromium Plating and Chromic Acid Anodizing Operations for Certification of Wetting Agent Chemical Mist Suppressant Subject to SCAQMD Rule 1469*.

(5) *Tier II Hexavalent Chromium Tank*

The owner or operator of a ~~f~~Facility shall control ~~h~~Hexavalent ~~c~~Chromium emissions from a Tier II Hexavalent Chromium Tank by:

(A) Utilizing a tank cover, M~~m~~echanical F~~f~~ume S~~s~~uppressant, or other method approved by the Executive Officer, no later than January 31, 2019; or

(B) Meeting the requirements for a Tier III Hexavalent Chromium Tank specified in subparagraph~~s~~ (h)(4)(A) and (h)(4)(B).

(6) *Ventilation Design and Operation of Air Pollution Control Techniques*

The owner or operator of a ~~f~~Facility shall operate A~~a~~ir pollution C~~c~~ontrol T~~t~~echniques required under subdivisions (h) or (x), or paragraph (w)(2) at or above the applicable minimum hood induced capture velocity specified in the most current edition (i.e., at the time the South Coast AQMD permit application was deemed complete by South Coast AQMD) of *Industrial Ventilation, A Manual of Recommended Practice for Design,* published by the American Conference of Governmental Industrial Hygienists or an alternative ventilation velocity approved by the Executive Officer.

(i) *Alternative Compliance Methods for Existing, Modified, and New Hexavalent Decorative and Hard Chromium Electroplating and Chromic Acid Anodizing Facilities*

The owner or operator of a ~~f~~Facility that elects to submit an alternative compliance method to meet the emission limits specified in paragraphs (h)(2) and (h)(4) shall:

(1) Submit a~~n~~ South Coast AQMD permit application that includes the information contained in Appendix 7 to the Executive Officer; and

(2) Demonstrate that the alternative method is enforceable, provides an equal, or greater ~~h~~Hexavalent ~~c~~Chromium emission reduction, and provides an equal, or greater risk reduction than compliance with the emission limits specified in paragraphs (h)(2) and (h)(4) .

(j) *Training and Certification*

(1) Chromium ~~e~~Electroplating and ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing personnel responsible for environmental compliance, maintaining E~~e~~lectroplating B~~b~~ath chemistries, and testing and recording ~~e~~Electroplating or Anodizing ~~b~~Bath S~~s~~urface T~~t~~ension data shall complete a South Coast AQMD approved training program every two years and receive a certification issued by the Executive Officer. ~~For new facilities, initial training must be completed within a period not to exceed two years from start-up.~~

(2) Only persons who have completed a South Coast AQMD approved training program and have received a certification issued by the Executive Officer shall be responsible for recordkeeping associated with environmental compliance, maintaining E~~e~~lectroplating B~~b~~ath chemistries, and testing and recording E~~e~~lectroplating B~~b~~ath S~~s~~urface T~~t~~ension data.

(3) Notwithstanding paragraph (j)(2), in the event that all persons who have completed a South Coast AQMD approved training program and received a certification issued by the Executive Officer leaves employment at a F~~f~~acility, the owner or operator of a ~~f~~Facility ~~may~~ shall be responsible for recordkeeping associated with environmental compliance, maintaining E~~e~~lectroplating B~~b~~ath chemistries, and testing and recording E~~e~~lectroplating B~~b~~ath S~~s~~urface T~~t~~ension data for a period not to exceed two years.

(k) *Source Test Requirements and Test Methods*

(1) *Source Test Requirements for Tier III Hexavalent Chromium Tanks*

(A) The owner or operator of a ~~f~~Facility required to meet an emission limit pursuant to paragraphs (h)(2) or (h)(4) shall conduct an initial source test and subsequent source tests pursuant to the schedule specified in Table 3 – Source Tests Schedule.

Table 3~~:~~ - Source Tests Schedule

Facility-wide Permitted Annual Ampere-Hours	Due Date of Initial Source Test Protocol[a]	Initial Source Test Date	Due Date of Subsequent Source Test Protocol	Subsequent Source Tests*
> 20,000,000	No later than May 1, 2019	No later than 120 days after approval of the initial source test protocol.	180 days prior to the due date of the subsequent source test.	No later than 60 months from the day of the most recent source test that demonstrates compliance with all applicable requirements
≤ 20,000,000 and > 1,000,000	No later than November 2, 2019			
≤ 1,000,000	No later than April 30, 2020			No later than 84 months from the day of the most recent source test that demonstrates compliance with all applicable requirements

[a] New or modified Aair Ppollution Ceontrol Ttechniques used to meet the emission limits under paragraphs (h)(1), (h)(2), or (h)(4) permitted after November 2, 2018, shall submit the initial source test protocol 60 days after initial start-up of the Aair Ppollution Ceontrol Ttechnique.

* Functional Chrome Plating facilities are subject to more frequent source testing requirements in clause (k)(2)(B)(ii) beginning January 1, 2026.

(B) The owner or operator of a fFacility may conduct the initial source test after the 120 days specified in Table 3 – Source Tests Schedule, provided:

(i) A written request 30 days before the due date of the source test is submitted to the Executive Officer;

(ii) The additional time needed is substantiated by reason(s) outside of their control; and

(iii) The Executive Officer approves the request in writing no later than the due date of the source test.

(C) The owner or operator of a fFacility may use an existing source test conducted after January 1, 2015 to demonstrate compliance with the initial source test requirements of subparagraph (k)(1)(A), provided:

(i) The applicable emission limits in subdivision (h) are demonstrated;

(ii) The operating conditions during the source test are representative of the operating conditions as of November 2, 2018; and

(iii) Test methods specified in paragraph (k)(~~2~~3) are used.

(D) No later than December 2, 2018, an owner or operator of a fFacility

using a source test pursuant to subparagraph (k)(1)(C) that has not been approved, shall submit the source test to the Executive Officer for approval.

(E) An owner or operator of a ~~f~~Facility that elects to use an existing source test pursuant to subparagraph (k)(1)(C), shall conduct the first subsequent source test no later than January 1, 2024 and conduct all other subsequent source tests pursuant to schedule in Table 3 - Source Tests Schedule.

(F) An owner or operator of ~~f~~Facility that elects to meet an emission limit specified in paragraph (h)(2) using only a certified W~~w~~etting A~~a~~gent C~~c~~hemical F~~f~~ume S~~s~~uppressant or a certified alternative to a W~~w~~etting A~~a~~gent C~~c~~hemical F~~f~~ume S~~s~~uppressant shall not be subject to the requirements of subparagraph (k)(1)(A).

(2) *Source Test Requirements at Facilities Undergoing a Modification or Functional Chrome Plating Facilities Beginning January 1, 2026*

(A) *Protocol Submission*

Beginning January 1, 2026, an owner or operator of a Tier III Hexavalent Chromium Tank required to meet the requirements of either subdivision (w) or (x) shall submit:

(i) At least 60 days prior to conducting the first source test to demonstrate compliance with the applicable requirements in paragraph (w)(2), (x)(1), or (x)(2), a source test protocol with the information specified in paragraph (k)(3) and subparagraph (k)(5)(A), as applicable, to sourcetesting@aqmd.gov or a South Coast AQMD web portal for approval; and

(ii) At least 60 days prior to conducting a subsequent source test, a source test protocol if there are any changes to the tank dimensions, collection slots, ventilation flow rate, sampling location(s), sampling method, or analytic method(s) in the most recently approved source test protocol, or if the Executive Officer requests an updated or new source test protocol.

(B) *Conducting Source Tests for Functional Chrome Plating Facility*

Beginning January 1, 2026, an owner or operator of a Functional Chrome Plating Facility required to meet the requirements of subdivision (x) shall conduct:

(i) A source test:

(I) No later than December 31, 2025, but no earlier than January 1, 2024 or no later than 60 days after initial start-up of the Tier III Hexavalent Chromium Tank, whichever is later;

(II) Meeting the requirements of paragraph (k)(3), subparagraph (k)(5)(A), and paragraphs (k)(6) through (k)(8); and

(III) Demonstrating the combined emission rate from all Tier III Hexavalent Chromium Tanks vented to the same Add-on Air Pollution Control Device and all Tier II Hexavalent Chromium Tanks electing to vent to the same Add-on Air Pollution Control Device meets the applicable emission limit specified in subdivision (x) as measured downstream of the Add-on Air Pollution Control Device; and

(ii) A subsequent source test:

(I) No later than the end of the second year after the year the last source test demonstrating compliance with the applicable emission limit; and

(II) Meeting the requirements specified in subclauses (k)(2)(B)(i)(II) and (k)(2)(B)(i)(III).

(C) *Conducting Initial Source Tests at Decorative Chromium Electroplating Facility using Hexavalent Chromium that underwent a Modification after January 1, 2024*

An owner or operator of a Decorative Chromium Electroplating Facility required to meet the requirements of subdivision (w) shall conduct a source test(s) for all Decorative Chromium Electroplating Tank(s) using Hexavalent Chromium at the Facility:

(i) No later than 60 days after initial start-up of the new or modified equipment;

(ii) Meeting the requirements of subclause (k)(2)(B)(i)(II); and

(iii) Demonstrating compliance with the applicable emission limit specified in subdivision (w) as measured downstream of the Add-on Air Pollution Control Device.

(~~2~~3) *Approved Test Methods*

(A) Emissions testing shall be conducted in accordance with one of the following test methods:

(i) CARB Test Method 425, last amended July 28, 1997, (section 94135, Title 17, California Code of Regulations (CCR); or

(ii) U.S. EPA Method 306, (40 CFR 63 Appendix A) with a minimum of three test runs; or

(iii) South Coast AQMD Method 205.1, for results reported as total chromium.

(B) Emissions testing for ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Devices shall be conducted in accordance with a Smoke Test for Add-on Non-Ventilated Air Pollution Control Device(s). (See Appendix 5).

(C) Surface ~~t~~Tension using a T~~t~~ensiometer shall be measured in accordance with U.S. EPA Method 306B (40 CFR 63 Appendix A). Surface T~~t~~ension using a S~~s~~talagmometer shall be measured using the procedure set forth in Appendix 9, or an alternative procedure approved by the Executive Officer.

