

(Adopted March 4, 2005)(Amended June 4, 2021)

**RULE 1469.1 SPRAYING OPERATIONS USING COATINGS
CONTAINING CHROMIUM**

(a) Purpose

The purpose of this rule is to reduce emissions of hexavalent chromium from spray coating and related operations.

(b) Applicability

This rule applies to an owner or operator conducting spraying of chromate coatings.

(c) Definitions

For the purpose of this rule the following definitions shall apply:

- (1) APPROVED CLEANING METHOD means cleaning using a wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA VACUUM, protective coverings, or other method as approved by the Executive Officer.
- (2) APPROVED HEALTH RISK ASSESSMENT means a health risk assessment prepared pursuant to Rule 1402 that is approved by the Executive Officer.
- (3) BENCH SPRAY BOOTH means a SPRAY BOOTH with a raised spray enclosure area typically used for smaller workpieces, in which the operator cannot stand within the enclosure.
- (4) BUILDING ENCLOSURE means a permanent building or physical structure, or a portion of a building, 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 workpieces.
- (5) CHROMATE means strontium CHROMATE, zinc CHROMATE, lead CHROMATE, barium CHROMATE, calcium CHROMATE, and any other CHROMATE used in COATINGS for corrosion protection or other properties.
- (6) COATING means a material that is applied to a surface and that forms a continuous film in order to beautify and/or protect such surface and includes primers used for corrosion prevention, protection from the environment, functional fluid resistance and/or adhesion of subsequent COATINGS, adhesives, or sealants.
- (7) COMPLIANCE PLAN APPROVAL LETTER means the official notice of approval for a compliance plan.

- (c) (8) DEMASKING ACTIVITY means an activity in which tape or other masking material is removed from workpieces that have been coated with CHROMATE COATINGS.
- (9) DRIED CHROMATE COATING REMOVAL ACTIVITY means an activity whereby dried CHROMATE COATINGS on workpieces are removed through physical or mechanical means, such as buffing, scuffing, sanding, or grinding. DRIED CHROMATE COATING REMOVAL ACTIVITY does not include DEMASKING ACTIVITY.
- (10) ELECTROSTATIC APPLICATION means charging of atomized paint droplets for deposition by electrostatic attraction.
- (11) ENCLOSED SPRAY BOOTH means a SPRAY BOOTH with four sides that are enclosed during spraying operations and where the only openings in the SPRAY BOOTH during spraying operations are for makeup air.
- (12) EXHAUST COVERING means a material placed in front of existing filters and pre-filters, that is located on the inside of a spray enclosure and that is not part of the designed filter system.
- (13) FACILITY means any source or group of sources or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way and are owned or operated by the same person (or persons under common control), or an outer continental shelf as determined in 40 CFR Section 55.2. Such above-described groups, if non-contiguous, but connected 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 Outer Continental Shelf (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 onshore.
- (14) HAND APPLICATION METHOD means the application of materials by manually held, non-mechanically operated equipment. Such equipment includes paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.
- (15) HEPA VACUUM means a vacuum that is both designed to be fitted and used with a filter that is individually tested and certified by the

manufacturer to have a control efficiency of not less than 99.97 percent on 0.3 micron particles.

- (c) (16) **HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER** means a filter that is both individually tested and certified by the manufacturer to have a control efficiency of not less than 99.97 percent on 0.3 micron particles.
- (17) **HIGH-VOLUME, LOW-PRESSURE SPRAY** means a material application system that is operated at air pressure of between 0.1 and 10 pounds per square inch gauge.
- (18) **OPEN FACE SPRAY BOOTH** means for the purpose of this rule a **SPRAY BOOTH** in which one side of the booth is not enclosed, and air can flow through the open face horizontally. **OPEN FACE SPRAY BOOTH** does not include any **SPRAY BOOTH** configured for downdraft ventilation.
- (19) **OVERSPRAY** means the fraction of **COATING** sprayed that does not adhere to the intended surface.
- (20) **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 fugitive emissions, 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.
- (21) **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) schools; daycare centers; and health care **FACILITIES** such as hospitals or retirement and nursing homes. A **SENSITIVE RECEPTOR** includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.
- (22) **SPRAY BOOTH** means for the purpose of this rule any enclosure with walls and an impermeable ceiling used to contain and capture **OVERSPRAY** from the spray application of any **CHROMATE COATINGS**.
- (23) **STICKY MAT** means a non-reusable floor mat or floor covering with an adhesive or tacky surface that removes particles from shoes, wheels, or other objects that travel over the mat or covering.

