

**PROPOSED AIR TOXIC METALS MONITORING
RULE 1480.**

(a) Purpose

The purpose of this rule is to require an owner or operator of a facility that is designated by the Executive Officer as a Potentially Significant Facility of Metal TAC emissions to conduct Metal TAC Monitoring.

(b) Applicability

This rule applies to an owner or operator of any facility that receives an Initial Notice.

(c) Definitions

- (1) AMBIENT AIR means outdoor air.
- (2) 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.
- (3) INDIVIDUAL SUBSTANCE CHRONIC HAZARD INDEX is as defined in Rule 1401 – New Source Review of Toxic Air Contaminants.
- (4) INITIAL NOTICE means a written notice to an owner or operator of a facility that Metal TAC Monitoring is being conducted and a Notice of Findings may be issued.
- (5) MAXIMUM EXPECTED GROUND LEVEL CONCENTRATION means the greatest concentration of a specific Metal TAC from a facility as determined by air dispersion modeling calculations and emission estimates from toxic metal point sources and fugitive toxic metal-dust sources, meteorology, and other factors.
- (6) METALS OF CONCERN means the specific Metal TAC(s) that are identified in the notice that a facility has been designated as a Potentially Significant Facility pursuant to paragraph (d)(9).
- (7) METAL TOXIC AIR CONTAMINANT (Metal TAC) means a metal air pollutant which may cause or contribute to an increase in mortality or serious

- illness, or which may pose a present or potential hazard to human health as listed by Office of Environmental Health Hazard Assessment.
- (8) METAL TAC MONITORING means ambient air monitoring that is designed to measure concentrations of Metal TAC(s) from a facility and is conducted by an owner or operator of the facility, South Coast Air Quality Management District (South Coast AQMD), or third party contractor.
 - (9) NOTICE OF FINDINGS means a notice from the Executive Officer that a facility may be a Potentially Significant Facility.
 - (10) POTENTIALLY SIGNIFICANT FACILITY means a facility, as determined by the Executive Officer, that is likely to either exceed or has exceeded the Significant Risk Level for any Sensitive Receptor location based on ambient air monitoring data, emissions data, air dispersion modeling, or other data.
 - (11) REDUCED RISK LEVEL means a Sensitive Receptor Cancer Risk that is less than 25 in one million and a total Individual Substance Chronic Hazard Index that is less than 3.0 for all target organ system at all Sensitive Receptor locations.
 - (12) SAMPLE EXTRACT means the solution rendered from the acid extraction and digestion of a filter sample used for metals sample analysis.
 - (13) SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the 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 preschools, Early Head Start, Head Start, First Five, and Child Development Centers. A 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 school property.
 - (14) SENSITIVE RECEPTOR means any residence including private homes, condominiums, apartments, and living quarters; Schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. Sensitive Receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.
 - (15) SENSITIVE RECEPTOR CANCER RISK is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to Metal TAC(s) for Sensitive Receptor locations calculated pursuant to the Risk Assessment Procedures referenced in Rule 1401.

- (16) SIGNIFICANT RISK LEVEL means a Sensitive Receptor Cancer Risk that is equal to or greater than 100 in one million or a total Individual Substance Chronic Hazard Index that is greater than 5.0 for any target organ system at any Sensitive Receptor location.
 - (17) VALID SAMPLE means a sample for which the sampling run-time was no less than 23 hours and no greater than 25 hours or a sampling run-time approved by the Executive Officer.
- (d) Designation of a Potentially Significant Facility
- (1) The Executive Officer may issue an Initial Notice to an owner or operator of a facility if the Executive Officer has reason to believe the facility may be contributing to elevated concentrations of Metal TAC(s) or be emitting a substantial amount of Metal TAC emissions.
 - (2) An owner or operator of a facility issued an Initial Notice shall comply with written requests from the Executive Officer, which may include:
 - (A) Conducting emissions testing and/or sample analyses, or providing the Executive Officer access to the facility to conduct such activities;
 - (B) Allowing the Executive Officer to conduct Metal TAC Monitoring for the limited duration specified in the written request; and
 - (C) Providing material usage, manifests, emissions testing results, and other records for any Toxic Air Contaminants listed in Table 1 of Rule 1401.
 - (3) At least 30 days following the issuance of an Initial Notice, the Executive Officer may issue a Notice of Findings to an owner or operator of a facility, which will include:
 - (A) Results of Metal TAC Monitoring with information on each individual sample including the Metal TAC(s) monitored, concentration of each Metal TAC, the dates and sample locations;
 - (B) Findings that demonstrate the facility is contributing to ambient levels for the Metal TAC(s) identified in subparagraph (d)(3)(A); and
 - (C) Location of the Sensitive Receptor with the highest Sensitive Receptor Cancer Risk and/or Individual Substance Chronic Hazard Index and the values.
 - (4) No later than 14 days after receiving a Notice of Findings pursuant to paragraph (d)(3), an owner or operator of a facility may submit a written

request to the Executive Officer to schedule a meeting to discuss the Notice of Findings.