(~~3~~4) *Use of Emissions Screening Tests*

(A) The owner or operator of a ~~f~~Facility, except a Facility subject to the requirements of subdivision (w) or (x), that elects to use an emissions screening test in lieu of a source test to comply with the ~~-~~subsequent source test requirements in Table 3 - Source Tests Schedule shall conduct an emissions screening test:

(i) Consisting of one run to evaluate the ~~h~~Hexavalent ~~c~~Chromium emissions for a Tier II or Tier III Hexavalent Chromium Tank;

(ii) In accordance with a source test protocol approved by the Executive Officer; and

(iii) Representative of the operating conditions during the most recent source test.

(B) The owner or operator of a ~~f~~Facility, except a Facility subject to the requirements of subdivision (w) or (x), may conduct an emissions

screening test in lieu of a source test to comply with the requirements for an initial source test in Table 3 – Source Tests Schedule provided:

(i) The emissions screening test meets the requirements of clauses (k)(~~3~~4)(A)(i) through (iii);

(ii) The owner or operator of a ~~f~~Facility conducted a source test after January 1, 2009 that meets the requirements of clauses (k)(1)(C)(i) through (iii); and

(iii) No later than December 2, 2018, an owner or operator of a ~~f~~Facility using a source test that is not approved to satisfy clause (k)(~~3~~4)(B)(ii) shall submit the source test to the Executive Officer for approval.

(C) Within 30 days of receiving the results, the owner or operator of a F~~f~~acility shall submit the results of the emissions screening test to the Executive Officer.

(D) The owner or operator of a ~~f~~Facility shall conduct a source test using an approved test method specified under paragraph (k)(~~2~~3) within 60 days of conducting an emissions screening test that:

(i) Failed the capture efficiency test(s) specified in the source test protocol;

(ii) Exceeded an emission limit specified in the South Coast AQMD Permit to Operate; or

(iii) Exceeded an emission standard specified in subdivision (h).

(4~~5~~) *Source Test Protocol*

(A) The source test protocol shall include the source test criteria, all assumptions, required data, and calculated targets for testing the following:

(i) Target chromium concentration;

(ii) Preliminary chromium analytical data; and

(iii) Planned sampling parameters.

(B) The most recent South Coast AQMD approved source test protocol may be used for subsequent source tests, provided there are no changes to the tank dimensions, collection slots, ventilation flow rate, sampling location(s), sampling method, or analytic method(s) unless the Executive Officer requests an updated or new source test protocol.

(~~5~~6) *Emission Points Test Requirements*

Each emission point subject to the requirements of this rule shall be tested unless a waiver is granted by U.S. EPA and approved by the Executive Officer.

(~~6~~7) *Capture Efficiency*

The owner or operator of a ~~f~~Facility that is required to conduct a source test pursuant to subdivision (k) shall demonstrate that each ~~a~~Add-~~-~~on ~~-a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device meets the design criteria and ventilation velocities specified in *Industrial Ventilation: A Manual of Recommended Practice for Design* authored by the American Conference of Governmental Industrial Hygienists or alternative design criteria and ventilation velocities approved by the Executive Officer.

(~~7~~8) *Smoke Test*

The owner or operator of a ~~f~~Facility shall conduct an acceptable smoke test for each ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device pursuant to Appendix 5 and each ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device pursuant to Appendix 8.

(l) ~~*Certification and Approval of*~~ *Wetting Agent Chemical Fume Suppressants Requirements for Hexavalent Chromium Electroplating or Chromic Acid Anodizing Tanks*

(1) The owner or operator of a F~~f~~acility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating shall not add PFOS based ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants to any t ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~bath~~ Tank using Hexavalent Chromium.

(2) The owner or operator of a ~~facility~~ Facility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating that elects to use a ~~w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant to comply with the requirements of this rule shall only use a ~~w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant(s) that:

(A) Reduces or suppresses ~~h~~Hexavalent ~~c~~Chromium emissions at the surface of an ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath to meet an emission factor below 0.01 milligrams per ~~a~~Ampere hour,

(B) Meets a ~~s~~Surface ~~t~~Tension below 40 dynes/cm, as measured by a ~~s~~Stalagmometer, or below 33 dynes/cm, as measured by a

~~t~~Tensiometer, unless an alternative is approved pursuant to subdivision (q), and

(C) Has been certified by the Executive Officer based on a certification process conducted by South Coast AQMD and CARB.

(3) The owner or operator of a ~~facility~~ Facility using Hexavalent Chromium for either Decorative Chromium Electroplating or Functional Chrome Plating shall use a ~~certified w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant in accordance with the applicable certification and ~~applicable~~ manufacturer's specifications and instructions.

~~(4) No later than January 1, 2020, the owner or operator of a facility shall be notified by the Executive Officer the status of:~~

~~(A) Any wetting agent chemical fume suppressant available on and after July 1, 2021 that meets the requirements specified in paragraphs (l)(2); and~~

~~(B) Any potential wetting agent chemical fume suppressant going through the certification process conducted by SCAQMD and CARB.~~

~~(5) If a wetting agent chemical fume suppressant will not be available by July 1, 2021, the owner or operator of a facility shall only add a wetting agent chemical fume suppressant to a chromium electroplating or chromic acid anodizing tank based on the information in the notice as specified by paragraph (l)(4) and:~~

~~(A) On or before July 1, 2021, meet the hexavalent chromium emission limit specified in Table 1 – Hexavalent Chromium Emission Limits for Hard and Decorative Chromium Electroplating and Chromic Acid Anodizing Tanks;~~

~~(B) On or before July 1, 2022, phase out the use of hexavalent chromium in the chromium electroplating or chromic acid anodizing tanks that use a wetting agent chemical fume suppressant that meets the requirements of paragraph (l)(6); or~~

~~(C) On or before July 1, 2021 implement an alternative to a wetting agent chemical fume suppressant that meets the requirements of paragraph (l)(7).~~

~~(6) The owner or operator of a facility that elects to meet the requirements of paragraph (l)(5) by phasing out the use of hexavalent chromium in a chromium electroplating or chromic acid anodizing tank shall:~~

~~(i) No later than January 1, 2021, submit a written and signed commitment to the Executive Officer stating that the facility will phase out by July 1, 2022, the use of hexavalent chromium in the electroplating or chromic acid anodizing tank(s) that use a wetting agent chemical fume suppressant.~~

~~(ii) No later than July 1, 2022 cease operating and surrender SCAQMD permits to operate the chromium electroplating or chromic acid anodizing tank(s) that use a wetting agent chemical fume suppressant.~~

~~(7) The owner or operator of a facility that elects to meet the requirements of paragraph (l)(5) by implementing an alternative to a wetting agent chemical fume suppressant, shall submit a permit application for the chromium electroplating or chromic acid anodizing tank(s) that includes the alternative and any conditions specified in the approval of the alternative in paragraph (l)(8).~~

~~(8) The alternative to a wetting agent chemical fume suppressant specified in paragraph (l)(7) shall:~~

~~(A) Meet an emission limit that is equally effective as the emission limit required for a wetting agent chemical fume suppressant specified in subparagraph (l)(2)(A);~~

~~(B) Be approved by the Executive Officer in consultation with CARB to meet the requirement specified in subparagraph (l)(2)(A); and~~

~~(C) Be used by the owner or operator in accordance with the approval specified in subparagraph (l)(8)(B).~~

~~(9) An owner or operator of a facility that fails to phase out the use of hexavalent chromium by July 1, 2022 pursuant to paragraph (l)(6) will be required to cease operation of the electroplating or chromic acid anodizing tank that contains hexavalent chromium until the facility can meet the emission limits specified in paragraph (h)(2) for the subject tank.~~

(m) *Parameter Monitoring*

(1) *Add-On Air Pollution Control Device(s) and Add-On Non-Ventilated Air Pollution Control Device(s)*

(A) *Pressure and Air Flow*

The owner or operator of a ~~f~~Facility shall continuously monitor the operation of the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device by:

(i) Installing and maintaining a device to measure the applicable pressures and air flows specified in Table 4 ─ Pressure and Air Flow Measurement Parameters;

(ii) Installing each device so that it is accessible and in clear sight of the operation or maintenance personnel;

(iii) Maintaining all parameters identified in Table 4 ─ Pressure and Air Flow Measurement Parameters within the range specified in the ~~f~~Facility's South Coast AQMD Permit to Operate;

(iv) Labeling each mechanical gauge with the corresponding acceptable operating ranges established during the most recent source test and within the range specified in the South Coast AQMD Permit to Operate; and

(v) Maintaining the mechanical gauges in accordance to the requirements in Appendix 4.

Table 4~~:~~ - Pressure and Air Flow Measurement Parameters

Permitted Air Pollution Control Technique	Location	Parameter Monitored	Units	Monitoring Start Date
Push-Pull Systems	Push Manifold	Static Pressure	Inches of water	60 Days After Completion of Initial Source Test or within January 1, 2019
All	Collection Manifold or Any Location within the System Using a Flow Meter	Static Pressure or Volumetric Flow Rate	Inches of water or Actual Cubic Feet per Minute	60 Days After Completion of Initial Source Test or within January 1, 2019
Existing on or Before November 2, 2018	Across Each Stage of the Control Device	Differential Pressure	Inches of water	November 2, 2018
Installed after November 2, 2018	Across Each Stage of the Control Device	Differential Pressure	Inches of water	60 Days After Completion of Initial Source Test

(B) *Semiannual Measurements of Velocity of Collection Slots*

Beginning 60 days after the completion of the initial source test required in Table 3 – Source Tests Schedule and at least once every 180 days ~~thereafter~~following the most recent source test demonstrating compliance with the applicable emission limit, the owner or operator of a ~~f~~Facility shall demonstrate that emissions are captured by the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device that meets the requirements in Table 5 – Add-on Air Pollution Control Device Parameter Monitoring using any of the following:

(i) A hot-wire anemometer;

(ii) A vane anemometer; or

(iii) A device or method approved by the Executive Officer.

Table 5~~:~~ - Add-on Air Pollution Control Device Parameter Monitoring[1,2]

	Collection Slot(s) Velocity[1,3]	**Push Air Manifold Pressure (for push-pull systems only)**	**Required Action**
Row 1: Acceptable Measurement	> 95% of the most recent passing source test or emission screening; or ≥ 2,000 fpm	95-105% compared to the most recent passing source test or emission screening	None
Row 2: Repairable Measurement	90-95% of the most recent passing source test or emission screening test, or < 2,000 fpm and > 1,800 fpm	90-95% or 105-110% of the most recent passing source test or emission screening test	Repair or replace, and re-measure within 3 calendar days of measurement
Row 3: Failing Measurement	< 90% of the most recent passing source test or emission screening test, or <1,800 fpm	> 110% or < 90% of the most recent passing source test or emission screening test	Immediately shut down any tanks controlled by the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device that had a failing measurement

[1] If the measured slot velocity appears in multiple rows, the owner or operator shall implement the required action in the lower numbered row. For example the owner or operator would implement the required action in Row 2, if the measured slot velocity shows a repairable measurement (row 2) or a failing measurement (row 3).