- (c) (24) **THERMAL SPRAYING OPERATION** means one of several processes in which metallic or nonmetallic surfacing materials are deposited in a molten or semi-molten condition on a substrate to form a **COATING**. The surfacing material may originate in the form of powder, rod, or wire before it is heated, prior to spraying and deposition. **THERMAL SPRAYING OPERATIONS** include: detonation gun spraying, flame spraying, high-velocity oxy-fuel spraying, plasma spraying, and twin-wire electric arc spraying.
 - (25) **TOUCH UP AND REPAIR OPERATION** means the application of **COATING** used to cover minor **COATING** imperfections after the main **COATING** operation is conducted.
 - (26) **TRANSFER EFFICIENCY** means the ratio of the weight or volume of **COATING** solids adhering to an object to the total weight or volume, respectively, of **COATING** solids used in the application process, expressed as a percentage.
 - (27) **WORKPIECE SUPPORT EQUIPMENT** means racks, stands, or other equipment used to hold or support workpieces during **CHROMATE** spraying operations.
- (d) **Point Source Requirements**
- (1) An owner or operator of a facility with a chromate spraying operation shall:
 - (A) Conduct chromate spraying operations in a spray booth that is vented to an air pollution control system with HEPA filters or filters individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles;
 - (B) Meet the alternate point source requirements of paragraphs (e)(1) and (e)(2) until the earlier date required in subparagraph (d)(2)(B) to meet subparagraph (d)(1)(A); or
 - (C) Meet the alternate point source requirements of paragraphs (e)(3), (e)(4), and (e)(5).
 - (2) An owner or operator of a facility with a chromate spraying operation that meets the alternate point source requirements pursuant to subparagraph (d)(1)(B) or fails to meet the requirements of paragraph (e)(3) for facilities that meet the alternate point source requirements pursuant to subparagraph (d)(1)(C) shall:

- (d) (2) (A) On or before January 1, 2023, submit complete permit applications for a spray booth that meets the requirements of subparagraph (d)(1)(A); and
- (B) No later than 18 months after a Permit to Construct has been issued or January 1, 2026, whichever date is earlier, meet the requirements of subparagraph (d)(1)(A).
- (3) When spraying chromate coatings, an owner or operator of a facility with a chromate spraying operation shall ensure that:
 - (A) Visible emissions do not exit the spray booth;
 - (B) All spray booth filters are free of leaks, breaks, and tears, and are properly seated; and
 - (C) Inward air flow of the spray booth is maintained:
 - (i) Before January 1, 2026, by meeting the interim inward face air velocity requirement of paragraph (o)(1); and
 - (ii) Beginning January 1, 2026, by meeting the spray booth measurement or demonstration requirements in paragraph (g)(1).
- (e) Alternate Point Source Requirements for Chromate Spraying Operations With Compliance Plans or Health Risk Assessments Approved Before June 4, 2021
 - (1) Until the provisions in subparagraph (d)(1)(A) are met, an owner or operator of a facility with a chromate spraying operation with a compliance plan approved before June 4, 2021, or enforceable permit conditions resulting from a health risk assessment approved before June 4, 2021 that limit the cancer risk to 25 in a million if a facility is located more than 25 meters from a sensitive receptor or 10 in a million if a facility is located 25 meters or less from a sensitive receptor or located 100 meters or less from an existing school, shall continue to meet the conditions in the approved compliance plan.
 - (2) Until the provisions in subparagraph (d)(1)(A) are met, an owner or operator of a facility with a chromate spraying operation with an approved compliance plan pursuant to paragraph (e)(1) shall:
 - (A) Mount the compliance plan approval letter so as to be clearly visible in an accessible place within 8 meters (26 feet) of the spray booth identified in the approved compliance plan, or as otherwise approved

- in writing by the Executive Officer for equipment not subject to a facility permit under Regulation XX or Regulation XXX; or
- (e) (2) (B) Keep the compliance plan approval letter with the facility permit, or as otherwise approved in writing by the Executive Officer for equipment subject to a facility permit under Regulation XX or Regulation XXX.
- (3) On or before January 1, 2023, an owner or operator of a facility with a chromate spraying operation with a health risk assessment approved before June 4, 2021 using the 2015 OEHHA risk assessment guidance shall submit complete permit applications to modify the spray booth(s) conducting chromate spraying operations to:
 - (A) Limit the annual chromate emissions at or below the amount evaluated in the approved health risk assessment; and
 - (B) Require use of a filter that meets a minimum filter efficiency that is equal to or greater than the filter efficiency evaluated in the approved health risk assessment.
 - (4) Upon receiving written notification from the Executive Officer that the annual chromate emissions exceed the permit limit pursuant to subparagraph (e)(3)(A), an owner or operator of a facility with a chromate spraying operation shall:
 - (A) Submit complete permit applications for a spray booth that meets the requirements of subparagraph (d)(1)(A) within six months after the date of written notification; and
 - (B) No later than 18 months after a Permit to Construct has been issued or 36 months after the date of written notification, whichever date is earlier, meet the requirements of subparagraph (d)(1)(A).
 - (5) On or before January 1, 2023, an owner or operator of a facility with a chromate spraying operation with a health risk assessment approved before June 4, 2021 using the 2015 OEHHA risk assessment guidance shall:
 - (A) Clean the spray booth duct to remove all overspray and dried coatings that may contain chromium using an approved cleaning method;
 - (B) Inspect associated exterior surfaces of the spray booth duct and remove all overspray and dried coatings that may contain chromium using an approved cleaning method; and

- (e) (5) (C) Notify the Executive Officer at least 72 hours prior to the cleaning by calling 1-800-CUT-SMOG.