- (5) No later than 30 days from the date of the Notice of Findings, an owner or operator of a facility shall:
 - (A) Respond in writing to the Executive Officer that no additional information will be provided;
 - (B) Submit additional information for the Executive Officer to consider; or
 - (C) Notify the Executive Officer in writing that additional information will be submitted no later than 60 days from the date of the Notice of Findings.
- (6) No later than 60 days from the date of the Notice of Findings, an owner or operator of a facility shall provide a written list to the Executive Officer of any enforceable measures that permanently reduce Metal TAC emissions from the facility, including, but not limited to, surrendering or modifying Permits to Operate.
- (7) No later than 60 days from the date of the Notice of Findings, an owner or operator of a facility that submitted a written notice to the Executive Officer pursuant to subparagraph (d)(5)(C) shall submit any additional information to the Executive Officer for consideration.
- (8) A facility shall be designated as a Potentially Significant Facility based on information, including, but not limited to, the information provided in paragraphs (d)(3), (d)(5), (d)(6), and (d)(7).
- (9) The Executive Officer will notify an owner or operator of a facility in writing if the facility has or has not been designated as a Potentially Significant Facility. A facility designated as a Potentially Significant Facility will be provided the following information:
 - (A) Information used as the basis to designate the facility as a Potentially Significant Facility;
 - (B) Location of the Sensitive Receptor with the highest Sensitive Receptor Cancer Risk and/or Individual Substance Chronic Hazard Index and the values; and
 - (C) Metals of Concern.

(e) Monitoring and Sampling Plan

- (1) No later than 30 days after a facility is designated as a Potentially Significant Facility, an owner or operator of a Potentially Significant Facility shall submit an application and fees for a draft Monitoring and Sampling Plan to the Executive Officer that includes:
 - (A) A list of all equipment and processes that use or emit Metals of Concern with operating schedules;
 - (B) Any existing source test or emissions test reports of equipment and processes listed in subparagraph (e)(1)(A);
 - (C) A map of the facility that identifies the location of:
 - (i) All equipment and processes listed in subparagraph (e)(1)(A);
 - (ii) Air pollution control devices and stacks;
 - (iii) Building Enclosures;
 - (iv) Building Enclosure openings;
 - (v) Storage of any materials that contain Metals of Concern;
 - (vi) Points of vehicle egress and ingress;
 - (vii) Property boundary of the facility;
 - (viii) Areas within the property boundary of the facility that are publicly accessible; and
 - (ix) Nearest Sensitive Receptors in all directions.
 - (D) A list of all equipment to be used for Metal TAC Monitoring and collecting wind data;
 - (E) Procedures including:
 - (i) Installation, operation, and maintenance of the Metal TAC Monitoring equipment;
 - (ii) Sampling schedule, sample collection and analysis that meet the requirements of subdivision (f);
 - (iii) Quality assurance for Metal TAC Monitoring;
 - (iv) Wind speed and direction data collection;
 - (v) Background subtraction procedures; and
 - (vi) Metals of Concern and/or surrogate of Metals of Concern to be sampled.
 - (F) Number and locations of the sampling sites that meet the requirements of subdivision (f);
 - (G) The company name(s) and contact information that will be conducting:
 - (i) Ambient air monitoring and sample collection;
 - (ii) Sample analysis and sample storage; and

