January 16, 2023 via comment portal: https://ww2.arb.ca.gov/applications/public-comments

Liane M. Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

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

Chair Randolph:

The organizations signing onto this letter together urge the California Air Resources Board [CARB] not to move forward with the current draft of proposed amendments to the Airborne Toxic Control Measure for Chromium Electroplating and Chromic Acid Anodizing Operations [CrVI ATCM] that was posted on November 29, and to correct the significant deficiencies before moving forward with an update.

We urge the Board to revise the current draft ATCM to provide emission control measures that will be effective in further reducing the negligible amount of air emissions of hexavalent chromium from metal finishing facilities, recognize the extremely negative consequences of these bans, and provide a reasoned, science- based approach and emission-based rule moving forward.

The current draft instead proposes three severe bans on hexavalent chromium plating in California on the following dates:

- January 1, 2024—new or expanded operations
- January 1, 2027—decorative plating
- January 1, 2039—functional plating [hard plating and chromic acid anodizing]

As documented by numerous verbal and written comments made and submitted throughout the workshops that have been held in the development of the updated ATCM, the bans will not change what the market requires. The bans will simply export these operations to other states and countries where there are less if any controls and will result in an increase in emissions. These bans will leak significant businesses and associated jobs away from California.

The current draft understates the likelihood of this happening, and provides no data to support the assumption that California facilities will explore CrVI alternatives, and invest in the transition to alternatives, without customers. While we appreciate the intention to further the acceptance of alternatives through the appropriation of state funds, any success is speculative. The January 1, 2026 ban is not conditioned on changes in customer acceptance of alternatives. It is not conditioned on the ability of a facility to close down its CrVI plating operations and simultaneously invest in alternative plating operations.

This reality undermines the statements that the update will provide an incentive for the future development of non-hexavalent chromium plating technology, including the following in the Standardized Regulatory Impact Assessment [SRIA]:

> *"Some decorative plating facilities may not wish to convert to trivalent chromium because they believe their customers will not accept the deposition color. Therefore, the Proposed Amendments may create opportunities for design, research, engineering, construction, and project management firms to design and research new technologies for a less toxic or*

> *nontoxic alternative to hexavalent chromium. Some of these innovative technologies may be manufactured in California and, in these cases, would benefit Californian businesses and provide jobs for California."* [SRIA-208]

The California Department of Finance explicitly asserted the lack of data:

> "*These impacts are the motivation behind the sensitivity analysis presented in Section 5.3.6 of the SRIA, where staff considered the impacts under potential scenarios where the Proposed Amendments would be associated with a 25, 50, and 75 percent decrease in final demand for California's chrome plating industry. This approach was taken due to the lack of specific data quantifying the reduction in demand or the amount of business closures that could result from the Proposed Amendments."*

To the contrary, the comments and testimony submitted by customers confirm that they will respond to the ban on decorative chrome plating by taking their products to other states and/or countries.

It is also of great concern that the proposal to ban CrVI plating fails to acknowledge the importance of this segment of manufacturing in California, the significant emission reductions this industry has achieved to date and can obtain through further emission reduction efforts, and the increase in emissions that will result from plating operations moving to other states and countries with less if any emission requirements. Bans send the wrong message to manufacturers. These bans will increase emissions, remove California as a location for future manufacturing, and permanently drive essential jobs out of our communities.

This does not have to occur. The associations have provided reasonable approaches for CARB to structure the update to the ATCM so that it will not pose these concerns. This can be accomplished by an emissions-based rule that enables facilities to invest in the necessary technologies and operational improvements to meet specific targets. It will also enable those facilities that are already dedicating resources to comply with the requirements of the South Coast Air Quality Management District's Rule 1469.

The processes covered by the CrVI ATCM are critical to many industries. Decorative hex chrome plating is utilized for key segments of the consumer marketplace, while the aerospace and defense industries use hard chrome plating and chromic acid anodizing to meet strict OEM and defense [MIL-SPEC] requirements. It is estimated that 30% of contractors for the aerospace and defense sectors are located in California. The ability to meet these specifications is crucial to many supply chains.

It is important that the updated ATCM meet the goals of the California Health and Safety Code [HSC]. HSC Section 39666[c] requires the ATCM for toxic air contaminants [TACs] with no identified safe level of exposure to reduce emissions to the lowest level achievable through application of the best available control technology or a more effective control method, in consideration of the factors specified in HSC Section 39665[b]. These factors include health risks, availability and technological feasibility, costs, and the availability, suitability, and relative efficacy of less hazardous substitute compounds.

HSC Section 39666[c] requires the ATCM *"to reduce emissions to the lowest level achievable through application of the best available control technology or a more effective control method."* The current draft CrVI ATCM fails to identify or analyze the best available control technology [BACT] or more effective control methods. This is a clear error since the South Coast Air Quality Management District [SCAQMD] recently developed and adopted Rule 1469 with BACT requirements.