- (f) Point Source Requirements for Dried Chromate Coating Removal Activities
 - (1) Beginning January 1, 2026 or the date specified in subparagraph (f)(2)(B), an owner or operator of a facility with a chromate spraying operation shall ensure any dried chromate coating removal activity is:
 - (A) Conducted in a spray booth that meets the requirements of paragraph (d)(1); or
 - (B) Vented to a control device permitted for dried chromate coating removal activity that is:
 - (i) Equipped with HEPA filters, or filters that are individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles; and
 - (ii) Operated pursuant to a South Coast AQMD permit.
 - (2) An owner or operator of a facility with a chromate spraying operation that is conducting any dried chromate coating removal activity without a control device or with a control device that does not meet the requirements of paragraph (f)(1) shall:
 - (A) On or before January 1, 2023, submit a complete permit application for a control device that meets the requirements of clause (f)(1)(B)(i); and
 - (B) No later than 18 months after a Permit to Construct has been issued or January 1, 2026, whichever date is earlier, vent the dried chromate coating removal activity to the permitted control device that meets the requirements of clause (f)(1)(B)(i).
 - (3) An owner or operator of a facility with a chromate spraying operation conducting dried coating removal activity shall not operate a spray booth or other control device unless the filters are free of leaks, breaks, and tears, and are properly seated.

- (g) Spray Booth Requirements
 - (1) Beginning January 1, 2026 or the date specified in subparagraph (g)(2)(B), an owner or operator with a chromate spraying operation shall not conduct

chromate spraying operations or dried chromate coating removal activity in a spray booth unless:

- (g) (1) (A) The applicable average velocity and minimum velocity in Table 1 – Spray Booth Inward Face Air Velocity Requirements are met for the enclosed or open face spray booth using Appendix 1 – Inward Face Air Velocity Measurement Procedures; or
- (B) The enclosed spray booth meets the design requirements of a permanent total enclosure set forth in U.S. EPA Method 204 or other design approved by the Executive Officer.

Table 1 – Spray Booth Inward Face Air Velocity Requirements

| Spray Booth Type | Measurement Location | Average Velocity of Measurement Points | Minimum Velocity at Each Measurement Point |
|-------------------------|-----------------------------|---|---|
| Enclosed Non-Bench | At the filter face | 100 feet per minute | 75 feet per minute |
| Open Face Non-Bench | At the opening of the booth | | |
| Enclosed Bench | At the filter face | 150 feet per minute | 125 feet per minute |
| Open Face Bench | At the opening of the booth | | |

- (2) An owner or operator of a facility with chromate spraying operations that does not meet the requirements of paragraph (g)(1) shall:
 - (A) On or before January 1, 2023, submit complete permit applications to modify the spray booth to meet the requirements of paragraph (g)(1); and
 - (B) Modify the spray booth no later than 18 months after a Permit to Construct has been issued or January 1, 2026, whichever date is earlier.
- (3) After demonstrating that a spray booth meets the requirements of paragraph (g)(1), an owner or operator of a facility with a chromate spraying operation shall demonstrate that the spray booth continues to meet the requirements of paragraph (g)(1) according to the frequency in Table 2 Measurement or Demonstration Frequency.

Table 2 – Measurement or Demonstration Frequency

| Spray Booth Type | Frequency |
|------------------------------|--|
| Enclosed Non-Bench or Bench | At least once every 12 calendar months from the previous air velocity measurement pursuant to subparagraph (g)(1)(A) or permanent total enclosure demonstration pursuant to subparagraph (g)(1)(B) |
| Open Face Non-Bench or Bench | At least once every six calendar months from the previous air velocity measurement pursuant to subparagraph (g)(1)(A) |