[2] The owner or operator shall measure and evaluate the applicable velocity or pressure at each location tested during the most recent source test that demonstrated compliance with the applicable emission limit.

[3] Alternative slot velocities less than 2,000 fpm would be specified in the most recently approved source test report demonstrating compliance with the applicable emission limit.

(C) *Repairable Measurements*

The owner or operator of a ~~f~~Facility with an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device for a Tier II or Tier III Hexavalent Chromium Tank that demonstrates a repairable measurement according to Table 5 – Add-on Air Pollution Control Device Parameter Monitoring shall:

(i) Perform the required action specified in Table 5 – Add-on Air Pollution Control Device Parameter Monitoring for a repairable measurement,

(ii) Demonstrate an acceptable measurement within the time period established for the required action specified in Table 5 – Add-on Air Pollution Control Device Parameter Monitoring, and

(iii) Immediately shutdown the Tier II or Tier III Hexavalent Chromium Tank if an acceptable measurement is not demonstrated within the time period established for the required action specified in Table 5 – Add-on Air Pollution Control Device Parameter Monitoring. The tank shall remain shutdown until an acceptable measurement is measured.

(D) *Failing Measurement*

The owner or operator of a ~~f~~Facility with an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device for a Tier II or Tier III Hexavalent Chromium Tank that demonstrates a failing measurement according to Table 5 – Add-on Air Pollution Control Device Parameter Monitoring shall perform the required action specified in Table 5 – Add-on Air Pollution Control Device Parameter Monitoring for a failing measurement. The tank shall remain shutdown until an acceptable measurement is measured.

(E) *Smoke Test Requirements*

Once every 180 days the owner or operator of a ~~f~~Facility subject to ~~sub~~paragraph (k)(8~~7~~) shall conduct a smoke test:

(i) Using a method described in Appendix 5, Appendix 8, or any other method deemed acceptable by the Executive Officer; and

(ii) Within 30 days of start-up for new and modified A~~a~~dd-on A~~a~~ir P~~p~~ollution C~~c~~ontrol D~~d~~evices or A~~a~~dd-on N~~n~~on-ventilated A~~a~~ir P~~p~~ollution C~~c~~ontrol D~~d~~evices.

(F) *Failure of Smoke Test*

The owner or operator of a ~~f~~Facility shall immediately shut down all Tier II and Tier III Hexavalent Chromium Tanks associated with the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device or ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device if an acceptable smoke test for each ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device pursuant to Appendix 5 and each ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device pursuant to Appendix 8 is not conducted. The Tier II and Tier III Hexavalent Chromium Tank shall remain shut down until an acceptable smoke test is conducted.

(G) *HEPA Filters*

Beginning 60 days after completion of the initial source test required by subdivision (k), the owner or operator of a ~~f~~Facility with an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device equipped with HEPA filters shall ensure that the device to monitor pressure drop pursuant to subparagraph (m)(1)(A):

(i) Is equipped with ports to allow for periodic calibration in accordance with manufacturer specifications;

(ii) Is calibrated according to manufacturer specifications at least once every calendar year; and

(iii) Is maintained in accordance with manufacturer specifications.

(2) *Wetting Agent Chemical Fume Suppressants (Excluding Decorative Chromium Electroplating Tanks Using a Trivalent Chromium Bath)*

(A) The owner or operator of a ~~f~~Facility shall monitor the ~~s~~Surface ~~t~~Tension of the ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank that contains a certified ~~w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant with either a ~~s~~Stalagmometer or ~~t~~Tensiometer using the applicable method pursuant to subparagraph (k)(~~2~~3)(C). The ~~s~~Surface ~~t~~Tension shall be maintained below the respective value established in the list of certified ~~w~~Wetting ~~a~~Agent ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants pursuant to subdivision (l), or at or below a value specified in the South Coast AQMD Permit to Operate.

(B) The owner or operator of a ~~f~~Facility shall measure the ~~s~~Surface ~~t~~Tension every third operating day but not less than once per week.

(C) If at any time the ~~s~~Surface ~~t~~Tension required by subparagraph (m)(2)(A) is not maintained, the owner or operator of a ~~f~~Facility shall measure the ~~s~~Surface ~~t~~Tension:

(i) Daily for 20 consecutive operating days; and

(ii) Resume the measurement schedule pursuant to subparagraph (m)(2)(B).

(D) The owner or operator of a ~~f~~Facility operating under an approved alternative compliance method pursuant to subdivision (i), and using ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants as all or partial control of ~~h~~Hexavalent ~~c~~Chromium emissions shall measure and monitor the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath each operating day. The ~~s~~Surface ~~t~~Tension shall be maintained at or below the ~~s~~Surface T~~t~~ension measured during the source test.

(3) *Fume Suppressants Forming a Foam Blanket*

(A) The owner or operator of a ~~f~~Facility shall maintain the ~~f~~Foam ~~b~~Blanket thickness across the surface of the ~~c~~Chromium ~~e~~Electroplating or ~~c~~Chromic ~~a~~Acid ~~a~~Anodizing ~~t~~Tank established during the most recently approved source test to demonstrate compliance with the emission limit specified in subdivision (w) or (x) or paragraphs (h)(2) or (h)(4).

(B) The owner or operator of a ~~f~~Facility shall measure the ~~f~~Foam ~~b~~Blanket thickness each operating day.

(C) If at any time the ~~f~~Foam ~~b~~Blanket thickness required by subparagraph (m)(3)(A) is not maintained, the owner or operator of a ~~f~~Facility shall measure the ~~f~~Foam ~~b~~Blanket thickness:

(i) Hourly for 15 consecutive operating days; and

(ii) Resume the measurement schedule pursuant to subparagraph (m)(3)(B).

(4) *Polyballs or Similar Mechanical Fume Suppressants*

The owner or operator of a ~~f~~Facility shall visually inspect the Tier II or Tier III Hexavalent Chromium Tank and maintain coverage comparable to the coverage during the source test each operating day.

(n) *Inspection, Operation, and Maintenance Requirements*

(1) *Inspection and Maintenance*

(A) The owner or operator of a ~~f~~Facility using an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device or ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device shall comply with the applicable inspection and maintenance requirements listed in Table 4-1 of Appendix 4.

(B) The owner or operator of a ~~f~~Facility using an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device or ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device custom designed for a specific operation shall develop operating and maintenance requirements for approval by the Executive Officer. The requirements and frequency of inspection shall be sufficient to ensure compliance.

(2) The owner or operator of a ~~f~~Facility using ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants or ~~m~~Mechanical ~~f~~Fume ~~s~~Suppressants shall comply with the applicable inspection and maintenance requirements in Table 4-4 of Appendix 4.

(3) Beginning January 31, 2019, the owner or operator of a ~~f~~Facility operating a Tier II Hexavalent Chromium Tank that is not controlled by an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device shall comply with the applicable inspection and maintenance requirements in Table 4-3 of Appendix 4.

(4) Beginning January 31, 2019, the owner or operator of a ~~f~~Facility operating a Tier I, Tier II, and Tier III Hexavalent Chromium Tank shall comply with the applicable inspection and maintenance requirements in Table 4-2 of Appendix 4.

(5) *Operation and Maintenance Plan*

The owner or operator of a ~~f~~Facility subject to the inspection and maintenance requirements of paragraphs (n)(1), (n)(2), (n)(3), or (n)(4) shall ~~prepare~~maintain an operation and maintenance plan. For M~~m~~ajor S~~s~~ources, the plan shall be incorporated by reference into the S~~s~~ource's Title V permit. The plan shall incorporate the inspection and maintenance requirements for that device or monitoring equipment, as identified in Tables 4-1, 4-2, 4-3, and 4-4 of Appendix 4, and shall include the following elements:

(A) A standardized checklist to document the operation and maintenance of the S~~s~~ource, the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device, and the process and control system monitoring equipment; and

(B) Procedures to be followed to ensure that equipment is properly maintained.

(6) Notwithstanding the operation and maintenance plan required by paragraph (n)(5), the owner or operator of a ~~f~~Facility 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 subdivision.

(7) *Operation and Maintenance Plan Availability*

The owner or operator of a ~~f~~Facility shall keep the written operation and maintenance plan on record after it is developed, to be made available for inspection, upon request.

(8) *Operation and Maintenance Plan Modifications*

Any changes made by the owner or operator of a ~~f~~Facility shall be ~~documented in an addendum~~incorporated into ~~the~~ a revised operation and maintenance plan. In addition, the owner or operator of a ~~f~~Facility shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, for a period of 5 years after each revision to the plan.

~~(9) *Amended Operation and Maintenance Plan*~~

~~No later than January 31, 2019, the facility's operation and maintenance plan shall be revised and made available upon request to the Executive Officer to reflect the incorporation of the inspection and maintenance requirements for a device or monitoring equipment that is identified in Table 4-2 and Table 4-3 of Appendix 4 and shall include the elements required in subparagraphs (n)(5)(A) and (n)(5)(B).~~

(~~10~~ *Replacement of Ampere-Hour Meter*

9)

Prior to replacement of a continuous recording non-resettable ~~a~~Ampere-hour meter that is required under paragraph (d)(1), the owner or operator of a ~~f~~Facility shall photograph the actual ~~a~~Ampere-hour reading of:

(A) The ~~a~~Ampere-hour meter being replaced; and

(B) The new ~~a~~Ampere-hour meter immediately after installation.

(o) *Recordkeeping*

(1) *Inspection Records for Sources Using an Add-on Air Pollution Control Device or Non-Ventilated Air Pollution Control Device*

The owner or operator of a ~~f~~Facility shall maintain inspection records to document that the inspection and maintenance requirements of subdivision (n) , and that the provisions of the operation and maintenance plan required by subdivision (n) have been met. The record can take the form of a checklist and shall identify:

(A) The device inspected;

(B) The date and time of inspection;

(C) A brief description of the working condition of the device during the

inspection;

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

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

(2) *Inspection Records for Sources Using Chemical or Mechanical Fume Suppressants*

The owner or operator of a ~~f~~Facility shall maintain inspection records to document that the applicable inspection and maintenance requirements of paragraphs (n)(1), (n)(2), (n)(3), and (n)(4) have been met. The record can take the form of a checklist.

