CALIFORNIA
AIR RESOURCES BOARD

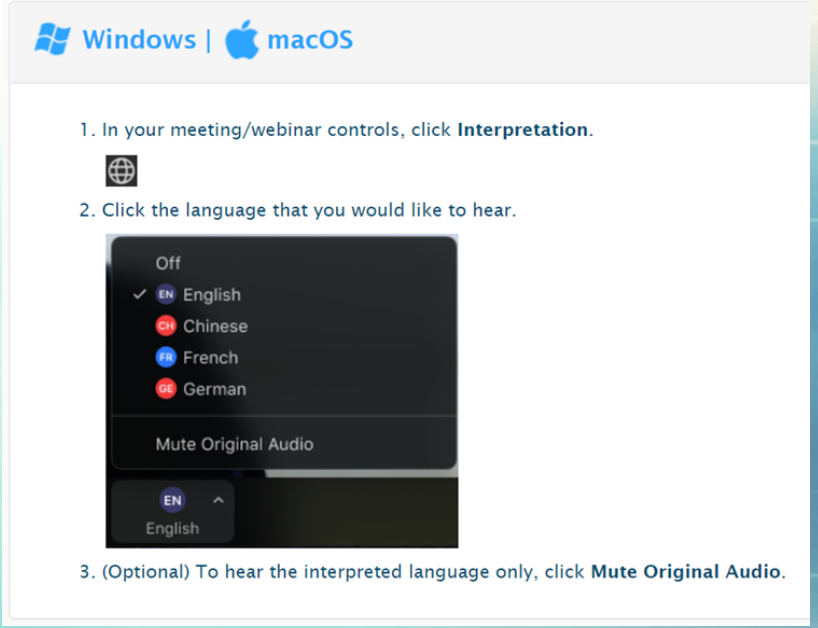
# Chrome Plating ATCM Amendments

## Public Workshop

06/09/2022

# ¿Cómo escuchar la interpretación de un idioma?

1. En los controles de su reunion/seminario web (meeting/webinar), haga clic in **Interpretación** (Interpretation) ubicado en la parte inferior de la pantalla
2. Haga clic en el idioma que le gustaría escuchar. Las opciones para esta reunion son ingles y español
3. Para solo escuchar el idioma interpretado, haga clic en **Silenciar audio original** (Mute Original Audio).

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# ¿Cómo escuchar la interpretación de un idioma?

Llame a nuestra línea de conferencias en español si no puede acceder a la interpretación en Zoom.

Número de llamada de conferencia en español:

**(866) 803-2146**

Contraseña:

**1083550**

# Before We Get Started

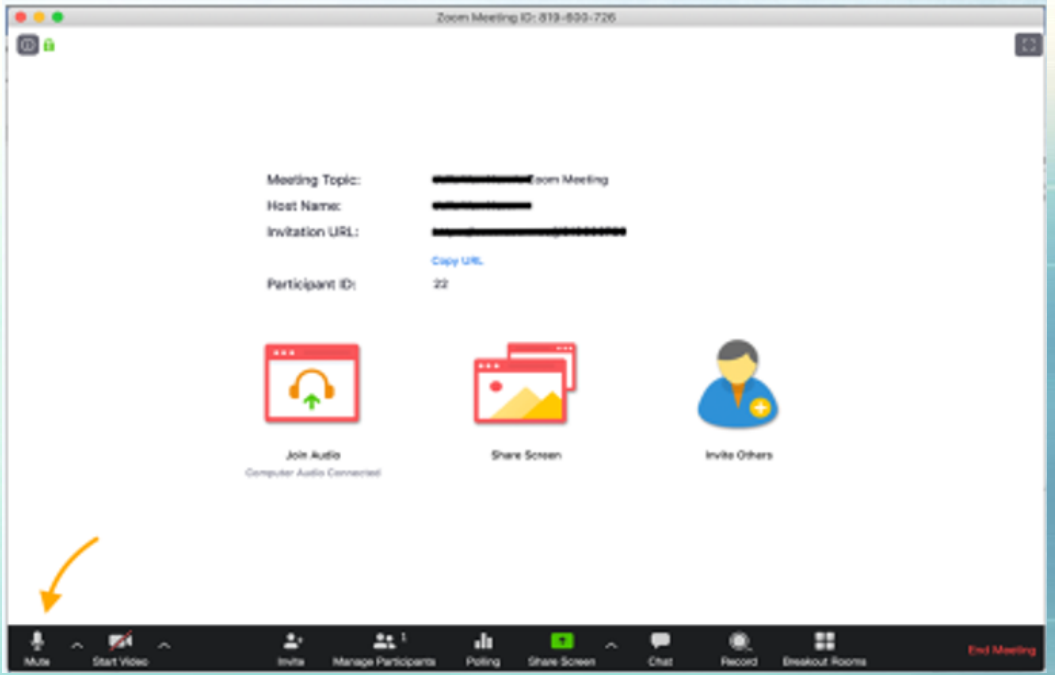
- Please **mute yourself** and make sure your name is showing as your screen name
- To **rename**, click on the top right side of your picture/video
- Use this naming convention, **First Last- Affiliation** (e.g. Jane Doe- CARB)
  - **Community Organization / Agency / Air District / Company / etc.**
- **Need help?** Use the Chat function to request assistance