- (g) (4) Beginning January 1, 2026, an owner or operator of a facility with a chromate spraying operation that fails to meet the requirements of paragraph (g)(1) shall:
 - (A) Not operate the spray booth for chromate spraying operations or dried chromate coating removal activities;
 - (B) Perform necessary actions or repairs to meet the requirements of paragraph (g)(1) before operating the spray booth; and
 - (C) Notify the Executive Officer by calling 1-800-CUT-SMOG within 24 hours of knowing that the necessary actions or repairs pursuant to subparagraph (g)(4)(B) cannot be completed within 30 days of the failure to meet the requirements of paragraph (g)(1).
- (5) Prior to conducting chromate spraying or any dried chromate coating removal activity, an owner or operator of a facility with a chromate spraying operation that is required to notify the Executive Officer pursuant to subparagraph (g)(4)(C) and has met the requirements in paragraph (g)(1) shall:
 - (A) Notify the Executive Officer within 24 hours of meeting the requirements of paragraph (g)(1) by calling 1-800-CUT-SMOG; and
 - (B) Demonstrate that the spray booth meets the requirements in paragraph (g)(1) and every 30 days thereafter.
- (6) After three consecutive demonstrations pursuant to subparagraph (g)(5)(B), an owner or operator of a facility with a chromate spraying operation shall demonstrate that the spray booth continues to meet the requirements of

paragraph (g)(1) according to the frequency specified in Table 2 – Measurement or Demonstration Frequency.

(h) Requirements for Building Enclosures

- (1) An owner or operator of a facility with a chromate spraying operation shall conduct the following within a building enclosure:
 - (A) Spraying operations;
 - (B) Dried chromate coating removal activities; and
 - (C) Demasking activities.
- (2) An owner or operator of a facility with a chromate spraying operation shall store workpiece support equipment within a building enclosure.
- (3) An owner or operator of a facility with a chromate spraying operation shall store cleaning equipment used to conduct housekeeping activities pursuant to subdivision (i) within a building enclosure.
- (4) Beginning January 1, 2022, except for the movement of vehicles, equipment, or people, an owner or operator of a facility with a chromate spraying operation shall:
 - (A) Close any building openings within 20 feet of:
 - (i) The opening of an open face spray booth;
 - (ii) Areas where dried chromate coating removal activities occur; and
 - (iii) Areas where demasking activities occur; and
 - (B) Use one or more of the following methods to close building openings:
 - (i) Door that automatically closes;
 - (ii) Overlapping plastic strip curtains;
 - (iii) Vestibule;
 - (iv) Airlock system; or
 - (v) Alternative method to minimize the release of fugitive emissions from the building that has been approved by the Executive Officer as an equivalent or more effective method to minimize the movement of air from within the building to the outside.

(i) Housekeeping Requirements

- (i) (1) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall use an approved cleaning method to clean, at the frequencies specified in Table 3 – Cleaning Frequencies, all open floor areas within 20 feet of:
 - (A) The opening of an open face spray booth;
 - (B) Ingresses and egresses of an enclosed spray booth located within a building enclosure;
 - (C) Areas where dried chromate coating removal or demasking activities are conducted;
 - (D) Areas where chromate coatings are mixed;
 - (E) Storage areas for equipment and materials that may contain chromates, excluding storage areas used exclusively for unopened coating containers; and
 - (F) Waste storage areas for materials that may contain chromates.
- (2) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall use an approved cleaning method to clean, at the frequencies specified in Table 3 – Cleaning Frequencies, all floor areas within:
 - (A) Workpiece support equipment transit paths and work areas identified in paragraph (j)(6); and
 - (B) Workpiece support equipment storage areas identified in paragraph (j)(7).

Table 3 – Cleaning Frequencies

| Applicable Provisions | For Areas Located Within a Permanent Total Enclosure Vented to an Air Pollution Control System with Filters that Meet the Filter Requirements of Subparagraph (d)(1)(A) | For All Other Areas |
|--|--|--|
| (i)(1)(A) and (i)(1)(B) | Once per calendar month, for any month when chromate spraying operations are conducted on one or more days | Once per calendar week, for any week when chromate spraying operations are conducted on one or more days |
| (i)(1)(C), (i)(1)(D), (i)(1)(E), and (i)(1)(F) | Once per calendar month, for any month when activities are conducted on one or more days | Once per calendar week, for any week when activities are conducted on one or more days |
| (i)(2)(A) and (i)(2)(B) | Once per calendar month, for any month when workpiece support equipment is moved on one or more days | Once per calendar week, for any week when workpiece support equipment is moved on one or more days |

- (i) (3) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall use an approved cleaning method to clean all ground areas within 20 feet of ingresses and egresses of an enclosed spray booth located outside a building enclosure once per day on days when chromate spraying operations are conducted within the spray booth.
- (4) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall use an approved cleaning method to clean spills of liquid or solid material that may contain chromates immediately but no later than one hour after being spilled.
- (5) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall use an approved cleaning method to clean all floors within a spray booth without protective coverings at least

once per calendar week, during any week when activities subject to this rule are conducted on one or more days within the spray booth.