(3) *Source Test, Capture Efficiency, and Smoke Test Records*

The owner or operator of a ~~f~~Facility shall maintain the conditions and results of all source tests, capture efficiency tests, emissions screening test, and smoke tests required by subdivision (k). The records shall include source test results required to determine compliance with paragraph (m)(1), including the pressure drop established during the source test to demonstrate compliance with the applicable E~~e~~mission L~~l~~imitation.

(4) *Monitoring Data Records*

The owner or operator of a ~~f~~Facility shall maintain records of continuously recorded ~~a~~Ampere-hour data required by paragraph (d)(1) and monitoring data required by subdivision (m).

(A) *Cumulative Rectifier Usage Records*

The owner or operator of a ~~f~~Facility shall, on a monthly basis, record the actual cumulative rectifier usage expended during each month of the reporting period, and the total usage expended to date.

(B) *Pressure and Air Flow Measurements*

The owner or operator of a ~~f~~Facility shall record the applicable pressures and air flow as specified in Table 4: Pressure and Air Flow Measurement Parameters of subdivision (m) once a week.

(5) *Surface Tension Records*

(A) The owner or operator of a ~~f~~Facility shall record the ~~s~~Surface ~~t~~Tension pursuant to the requirements of paragraph (m)(2).

(B) For ~~f~~Facilities operating under an approved alternative compliance method pursuant to subdivision (i), and using ~~c~~Chemical ~~f~~Fume ~~s~~Suppressants as all or partial control of ~~h~~Hexavalent ~~c~~Chromium

emissions, the owner or operator of the ~~f~~Facility shall record the ~~s~~Surface ~~t~~Tension of the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath daily.

(6) *Mechanical Fume Suppressant and Foam Blankets Records*

(A) The owner or operator of a ~~f~~Facility that is required to measure the ~~f~~Foam ~~b~~Blanket thickness pursuant to paragraph (m)(3), shall record the foam thickness.

(B) The owner or operator of a ~~f~~Facility using polyballs or other ~~m~~Mechanical ~~f~~Fume ~~s~~Suppressants to comply with the emission standards of subdivision (h)~~, or~~ (i), (w), or (x), shall record the coverage of the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath daily. Coverage shall be reported as a percentage of bath surface area.

(7) *Records of Excesses*

The owner or operator of a ~~f~~Facility shall maintain records of exceedances of: the ~~e~~Emission ~~l~~Limitations in subdivisions (h), ~~and~~ (i), (w) and (x), the parameter monitoring values established under subdivision (m), 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.

(8) *Housekeeping and Best Management Practice Records*

The owner or operator of a ~~f~~Facility shall maintain records demonstrating compliance with housekeeping practices and best management practices, as required by subdivisions (f) and (g), 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~~f~~ugitive E~~e~~missions.

(9) *Records of Fume Suppressant Additions*

For S~~s~~ources using fume suppressants to comply with the standards, the owner or operator of a ~~f~~Facility shall maintain records of the date, time, approximate volume, and product identification of the fume suppressants that are added to the ~~e~~Electroplating or ~~a~~Anodizing ~~b~~Bath.

(10) *Records of Trivalent Bath Components*

For S~~s~~ources complying with paragraph (h)(3) using ~~t~~Trivalent ~~e~~Chromium baths, the owner or operator of a ~~f~~Facility shall maintain records of the B~~b~~ath C~~e~~omponents purchased, with the ~~w~~Wetting ~~a~~Agent clearly identified as a bath constituent contained in one of the components.

(11) *Records of Filter Purchase and Disposal*

For Ssources using ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Devices to comply with the standards, the owner or operator of a ~~f~~Facility shall retain purchase orders for filters and waste manifest records for filter disposal.

(12) *Records for Rinse Tanks*

The owner or operator of a Facility that uses Hexavalent Chromium for Chromium Electroplating or Chromic Acid Anodizing shall maintain record of a laboratory analysis conducted every 12 calendar months or is representative of the current operating condition for the first Rinse Tank following a Tier I, a Tier II, or a Tier III Hexavalent Chromium Tank demonstrating that the tank solution contains less than the applicable minimum concentration of Hexavalent Chromium to meet the definition of a Tier I, Tier II, or Tier III Hexavalent Chromium Tank using an approved ASTM, CARB, or U.S. EPA test method, where total chromium may serve as a surrogate for Hexavalent Chromium, unless:

(A) A South Coast AQMD permit condition limits the Rinse Tank solution concentration to less than the applicable minimum concentration of Hexavalent Chromium to meet the definition of a Tier I, Tier II, or Tier III Hexavalent Chromium Tank;

(B) The Rinse Tank is part of a rinsing operation that is designed to be continuously diluted with water;

(C) The Rinse Tank is permanently connected to a system to remove Hexavalent Chromium;

(D) The tank solution is replaced at least once every 12 calendar months with water and the corresponding records are retained on-site; or

(E) The Rinse Tank is required to meet the applicable requirements of a Tier III Hexavalent Chromium Tank.

(~~12~~ *Records Retention*

13)

All records shall be maintained for five years, at least two years on site, except the most recent source test report(s) which shall be kept on site.

(p) *Reporting*

(1) *Source Test Documentation*

(A) Notification of Source Test

At least ~~60~~ 14 calendar days before the source test is scheduled to occur, the owner or operator of a ~~f~~Facility shall notify the Executive

Officer at sourcetesting@aqmd.gov that a source test will be conducted.

(B) *Reports of Source Test Results*

The owner or operator of a Ffacility shall report source test results to the Executive Officer. Reports of source test results shall be submitted no later than 90 calendar days following the completion of the required source test, and shall be submitted as part of the ~~notification of~~ Ongoing cCompliance and Emission sStatus Reports required by paragraphs (p)(2) and (p)(3).

(C) The source test reports shall contain, at a minimum, the information identified in Appendix 1.

(2) Initial Compliance Status Report

An initial compliance status report is required each time that a Ssource becomes subject to the requirements of this rule. The owner or operator of a Ffacility shall submit to the Executive Officer an initial compliance status report, signed by the Rresponsible Oofficial who shall certify its accuracy, attesting to whether the Ssource has complied with this rule.

(A) Initial Compliance Status Report Due Date

The initial compliance status report for existing facilities shall be submitted to the Executive Officer no later than April 24, 2008. New or modified facilities shall submit the initial compliance status report upon start-up.

(B) The initial compliance status report shall contain, at a minimum, the information identified in Appendix 2.

(3) *Ongoing Compliance Status and Emission Reports*

The owner or operator of a ~~f~~Facility shall submit a summary report to the Executive Officer to document the ongoing compliance status.

(A) Frequency of Ongoing Compliance Status and Emission Reports

The report shall be submitted each calendar year on or before February 1 for all Ssources and shall include information covering the preceding calendar year (January 1 through December 31).

(B) The ongoing compliance status and emission reports shall, at a minimum, contain the information identified in Appendix 3.

(4) *Notification of Incident*

(A) The owner or operator of a ~~f~~Facility shall notify the Executive Officer within four hours of the incident or within four hours from the time

the owner or operator of a ~~f~~Facility knew or reasonably should have known of, any failed smoke test, any failed source test, any exceedance of a permitted ~~a~~Ampere-hour limit, or any malfunction of a non-resettable ~~a~~Ampere-hour meter by calling 1-800-CUT SMOG. In ~~the~~ cases of emergencies that prevent the owner or operator of a ~~f~~Facility from reporting all required information within the four hour limit, the Executive Officer may extend the time for reporting the required information provided such owner or operator of a ~~f~~Facility has notified the Executive Officer of the incident within 24-hours. The notification shall include the following information:

(i) Date and time of the incident and when it was discovered;

(ii) Specific location and equipment involved;

(iii) Responsible party to contact for further information;

(iv) Causes of the incident, to the extent known; and

(v) Estimated time for repairs and correction.

(B) Within seven calendar days after a reported incident has been corrected, but no later than thirty calendar days from the initial date of the incident, unless an extension has been approved in writing by the Executive Officer, the owner or operator of a ~~f~~Facility shall submit a written incident report to the Executive Officer that includes:

(i) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the incident;

(ii) The duration of the incident;

(iii) The date of correction and information demonstrating that compliance is achieved;

(iv) An identification of the types of emissions, if any, resulting from the incident;

(v) A quantification of the excess emissions, if any, resulting from the incident and the basis used to quantify the emissions;

(vi) Information substantiating that steps were immediately taken to correct the condition causing the incident, and to minimize the emissions, if any, resulting from the incident;

(vii) Written verification that the F~~f~~acility is operating in compliance with this rule. If the F~~f~~acility is not in compliance

with this rule, provide an approximate date the Ff~~f~~acility is expected to be in compliance;

(viii) A description of the corrective measures undertaken and/or to be undertaken to avoid such an incident in the future; and

(ix) Pictures of the equipment that failed, if available.

(5) *Reports Associated with Trivalent Chromium Baths Exclusively Using a Chemical Fume Suppressant Containing a Wetting Agent*

Owners or operators switching to ~~t~~Trivalent ~~c~~Chromium baths exclusively using a ~~c~~Chemical ~~f~~Fume ~~s~~Suppressant containing a ~~w~~Wetting ~~a~~Agent to comply with ~~sub~~paragraph (h)(3)~~(A~~) are not subject to paragraphs (p)(1) through (p)(3), but shall instead submit a report within 30 days of a change to the ~~t~~Trivalent ~~c~~Chromium E~~e~~lectroplating process that includes:

(A) A description of the manner in which the process has been changed and the ~~e~~Emission ~~l~~Limitation, if any, now applicable to the S~~s~~ource; and

(B) The notification and reporting requirements of paragraphs (p)(1), (p)(2), and (p)(3), if the ~~f~~Facility complies with the E~~e~~mission L~~l~~imitation option, or paragraph (p)(5), if the S~~s~~ource uses a ~~w~~Wetting ~~a~~Agent to comply. The report shall be submitted in accordance with the schedules identified in those paragraphs.

(6) *Adjustments to the Timeline for Submittal and Format of Reports*

The Executive Officer 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. Adjustments shall provide the same information and shall not alter the overall frequency of reporting.