# Zoom Orientation

**Mute/Unmute**

Please remain on mute when you are not speaking.

- Zoom: **Mute/Unmute** button at the bottom left
- Phone: Dial ***6** to mute/unmute

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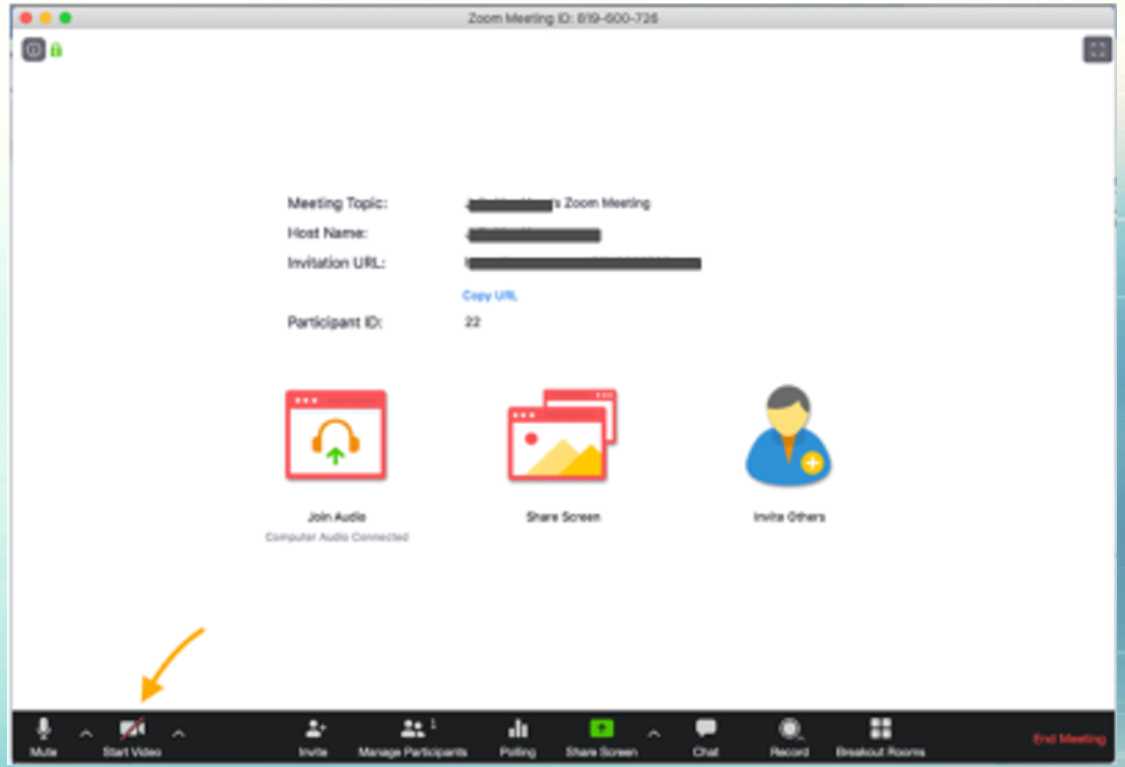
# Video

Click the camera icon at the bottom left of your screen to toggle your video on and off.

