Notice of Public Availability of Modified Text and Availability of Additional Documents and Information

Proposed Amendments to the Airborne Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations

Public Hearing Date: January 26-27, 2023 Public Availability Date: March 27, 2023 Deadline for Public Comment: April 11, 2023

At its January 27, 2023, public hearing, the California Air Resources Board (CARB or Board) considered staff's proposed amendments to California Code of Regulations, title 17, sections 93102, 93102.1, 93102.2, 93102.3, 93102.4, 93102.5, 93102.6, 93102.7, 93102.8, 93102.9, 93102.10, 93102.11, 93102.12, 93102.13, 93102.14, 93102.15, and 93102.16. The proposed amendments to the Airborne Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations (Proposed Amendments) are needed to further reduce the exposures and health impacts from hexavalent chromium emitted from chrome plating facilities (which include decorative and hard chrome plating and chromic acid anodizing facilities) in communities near these sources.

As directed by the Board at the January 27, 2023, hearing, staff is proposing to provide an alternative phase out pathway for decorative plating facilities who elect to continue to use hexavalent chromium in their chrome plating processes after January 1, 2027. The alternative phase out pathway will allow decorative plating facilities to delay the phase out of the use of hexavalent chromium by complying with building enclosure requirements to reduce fugitive emissions starting in 2026 until the phase out on January 1, 2030. Decorative chrome plating facilities that do not choose the alternative phase out pathway must phase out hexavalent chromium by January 1, 2027, as previously required by the Proposed Amendments.

This notice describes modifications made to the originally proposed regulatory language and adds documents and information to the rulemaking record. All regulatory documents (including this notice and proposed modifications to the regulatory text) for this rulemaking are available online at the following *CARB website*: https://ww2.arb.ca.gov/rulemaking/2023/chromeatcm2023

The text of the modified regulatory language is shown in Appendix A. The originally proposed regulatory language is shown in strikethrough to indicate deletions and <u>underline</u> to indicate additions. New deletions and additions to the proposed language that are made public with this notice are shown in double strikethrough and <u>double underline</u> format, respectively.

In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding all noticed changes. Therefore, staff will only address comments received during this 15-day comment period that are responsive to this notice, documents added to the record, or the changes detailed in Appendix A.

Summary of Proposed Modifications

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting, nor does it include all the non-substantive revisions. Attachment 1 provides an explanation of the 15-day changes.

- 1. In section 93102.3, staff made the following revisions:
 - a. Staff revised the definition of "Hard Chrome Plating" to replace the word "part" with the term "Base Material." This change improves clarity and consistency by using the defined term "Base Material" instead of the undefined word "part."
 - b. Staff revised the definition of "initial start up" to clarify the requirement and accommodate the use of "initial start up" in section 93102.7(a)(5) the first time a trivalent chromium plating tank begins operation.
 - c. Staff revised the definition of "modification" by adding subsections (D) and (E) to clarify that construction of building enclosures and changes related to conversion to alternative technology to hexavalent chromium do not fall under the definition of "modifications."
- 2. In section 93102.4, staff made the following revisions:
 - a. Staff revised the language in subsection (b)(1) to provide facilities the option of complying with the alternative phase out pathway requirements instead of phasing out hexavalent chromium on January 1, 2027.
 - b. Staff added subsection (b)(1)(A) to provide the requirements and timelines for facilities that choose the alternative phase out pathway.
 - c. Staff amended subsection (b)(2) to clarify that the one-year extension also applies to the alternative phase out pathway date of January 1, 2030.
 - d. Staff amended subsection (b)(2)(A) by adding the deadline of October 1, 2029, for submission of an extension request to the District for facilities that elect to comply with the alternative phase out pathway.
 - e. Staff amended subsection (b)(2)(A)3., by adding the date of January 1, 2030, for facilities following the alternative phase out pathway that are requesting an extension because they have not received an authority to construct from the District in time to meet the January 1, 2030, phase out.
 - f. Staff amended subsection (b)(2)(B)3., by adding the deadline of January 1, 2029, for facilities using the alternative phase out pathway that are requesting an extension. The request must provide documentation demonstrating that they submitted a complete application for an authority to

construct for equipment necessary to convert to alternatives to hexavalent chromium prior to January 1, 2029.