(q) *Procedure for Establishing Alternative Requirements*

(1) *Request Approval of an Alternative Requirement*

Any person may request approval of an alternative requirement. The person seeking such approval shall submit the proposed alternative requirement to the Executive Officer for approval. The request shall include the proposed alternative requirement, the reason for requesting the alternative requirement, and information demonstrating that the criteria for approval identified in Appendix 6 is met.

(2) *Approval of an Alternative Requirement*

The Executive Officer may approve an alternative requirement if it determines that application of the alternative requirement meets the criteria for approval identified in Appendix 6 and the Executive Officer has submitted the proposed alternative requirements and has received concurrence from the applicable concurring agencies identified in Appendix 6.

(3) *Approval Criteria*

Nothing in this subdivision prohibits the Executive Officer from establishing approval criteria more stringent than that required in Appendix 6.

(4) *Alternatives Already Approved by U.S. EPA*

Waivers for alternatives already approved by the U.S. EPA prior to October 24, 2007 shall remain in effect until the effective dates of the specified requirements become effective.

(r) *Exemptions*

(1) The requirements of subdivisions (m) and (n) do not apply to Dd~~d~~ecorative C~~c~~hromium E~~e~~lectroplating tanks using a T~~t~~rivalent C~~c~~hromium bath with a W~~w~~etting A~~a~~gent.

(2) The requirements of paragraphs (f)(6), (g)(4), and (g)(5) do not apply to buffing, grinding, or polishing operations conducted under a continuous flood of M~~m~~etal R~~r~~emoval F~~f~~luid.

(3) A temporary opening, no more than seven consecutive calendar days, in a wall or roof of a B~~b~~uilding E~~e~~nclosure created to install an air pollution control device shall be:

(A) Excluded from the combined area of all Enclosure Openings referenced in paragraph (e)(1); and

(B) Exempt from paragraph (e)(4), provided the opening is covered when construction work is not active and upon the end of each construction work day.

(4) Beginning January 1, 2026, the requirements of paragraphs (h)(2) and (h)(4) do not apply to a Tier III Hexavalent Chromium Tank subject to the requirements of subdivision (x).

(5) The requirements of paragraph (h)(5) do not apply to a Functional Chrome Plating Facility subject to the requirements of paragraph (x)(3).

(6) The requirements of paragraph (k)(1) do not apply to Tier III Hexavalent Chromium Tanks subject to the requirements of paragraph (k)(2).

(s) *Rule 1402 Inventory Requirements*

The owner or operator of a Ff~~f~~acility that is in compliance with this rule will not be required to submit an emission inventory to the Executive Officer for emissions of toxic compounds subject to this rule, pursuant to paragraph (p)(1) of Rule 1402 - Control of Toxic Air Contaminants from Existing Sources.

(t) *Conditional Requirements for Permanent Total Enclosure*

(1) The owner or operator of a ~~f~~Facility shall install a Permanent Total Enclosure that does not exceed 3.5% for all ~~e~~Enclosure ~~o~~Openings, as specified in paragraph (e)(1) for a Tier III ~~h~~Hexavalent ~~c~~Chromium ~~t~~Tank:

(A) That results in more than one non-passing source test as required in paragraph (k)(1) occurring within a consecutive 48-month period; or

(B) That is not immediately shut down pursuant to clause (m)(1)(C)(iii), subparagraph (m)(1)(D) or subparagraph (m)(1)(F):

(i) More than once within a consecutive 48-month period for a ~~f~~Facility that is located more than 1,000 feet from a ~~s~~Sensitive ~~r~~Receptor; or

(ii) Once for a ~~f~~Facility that is located less than or equal to 1,000 feet from a ~~s~~Sensitive ~~r~~Receptor.

(2) Within 30 days of the date of notification by the Executive Officer that a Permanent Total Enclosure is required, the owner or operator of ~~f~~Facility may submit a written report to the Executive Officer providing evidence that the installation of a Permanent Total Enclosure is not warranted based on the following criteria:

(A) The incidents of non-compliance specified in paragraph (t)(1) did not occur; or

(B) The owner or operator of a ~~f~~Facility resolved the incidents of non-compliance specified in paragraph (t)(1) in a timely manner; and

(C) The owner or operator of a ~~f~~Facility implemented specific measures to minimize ~~h~~Hexavalent ~~c~~Chromium emissions.

(3) The Executive Officer shall use the information provided by the owner or operator of a ~~f~~Facility to determine if a ~~p~~Permanent ~~t~~Total ~~e~~Enclosure is required and will notify the owner or operator of a ~~f~~Facility within 90 days of receiving the written report.

(4) The owner or operator of a ~~f~~Facility required to install a ~~p~~Permanent ~~t~~Total ~~e~~Enclosure pursuant to subdivision (t) shall vent the ~~p~~Permanent ~~t~~Total

~~e~~Enclosure to an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device that is fitted with HEPA filters, or other filter media that is rated by the manufacturer to be equally or more effective; and designed in a manner that does not conflict with requirements or guidelines set forth by OSHA or CAL-OSHA regarding worker safety, or the National Fire Protection Association regarding safety.

(5) The owner or operator of a ~~f~~Facility required to install a ~~p~~Permanent ~~t~~Total ~~e~~Enclosure pursuant to subdivision (t) shall install the ~~p~~Permanent ~~t~~Total ~~e~~Enclosure no later than 12 months after the South Coast AQMD Permit to Construct is issued by the Executive Officer. The owner or operator of a ~~f~~Facility shall submit complete South Coast AQMD permit applications for the ~~p~~Permanent ~~t~~Total ~~e~~Enclosure to the Executive Officer no later than:

(A) 180 days after notification by the Executive Officer if the property line of the F~~f~~acility is within 500 feet of the property line of any ~~s~~Sensitive ~~r~~Receptor.

(B) 270 days after notification by the Executive Officer for all other ~~f~~Facilities.

(u) Hexavalent Chromium Phase-Out Plan

(1) The owner or operator of a ~~f~~Facility shall not be subject to the requirements of paragraph (h)(4) to vent a Tier III Hexavalent Chromium Tank, existing on or before November 2, 2018, to an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device, if the owner or operator of a ~~f~~Facility submits a Hexavalent Chromium Phase-Out Plan to the Executive Officer for review and approval no later than January 31, 2019 containing the following:

(A) A commitment that the ~~f~~Facility will permanently eliminate or reduce ~~h~~Hexavalent ~~c~~Chromium concentrations within the subject tank to below the concentration of the definition of a Tier II or Tier III Hexavalent Chromium Tank;

(B) A description of the method by which ~~h~~Hexavalent ~~c~~Chromium concentrations will be permanently eliminated or reduced from the subject tank(s) and the date of final completion, not to exceed two years from approval of the Hexavalent Chromium Phase-Out Plan;

(C) A list of milestones, including any testing required to meet specifications or quality assurance requirements, to allow the ~~f~~Facility

to reduce or eliminate ~~h~~Hexavalent ~~c~~Chromium by the completion date;

(D) Completion date for each of the milestones listed in subparagraph (u)(1)(C); and

(E) A list of all control measures that will be implemented for the subject tank(s), including dates of implementation, until the ~~h~~Hexavalent ~~c~~Chromium- concentration is eliminated or reduced as stated.

(2) The Hexavalent Chromium Phase-Out Plan shall be subject to the fees specified in Rule 306.

(3) The Executive Officer shall notify the owner or operator of a ~~f~~Facility in writing whether the Hexavalent Chromium Phase-Out Plan is approved or disapproved. Determination of approval status shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in paragraph (u)(1). If the Hexavalent Chromium Phase-Out Plan is disapproved, the owner or operator of a ~~f~~Facility shall resubmit the plan, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the Hexavalent Chromium Phase-Out Plan. The resubmitted Hexavalent Chromium Phase-Out Plan shall include any information necessary to address deficiencies identified in the disapproval letter.

(4) Upon approval of the Hexavalent Chromium Phase-Out Plan, the owner or operator of a ~~f~~Facility shall implement the approved plan and shall submit a progress report to the Executive Officer by the first day of every calendar quarter indicating the increments of progress for the previous quarter, or submit according to an alternative schedule as specified in the approved plan.

(5) The Executive Officer shall notify the owner or operator of a ~~f~~Facility to submit complete South Coast AQMD permit applications for an ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device to comply with subdivision (h) if:

(A) The owner or operator does not eliminate or reduce ~~h~~Hexavalent ~~c~~Chromium by the final completion date in the approved Hexavalent Chromium Phase-Out Plan;

(B) The Executive Officer denies a resubmitted Hexavalent Chromium Phase-Out Plan; or

(C) The owner or operator fails to resubmit a Hexavalent Chromium Phase-Out Plan as required under paragraph (u)(3).

(6) The owner or operator shall install the ~~a~~Add-on ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device specified in the permit application submitted pursuant to paragraph (u)(5) no later than 180 days after a South Coast AQMD Permit to Construct has been issued.

(v) *Phase Out of Hexavalent Chromium for Chromium Electroplating and Chromic Acid Anodizing Operations*

(1) *New Hexavalent Chromium Facilities Prohibited*

An owner or operator of a Facility shall not construct nor operate a tank that uses Hexavalent Chromium for the purposes of Decorative Chromium Electroplating, Hard Chromium Electroplating, or Chromic Acid Anodizing, unless the Facility has a Chromium Electroplating or Chromic Acid Anodizing Tank using Hexavalent Chromium permitted on or before January 1, 2024.

(2) *Phase Out of Hexavalent Chromium for Decorative Chromium Electroplating Operations*

(A) Beginning January 2, 2030, an owner or operator of a Facility shall not use any Hexavalent Chromium for the purposes of Decorative Chromium Electroplating.

(B) In lieu of meeting the requirements of paragraph (v)(2)(A), an owner or operator of a Facility issued a Permit to Construct after January 1, 2029 for the non-Hexavalent Chromium alternative equipment that elects to have an alternative phase out date shall not use any Hexavalent Chromium for the purposes of Decorative Chromium Electroplating beginning the expiration date of the Permit to Construct for the non-Hexavalent Chromium equipment alternative, issuance date of the Permit to Operate for the non-Hexavalent Chromium equipment alternative, or January 2, 2031, whichever is the earliest, provided:

(i) No later than [6 Months after Date of Rule Adoption], the owner or operator submitted a complete permit application for the non-Hexavalent Chromium alternative equipment; and

(ii) No later than October 31, 2029, the owner or operator informs the South Coast AQMD staff processing the application for the non-Hexavalent Chromium alternative equipment that the

facility will continue to operate the Decorative Chromium Electroplating equipment after January 1, 2030.