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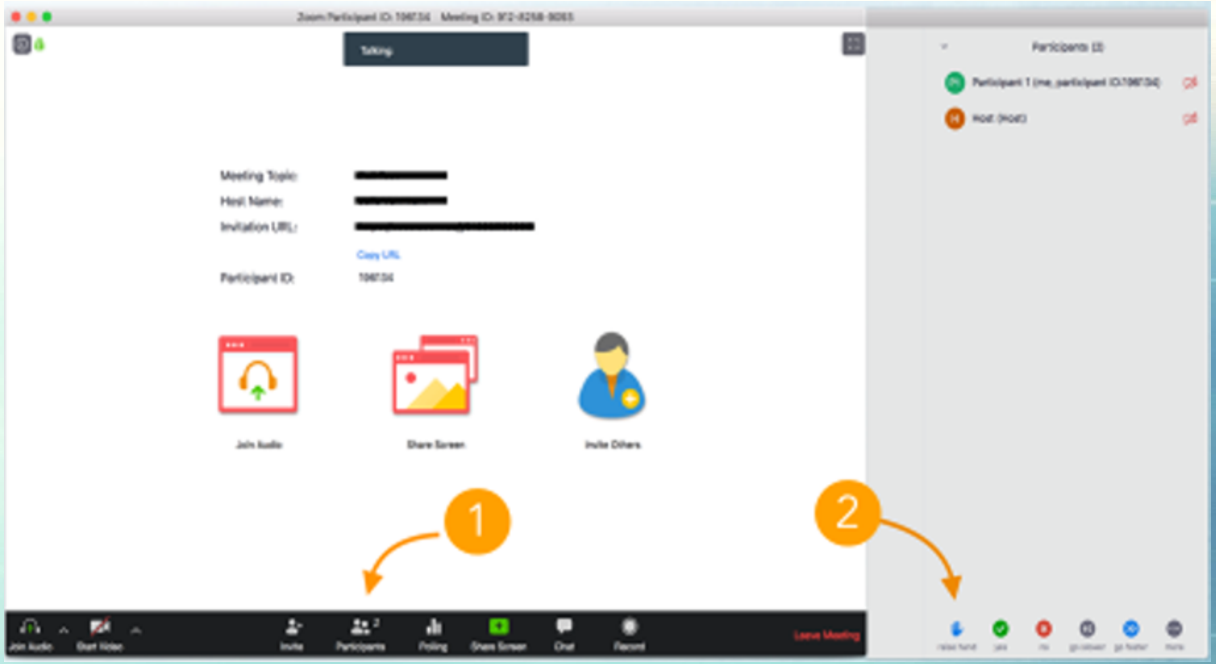
# Raise Hand

To be added to the speaking queue, please use **Raise Hand**

- Zoom: Click **Participants**, then **Raise Hand**.
- Phone: dial *9 We'll check in with the phone line periodically.

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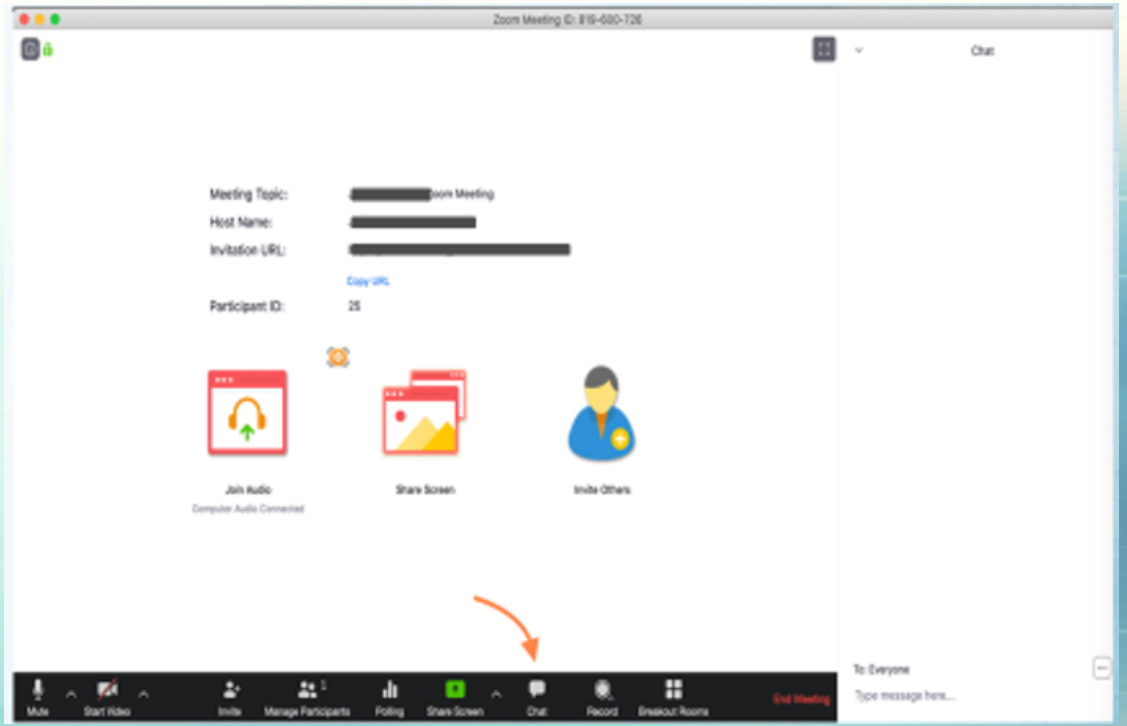
# Chat