- g. Staff amended subsection (b)(2)(D) by adding the phase out date of January 1, 2030, for facilities that elect to comply with the alternative phase out pathway. The District can grant an extension of up to one year after the January 1, 2030, phase out date.
- h. Staff amended subsection (c)(1)(A) to improve readability and to clarify that this subsection applies to individual chrome plating tanks used for the purposes of functional chrome plating.
- i. Staff amended subsection (c)(1)(B) to clarify that this subsection applies to individual chrome plating tanks used for the purpose of decorative chrome plating. Staff also amended subsection (c)(1)(B) to delete the language stating that it would apply until January 1, 2027, or the date that an extension granted pursuant to section 93102.4(b)(2) expires. This change simplifies the language because subsection (c)(1) specifies that it only applies to chrome plating tanks that use hexavalent chromium. Therefore, subsection (c)(1)(B) would not apply to a facility that is no longer using hexavalent chromium for the purposes of chrome plating.
- j. Staff added subsection (c)(2)(A) to clarify that a chrome plating tank that is used for both decorative chrome plating and functional chrome plating is required to meet the emission limitation in subsection (c)(2) instead of the requirements of (c)(1) starting on January 1, 2026. This addition was necessary to clarify which requirements must be met after January 1, 2026, for chrome plating tanks that are used for both functional and decorative purposes.
- k. Staff amended subsection (d) to add the start date of January 1, 2026, to these requirements rather than repeating this start date in each of the subsections that follow. Staff added the language specifying that subsection (d) applies to functional chrome plating operations that use hexavalent chromium rather than repeating this applicability language in each of the subsections that follow. Staff also amended subsection (d) to make the building enclosure requirements applicable to decorative chrome plating facilities electing to comply with the alternative phase out pathway for as long as they continue to use hexavalent chromium.
- I. Staff amended subsection (d)(1) and (d)(2) to remove the following language: "functional," "facilities operating," and "beginning January 1, 2026" because these specifications are now included in subsection (d). Additionally, staff amended subsections (d)(1) and (d)(2) to clarify that the building enclosure requirements in subsection (d)(1) apply to chrome plating operations that use any Tier I, Tier II, and Tier III tanks and that the requirements in subsection (d)(2) apply to chrome plating operations that use any Tier II or Tier III tanks.
- m. Staff clarified the language in subsection (d)(2)(B) to improve readability for the requirements for building enclosure openings in the roof.
- n. Staff revised the language in subsections (e)(1) and (e)(1)(B) to clarify the requirements for modified facilities by using the defined term "modification"

rather than the undefined term "modify" and "modified." Staff also revised the language to improve clarity and readability.

- o. Staff amended subsection (e)(2) to remove the phrase "During tank operation" and added the words "tank" and "all of" to improve readability and clarity.
- p. Staff added subsection (f)(2)(C)2., which clarifies how to conduct the surface area calculations for Tier II tanks that elect to comply with the requirements applicable to Tier III tanks pursuant to subsection (g)(2).
- 3. In section 93102.5, staff made the following revisions:
 - a. Staff clarified the language in subsection (c)(7)(A) regarding the proper storage of cleaning supplies to specify that only cleaning equipment and supplies used to comply with the housekeeping requirements in the Proposed Amendments are required to be stored in the enclosed storage area.
 - b. Staff amended subsection (d)(4)(B) to add language that clarifies that the requirement for buffing, grinding, and polishing operations to be conducted within a building enclosure starting on January 1, 2026, only applies to facilities that use hexavalent chromium for functional chrome plating and to decorative chrome plating facilities that elect to comply with the alternative phase out pathway. This clarifies that this subsection does not apply to decorative chrome plating facilities that do not elect to comply with the alternative phase out pathway. It also clarifies that this subsection does not to apply to chrome plating facilities that no longer use hexavalent chromium.
- 4. In section 93102.7, staff made the following revisions:
 - a. In subsection (a)(1), staff clarified that the requirements in subsection (a)(1) apply to facilities that use hexavalent chromium for the purposes of functional chrome plating. Staff also added a reference to subsection (c)(2) to clarify that the source test must demonstrate compliance with the emission limitation in section 93102.4(c)(2).
 - b. In subsection (a)(2), staff removed the word "modified" to improve readability and clarity.
- 5. In section 93102.13 staff, made the following revisions:
 - a. In subsection (b)(1), staff capitalized "facilities" for consistency in capitalizing defined terms.
 - b. In subsection (d)(1), staff replaced "currently" with "prior to January 1, 2024" to improve clarity.
- 6. In Appendix 1, staff added "Risk Reduction Branch" to the mailing address for CARB so that documentation submitted to CARB will be mailed to the Branch Chief of the Risk Reduction Branch.
- 7. In Appendix 5, staff made the following revisions:
 - a. Staff updated district rule names and numbers where applicable.

In addition to the modifications described above, additional modifications correcting grammar, punctuation, and spelling out of acronyms (e.g., CFR changed to Code of Federal Regulations), have been made throughout the proposed changes. Additionally, "this regulation" was changed to "this ATCM" to refer to the Proposed Amendments. These changes are nonsubstantive.

Additional Information and Incorporated Documents Added to the Record

In the interest of completeness and in accordance with Government Code section 11347.1, subdivision (a), staff has also added to the rulemaking record and invites comments on the following additional information and documents.

Additional References and Supplemental Information

The following information is added as Attachment 2 to this notice to reflect changes in emissions inventory, sensitive receptors, and costs. Staff propose these changes to the Initial Statement of Reasons (ISOR) for the Proposed Amendments to the Airborne Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations that was released on November 29, 2022. The supplemental information is as follows:

1. Updates to Appendix B of the ISOR, Table 1: Summary of Emissions Data for Chrome Plating Facilities in California.

Attachment 2 corrects a transcription and sorting error in Table 1 that caused discrepancies in the following columns: Permitted Annual Throughput (amp-hrs) (Reported), 2019 Facility Reported Throughput (amp-hrs) (Reported), Potential to Emit (lb), 2019 Emissions Based on ATCM Emission Factors (lb/year) (Calculated), Permitted Emissions Based on Source Tested Emission Factors (lb/year) (Calculated), and 2019 Emissions Based on Source Tested Emission Factors (lb/year) (Calculated). Table 1 has been updated to correct these discrepancies. The corresponding values in the ISOR were updated to reflect changes to Table 1 in Appendix B, as discussed below.

2. Updates to ISOR Table III.1: Summary of Estimated Emissions based on Air District Permit Limits, the 2007 ATCM Limit and Actual Emissions from Chrome Plating Facilities Before Phase Out Date.

Attachment 2 corrects Table III.1 to correspond to the totals presented in the updates to Appendix B, Table 1.

3. Updates to ISOR Table VI.1: Summary of Estimated Hexavalent Chromium (Cr₆) from Chrome Plating Facilities Before Phase Out Date.

Attachment 2 corrects Table VI.1 to correspond to the totals presented in the updates to Appendix B, Table 1.

4. Updates to ISOR Section VI.B.2(b): Bulleted list of statewide emissions.

Attachment 2 corrects the values in the bulleted list of statewide emissions of hexavalent chromium from chrome plating facilities to correspond to the values presented in the updates to Appendix B, Table 1.

5. Updates to ISOR Table IX.7: Approximate Number of Facilities and Total Unamortized Cost by Type. Table IX.8: Summary of Direct Costs after Tax and Amortization for All Facilities, by Facility Type and by Year. Table IX.9: Average Per Facility Total Direct Cost after Tax and Amortization by Year.

Attachment 2 corrects Table IX.7, Table IX.8, and Table IX.9. These updates correct the year when best management practices will occur and adds the cost of implementing best management practices for some decorative chrome plating facilities. Correcting these values resulted in an increase of reported costs to decorative chrome plating facilities. In addition, staff updated assumptions on amortization on certain costs to reflect the useful life until phase out for functional chrome plating facilities. These changes result in higher annual costs in the early years of the assessment but lower overall costs over the lifetime of the regulation because of decreased interest payments.

6. Updates to ISOR Section IX.B.2: Updates to amortization periods.

Attachment 2 amends two sentences that discussed amortization in the ISOR to update the change in amortization periods to correspond to the equipment's useful life until phase out.

7. Updates to ISOR Table ES.2: Chrome Plating Facilities Located in Disadvantaged Communities and Table ES.3: Chrome Plating Facilities Located in Disadvantaged Communities by District.

Attachment 2 updates Table ES.2 and Table ES.3 to include chrome plating facilities located in disadvantaged communities that use trivalent chromium. Tables ES.2 and ES.3 were updated to include the number of trivalent chrome plating facilities located in disadvantaged communities.

8. Updates to ISOR: Facility Distances to Sensitive Receptors.

Attachment 2 updates the distances from chrome plating facilities to sensitive receptors that was presented in various locations throughout the ISOR. Since the ISOR was released on November 29, 2022, CARB staff reassessed chrome plating facility locations relative to sensitive receptors.

9. Addition of Analysis of the Emission Impact of the Proposed 15-Day Changes and Table III.1: Summary of Emissions Reductions for Decorative Chrome Plating Facilities.

Attachment 2 adds an analysis of the range of potential emissions reductions for decorative chrome plating facilities that follow the alternative phase out pathway provided in the proposed 15-day changes. Attachment 2 adds Table III.1, which compares the emission reductions for decorative chrome plating facilities that comply with the alternative phase out pathway with decorative facilities that comply with the original proposal.

10. Addition of Table III.2: Summary of Costs for Decorative Chrome Plating Facilities.

Attachment 2 adds an analysis of the range of potential costs for decorative chrome plating facilities that follow the alternative phase out pathway provided in the proposed 15-day changes based. Attachment 2 adds Table III.2, which compares the costs for decorative chrome plating facilities that comply with the alternative phase out pathway with decorative facilities that comply with the original proposal.

Additional Reference Documents:

In accordance with Government Code section 11347.1, subdivision (a), staff has added to the rulemaking record and invites comments on the following:

 CARB's Health Risk and Cost Benefits Evaluation for Toxic Air Pollutants (Fact Sheet), released on January 5, 2023. Available at: https://ww2.arb.ca.gov/resources/factsheets/carb-health-risk-and-cost-benefits-evaluation-toxic-airpollutants/printable/print#:~:text=What%20Are%20Air%20Toxic%20Pollutant%20Heal th%20Analyses%3F%20Health,including%20potential%20cancer%20and%20noncance r%20adverse%20health%20effects.

The Fact Sheet provides information on how CARB conducts health risk and cost benefits evaluations for air toxics. In addition, Table 1 of the Fact Sheet shows Baseline Potential Cancer Risk from Previous Non-diesel Air Toxics and Diesel PM-focused ATCMs. This Fact Sheet is being added to the rulemaking record for public review.

Environmental Analysis

The 15-day changes do not change the implementation of the regulation in a way that affects the impact conclusions identified in the Draft Environmental Analysis (EA) included as Appendix D of the Staff Report. Many of the modifications made to the EA are a result of changes requested by the Board during the first Board Hearing held on January 27, 2023, which primarily consist of revisions to the Proposed Amendments to provide owner or operators of chrome plating facilities more flexibility in complying with the requirements, as well as clarifications to definitions and provisions that do not alter the compliance responses.

As described in more detail above, the 15-day changes to the Proposed Amendments would allow an alternative phase out pathway for decorative plating facilities. The alternative compliance pathway will require decorative chrome plating facilities to implement building enclosure requirements to reduce fugitive emissions until the phase out date goes into effect. For this alternative pathway, staff is proposing a new phase out date of January 1, 2030. Decorative chrome plating facilities that do not choose the alternative phase out pathway must phase out use of hexavalent chromium by January 1, 2027, as previously required by the Proposed Amendments.

Although the 15-day changes would require modification to the project description in the EA, staff has determined that these changes would not require new or modified compliance responses and therefore would not result in any new reasonably foreseeable significant environmental impacts or substantially increase the severity of an already identified environmental impact. Therefore, no additional environmental analysis or recirculation of the Draft EA is required.

Agency Contacts

Inquiries concerning the substance of the proposed regulation may be directed to Eugene Rubin, Staff Air Pollution Specialist, Toxics Control Section, at (916) 287-8214 or *Eugene.Rubin@arb.ca.gov* or (designated back-up contact) Greg Harris, Manager, Toxics Control Section, at (279) 208-7540 or *Greg.Harris@arb.ca.gov*.

Public Comments

Written comments will only be accepted on the modifications identified in this Notice. Comments may be submitted by postal mail or by electronic submittal no later than the due date to the following:

Postal mail: Clerks' Office, California Air Resources Board 1001 I Street, Sacramento, California 95814

Electronic submittal: https://www.arb.ca.gov/lispub/comm/bclist.php

Please note that under the California Public Records Act (Gov. Code § 7920.000 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to CARB in one of the two forms described above and received by CARB no later than the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerks' Office at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alterno u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

California Air Resources Board
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Steven S. Cliff, Ph.D.,
Executive Officer

Date: March 27, 2023

Attachments

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see CARB's website (www.arb.ca.gov).