(C) In lieu of meeting the requirements of paragraph (v)(2)(A), an owner or operator of Facility issued a Permit to Construct for the non-Hexavalent Chromium alternative equipment that elects to have an alternative phase out date shall not use any Hexavalent Chromium for the purposes of Decorative Chromium Electroplating beginning the expiration date of the extended Permit to Construct for the non-Hexavalent Chromium alternative equipment, issuance date of the Permit to Operate for the non-Hexavalent Chromium equipment alternative, or January 1, 2031, whichever is the earliest, provided:

(i) The requirements specified in subparagraphs (v)(2)(B)(i) and (v)(2)(B)(ii) are met; and

(ii) An extension to the Permit to Construct for the non-Hexavalent Chromium alternative equipment was granted for one or more of the following reasons:

(I) The procurement of equipment necessary to replace Hexavalent Chromium is delayed;

(II) The installation of equipment necessary to replace Hexavalent Chromium is delayed; or

(III) More time is needed to complete construction of the non-Hexavalent Chromium alternative equipment.

(3) *Phase Out of Hexavalent Chromium Functional Chrome Operations*

(A) Beginning January 2, 2039 or the date specified in the Air Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations (California Code of Regulations Section 93102.4) for when the use of any Hexavalent Chromium for the purposes of Functional Chrome Plating is prohibited, whichever is later, an owner or operator of a Facility shall not use any Hexavalent Chromium for the purposes of Functional Chrome Plating.

(B) An owner or operator of a Facility shall not be subject to the requirements of subparagraph (v)(3)(A), if no date is specified in the Air Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations for when the use of any Hexavalent Chromium for the purposes of Functional Chrome Plating is prohibited.

(w) *Requirements for Facilities Undergoing Modifications*

(1) *Permitted Annual Ampere-Hours*

The owner or operator of a Chromium Electroplating or Chromic Acid Anodizing Tank using Hexavalent Chromium shall not perform a Modification to the Facility on or after January 1, 2024, unless:

(A) The Facility's total permitted Ampere-hours for the Chromium Electroplating and Chromic Acid Anodizing Tanks using Hexavalent Chromium after the Modification does not exceed the total permitted Ampere-hours for the Chromium Electroplating and Chromic Acid Anodizing Tanks using Hexavalent Chromium prior to Modification; and

(B) All Tier I, II, and III Hexavalent Chromium Tanks that undergo a Modification at the Facility comply with all applicable requirements of this rule.

(2) *Emission Limitations for Hexavalent Decorative Chromium Electroplating and Hard Chromium Electroplating and Chromic Acid Anodizing Tanks*

An owner or operator of a Facility that underwent a Modification on or after January 1, 2024 shall control Hexavalent Chromium emissions from all Chromium Electroplating and Chromic Acid Anodizing tanks by:

(A) Venting Hexavalent Chromium emissions to an Add-on Air Pollution Control Device(s); and

(B) Meeting an Emission Limitation of 0.00075 milligrams of Hexavalent Chromium per Ampere-hour or less as demonstrated by conducting a source test meeting the requirements of paragraph (k)(2), subparagraph (k)(3)(A), and paragraphs (k)(5) through (k)(8).

(x) *New Requirements for Tier III Hexavalent Chromium Tanks at Functional Chrome Plating Facilities Beginning January 1, 2026*

(1) *Tank Used for Functional Chrome Plating*

Beginning on January 1, 2026, an owner or operator of a Functional Chrome Plating Facility shall control Hexavalent Chromium emissions from each Chromium Electroplating and Chromic Acid Anodizing Tank that uses Hexavalent Chromium for either Functional Chrome Plating or both Decorative Chrome Plating and Functional Chrome Plating by meeting the requirements of subparagraphs (w)(2)(A) and (w)(2)(B), in lieu of meeting the requirement in paragraph (h)(2).

(2) *Tier III Hexavalent Chromium Tanks (Excluding Chromium Electroplating and Chromic Acid Anodizing Tanks)*

Beginning on January 1, 2026, owner or operator of a Functional Chrome Plating 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 paragraph (x)(1), to an Add-on Air Pollution Control Device that meets the following Hexavalent Chromium emission limits as demonstrated by source test meeting the requirements in subdivision (k):

(A) 0.00075 mg/amp-hr for any tank connected to an Add-on Air Pollution Control Device that is also connected to a Functional Chrome Plating Tank.

(B) 0.20 mg/hr for any tank not connected to an Add-on Air Pollution Control Device that is also connected to a Functional Chrome Plating Tank, with a maximum exhaust rate of 5,000 cubic feet per minute or less per manufacturer's specifications; or

(C) 0.004 mg/hr-ft^2, with the applicable surface area based on the total surface area of all Tier II and Tier III Hexavalent Chromium Tanks connected to the same Add-on Air Pollution Control Device, for any tank not connected to an Add-on Air Pollution Control Device that is also connected to a Functional Chrome Plating Tank, with a maximum exhaust rate of greater than 5,000 cubic feet per minute per manufacturer's specification.

(3) *Tier II Hexavalent Chromium Tanks at a Functional Chrome Plating Facility*

Beginning January 1, 2026, the owner or operator of a Functional Chrome Plating 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; or

(B) Meeting the requirements for a Tier III Hexavalent Chromium Tank specified in paragraph (x)(2).

Appendix 1 – Content of Source Test Reports.

Source test reports shall contain, at a minimum, the following information:

1. A brief process description;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results in milligrams/ampere-hour;
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;
9. Applicable Industrial Ventilation Limits;
10. Collection slot velocities (if applicable);
11. Measured static, differential, or volumetric flow rate at the push manifold, collection manifold, across each stage of the control device, and exhaust stack (if applicable); and
12. Any other information required by the test method.

Appendix 2 – Content of Initial Compliance Status Reports.

Initial compliance status reports shall contain, at a minimum, the following information:

1. Facility name, SCAQMD ID number, Ff~~f~~acility address, owner and operator name, and telephone number;
2. The distance of the Ff~~f~~acility to the property line of the nearest commercial/industrial building and Ss~~s~~ensitive Rr~~r~~eceptor using measurement methods provided in paragraph (h)(2);
3. Sensitive Rr~~r~~eceptor locations, if they are located within one-quarter of a mile from the center of the Ff~~f~~acility;
4. Building parameters
   - Stack height in feet (point sources); or
   - Building area in square feet (volume sources).
5. Maximum potential rectifier capacity per tank and Ff~~f~~acility maximum operating schedule (more than or less than or equal to 12 hours per day);
6. The applicable Ee~~e~~mission Ll~~l~~imitation and the methods that were used to determine compliance with this limitation;
7. Facility-wide emissions, if applicable;
8. If a source test is required, the test report documenting the results of the source test, which contains the elements listed in Appendix 1;
9. If an initial smoke test demonstrating the capture efficiency of the Aa~~a~~dd-on Aa~~a~~ir Pp~~p~~ollution Cc~~c~~ontrol Dd~~d~~evice or Aa~~a~~dd-on Nn~~n~~on-ventilated Aa~~a~~ir Pp~~p~~ollution Cc~~c~~ontrol Dd~~d~~evice is required, the test report documenting the results which contain the elements listed in Appendix 8;
10. The type and quantity, in pounds, of hazardous air pollutants emitted by the Ss~~s~~ource.;
11. For each monitored parameter for which a compliant value is to be established under subdivision (m), the specific Oo~~o~~perating Pp~~p~~arameter Vv~~v~~alue, or range of values, that corresponds to compliance with the applicable emission limit;
12. The methods that will be used to determine continuous compliance, including a description of monitoring and reporting requirements, if methods differ from those identified in this section;
13. A description of the Aa~~a~~ir Pp~~p~~ollution Cc~~c~~ontrol Tt~~t~~echnique for each emission point;
14. A statement that the owner or operator of a Ff~~f~~acility has completed and has on file the operation and maintenance plan as required by subdivision (n);
15. The actual cumulative Aa~~a~~mpere-hour usage expended during the preceding calendar year, if operation occurred;
16. Information on calculations for the Bb~~b~~uilding Ee~~e~~nclosure envelope pursuant to paragraph (e)(1), including locations and dimensions of openings that are counted towards the applicable building envelope allowance;

17. A statement that the owner or operator of a F~~f~~acility, or personnel designated by the owner or operator of a F~~f~~acility, has completed a SCAQMD-approved training program pursuant to subdivision (j); and
18. A statement by the owner or operator of a F~~f~~acility as to whether the S~~s~~ource has complied with the provisions of this section.

Appendix 3 – Content of Ongoing Compliance Status and Emission Reports.

Ongoing compliance status and emission reports shall, at a minimum, contain the following information:

1. The company name and address of the Ssource;
2. An identification of the operating parameter that is monitored for compliance determination, as required by subdivision (m);
3. The relevant Eemission Llimitation for the Ssource, and the Ooperating Pparameter Vvalue, or range of values, that correspond to compliance with this Eemission Llimitation ~~as~~ specified in the ~~notification of~~ initial compliance status required by Appendix 2;
4. The beginning and ending dates of the calendar year for the reporting period;
5. A description of the type of process performed in the Ssource;
6. The actual cumulative rectifier usage expended during the calendar year of the reporting period, on a month-by-month basis, if the Ssource is a Hhard or Ddecorative Cchromium Eelectroplating Ttank or Cchromic Aacid Aanodizing Ttank;
7. Updated Ffacility-wide emissions, if applicable;
8. Hexavalent Cchromium and Ttrivalent Cchromium emissions data in grams per year for the reporting period;
9. Sensitive receptor distances, if they are located within ¼ of mile from the center of the facility and facility maximum operating schedule (more than or less than or equal to 12 hours per day), if changed since submittal of the initial compliance status report or subsequent ongoing compliance status and emission reports. Sensitive receptor distances shall be measured using methods provided in paragraph (h)(2);
10. A summary of any excess emissions or exceeded monitoring parameters as identified in the records required by paragraph (o)(7);
11. A certification by a Rresponsible Oofficial that the inspection and maintenance requirements in subdivision (n) were followed in accordance with the operation and maintenance plan for the Ssource;
12. If the operation and maintenance plan required by subdivision (n) 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 paragraph (o)(1) documenting that the operation and maintenance plan was not followed;
13. If applicable, results of periodic smoke tests demonstrating capture efficiency of an Aadd-on Aair Ppollution Ceontrol Ddevice or Aadd-on Nnon-ventilated Aair Ppollution Ceontrol Ddevice conducted during the reporting period;
14. A description of any changes in monitoring, processes, or controls since the last reporting period;

15. A statement that the owner or operator of a Ff~~f~~acility, or personnel designated by the owner or operator of a Ff~~f~~acility has, within the last 2 years, completed a South Coast AQMD-approved training program pursuant to subdivision (j);
16. Add-on air pollution ventilation measurements conducted during the most recent successful South Coast AQMD approved source test that include:

    (A) The velocity of each collection slot, including the velocity values that would be 95% and 90% of the source-tested value.