- (iii) Maintenance of monitoring and sampling equipment.
 - (H) Any other process or emission information the Executive Officer requests in writing; and
 - (I) Date when Metal TAC Monitoring would begin.
- (2) The Executive Officer will notify an owner or operator of a Potentially Significant Facility in writing whether the draft Monitoring and Sampling Plan is approved or disapproved. Approval of the draft Monitoring and Sampling Plan will be based on information submitted pursuant to paragraph (e)(1).
 - (A) If the draft Monitoring and Sampling Plan is disapproved, an owner or operator of a Potentially Significant Facility shall submit a revised draft Monitoring and Sampling Plan within 30 calendar days after the date of the notice of disapproval of the draft Monitoring and Sampling Plan that addresses deficiencies identified in the disapproval letter.
 - (B) The Executive Officer will either:
 - (i) Approve the revised draft Monitoring and Sampling Plan; or
 - (ii) Disapprove the revised draft Monitoring and Sampling Plan.
 - (C) Within 30 days of receiving a disapproval of a revised draft Monitoring and Sampling Plan pursuant to clause (e)(2)(B)(ii), an owner or operator of a Potentially Significant Facility shall either cease operating equipment or processes that may be contributing to Metals of Concern emissions specified in paragraph (d)(9) or elect the alternative monitoring and sampling pursuant to paragraph (g)(2).
- (3) The Executive Officer may require modification to an approved Monitoring and Sampling Plan based on new information including from the implementation of an approved Monitoring and Sampling Plan.
 - (A) An owner or operator of a Potentially Significant Facility that is required to modify its Monitoring and Sampling Plan shall submit a revised Monitoring and Sampling Plan no later than 30 days from receiving written notice from the Executive Officer.
 - (B) The Executive Officer will notify an owner or operator of a Potentially Significant Facility in writing whether the revised Monitoring and Sampling Plan is approved or disapproved. Approval of the revised Monitoring and Sampling Plan shall be based on information submitted pursuant to paragraph (e)(1).

- (i) If the revised Monitoring and Sampling Plan is disapproved, an owner or operator of a Potentially Significant Facility shall submit a revised Monitoring and Sampling Plan within 30 calendar days after the date of the notice of disapproval of the revised Monitoring and Sampling Plan that addresses deficiencies identified in the disapproval letter.
 - (ii) The Executive Officer will either:
 - (A) Approve the revised Monitoring and Sampling Plan; or
 - (B) Modify the revised Monitoring and Sampling Plan and approve the modified revised Monitoring and Sampling Plan to address deficiencies in the disapproval letter referenced in subparagraph (e)(3)(B).
 - (4) The Monitoring and Sampling Plan shall be subject to plan fees specified in Rule 306 – Plan Fees.
- (f) Metal TAC Monitoring Requirements
- (1) An owner or operator of a Potentially Significant Facility shall commence Metal TAC Monitoring as specified in the most recently approved Monitoring and Sampling Plan or within 30 days after approval.
 - (2) An owner or operator of a Potentially Significant Facility shall install Metal TAC monitors and conduct Metal TAC Monitoring at a minimum of two sample sites as approved by the Executive Officer in the Monitoring and Sampling Plan where:
 - (A) The location of at least one sampling site represents the Maximum Expected Ground Level Concentration of the Metals of Concern; and
 - (B) The location of at least one sampling site represents upwind or background concentrations.
 - (3) An owner or operator of a Potentially Significant Facility shall collect one Valid Sample from midnight-to-midnight at each site:
 - (A) At least once every three days on a schedule approved by the Executive Officer for Metals of Concern; or
 - (B) On a date specified in a written notice from the Executive Officer in lieu of a normally scheduled date that is an atypical sampling day.
 - (4) An owner or operator of a Potentially Significant Facility shall not miss a Valid Sample for more than one day over a consecutive 30-day period from each monitor approved by the Executive Officer.

- (5) An owner or operator of a Potentially Significant Facility shall call 1-800-CUT-SMOG within two hours of knowing that a Valid Sample was not or will not be collected from any approved monitor and provide:
 - (A) Facility name;
 - (B) Identification of the monitor;
 - (C) Date of the occurrence;
 - (D) Reason why a sample was not collected or the collected sample did not meet the definition of a Valid Sample; and
 - (E) Repair date or anticipated repair date, if the cause was due to mechanical breakdown of equipment.
- (6) An owner or operator of a Potentially Significant Facility shall record 15 minute averages of wind speed and direction at all times using equipment approved by the Executive Officer at a minimum of one location approved by the Executive Officer.
- (7) An owner or operator of a Potentially Significant Facility shall analyze each Valid Sample as follows:
 - (A) Submit the collected Valid Samples to a laboratory that has been approved in writing by the Executive Officer for analysis within:
 - (i) Three calendar days of collection for any Metal TAC except hexavalent chromium; and
 - (ii) One calendar day of collection for hexavalent chromium.
 - (B) Monitor and analyze Valid Samples collected in accordance with one of the following test methods:
 - (i) ASTM Method D7614 – Standard Test Method for Determination of Total Suspended Particulate (TSP) Hexavalent Chromium in Ambient Air Analyzed by Ion Chromatography (IC) and Spectrophotometric Measurements for hexavalent chromium; or
 - (ii) U.S. EPA Method IO-3.5 for non-hexavalent chromium metals; or
 - (iii) Other method pre-approved by the Executive Officer in writing.
 - (C) Valid Samples collected or the Sample Extracts if the entire filter media are digested, except those for hexavalent chromium, shall be retained for one year from the sample date or other time period pre-approved in writing by the Executive Officer. Each Valid Sample or Sample Extract shall be stored in an individually sealed container and

labeled with the applicable monitor and date by the laboratory that performed the analysis. Upon request, the samples shall be provided to Executive Officer within one business day.

- (8) An owner or operator of a Potentially Significant Facility shall not conduct any activities that have the potential to damage or bias the samples, including, but not limited to, wet washing or misting within 10 meters of any sampling site.
- (g) **Alternative Monitoring and Sampling**
 - (1) An owner or operator of a Potentially Significant Facility that elects to have the Executive Officer conduct Metal TAC Monitoring shall notify the Executive Officer in writing no later than 30 days after being designated a Potentially Significant Facility.
 - (2) An owner or operator of a Potentially Significant Facility that elects to, pursuant to either subparagraph (e)(2)(C) or paragraph (g)(1), have the Executive Officer conduct Metal TAC Monitoring shall:
 - (A) Provide access to the facility for the Executive Officer to conduct Metal TAC Monitoring; and
 - (B) Pay annual operating and maintenance fees for Metal TAC Monitoring pursuant to Rule 301 - Permitting and Associated Fees; or if Rule 301 does not list a fee for Metal TAC Monitoring, pay fees pursuant to Appendix 1 of this rule.
- (h) **Reduced Monitoring and Sampling Frequency**
 - (1) An owner or operator of a Potentially Significant Facility may submit a written request to the Executive Officer to reduce the monitoring and sampling frequency to collect one Valid Sample at all sites, at least once every six days for Metals of Concern, provided:
 - (A) No single 30-day rolling average concentration exceeds a concentration that corresponds to the Reduced Risk Level for any Sensitive Receptor for all Metals of Concern for 180 consecutive days; and
 - (B) The measures identified in an approved Early Action Reduction Plan pursuant to Rule 1402 – Control of Toxic Air Contaminants from Existing Sources or permanent measures that are enforceable and

verified by the Executive Officer to reduce emissions of Metals of Concern have been implemented.

- (2) The owner or operator of a Potentially Significant Facility submitting a written request to the Executive Officer to collect one Valid Sample at all sites at least once every six days for Metals of Concern shall provide the Executive Officer the most recent 30-day rolling average concentration from the Metal TAC Monitoring data collected in the duration specified in (h)(1)(A).
 - (3) An owner or operator of a Potentially Significant Facility that receives written confirmation from the Executive Officer that the provisions in paragraph (h)(1) and (h)(2) have been met shall collect one Valid Sample, at each site, at least once every six days for Metals of Concern.
 - (4) If the concentration of any Metals of Concern at any downwind monitoring site exceeds 10 times the concentration provided to the Executive Officer pursuant to subparagraph (h)(2), for three consecutive samples, then an owner or operator of a Potentially Significant Facility shall:
 - (A) Call 1-800-CUT-SMOG within 24-hours of receiving the Metal TAC concentration informing the Executive Officer that the facility will be resuming a sampling schedule pursuant to subparagraph (h)(4)(B); and
 - (B) Resume collecting one Valid Sample, at each site, at least once every three days for Metals of Concern no later than the next scheduled sampling day.
 - (5) An owner or operator of a Potentially Significant Facility required to resume a sampling schedule of at least once every three days pursuant to subparagraph (h)(4)(B), shall be ineligible to modify the sampling schedule to once every six days.
 - (6) An owner or operator of a Potentially Significant Facility may continue collecting one Valid Sample, at each site, at least once every six days for Metals of Concern if the concentration of any Metals of Concern at any downwind monitoring site exceeds 10 times the concentration provided to the Executive Officer pursuant to subparagraph (h)(2) for three consecutive samples, but the Sensitive Receptor Cancer Risk and Individual Substance Chronic Hazard Index for all Sensitive Receptors is less than the Reduced Risk Level.
- (i) Monitoring, Recordkeeping, and Reporting Requirements

- (1) Effective upon start of Metal TAC Monitoring pursuant to subdivision (f), an owner or operator of a Potentially Significant Facility shall submit a report to the Executive Officer by the 21st of each month. The report shall include the results of the Valid Sample analysis for the Metals of Concern and the wind monitoring data for the preceding month in a format approved by the Executive Officer that includes the following:
 - (A) Valid Sample collection date;
 - (B) Valid Sample collection location;
 - (C) Individual Valid Sample concentrations;
 - (D) Consecutive 30-day rolling average concentrations; and
 - (E) Concentration pursuant to paragraph (h)(2) if the facility is on a reduced monitoring and sampling schedule pursuant to paragraph (h)(3).
- (2) An owner or operator of a Potentially Significant Facility shall maintain the following records for a minimum of three years and make the records available to the Executive Officer upon request:
 - (A) Housekeeping activities;
 - (B) Maintenance activities;
 - (C) Construction and demolition activities;
 - (D) Throughput records of metals used in any operations capable of generating emissions of Metals of Concern;
 - (E) Wind speed and direction data;
 - (F) Calibration records of Metal TAC monitors and wind monitors;
 - (G) Raw data, monthly reports pursuant to subparagraph (i)(1), and calculations used to calculate Metal TAC concentrations; and
 - (H) Current Executive Officer approved Monitoring and Sampling Plan.
- (j) Request to Discontinue Metal TAC Monitoring
 - (1) An owner or operator of a Potentially Significant Facility that has been conducting monitoring and sampling for more than 180 consecutive days may submit a request to discontinue Metal TAC Monitoring by submitting a modified Monitoring and Sampling Plan to the Executive Officer that includes the following information:
 - (A) Most recent available results for 180 consecutive days of Metal TAC Monitoring data preceding the date of the request for each monitor and Metals of Concern;

- (B) Monthly process records for the 365 days preceding the date of the request;
 - (C) A description of the enforceable measures implemented to reduce Metals of Concern emissions, including, but not limited to, installation of air pollution controls, changes to the building enclosure, changes to processes, and removal of equipment;
 - (D) Housekeeping measures included in an approved Risk Reduction Plan under Rule 1402 to minimize fugitive emissions; and
 - (E) Status of implementing a Risk Reduction Plan under Rule 1402, if one is required.
- (2) Approval of the request to discontinue Metal TAC Monitoring shall be based on information submitted that meets the following requirements:
- (A) The consecutive 30-day rolling average concentration for any Metals of Concern for the duration specified in subparagraph (j)(1)(A) does not exceed a concentration that corresponds to the Reduced Risk Level for any Sensitive Receptor;
 - (B) Monthly process records for the most recent 365 days preceding the date of the request represent normal operations;
 - (C) Verification that enforceable measures through new Permits to Operate or modifications have been implemented;
 - (D) Verification that housekeeping measures were incorporated in the approved Risk Reduction Plan under Rule 1402; and
 - (E) Verification that any required Risk Reduction Plan under Rule 1402 has been fully implemented.
- (3) The Executive Officer will notify an owner or operator of a Potentially Significant Facility in writing whether the request to discontinue Metal TAC Monitoring is approved or disapproved.
- (k) Exemptions
- (1) Lead emissions subject to ambient air monitoring as required by Rule 1420 – Emissions Standard for Lead, Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities, or Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities, shall not be subject to this rule.

- (2) An owner or operator of a Potentially Significant Facility that elects to have the Executive Officer conduct Metal TAC Monitoring shall not be subject to subdivision (e) and paragraphs (f)(1) through (f)(7).

Appendix 1: South Coast AQMD Monitoring Cost for FY 2019-2020

1. Principle

This cost is applicable to all facilities that have elected to have South Coast AQMD conduct Metal TAC Monitoring. The cost includes monitoring equipment, material, labor, retrieval, analysis, construction and other associated costs per sample.

2. Cost

A. The cost listed in Table 1 – Installation Fees, are the initial costs per monitor.

Table 1: Installation Fees

Item	Cost
Metal TAC Monitor	[Placeholder A]
Weather Station	[Placeholder B]

B. The cost listed in Table 2 – Sample Fees is for the analysis, retrieval, quality assurance/quality control, and other associated costs per sample.

Table 2 – Sample Fees

Item	Cost
Hexavalent Chromium Sample	[Placeholder C]
Other Metal TAC Sample	[Placeholder D]

C. The cost listed in Table 3 – Operation and Maintenance Fees is for each monitor or weather station for every [Placeholder time (day/week/month/quarter)] the monitor or weather station is sited at the facility.

Table 3 – Operation and Maintenance Fees

Item	Cost
Hexavalent Chromium Monitor	[Placeholder E]
Other Metal TAC Monitor	[Placeholder F]
Weather Station	[Placeholder G]