- (i) (6) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall remove and replace all spray booth protective floor or wall coverings at least every six months.
- (7) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation that elects to use sticky mats in lieu of conducting the housekeeping requirements specified in subparagraphs (i)(1)(A) and (i)(1)(B) and paragraphs (i)(5) and (i)(6) shall ensure the sticky mats are:
 - (A) At least two feet in depth and as wide as the opening at all spray booth ingresses and egresses;
 - (B) Placed in locations such that all foot and equipment traffic into and out of the spray booth travels over the sticky mats; and
 - (C) Replaced at least once per day on days when chromate spraying operations are conducted in the spray booth. Used sticky mats shall be disposed of in a container before removal from a building. The container shall remain closed except when being filled or emptied.
- (8) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall place waste materials that may contain chromates immediately in a container. The container shall remain closed except when being filled or emptied. If waste material will be transferred to other on-site containers, the container shall be lined with removable bags.
- (9) Beginning January 1, 2022, an owner or operator of a facility with a chromate spraying operation shall ensure that when a HEPA vacuum is used:
 - (A) The HEPA filter is free of leaks, breaks, tears, or other types of damage, and securely latched and properly situated in the vacuum to prevent air leakage from the filtration system; and
 - (B) The HEPA vacuum is emptied into a container within a spray booth that meets the provisions of paragraph (d)(1). The container shall remain closed except when being filled or emptied.
 - (C) The HEPA filter shall be replaced within a spray booth that meets the provisions of paragraph (d)(1), and the used filter shall be placed in a closed container before removal from the spray booth.

(j) Best Management Practices

(1) Chromate Spraying Operations

An owner or operator of a facility with a chromate spraying operation shall:

- (A) Keep ingresses and egresses of an enclosed spray booth closed while conducting spraying operations; and
- (B) Beginning July 1, 2022 or the date specified in subparagraph (d)(2)(B) for facilities meeting the requirements in subparagraph (d)(1)(B), whichever date is later, not operate a spray booth unless a system is used to ensure that the air pollution control system for the spray booth is operating while the chromate spraying equipment is being used.

(2) Spray Booth Operations

An owner or operator of a facility with a chromate spraying operation shall:

- (A) When removing protective floor, wall, or exhaust coverings within the spray booth:
 - (i) Operate the air pollution control system;
 - (ii) Ensure that the ingresses and egresses of an enclosed spray booth are closed; and
 - (iii) Place all material that may contain chromates that are intended to be disposed of in a container before removal from the spray booth. The container shall remain closed except when being filled or emptied.
- (B) Operate the air pollution control system for a minimum of three air exchanges within the spray booth or five minutes, whichever is longer:
 - (i) After spraying operations have ceased;
 - (ii) After conducting dried chromate coating removal activities within the spray booth; and
 - (iii) After removing protective floor, wall, or exhaust coverings within the spray booth;
- (C) Beginning August 1, 2021, post on the spray booth, in a location that is clearly visible and accessible to the spray booth operator, the minimum ventilation time needed to meet the requirements of subparagraph (j)(2)(B); and

- (j) (2) (D) Not operate the air pollution control system when the final stage filters are being removed, replaced or are missing, damaged, or improperly installed.
- (3) Transfer Efficiency

An owner or operator of a facility with a chromate spraying operation shall not spray chromate coatings unless the chromate coatings are applied according to operating procedures specified by the equipment manufacturer, or applicable permit conditions, and by use of one of the following methods:

 - (A) High-Volume, Low-Pressure Spray;
 - (B) Electrostatic application; or
 - (C) Such other alternative application methods as are demonstrated to the Executive Officer in accordance with the South Coast AQMD method (Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989), or subsequent revisions to be capable of achieving at least equivalent transfer efficiency to the method in subparagraph (j)(3)(A) and for which written approval of the Executive Officer has been obtained.
- (4) Dried Chromate Coating Removal Activities

An owner or operator of a facility with a chromate spraying operation that conducts any dried chromate coating removal activity in a spray booth shall keep ingress and egress of an enclosed spray booth closed and operate the air pollution control system for the spray booth pursuant to the spray booth requirements in paragraph (d)(3) and subdivision (g), and the pressure drop requirements in subdivision (k), while conducting dried chromate coating removal activities.
- (5) Demasking Activities

Beginning August 1, 2021, an owner or operator of a facility with a chromate spraying operation conducting any demasking activity outside of an enclosed spray booth or a permanent total enclosure vented to an air pollution control system with HEPA filters or filters individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles shall not use compressed air to clean workpieces on tables or other surface areas where demasking activity occurs.

(j) (6) Workpiece Support Equipment Used During Chromate Spraying Operations

Beginning August 1, 2021, an owner or operator of a facility with a chromate spraying operation that moves workpiece support equipment outside of a spray booth or permanent total enclosure vented to an air pollution control system with HEPA filters or filters individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles shall:

(A) Establish and clearly mark transit paths and work areas outside of the spray booth or permanent total enclosure; and

(B) Transport equipment within established transit paths and work areas.