    (B) For push-pull systems, the pressure of each push air manifold, including the pressure values that would be 110%, 105%, 95%, and 90% of the source-tested value;
17. A summary of any pollution prevention measures that the Ff~~f~~acility has implemented that eliminates or reduces the use of Hh~~e~~xavalent Cc~~e~~hromium in the Cc~~e~~hromium Ee~~l~~ectroplating or Cc~~e~~hromic Aa~~c~~id Aa~~n~~odizing process and Aa~~s~~sociated Pp~~r~~ocess Tt~~a~~nks.
18. Information on calculations for the Bb~~u~~ilding Ee~~n~~closure envelope pursuant to paragraph (e)(1), including locations and dimensions of openings that are counted towards the applicable building envelope allowance.
19. The name, title, and signature of the Rr~~e~~sponsible Oo~~f~~ficial who is certifying the accuracy of the report; and
20. The date of the report.

Appendix 4 – Summary of Inspection and Maintenance Requirements

Table 4-1:
Summary of Inspection and Maintenance Requirements for Sources Using Add-on Air Pollution Control Device(s) or Add-On Non-Ventilated Air Pollution Control Device(s)

Control Technique/Equipment	Inspection and Maintenance Requirements	Frequency
Composite mesh-pad (CMP) system.	1. Visually inspect device to ensure that there is proper drainage, no unusual Cehromic Aacid buildup on the pads, and no evidence of chemical attack that affects the structural integrity of the device.	1. Once per quarter.
	2. Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of Cehromic Aacid mist.	2. Once per quarter.
	3. Visually inspect ductwork from tank to the control device to ensure there are no Lleaks.	3. Once per quarter.
	4. Perform washdown of the composite mesh-pads in accordance with manufacturer's recommendations.	4. Per manufacturer.
Packed-Bbed Sscrubber (PBS)	1. Visually inspect device to ensure there is proper drainage, no unusual Cehromic Aacid buildup on the packed-beds, and no evidence of chemical attack that affects the structural integrity of the device.	1. Once per quarter.
	2. Visually inspect back portion of the chevron blade mist eliminator to ensure that it is dry and there is no breakthrough of Cehromic Aacid mist.	2. Once per quarter.
	3. Same as number 3 above for CMP system.	3. Once per quarter.
	4. Add fresh makeup water to the packed-bed[A].	4. Whenever makeup is added.

[A] Horizontal Ppacked-Bbed Sscrubbers without continuous recirculation must add make-up water to the top of the packed-bed.

Table 4-1:
Summary of Inspection and Maintenance Requirements for Sources Using Add-on Air Pollution Control Device(s) or Add-On Non-Ventilated Air Pollution Control Device(s) (cont)

Control Technique/Equipment	Inspection and Maintenance Requirements	Frequency
PBS/CMP system	1. Same as for CMP system.	1. Once per quarter.
	2. Same as for CMP system.	2. Once per quarter.
	3. Same as for CMP system.	3. Once per quarter.
	4. Same as for CMP system	4. Per manufacturer.
Fiber-B~~b~~ed M~~m~~ist E~~e~~liminator[B]	1. Visually inspect fiber-bed unit and prefiltering device to ensure there is proper drainage, no unusual C~~e~~hromic A~~a~~cid buildup in the units, and no evidence of chemical attack that affects the structural integrity of the devices.	1. Once per quarter.
	2. Visually inspect ductwork from tank or tanks to the control device to ensure there are no L~~l~~eaks.	2. Once per quarter.
	3. Perform washdown of fiber elements in accordance with manufacturer's recommendations.	3. Per manufacturer.
High Efficiency Particulate Arrestors filter (HEPA)	1. Look for changes in the pressure drop.	1. Once per week.
	2. Replace HEPA filter.	2. Per manufacturer's specifications or South Coast AQMD's requirement.

[B] Inspection and maintenance requirements for the control device installed upstream of the F~~f~~iber-B~~b~~ed M~~m~~ist E~~e~~liminator to prevent plugging do not apply as long as the inspection and maintenance requirements for the fiber-bed unit are followed.

Table 4-1:
Summary of Inspection and Maintenance Requirements for Sources Using Add-on Air Pollution Control Device(s) or Add-On Non-Ventilated Air Pollution Control Device(s) (cont)

Control Technique/Equipment	Inspection and Maintenance Requirements	Frequency
Enclosed Hexavalent Chromium Tank ~~Covers~~	1. Drain the air-inlet (purge air) valves at the end of each day that the tank is in operation.	1. Once per day.
	2. Visually inspect access door seals and membranes for integrity.	2. Once per week.
	3. Drain the evacuation unit directly into the electroplating tank or into the R~~r~~inse T~~t~~anks (for recycle into the electroplating tank).	3. Once per 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. Once per month.
	5. Visually inspect all clamps for proper operation; replace as needed.	5. Once per month.
	6. Clean or replace filters on evacuation unit.	6. Once per month.
	7. Visually inspect piping to, piping from, and body of evacuation unit to ensure there are no L~~l~~eaks and no evidence of chemical attack.	7. Once per 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 F~~f~~resh W~~w~~ater. 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.	Once per quarter.
Ampere-hour meter	Install and maintain per manufacturer's specifications.	Per manufacturer.

Table 4-2:
Additional Inspection and Maintenance Requirements for Tier I, II, and III Hexavalent Chromium Tank(s)

Control Technique/Equipment	Inspection and Maintenance Requirements	Minimum Frequency
Temperature Gauge	1. Install and maintain per manufacturer's specification at each Tier I, II, and III Hexavalent Chromium Tank.	1. Per manufacturer.
	2. Calibrated or confirmed to be accurate.	2. Once per year.
Collection Slots and Push Air Manifolds for Push-Pull Systems	1. Visually inspect slots and push air manifolds to ensure that there are no obstructions or clogs.	1. Once per week.
	2. Clean slots or push air manifolds.	2. Once every 180 days.
	3. Measure slot velocity of each slot and pressure at each push air manifold using a hot-wire anemometer, vein anemometer, or approved device	3. Once every 180 days.
Air Flow Gauges	Install and maintain per manufacturer's specifications.	Per manufacturer

Table 4-3
Summary of Inspection and Maintenance Requirements for Sources Not Using Add-on Air Pollution Control Devices to Control Tier II Hexavalent Chromium Tank(s)

Equipment	Inspection and Maintenance Requirement for Monitoring Equipment	Frequency
Temperature Data Logger	1. Install and maintain per manufacturer's specification at each Tier II Hexavalent Chromium Tank.	1. Per manufacturer.
	2. Calibrate ~~or confirm to be accurate~~per manufacturer.	2. Per manufacturer.

Table 4-4
Summary of Inspection and Maintenance Requirements for Sources Using Chemical or Mechanical Fume Suppressants

Equipment	Inspection and Maintenance Requirement for Monitoring Equipment	Frequency
Ampere-hour meter	Install and maintain per manufacturer's specifications.	Per manufacturer.
Stalagmometer/ Tensiometer	Calibrate and maintain per manufacturer's specifications.	Per manufacturer.

Appendix 5 – Smoke Test for Add-on Non-Ventilated Air Pollution Control Device

SMOKE TEST TO VERIFY THE SEAL INTEGRITY OF COVERS DESIGNED TO REDUCE CHROMIUM EMISSIONS FROM TIER III HEXAVALENT CHROMIUM TANKS

1. Applicability and Principle

1.1 Applicability. This method is applicable to all Tier III Hexavalent Chromium Tanks where a chromium tank cover of an Enclosed Hexavalent Chromium Tank or ~~a~~Add-on ~~n~~Non-ventilated ~~a~~Air ~~p~~Pollution ~~c~~Control ~~d~~Device is used on the tank for reducing chromium emissions.

1.2 Principle. During electrolytic operations, gas bubbles generated during the process rise to the surface of the tank liquid and burst. Non-electrolytic tanks that are either heated or air sparged generate bubbles that rise to the surface. Upon bursting, tiny droplets of Ce~~c~~hromic A~~a~~cid (chromium mist) or H~~h~~exavalent Ce~~c~~hromium laden liquid become entrained in the air above the tank. Because the chromium 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 chromium tank cover and runs back into the solution. A semi-permeable membrane allows passage of the hydrogen and oxygen out of the chromium tank cover. A smoke device is placed inside the chromium tank cover to detect L~~l~~eaks at the membrane, joints, or seals.

2. Apparatus

2.1 Smoke device. Adequate to generate 500 to 1000 ft^3 of smoke/20 ft^2 of tank surface area.

2.2 Small container. To hold the smoke device.

3. Procedure

Place the small container on a stable and flat area at center of the chromium tank cover (you can use a board and place it on the buss bars). Place the smoke device inside the container. After activating the smoke device, quickly close the access door to avoid smoke from escaping. Let smoke device fill the entire space under the chromium tank cover with smoke. An acceptable smoke test shall demonstrate no L~~l~~eaks of smoke from each seal, joint, and membrane of the chromium tank cover. Record these observations including the locations and a qualitative assessment of any L~~l~~eaks of smoke.