Further, HSC Section 39666[c] does not state that the ATCM may include two of the key provisions of the draft update: [i] chemical bans; and [ii] requirements to substitute trivalent and other yet-to-be-determined substitutions for CrVI.

This is especially troublesome in light of the extensive BACT provisions established by the South Coast Air Quality Management

District in its recent updates to Rule 1469. The majority of the decorative CrVI platers in California that will be subject to the updated ATCM have invested significant funds to comply with that rule and the additional emission control provisions. Those significant assets will be stranded if an updated ATCM overrides this new rule.

CARB participated in that rulemaking, yet the draft update ignores the provisions of the rule, the costs of compliance, and its effectiveness in reducing emissions including fugitive emissions. There is no analysis or risk analysis that facilities that are meeting the Rule 1469 requirements are endangering public health. Instead, the draft establishes the rule's provisions as an interim requirements for hard chrome plating until the January 1, 2039 ban date. The one difference, the increase in the frequency of source testing, is unnecessary, unsubstantiated, and costly.

The draft update includes a number of misstatements that provide the foundation for its provisions. For instance, the most recent data on compliance was published over a decade ago, in October 2011. click here. Yet, the Initial Statement of Reasons [ISOR] states that *"CARB's evaluation of the effectiveness of the 2007 ATCM demonstrates the need for further amendments."* The record does not include an evaluation. Instead, the document refers to people living near many of these facilities being concerned about exposure to elevated concentration of hexavalent chromium without reference to elevated concentrations. [ISOR, Page 3].

The SRIA cites two previously-adopted ATCMs in support of the phasing out of the use of TACS for more environmentally friendly alternatives. These are clearly distinguishable from the draft update to the CrVI ATCM. Customers desiring to have products hexavalent chromium-plated can easily take their products to other states or countries for this process.

In contrast, customers face timing and cost barriers if they desire to send their drycleaning to other states or countries to avoid the referenced perchloroethylene ban. Customers of automobile maintenance and repair facilities face similar challenges if they desire to drive to other states or countries to have their brakes cleaned or engines degreased to avoid the referenced ban on methylene chloride, trichloroethylene, and perchloroethylene. [SRIA-13]

It is also significant that the cited automobile maintenance and repair facilities ATCM includes variances:

> *"The proposed regulation is not expected to cause or result in significant economic hardship to any person or manufacturer. However, to further reduce this possibility, any person who cannot comply with the requirements of the proposed ATCM, due to reasons beyond the person's reasonable control, may apply in writing for a variance. The proposed variance procedures for the ATCM closely mirror other ARB variance procedures specified in ARB regulations.*" [SRIA-3]

In contrast, the current draft CrVI ATCM update provides no opportunity to obtain a variance, nor does it provide an off-ramp that would enable facilities to find ways to further lower their emissions [such as to meet an emission limit of 0.00075 mg/amp-hr] and continue to operate.

The emissions inventory used in the update is a guess, based on estimates and assumptions tied to maximum permitted limits. This is confirmed in Appendix F-22: click here and SRIA 21: click here:

> *F-22: The emission factors used for facility emissions were based on the current ATCM limits and Proposed Amendments limits (see Section I.B). The annual emissions rates were calculated by multiplying the amp-hours by the respective emission factors.*

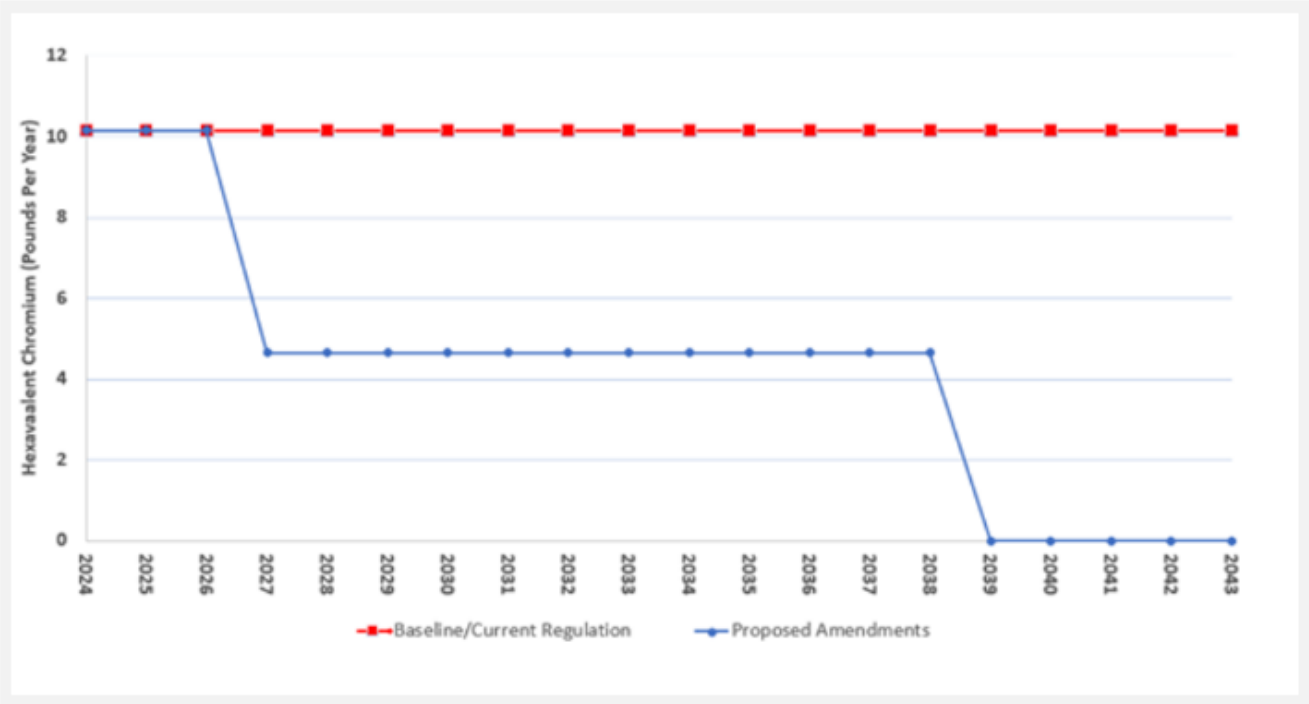
> *SRIA 21: When 2019 facility throughput data is not available, the permitted throughput limit is used to estimate actual emissions. Also, when source testing data is not available, ATCM limits are used to estimate actual emission rates. To estimate the ATCM limit and actual emissions, CARB obtained the annual throughput data for approximately 80 percent of facilities for the calendar year 2019. Using emissions limits may overestimate actual emissions at some facilities. The emission estimates for any given year can be calculated by multiplying the electricity usage (activities or throughput) in ampere -hours, the number of hours used for chrome plating, and any emission factors (see equation below).*

The update is not based upon accurate emissions data. CrVI plating facility emissions have been significantly reduced over the years to the extent that chrome metal finishing comprises significantly less than 1% of total CrVI emissions for the entire state. The draft Multiple Air Toxics Exposure Study [MATES] V report shows a significant decline in CrVI emissions. This is prior to the adoption of SCAQMD's Rule 1469. Adoption of this rule and its controls [HEPA/fume suppressant] by facilities not located within the district would reduce emissions statewide by a projected 94%. In contrast, the SRIA on Page 22 states that:

> *"The resulting permitted emissions (based on maximum permitted throughput and ATCM emission limits) represent a possible maximum emission from all of the chrome plating facilities in California at 10.19 pounds of hexavalent chromium per year. Using the ATCM emission rate and actual reported 32 Paramount Emissions Investigation - Summary of Efforts 33 Paramount – Ongoing Air Monitoring Activities SRIA 22 ampere-hour data, the estimated potential emissions from chrome plating facilities is 3.81 pounds of hexavalent chromium per year. When using available source test data and actual reported ampere-hour data, the estimated actual emissions in 2019 is about 2.3 pounds of hexavalent chromium."*

As clearly shown in the following figure in the SRIA, the document establishes a baseline utilizing allowable rather than real emissions data to overstate the minimal contribution that metal finishers make to total CrVI emissions, ignores the significant impact of Rule 1469 in reducing emissions, and focuses on zero emissions as the target:

Figure 1: Current Regulation/Baseline vs. Proposed Amendments Hexavalent Chromium Emissions



There is an effective alternative. Metal finishing shops in Southern California are investing significant capital to install and operate new measures as required by the recently-enacted South Coast Air Quality Management District Rule 1469 to further reduce emissions of hexavalent chromium.

CARB should adopt this rule on a statewide basis. The draft update fails to consider this reasonable and effective alternative. Instead, the SRIA identifies and analyzes just the two alternatives of a short phase-out and no phase-out.

We can accomplish more by working together to protect our communities, further reduce emissions, and enable essential jobs to remain in California. We urge your timely engagement and leadership to ensure that the updated CrVI ATCM is based on currently available and proven technologies that significantly decrease emissions and does not lead to a ban of these critical processes, strand assets, export plating and their jobs to other states and countries, and significantly increase air emissions.

We remain committed to working with the Board as we have in each of the previous rulemakings addressing hexavalent chromium, to develop an updated rule that protects public health.

Sincerely —

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C: Members, California Air Resources Board
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