(7) Storage of Workpiece Support Equipment Used During Chromate Spraying Operations

Beginning August 1, 2021, an owner or operator of a facility with a chromate spraying operation that stores workpiece support equipment outside of a spray booth or permanent total enclosure vented to an air pollution control system with HEPA filters or filters individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles shall:

(A) Establish and clearly mark storage areas used to store workpiece support equipment; and

(B) Store workpiece support equipment within established storage areas.

(8) Visual Inspections

An owner or operator of a facility with a chromate spraying operation shall perform a weekly visual inspection of the filter media subject to this rule for leaks, breaks, tears, and improper seating.

(9) Personal Protective Equipment

An owner or operator of a chromate spraying operation shall remove personal protective equipment in a manner that minimizes fugitive emissions.

(k) Pressure Drop Across Filter Media

(1) Beginning January 1, 2023 or the date specified in subparagraph (d)(2)(B) for facilities meeting the requirements in subparagraph (d)(1)(B), whichever is later, an owner or operator of a facility with a chromate spraying operation shall:

- (k) (1) (A) Install a pressure gauge to continuously monitor the pressure drop across the spray booth final stage filter media; and
- (B) Maintain the pressure drop across the spray booth final stage filter media at or below the maximum pressure drop specified in a South Coast AQMD permit or the filter manufacturer’s recommended maximum pressure drop, whichever is lower.
- (2) An owner or operator of a facility with a chromate spraying operation shall maintain the pressure drop across the spray booth final stage filter media at or above the minimum pressure drop pursuant to Table 4 – Minimum Pressure Drop Across Final Stage Filters.

Table 4 – Minimum Pressure Drop Across Final Stage Filters

| Availability of Minimum Pressure Drop Information | Minimum Pressure Drop Requirement | Effective Date |
|--|--|--|
| Specified in a South Coast AQMD permit | Specified in a South Coast AQMD permit | June 4, 2021 |
| Not specified in South Coast AQMD permit | Measure pressure drop to the nearest tenth of an inch of water column while the air pollution control system is in operation to establish the minimum pressure drop across existing final stage filter media in place before January 1, 2023 | January 1, 2023 until new final stage filter media replacement |
| | Measure pressure drop to the nearest tenth of an inch of water column while the air pollution control system is in operation to establish the minimum pressure drop across new final stage filter media replaced after January 1, 2023 | At time of new final stage filter media installation |

- (3) An owner or operator of a facility with a chromate spraying operation shall not operate a spray booth:

- (k) (3) (A) Before January 1, 2023 if the pressure drop across the filter media is above the maximum limits specified in paragraph (o)(3); and
- (B) Beginning January 1, 2023, if the pressure drop across the final stage filter media is above the maximum limits specified in subparagraph (k)(1)(B) or below the minimum limits specified in Table 4 – Minimum Pressure Drop Requirements.
- (4) An owner or operator of a Facility with a Chromate spraying operation shall maintain onsite, and make available to the Executive Officer upon request:
 - (A) The filter technical specification sheets for all spray booth final stage filter media installed in a spray booth subject to this rule; and
 - (B) Any minimum pressure drop established in accordance with Table 4 – Minimum Pressure Drop Requirements.
- (5) An owner or operator of a facility with a chromate spraying operation shall record the pressure drop as measured by the gauge required in subparagraph (k)(1)(A) or paragraph (o)(3) at least once on days when a chromate spraying operation or dried chromate coating removal activity is conducted within the spray booth.
- (6) An owner or operator of a facility with a chromate spraying operation that elects to use a continuous data acquisition system (DAS) in lieu of recording the final filter pressure drop required by paragraph (k)(5) shall ensure the DAS is installed, operated, and maintained in accordance with manufacturer's specifications. The DAS shall:
 - (A) Record the data output from the gauge required in paragraph (k)(1)(A) at least once, and at a frequency of not less than once every sixty (60) minutes, when conducting a chromate spraying operation or dried chromate coating removal activity within the spray booth and;
 - (B) Generate a data file that contains a table of chronological date and time and the corresponding data output value from the gauge required in paragraph (k)(1)(A) in inches of water column on days when a chromate spraying operation or dried chromate coating removal activity is conducted within the spray booth. The file shall be saved in an electronic spreadsheet format or other format approved by the Executive Officer; and

- (k) (6) (C) Have an audible alarm that alerts when the pressure drop is above the maximum limit specified in subparagraph (k)(1)(B) or below the minimum limit specified in paragraph (k)(2).