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

Appendix 6 – Approval of Alternatives for Specific Requirements

Section	Requirement	Description of Authority	Approving Agency	Concurring Agency
(b)	Applicability	Assisting an owner or operator of a F~~f~~acility in determining whether a F~~f~~acility is subject to the rule	South Coast AQMD	
(h)	Standards	Approving alternative standards	South Coast AQMD	U.S. EPA
(k)(1)	Source Test Requirement	Waiving a source test requirement	South Coast AQMD	
(k)(1)	Use of Existing Source Tests	Approving the use of existing performance test results to demonstrate compliance, based on the "Description of the Technical Review Protocol for Performance Tests of California Chrome Plating Sources" (see Attachment 2 of the July 10, 1998 memorandum from John S. Seitz entitled, "Delegation of 40 CFR Part 63 General Provisions Authorities to State and Local Air Pollution Control Agencies.")	South Coast AQMD	
(k)(3~~2~~)	Test Method	Approving site-specific alternatives to test methods	South Coast AQMD for minor[1] or intemediate[2] changes	U.S. EPA for major[3] changes, and ARB
(k)(5~~4~~)	Pre-Test Protocol	Approving pre-test protocols	South Coast AQMD	
(k)(6~~5~~)	Test All Emission Points	Waiving the requirement to test all emission points	South Coast AQMD	
(m)	Parameter Monitoring	Approving site-specific changes in monitoring methodology	South Coast AQMD for minor[1] or intermediate[4] changes	U.S. EPA for major[3] changes
(n)	Inspection and Maintenance Requirements	Approving site-specific changes to inspection and maintenance requirements	South Coast AQMD	
(n)	Operation and Maintenance Plans	Approving or requiring site-specific changes to operation and maintenance plans	South Coast AQMD	

Section	Requirement	Description of Authority	Approving Agency	Concurring Agency
(o)(1)-(o)(12~~11~~)	Recordkeeping	Waiving or altering recordkeeping requirements	South Coast AQMD	U.S. EPA for major[3] changes
(o)(13~~12~~)	Retention of Records	Waiving or altering the requirement to retain records for 5 years	South Coast AQMD	U.S. EPA for major[3] changes
(p)	Reporting	Waiving or altering reporting requirements	South Coast AQMD	U.S. EPA[5] for major[3] changes

1 Minor change to a test method or monitoring is a modification to a federally enforceable test method or monitoring that (a) does not decrease the stringency of the Eemission Llimitation or standard or the compliance and enforcement measures for the relevant standard; (b) has no national significance (e.g., does not affect implementation of the applicable regulation for other affected Ssources, does not set a national precedent, and individually does not result in a revision to the test method or monitoring requirement); and (c) is site specific, made to reflect or accommodate the operation characteristics, physical constraints, or safety concerns of an affected Ssource.

2 Intermediate change to a test method is a within-method 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 Eemission Llimitation or standard. Intermediate changes are not approvable if they decrease the stringency of the standard.

3 Major change to a test method or monitoring is a modification to a federally enforceable test method or federally required monitoring that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).

4 Intermediate change to monitoring is a 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 compliance and enforcement measures for the relevant standard.

5 U.S. EPA concurrence is not needed for adjustments made according to paragraph (p)(6).

Appendix 7 – Information Demonstrating an Alternative Method(s) of Compliance Pursuant to Subdivision (i)

The owner or operator of a F~~f~~acility applying for approval of an alternative method of compliance must submit to the Executive Officer the following information.

1. A source test as specified in subdivision (i) that is submitted after receipt of the South Coast AQMD Permit to Construct. 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~~h~~exavalent C~~c~~hromium emissions than would be achieved with direct compliance with the applicable emission rate in paragraphs (h)(2) or (h)(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. A F~~f~~acility using in-tank controls shall only be modeled as a volume source and the resulting risk shall be compared to the same F~~f~~acility 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.
5. A demonstration that the F~~f~~acility is at least 75 feet from a S~~s~~ensitive R~~r~~eceptor.

Appendix 8 – Smoke Test to Demonstrate Capture Efficiency for an Add-on Air Pollution Control Device(s) Pursuant to Paragraph (k)(6).

1. Applicability and Principle

1.1 Applicability. This method is applicable to all Hhard and Ddecorative Cchromium Eelectroplating and Cchromic Aacid Aanodizing operations where an Aadd-on Aair Ppollution Ccontrol Ddevice is used to reduce chromium emissions from the Cchromium Eelectroplating or Aanodizing Ttank.

1.2 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. Collection of this chromium mist is achieved with the add-on air pollution control device for the tank(s) where chromium emissions are reduced downstream. Emission control efficiency at the exhaust of an add-on control device is related to capture efficiency at the inlet of the add-on air pollution control device. For this reason, it is imperative that 100% capture efficiency is maintained. A smoke device placed within the area where collection of chromic mist by the add-on air pollution control device occurs reveals this capture efficiency.

2. Apparatus

2.1 Smoke Generator. Adequate to produce a persistent stream of visible smoke.

3. Testing Conditions

The smoke test shall be conducted while the Aadd-on Aair Ppollution Ccontrol Ddevice is in normal operation and under typical draft conditions representative of the Ffacility's Cchromium Eelectroplating and/or Cchromic Aacid Aanodizing Ooperations. This includes cooling fans and openings affecting draft conditions around the tank area including, but not limited to, vents, windows, doorways, bay doors, and roll-ups. The smoke generator must be at full generation during the entire test and operated according to manufacturer's suggested use.

3. Procedure

The smoke test shall be conducted over a minimum twelve point matrix evenly distributed over the entire liquid surface of each Cchromium Eelectroplating or Cchromic Aacid Aanodizing Ttank vented to the Aadd-on Aair Ppollution Ccontrol Ddevice. Place the aperture of the smoke device at each point of the matrix at a height within one inch above the tank top. Observe collection of the smoke to the collection location(s) of the Aadd-on Aair Ppollution Ccontrol Ddevice. An acceptable smoke test shall demonstrate a direct stream to the collection location(s) of the Aadd-on Aair Ppollution Ccontrol Ddevice without meanderings out of this direct path. Record these observations at each of the points on the matrix providing a qualitative assessment of the collection of smoke to the Aadd-on Aair Ppollution Ccontrol Ddevice. The test shall also be documented by photographs or video at each point of the matrix.

Appendix 9 – Surface Tension Measurement Procedure for a Stalagmometer

The S~~s~~talagmometer shall first be properly cleaned before being used for the first time and after a period of storage. Properly clean the S~~s~~talagmometer using the following procedure:

1. Set up S~~s~~talagmometer in stand in a fume hood.
2. Place a clean 150 mL beaker underneath the S~~s~~talagmometer then fill with reagent grade concentrated nitric acid. Immerse bottom tip (approximately ½") of S~~s~~talagmometer 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~~s~~talagmometer. 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~~s~~talagmometer for 5 minutes and then carefully 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~~s~~talagmometer with 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~~s~~talagmometer twice with isopropyl alcohol and allow the 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~~s~~talagmometer into the beaker. Fill the S~~s~~talagmometer per instructions in Step #3, making sure that the solution level is above the top etched line.
9. Raise the S~~s~~talagmometer so that the bottom end is completely out of solution. Remove bulb and immediately place a finger on the top end of the S~~s~~talagmometer. 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

$$\text{Surface T}\sout{\text{t}}\text{ension (dynes/cm)} = \frac{Sw * Nw * D}{N * Dw}$$

Sw = Surface T~~t~~ension 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 S~~s~~talagmometer 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 S~~s~~talagmometer 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 S~~s~~talagmometer; 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 S~~s~~talagmometer.
7. Sample at room temperature.

Appendix 10 – Tier II and Tier III Hexavalent Chromium Tank Thresholds

1. Tier II Hexavalent Chromium Tank's H~~h~~exavalent C~~c~~hromium concentrations shall remain in the concentration range for the specified temperature and be required to comply with paragraph (h)(5). Tanks that exceed the H~~h~~exavalent C~~c~~hromium concentration for a corresponding temperature for Tier II Hexavalent Chromium Tanks shall be considered a Tier III Hexavalent Chromium Tank and shall be required to comply with subparagraph (h)(4)(A) or paragraph (x)(3).

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~~c~~hromium E~~e~~lectroplating or C~~c~~hromic A~~a~~cid A~~a~~nodizing T~~t~~anks, with H~~h~~exavalent C~~c~~hromium concentration greater than 1,000 ppm shall be considered a Tier III Hexavalent Chromium T~~t~~ank regardless of operating temperature.

3. Air sparged tanks with a H~~h~~exavalent C~~c~~hromium concentration greater than 1,000 ppm shall be considered a Tier III Hexavalent Chromium T~~t~~ank regardless of operating temperature.

4. The owner or operator of a F~~f~~acility shall not be subject to the requirement of subparagraph (h)(4)(A) or paragraph (x)(2) to vent a Tier III Hexavalent Chromium Tank to an A~~a~~dd-on A~~a~~ir P~~p~~ollution C~~c~~ontrol D~~d~~evice for one tank at a F~~f~~acility if the tank meets the following requirements:
   a) The surface area is less than or equal to four (4) square feet;
   b) The H~~h~~exavalent C~~c~~hromium concentration is less than or equal to 11,000 ppm based on one or more of the following:~~;~~
      - Maximum operating concentration of Hexavalent Chromium specified in a permit condition
      - Laboratory analysis of the concentration of Hexavalent Chromium in the tank solution conducted within the last 12 months and using an approved ASTM, CARB, or U.S. EPA test method, where total chromium may serve as a surrogate for Hexavalent Chromium
   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 equal to two and one-half (2.5) hours per week; and
   e) The tank complies with the tank cover requirements in paragraph (h)(5) and the temperature data logger requirements in paragraph (n)(3), and the data logger must log the duration of time and temperature of the tank to demonstrate compliance with (d) above.

   A Tier III Hexavalent Chromium Tank that fails to comply with any of the conditions listed in a through e shall be subject to subparagraph (h)(4)(A) or paragraph (x)(2).

Appendix 11 – Implementation Schedule

Requirement	Affected Tanks	Implementation Date
(d)(6)	Tier I Hexavalent Chromium Tank	Beginning January 1, 2023
(f)(10)	Tier I, Tier II, or Tier III Hexavalent Chromium Tank	Beginning January 1, 2023
(g)(1)	Chromium Eelectroplating or Cchromic Aacid Aanodizing ~~tank~~Tank	Beginning April 2, 2021
	Tier I or Tier II Hexavalent Chromium Tank or Tier III Hexavalent Chromium Tank (except Cchromium Eelectroplating or Cchromic Aacid Aanodizing Ttanks)	Beginning January 1, 2023
(g)(2)	Tier II or Tier III Hexavalent Chromium Tank	Beginning April 2, 2021
	Tier I Hexavalent Chromium Tank	Beginning January 1, 2023
(g)(5)	Chromium Eelectroplating or Cchromic Aacid Aanodizing Ttank	Beginning April 2, 2021
	Tier I or Tier II Hexavalent Chromium Tank or Tier III Hexavalent Chromium Tank (except Cchromium Eelectroplating or Cchromic Aacid Aanodizing Ttanks)	Beginning January 1, 2023