- Click on the **chat** icon near the center bottom of your screen.
- Choose “private” chat to chat with the Host or Co-host
- Private chats are archived.

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# Meeting Agenda

- Introductions
- Need for Regulation
- ATCM Process to Date
- Proposal Summary
- Emissions/Risk
- Economic Impacts
- Timeline

# Need for Regulation

# Why Chrome Plating?

- Hexavalent chromium is a highly toxic compound
  - ~500 times more potent carcinogen than diesel exhaust
- Community concerns about chrome plating facilities
- Chrome plating part of CARB's blueprint document

# Exposure Concerns

- Chrome platers located in disadvantaged communities
- Monitoring - hexavalent chromium near chrome plating facilities
- Fugitive emissions

# California Health and Safety Code

- CARB is required to reduce the emissions of air toxics to the lowest level achievable while taking cost and health risk into account [HSC Section 39666(C)]

# Lowest Achievable Levels

- For decorative chrome plating
  - Trivalent chromium plating
  - Reduces emissions of hexavalent chromium to zero
- For Functional chrome plating
  - Replacement technology still being developed
  - Hexavalent chromium emissions cannot be reduced to zero yet

# ATCM Process

# Pre-Regulatory Process

- CARB preliminary rule making activities
  - Workgroup meetings
  - Public workshops
  - Internal and external collaboration
  - Data collection and analysis

# Rulemaking Documents

- Environmental Assessment CEQA Document
  - Identify, prevent or minimize, and disclose environmental impacts associated with project
- Initial statement of reasons (ISOR)
  - Summarizes the development of the regulation and describes the basis and purpose

# Rulemaking Documents

- Economic impact analysis (Form 399, SRIA)
  - Form 399
  - Standard Regulatory Impact Analysis (SRIA)
  - Outline the economic impacts of the proposal
- Proposed Regulation
  - Clear and concise regulation language

# 45-Day Notice

- Required by the Administrative Procedures Act (APA)
- Publication of 45-day notice starts timeline
- Opens the initial public comment docket
- First step in creating record for public review
- 1 year to complete the rulemaking process and final rulemaking package

# CARB Board Hearing

- Chrome Regulation - 2 Board Hearings
- Staff presents proposal to the board
- Public comments are heard
- Board can direct changes or accept/deny as is
  - Changes made via 15-day change process

# Post Board Hearing

- 15-day changes
  - Staff develops and analyzes changes and posts for 15-day public comment
- Update to ISOR responding public comments and changes to the regulation
- Final Statement of Reason prepared

# First Steps - Regulatory Notice

- CARB began amendment process in 2018
- Published a regulatory notice for start of development process
- Can be found on our webpage

# Data Gathering Work

- Facility survey in 2018
- 29 site visits from 2018 – 2022
- 3 emissions tests from 2018 – 2020
- 2 short-term air monitoring studies at facilities from 2018 - 2019
- 1 Environmental Justice Community Tour in 2022

# Public Meetings/Documents

- Hosted 7 public technical working group meetings
  - 1 also served as a public workshop for the CEQA
- Posted:
  - 2 draft regulation language versions
  - CEQA Notice of Preparation
  - Preliminary cost document
  - Standardized Regulatory Impact Analysis

# Proposal Summary

# New and Modified Facilities (All Facility Types)

- No new facilities after Jan 1, 2024
- Modification of existing facilities (until phase out dates)
  - Facilities can be modified after Jan 1, 2024, if permitted amp-hr/year are not increased AND
  - Any additional tanks meet Tier I, Tier II, or Tier III standards as applicable

# Hexavalent Chromium Phase-out

- Decorative plating
  - January 1, 2026
  - 1-year extension if needed to deal with delays in the transition
- Functional Plating
  - January 1, 2039
  - Two technology reviews in the interim

# Technology Reviews Functional Plating

- Two technology reviews
  - Plan to be developed by 2029
  - First technology review completed by Jan 1, 2032
  - Second technology review completed by Jan 1, 2036
- Determine if phase-out date should be amended

# New Emission Limit Functional Plating

- ATCM limit decreased to 0.00075 mg/amp-hr
  - January 1, 2026
  - Most facilities - existing control equipment
  - Some facilities - upgrade control equipment

# Source Testing
# Functional Plating

- Perform source test before January 1, 2026
- On-going source testing every 2 years

# Additional Requirements

- Draft regulation language additional requirements:
  - Building enclosures
  - Tier Tank controls
  - Enhanced Housekeeping Requirements
  - Best Management Practices

# Emissions & Risk

# Emissions Inventory

- CARB used two approaches
  - Method 1: Used reported emissions data to compare plating emissions to other operations
  - Method 2: Used permitted and actual throughput to calculate emissions
  - Fugitive emissions not quantified

# Method 1 – Reported Emissions

- CARB maintains a statewide database for toxic emissions
- Data does not include all sources in every category
- Inventory year 2020 was used
- Chrome plating emissions account for less than 1 percent
  - Chrome plating emissions only include “direct” plating tank emissions
  - No fugitive emissions consideration


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# Method 2 – Facility Emissions

- Permit limits and quantifiable emission data reported by local air districts
- Year 2019 data - most recent data not impacted by COVID19 pandemic
- Permit limits - highest potential emissions from permitted sources
- Potential emissions from platers approximately 10 lbs. hexavalent chrome per year

# Potential Cancer Risk Estimates

- Conducted health risk assessment
  - AERMOD air dispersion model
  - OEHHA guidelines
  - Estimated cancer and non-cancer impacts
- Risk estimates do not include fugitive emissions
  - Staff are working to best characterize fugitive emissions

# Plating Facilities Classification

- Hard Plating w/ Add-On Controls
- Anodizing

→ Small Functional Platers ( < 1,000,000 annual amp-hrs)

→ Large Functional Platers ( > 1,000,000 annual amp-hrs)

Decorative Plating

→ Decorative (Fume Suppressants Only)

→ Decorative Plating w/ Add-On Controls

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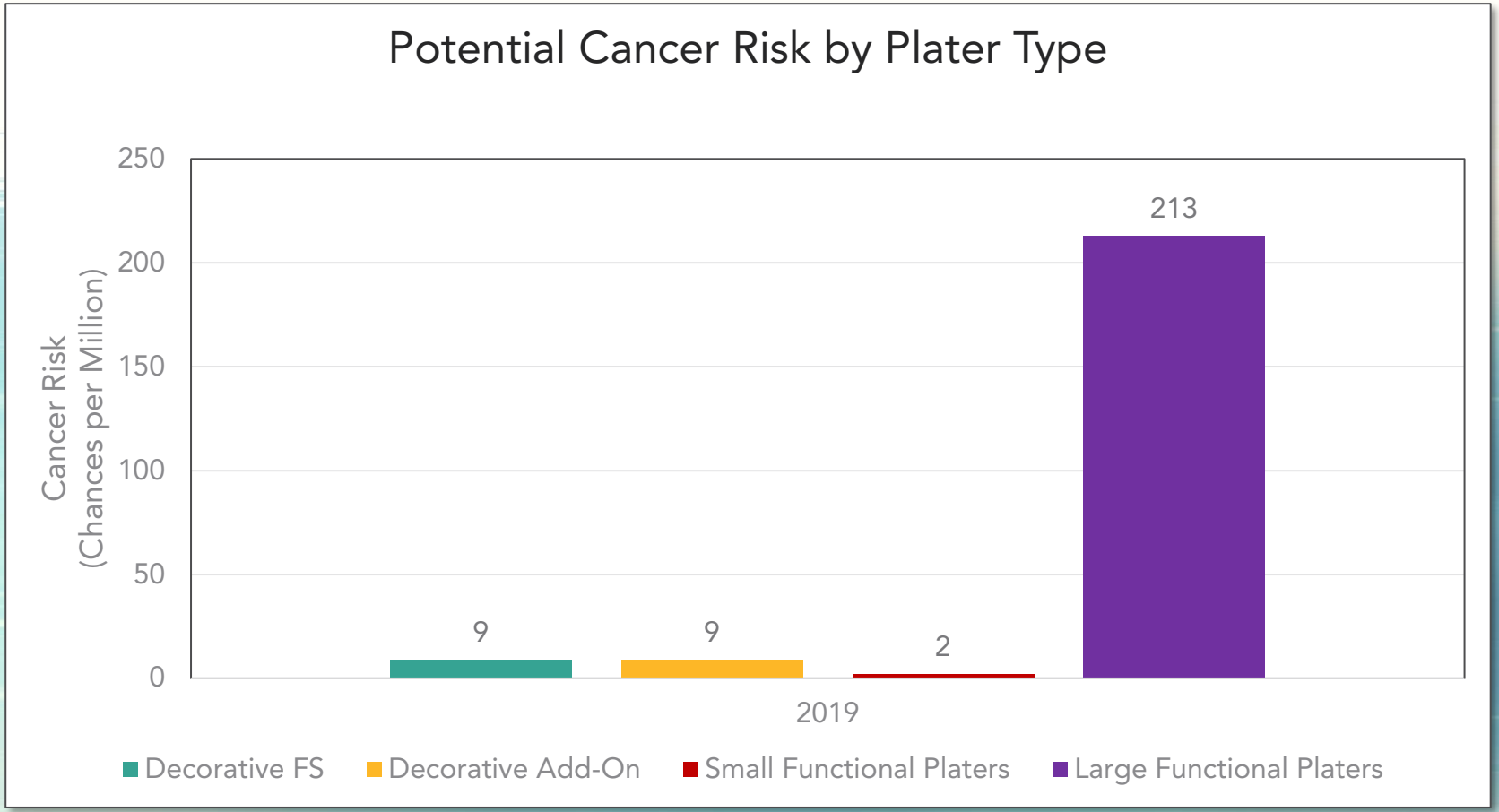
# Potential Cancer Risk by Plater Type

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# Chrome Plating – Localized Potential Risk

| Distance to Nearest Receptor (measured from property boundary) | Number of Facilities | Risk range at this distance (not including fugitive emissions) |
|---|---|---|
| 0 - 25 meters | 13 | <1 to 213 chances per million |
| 26 – 100 meters | 21 | <1 to 180 chances per million |
| 100 – 500 meters | 43 | <1 to 54 chances per million |
| >500 meters | 36 | <1 chances per million |

# Fugitive Emissions

- Have not been included in previous estimates
- Unknowns:
  - Inlet concentrations
  - Capture efficiency
  - Fraction escaping the building
- Small changes in assumptions - large variations in emissions and risk
- Currently CARB can qualitatively conclude that emissions exist

# Economic Impacts

# Total Cost of the Proposed Regulation

| Facility Type | Quantity | Total Cost Including Conversion (2024 – 2043) |
|---|---|---|
| Decorative Chrome Plating | 51 | $43,462,546 |
| Functional Chrome Plating | - | - |
| A) Hard Chrome Plating | 36 | $523,345,220 |
| B) Chromic Acid Anodizing | 26 | $121,394,958 |
| Total | 113 | $688,202,724 |

# Detailed Cost Information

- SRIA has more information on the cost assessment
- Includes macroeconomic impacts
- Includes assessment on jobs in California for different assumed impacts of regulation
- Available now for public review and comment

# Timeline

# Timeline

- 45-day comment period starts Sept 2, 2022
  - All rulemaking documents will be available for public review
- Board Hearing #1
  - October 27-28, 2022, in Riverside (exact date/time TBD)
- Board Hearing #2
  - Tentatively scheduled for April 2023

# CARB Chrome ATCM Webpages

- Chrome Plating ATCM Main Page
- Workshops & Meetings
- Draft Regulatory Language
- Department of Finance SRIA page
- Subscribe to the Chrome Plating ATCM Mailing List

# CARB Contacts

- Eugene Rubin (Staff Lead)
  - Eugene.Rubin@arb.ca.gov
  - 916-287-8214
- Maria Vacaru (Staff)
  - Maria.Vacaru@arb.ca.gov
  - 916-322-7433
- Greg Harris (Manager)
  - Greg.Harris@arb.ca.gov
  - 916-327-5980
- Robert Krieger (Branch Chief)
  - Robert.Krieger@arb.ca.gov
  - 916-323-1202
- Subscribe to the Chrome Plating ATCM Mailing List

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