- (l) Spray Booth Exhaust Duct Cleaning Requirements
 - (1) When replacing the final stage filter media, an owner or operator of a facility with a chromate spraying operation shall conduct a visual inspection of the spray booth duct immediately downstream of the final stage filter media for the presence of overspray or dried coatings that may contain chromium.
 - (2) An owner or operator of a facility with a chromate spraying operation that observes overspray or dried coating that may contain chromium during a visual inspection conducted pursuant to paragraph (l)(1) shall:
 - (A) Clean the spray booth duct, and inspect associated exterior surfaces of the spray booth duct and remove all such overspray and dried coatings using an approved cleaning method:
 - (i) No later than seven days after observation; or
 - (ii) Before any chromate spraying operations are conducted in the spray booth; or
 - (B) Analyze the overspray or dried coating for the presence of hexavalent chromium and if found, clean the spray booth duct, and inspect associated exterior surfaces of the spray booth duct and remove all such overspray and dried coatings using an approved cleaning method:
 - (i) No later than 14 days after observation; or
 - (ii) Before any chromate spraying operations are conducted in the spray booth.
 - (3) If an owner or operator of a facility with a chromate spraying operation receives written notification from the Executive Officer confirming the presence of hexavalent chromium in the spray booth duct and/or associated exterior surfaces, the owner or operator shall:
 - (A) Not operate the spray booth until the spray booth duct and/or associated exterior surfaces are cleaned; and
 - (B) Clean the spray booth duct and/or associated exterior surfaces to remove all overspray and dried coating that may contain chromium using an approved cleaning method.

- (1) (4) An owner or operator of a facility with a chromate spraying operation required to clean a spray booth duct and/or associated exterior surfaces pursuant to paragraphs (1)(2) and (1)(3) shall notify the Executive Officer at least 72 hours prior to the cleaning by calling 1-800-CUT-SMOG.

(m) Recordkeeping Requirements

(1) Coatings Usage Records

An owner or operator of a facility with a chromate spraying operation shall maintain:

- (A) Purchase records of chromate coatings used for spray coating operations;
- (B) Safety data sheets provided for the materials subject to the requirements of subparagraph (m)(1)(A) that indicate the weight percent of chromate(s) in the coating, and the density of the coating;
- (C) Daily usage records for each coating subject to subparagraph (m)(1)(A), applied or used daily; and
- (D) Application method for each coating used.

(2) Housekeeping and Best Management Practice Records

An owner or operator of a facility with a chromate spraying operation shall:

- (A) Maintain records demonstrating compliance with housekeeping requirements specified in subdivision (i) and paragraph (o)(2) and the best management practices specified in paragraphs (j)(1) through (j)(7); and
- (B) Maintain records of the visual inspections required by paragraph (j)(8), including:
 - (i) Name of the person(s) performing the visual inspection for each spray booth or other control device;
 - (ii) Identification of each spray booth, including the permit number or the device identification number listed on a South Coast AQMD permit;
 - (iii) Date and time of the visual inspection;
 - (iv) Documentation of filter media found to have any leaks, breaks, or tears, or found to be improperly installed; and
 - (v) Description of any maintenance and repair activities conducted for any spray booth or other control device.

(m) (3) Monitoring Records

An owner or operator of a facility with a chromate spraying operation shall:

(A) Maintain records of measurements or demonstrations of spray booth requirements in paragraph (g)(1) including:

- (i) Name of the person(s) conducting the measurement or demonstration;
- (ii) Identification of each spray booth, including the permit number or device identification number;
- (iii) Date and time the demonstrations were conducted;
- (iv) Description of the equipment used to conduct the measurement or demonstration;
- (v) Calibration records for the equipment used to conduct the measurement or demonstration;
- (vi) Results of the measurement or demonstration conducted for each spray booth; and
- (vii) Description of any maintenance and repair activities conducted for each spray booth.

(B) Maintain records of spray booth pressure drop readings as required in paragraphs (k)(5) and (o)(3), or DAS data files as required in paragraph (k)(6);

(C) Maintain records of spray booth final stage filter media replacement, and established minimum pressure drop as required in paragraph (k)(2); and

(D) Maintain records of the exhaust duct visual inspections required by paragraphs (l)(1) and (l)(2) including:

- (i) Name of the person(s) conducting the visual inspection;
- (ii) Identification of each spray booth, including the permit number or device identification number;
- (iii) Date and time the visual inspection was conducted;
- (iv) A photograph of the spray booth duct taken when the visual inspection was conducted; and
- (v) Results of analysis of overspray or dried coating for the presence of hexavalent chromium.

(4) Records Retention

(A) Before July 1, 2023, an owner or operator of a facility with a chromate spraying operation shall maintain all records for three

years, with at least the two most recent years kept onsite, and made available to the Executive Officer upon request. Records kept offsite shall be made available within one week of the request from the Executive Officer; and

- (m) (4) (B) Beginning July 1, 2023, an owner or operator of a facility with a chromate spraying operation shall maintain all records for five years, with at least the two most recent years kept onsite, and made available to the Executive Officer upon request. Records kept offsite shall be made available within one week of the request from the Executive Officer.

(n) Prohibitions

- (1) Beginning June 4, 2021, an owner or operator of a facility with a chromate spraying operation shall not install or construct a new open face spray booth for chromate spraying operations unless the open face spray booth is located within a permanent total enclosure that is vented to an air pollution control system with HEPA filters or filters individually tested and certified by the manufacturer to have a control efficiency of at least 99.97 percent on 0.3 micron or smaller particles.
- (2) Beginning June 4, 2021, an owner or operator of a facility with a chromate spraying operation shall not install or construct a new spray booth for chromate spraying operations unless the spray booth is located within a building enclosure. This prohibition does not apply to spray booths installed or constructed after June 4, 2021 greater than 10,000 square feet.

(o) Interim Requirements

- (1) Before January 1, 2026, an owner or operator with a chromate spraying operation that conducts spraying operations in an open face spray booth shall ensure that the average inward face air velocity in the open face spray booth is maintained at a minimum of 100 feet per minute or other minimum velocity approved by the Executive Officer.
- (2) Before January 1, 2022, an owner or operator with a chromate spraying operation shall conduct spraying and cleanup operations in a manner that minimizes fugitive emissions of atomized paint particles.
- (3) Before January 1, 2023, an owner or operator of a facility with a chromate spraying operation shall install a gauge to continuously monitor the

pressure drop across the spray booth filter media in a location that is easily visible and in clear sight of the operation or maintenance personnel. The pressure drop shall be maintained at or below the pressure drop prescribed by a permit condition, or by the manufacturer's recommended operating range if no permit condition limits pressure drop.

(p) Exemptions

- (1) The requirements of this rule shall not apply to thermal spraying operations.
- (2) The spray booth requirements of subparagraph (d)(1)(A) and paragraph (d)(3) shall not apply to operations where chromate coatings are applied only by flow coater, roll coater, dip coater, or hand application methods.
- (3) The spray booth requirements of subparagraph (d)(1)(A) and paragraphs (d)(3) and the transfer efficiency requirements in (j)(3) shall not apply to any touch up and repair operation spraying chromate coatings that is conducted outside of a spray booth, provided the touch up and repair operation is performed inside a building enclosure, and emissions and cancer risk from the touch up and repair operation have been calculated and included in an approved facility-wide health risk assessment that does not exceed a facility-wide cancer risk of 10 in a million.

Appendix 1 – Inward Face Air Velocity Measurement Procedures

1. Applicability

This method applies to an owner or operator of a chromate spraying operation required to measure the inward face air velocity of a spray booth to demonstrate compliance with the requirements in subdivision (g).

2. Equipment – Anemometer

The anemometer shall be capable of measuring the inward face air velocity in feet per minute (fpm) within an appropriate velocity range with an accuracy within +/- 10% of full scale.

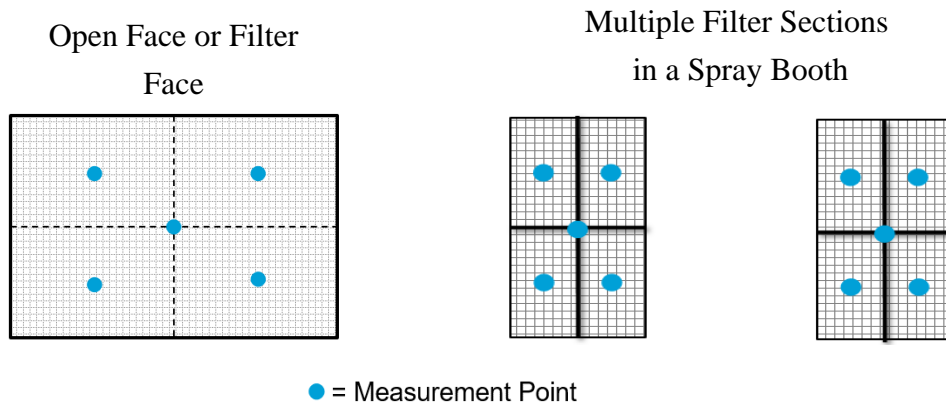
The anemometer shall be operated and calibrated per the manufacturer’s recommendations.

3. Test Conditions

The inward face air velocity measurement test shall be conducted while the spray booth is in normal operation and under typical conditions representative of the facility’s chromate spraying operation.

4. Procedure

The inward face air velocity measurement shall be conducted over a five-point grid pattern as shown in the below examples:



For an enclosed spray booth, the inward face air velocity measurements shall be taken between 6 and 12 inches from the exhaust filters.

For an open face spray booth, the inward face air velocity measurements shall be taken no more than one inch inside the plane of the open face.

5. Reporting

The following information shall be provided for each inward face air velocity measurement.

Rule 1469.1 (Cont.)

(Amended June 4, 2021)

Anemometer Model:

Anemometer Calibration Factor:

Anemometer Calibration Date:

Inward Face Air Velocity Measurements:

Upper Left: _____ fpm

Upper Right: _____ fpm

Center: _____ fpm

Lower Left: _____ fpm

Lower Right: _____ fpm

Measurements Performed by:

Measurement Date: