METAL FINISHING ASSOCIATIONS OF CALIFORNIA

November 15 & 16, 2017
California Government Affairs Update
CONTINUED MOVEMENT TO THE LEFT

- Elected Officials
  - Governor
  - All Other Statewide Offices
  - Two-thirds of Senate
  - Two-thirds of Assembly
- Voters*
  - Democrats - 44.8%
  - Republicans -25.9%
  - No Party Preference - 24.5%

*Public Policy Institute August 2017
REACTION TO ELECTION OF PRESIDENT TRUMP

- **Protection** - of Issues of Importance
  - Environment - Health Care – Sanctuary State - Housing
- **Continuation** - of Democratic Political & Social Issues
  - Cap and Trade Extension
  - Tax Increases – fuel, tobacco, soda
- SB 49 [De León]
  - Attempt to Lock in Clean Water Act, Clean Air Act in state law prior to inauguration
  - Status – stalled this year
- 2020 Presidential Primary
  - Movement to First Tuesday in March
  - SB 568 [Lara] – enacted into law
REACTION TO ELECTION OF PRESIDENT TRUMP

- **Sanctuary State**
- **SB 54 [De León] Chapter 495, Statutes of 2017**
- Limits the involvement of state and local law enforcement agencies in federal immigration enforcement.
- Prohibits - law enforcement officers in the state from:
  - Arresting individuals based on civil immigration warrants;
  - Asking about a person’s immigration status; or
  - Participating in any joint task force with federal officials for the purpose of enforcing immigration laws
- Prohibits - local jails from contracting with the federal government to house their detainees and holding immigrants for any reason if they are cleared for release on their state criminal cases
2018 – ELECTION YEAR

• **Governor**

  • Democratic Candidates
    • **Gavin Newsom** [Lieutenant Governor, Former SF Mayor]
    • **Antonio Villaraigosa** [Former LA Mayor and Assembly Speaker]
    • **Delaine Eastin** [Former Superintendent of Public Instruction, Former Assembly Member]
    • **John Chiang** [Treasurer, Former Controller]
    • **Tom Steyer?** [hedge fund manager, philanthropist, and environmentalist]

  • Republican Candidates
    • **John Cox** [Businessman]
    • **Travis Allen** [Assembly Member – Huntington Beach]
    • **Doug Ose?** [Former Congressman]
2018 – ELECTION YEAR

- **US Senate**
  - **Democratic Candidates**
    - Diane Feinstein [Incumbent, has held position since 1992]
    - Kevin De León [Senate President Pro Tempore]
    - Tom Steyer? [hedge fund manager, philanthropist, and environmentalist]
  - **Republican Candidates**
    - Declared:
      - Timothy Charles Kalemkarian [candidate for offices]
      - Caren Lancona [businesswoman]
      - Stephen James Schrader [veteran]
2018 – ELECTION YEAR

• **Lieutenant Governor**
  • Democratic Candidates
    • **Ed Hernandez** [Senator]
    • **Eleni Kounalakis** [Former Ambassador to Hungary]
  • Republican Candidates
    • **David Hernandez** [candidate for offices]
2018 – ELECTION YEAR

• Attorney General
  • Democratic Candidates
    • Xavier Becerra [Incumbent, Former Congressman]
    • Dave Jones [Insurance Commissioner, Former Legislator]
  • Republican Candidates
    • Steven Bailey [retired El Dorado County Superior Court Judge]
    • Eric Early [Managing Partner, Early Sullivan Wright Gizer & McRae LLP]
2018 – ELECTION YEAR

- **Treasurer**
  - Democratic Candidates
    - Mike Gatto [Former Assembly Member]
    - Fiona Ma [Board of Equalization Member, Former Assembly Member]

- **Superintendent of Public Instruction**
  - Democratic Candidates
    - Tony Thurmond [Assembly Member]
    - Malcolm Norrington [Teacher]
    - Marshall Tuck [Previous Candidate, Former CEO of Partnership for LA Schools]

- **Insurance Commissioner**
  - Democratic Candidates
    - Ricardo Lara [Senator]
    - Henry Perea? [Former State Assembly Member]

- **Controller**
  - Democratic Candidate – Betty Yee [Incumbent]

- **Secretary of State**
  - Democratic Candidate – Alex Padilla [Incumbent]
2018 – STATE LEGISLATURE

- Senate President Pro Tempore
  - Kevin De León [Los Angeles] – term limit 2018

- Senate Minority Leader
  - Patricia Bates [Laguna Niguel] – term limit 2022

- Assembly Speaker
  - Anthony Rendon [Lakewood] – term limit 2024

- Assembly Republican Leader
  - Brian Dahle [Bieber] – term limit 2024
2018 – STATE LEGISLATURE

• Term Limits in 2018

• Senate
  • Joel Anderson [R-Alpine]
  • Tom Berryhill [R-Modesto]
  • Anthony Cannella [R-Ceres]
  • Kevin de Leon [D-Los Angeles]
  • Jean Fuller [R-Bakersfield]
  • Ed Hernandez [D-Azusa]

• Assembly
  • Anna Caballero [D-Salinas]
2018 – STATEWIDE BALLOT ISSUES

- **Qualified for June 5 Ballot**
- Motor vehicle fees and taxes: restriction on expenditures: appropriations limit
  - ACA 5 (Resolution Chapter 30, statutes of 2017), Frazier
- Greenhouse Gas Reduction Reserve Fund
  - ACA 1 (Resolution Chapter 105, statutes of 2017), Mayes
- California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018
  - SB 5 (Chapter 852, Statutes of 2017), De León
- Ballot measures: effective date
  - ACA 17 (Resolution Chapter 190, Statutes of 2017), Mullin
2018 – STATEWIDE BALLOT ISSUES

• Qualified for November 8 Ballot
• Veterans and Affordable Housing Bond Act of 2018
  • SB 3 (Chapter 365, Statutes of 2017), Beall
2018 – STATEWIDE BALLOT ISSUES

• Pending Review by Attorney General [4 total]
  • Voter Approval for Increases in Gas and Car Tax
  • The California Consumer Privacy Act of 2018
  • Worker Protection and Lawsuit Accountability Act
  • The College for All Act of 2018
  • Homeowners and Renters Tax Credit Act of 2018

• Initiatives and Referenda Cleared for Circulation [26 total]
  • Constitutional Right to Gender Identity
  • Bonds to Fund Projects for Drinking Water and Water Quality Improvements, to Reduce Environmental Vulnerability to Climate Change, and For State and Local Parks
2018 – POLITICAL THEMES & CONTEXT

- **Reaction to President Trump**
- **Protection** - of Issues of Importance
  - Environment - Health Care – Sanctuary State - Housing
- **Continuation** - of Democratic Political & Social Issues
  - Cap and Trade Extension
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- **SB 49 [De León]**
  - Attempt to Lock in Clean Water Act, Clean Air Act in state law as existed prior to inauguration
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2018 – POLITICAL THEMES & CONTEXT

• Allegations of State Capitol Workplace Sexual Misconduct
  • October 17 OpEd “We Said Enough”
    • Signed by over 100 current and former staffers, lobbyists and lawmakers
    • Claim: they had experienced or witnessed groping, inappropriate comments or other dehumanizing behavior toward women
    • November 28 hearing – Senate Rules Subcommittee
2018 – POLITICAL THEMES & CONTEXT

- Governor Brown’s Legacy Infrastructure Projects
- California WaterFix [$17 Billion]
  - Funding Issues
    - Westlands Water District – no to $3 billion
  - Opposition
    - Environmentalists
    - Northern Californians – Democrats and Republicans
    - President Trump?
- One-Tunnel Option?
  - US Senator Diane Feinstein Statement
- California Bullet Train [$68.4 billion 2012 estimate]
  - Proposition 9a 2008 – Approval and $9 billion bond for Initial Construction
  - 2025 – Anticipated completion of the initial operating segment
    - San Jose Diridon Station to Bakersfield with a spur to Merced
2018 – POLITICAL THEMES & CONTEXT

• Climate Change – California Acts Like a Nation
• Void Created – President Trump Announcement
  • US to Depart 2015 Paris Accord in 2020
• California Status – World’s 6th largest Economy
• Governor’s National and International Efforts
  • America’s Pledge Alliance – includes New York
  • Governor is UN Special Advisor to States and Regions
  • 10-day Trip to Europe: Vatican, Oslo, Brussels and Stuttgart
  • Upcoming United Nations Conference – Bonn
• Under 2 Coalition
  • 188 cities, states and other jurisdictions
  • 1.2 billion people
  • Commitments:
    • Reduce carbon dioxide emissions
    • Limit global warming to an increase of 2 degrees Celsius
2018 – POLITICAL THEMES & CONTEXT

- California Environmental Issues
- Cap and Trade Extension – signed by Governor on July 25
  - From 2020 to 2030
  - AB 398 [Garcia] Chapter 135, Statutes of 2017
  - Support:
    - National Environmental Groups
    - Business Organizations
    - Republican Legislators – cost to Assembly Republican Leader Chad Mayes
2018 – POLITICAL THEMES & CONTEXT

• California Environmental Issues
• Climate Change and Public Construction Contracts
• AB 262 (Bonta) Chapter 816, Statutes of 2017
  • System requiring the state to take into consideration climate pollution created during manufacture when it buys certain materials used in construction.
  • Sierra Club: “Acknowledges clean manufacturers and motivate dirty manufacturers to clean up their act to be competitive in bids for state construction contracts.”
2018 – POLITICAL THEMES & CONTEXT

- California Environmental Issues
- Cleaning Product Right To Know Act of 2017
- SB 259 [Lara], Chapter 830, Statutes of 2017
- Requires manufacturers of cleaning products to disclose specified chemical ingredients on a product label and on the manufacturers Web site
  - On label – A list of intentionally added ingredients that are on any of 23 authoritative lists identified in the Act which identify chemicals as causing cancer or other human health or environmental harm
  - On website - A list of each intentionally added ingredient in the product, the Chemical Abstracts Service (CAS) number, the functional purpose of each intentionally added ingredient, and an electronic link to the relevant designated list for any intentionally added ingredient required to be listed
CRVI AIR EMISSIONS

• New Enforcement
• New Regulations
• South Coast Air Quality Management District
• Bay Area Air Quality Management District
• New and Costly Requirements
• MFASC and MFANC Engagement
CRVI AIR EMISSIONS - SCAQMD

The Team

- Leader - Wesley Turnbow
  - MFASC President, EME Inc., Compton
- MFANC – Ray Lucas
  - MFANC President, Valley Chrome Plating
- Association – Bryan Leiker
  - MFASC Executive Director, K&L Plating
- Attorney – Barry Groveman
  - Musick, Peeler & Garrett LLP
- Scientist – Dr. Deborah Proctor
  - ToxStrategies
- Lobbyist – Jerry Desmond
  - Desmond & Desmond LLC

- Public Relations – Stevan Allen
  - AllenStrategic
- Economics – Stu Sessions
  - Environomics Incorporated
- Economics - John Husing
  - John Husing, Inc.
- Regulatory - Stevan Walters
  - Trinity Consultants, Inc.
- National [NASF] – Christian Richter & Jeff Hannapel
  - The Policy Group

MFASC & MFANC  NOVEMBER 15 & 16 2017
CRVI AIR EMISSIONS - SCAQMD

Enforcement

- Ambient Air Monitoring

Newport Beach, Paramount, Long Beach, Compton & More

- SCAQMD ambient monitoring at:
  - Hixson Metal Finishing - Newport Beach
  - Anaplex Corporation – Paramount
  - Lubeco – Long Beach
  - Morell’s and EME Inc – Compton

- Ambient monitoring captures point and fugitive emissions
  - **Point source emissions** - released through a stack, generally after pollution controls
  - **Fugitive emissions** - those emissions that are not captured through pollution controls such as building openings (e.g. doors, windows, and vents)
CRVI AIR EMISSIONS - SCAQMD

Enforcement

- Ambient Air Concentration Threshold
- According to South Coast:

- Hexavalent chromium ambient threshold used for Hixson and Anaplex based on 100 in a million cancer risk assuming residential exposure
- SCAQMD has utilized three-sample average of 1.0 ng/m³ as part of Anaplex Stipulated Order for Abatement; must curtail operations if exceeded
- 1.0 ng/m³ is an interim threshold representing a significant cancer risk; must also meet risk requirements of Rule 1402
- Basis for 1.0 ng/m³ threshold (Anaplex):
  - Monitor placed at closest sensitive receptor to the facility is located 500 feet downwind
  - Monitor measured a 5-fold drop off in concentration at the facility’s property line to the monitor
  - Hexavalent chromium has ~0.2 ng/m³ chronic exposure for 100 in a million cancer risk
  - (5) x (0.2 ng/m³) = 1.0 ng/m³
CRVI AIR EMISSIONS - SCAQMD

Enforcement

- Hixson – Newport Beach
CRVI AIR EMISSIONS - SCAQMD

Enforcement

- Hixson – Newport Beach

<table>
<thead>
<tr>
<th>Emission Source</th>
<th>Concentration [ng/m³]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anodizing Tank #70 in Bldg #2</td>
<td>222,000</td>
</tr>
<tr>
<td>Sodium Dichromate Seal Tank #75 in Bldg #2</td>
<td>97,200</td>
</tr>
<tr>
<td>Bldg #2 Roof Vent</td>
<td>2,510</td>
</tr>
<tr>
<td>Spray Booth #1 Exhaust in Bldg #3</td>
<td>36</td>
</tr>
<tr>
<td>Interior of Bldg #3</td>
<td>14</td>
</tr>
<tr>
<td>Spray Booth #2 Exhaust in Bldg #4</td>
<td>10.8</td>
</tr>
</tbody>
</table>

**Hixson Risk Reduction Measures**

- Construction of a Permanent Total Enclosure for Anodizing
  - Entire room vented to scrubber
  - Fast closing roll-up doors
- Installation of multiple HEPA system with scrubber system to control tanks and other operations
- Waste Treatment area enclosed using plastic strip curtains
- Increased housekeeping including daily HEPA-cleaning of multiple areas of facility

**Hixson Results [per SCAQMD]**

- Significant decline in hexavalent chromium corresponds to mitigation measures
Enforcement

- Paramount
Enforcement

- Paramount
CRVI AIR EMISSIONS - SCAQMD

Enforcement

- Anaplex - Paramount
Enforcement

- Anaplex - Paramount

SCAQMD source testing, engineering, and compliance staff conducted a comprehensive facility assessment to observe and better understand:

- All processes, association to each other, and hexavalent chromium emission potentials
- Condition of process equipment, structures housing processes, and breaches that could lead to fugitive emissions
- Sampling and source testing included:
  - Sampling of material around roof vents above process tanks
  - Source testing of air spaces above and adjacent to tanks
  - Assessment of air flow throughout building housing tank area
<table>
<thead>
<tr>
<th>Emission Source</th>
<th>Concentration (ng/m³)</th>
<th>Tank Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agitation Seal Tank</td>
<td>682,000</td>
<td>194-212°F</td>
</tr>
<tr>
<td>No Chromate Film Tank</td>
<td>8,340</td>
<td>Ambient</td>
</tr>
<tr>
<td>Yes Chromic Acid Anodizing Tank</td>
<td>6,880</td>
<td>91-99°F</td>
</tr>
</tbody>
</table>

- **Anaplex Interim Measures** implemented:
  - Closing of access doors
  - Implement practices to reduce emissions from tanks
  - Daily clean-up activities in areas that may create dust containing hexavalent chromium

- **Anaplex Results**
  - Decline in hexavalent chromium corresponds to mitigation measures
  - But Now – Abatement Orders and Not Operating
Enforcement

- Lubeco – Long Beach

District Allegations:

- Levels of chromium-6 around the company were 18 times normal [May 13 – July 12]
- Levels of chromium-6 ranging from 0.2 to 8.9 nanograms per cubic meter across 22 monitoring stations in Long Beach and Paramount
- Proper emission controls were not installed at the site
Enforcement

- **Lubeco – Long Beach**
  - District allegations:
    - Recorded CrVI at 18 times above normal levels in the air near Lubeco between May 13 and July 12.
    - Average level of chromium-6 in the air near the company was 1.07 nanograms per cubic meter.
    - Base average of 0.6 nanograms per cubic meter.
  - District Hearing Board Order – August 17
    - Lubeco must ensure that readings of chromium-6 do not exceed 1 nanogram per cubic meter, based on a three sample average
Enforcement
Community Air Toxics Initiative

- Compton
Enforcement Community Air Toxics Initiative

Initial inspections conducted at:
- EME Inc./Electro Machine and Engineering
- Morrell’s Electro Plating Inc.
- Triumph Processing Inc.
- AAA Plating & Inspection Inc.
- Bowman Plating Co. Inc.
- S & K Plating Inc.

Multi-Agency Inspections (7/20/17 – 7/27/17)
- South Coast Air Quality Management District (SCAQMD)
- California Air Resources Board (CARB)
- Department of Toxic Substances Control (DTSC)
- LA County Hazardous Materials (CUPA)
- LA County Public Health
- Compton Code Enforcement
- Compton Fire Department
Enforcement Community Air Toxics Initiative

- Compton
CRVI AIR EMISSIONS - SCAQMD

Enforcement Community Air Toxics Initiative

- Compton

- 99 door to door inspections
- 5 Notices of Violation
- 16 Notices to Comply
- Collected suspected hexavalent chrome material from 2 facilities for lab analysis
- Sought, obtained, and executed an Inspection Warrant
- District will pursue orders for abatement when necessary
  - Evidence gathering includes:
    - Facility inspections
    - Monitoring of emissions near facilities
    - Source tests of equipment and processes
- Facilities contributing to elevated hexavalent chrome at the monitors are subject to Orders for Abatement
  - The Hearing Board will determine whether a facility’s operations should be curtailed or their operations modified to protect public health
  - The conditions are designed to reduce the elevated hexavalent chrome emissions
Regulations

Status – Rule 1426 to be considered in 2018

- Rule 1469 [and possibly Rule 1426]
- Rule 1469 - applies to chrome plating and chromic acid anodizing
- Rule 1426 - applies to other metal finishing operations (e.g., nickel, cadmium, copper, lead); no control requirements
- Ambient Monitoring - to the District:
  - Ambient monitoring have identified new sources of hexavalent chromium that the SCAQMD was not previously aware of such as cement clinker, metal heat treating, and unregulated tanks at chromic acid anodizing facilities
  - For Aerocraft and Anaplex, observed a 5-fold drop-off in concentration over 500 feet in the downwind concentration
  - Ambient monitoring has shown that contribution of fugitive emissions can be substantial – enclosures and housekeeping are effective at minimizing fugitive emissions
Regulations

Air Monitoring

Status –
District Proposes to Address in Separate Rulemaking PAR 1480 applicable to Stationary Sources

- Rule 1469 [and possibly Rule 1426]
- Possible On-ramps to monitoring:
  - Estimated cancer risk of > 100 in a million based on:
    - SCAQMD ambient monitoring
    - Approved health risk assessment
  - High amp-hour facilities possibly sensitive receptor component
  - High amp-hour facilities operating tanks without add-on air pollution control (only in-tank controls such as fume suppressants) possibly sensitive receptor component
  - Source test determining non-compliance with hexavalent chromium emission rate limit
  - Continuous operational issues with point source controls – such as operating outside monitored parameters specified in rule
  - Failed capture efficiency testing of point source controls
CRVI AIR EMISSIONS - SCAQMD

Regulations

- Air Monitoring

Status –
District Proposes to Address in Separate Rulemaking PAR 1480 applicable to Stationary Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
<th>Mount Option</th>
<th>Power Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGI OMNI</td>
<td>~$4,800</td>
<td>Stands, Pole mount</td>
<td>AC, DC and solar, Recharge unit if pole mounted</td>
</tr>
<tr>
<td>BGI PQ100</td>
<td>~$6,700</td>
<td>Stands</td>
<td>AC, DC and solar</td>
</tr>
<tr>
<td>Xon-teck 924</td>
<td>~$24,000</td>
<td>Stands</td>
<td>AC, DC and solar</td>
</tr>
</tbody>
</table>
CRVI AIR EMISSIONS - SCAQMD

District Cost Estimates:

- Ambient Air Monitoring Sampling Plan
  - Cost to prepare Plan ~$8,500\(^1\)
  - Cost SCAQMD review (20 to 50 hours) ~$130 per hour (Rule 306)\(^2\)
- Ambient sampler ~$4,800-$24,800
- Wind monitor\(^3\) – capital and installation ~$4,000
- Ongoing ambient air monitoring costs
  - Filter costs ($40-$90 per pack)
  - Sample collection and transport\(^3\) (5 hours @ $80/hr = $400)
  - Laboratory analysis ($75-$150 per sample)
  - Maintenance of sampler\(^4\) ($1920 per year)
  - Expedited sample analysis (added cost of $350-$550 per sample depending on situation)
- Sampling frequency will substantially affect ambient monitoring costs

Regulations

- Air Monitoring

Status –
District Proposes to Address in Separate Rulemaking PAR 1480 applicable to Stationary Sources
CRVI AIR EMISSIONS - SCAQMD

Regulations

• Tier I Hexavalent Chromium-Containing Tank
  • Hexavalent chromium concentration ≥ 1,000 parts per million (ppm)

• Tier 1 Requirements
  • Housekeeping Requirements
  • Best Management Practices
  • Building Enclosure Requirements

• Type I and Type II Tanks
CRVI AIR EMISSIONS - SCAQMD

Regulations
• Tier II Hexavalent Chromium-Containing Tank
  • Meets one or more of the following:
    • Operating temperature above 140°F; or
    • Air sparging as an agitation method; or
    • Is electrolytic
• Tier II Requirements
  • Housekeeping Requirements
  • Best Management Practices
  • Building Enclosure Requirements
  • Pollution Control Requirements
  • Source Testing Provisions
  • Conditional Provisions for Building Enclosure with Negative Air

Type I and Type II Tanks
Regulations

- Type I and Type II Tanks

140 Degree Issue

- Stakeholders commented that more testing is needed to show hexavalent chromium emissions at an operating temperature range between 140°F and 169°F
- District agrees that additional testing should be conducted
- Staff conducted additional tests on November 2nd
- Staff conducting additional temperature tests the week of November 14th
Regulations

• Type I and Type II Tanks

• Permit Application Submittal Dates for Controls on Tier II Tanks
• For Tier II Tanks existing prior to date of rule adoption, the owner or operator must submit permit applications for control equipment as follows:
  • Tier II Tank(s) at Chromic Acid Anodizing Facilities
    • 180 days after Rule Adoption
  • Tier II Tank(s) at Hard Chromium Electroplating Facilities
    • 270 days after Rule Adoption
  • Tier II Tank(s) at Decorative Chromium Electroplating Facilities
    • 365 days after Rule Adoption
• Controls required to be installed no later than 1 year after Permit to Construct is issued
• Interim requirements for tank covers until controls are installed

CRVI AIR EMISSIONS - SCAQMD

MFASC & MFANC  NOVEMBER 15 & 16 2017
CRVI AIR EMISSIONS - SCAQMD

- Conversion away from CrVI
- District now also looking into mechanism to delay control requirements for a Tier II tank that is undergoing a process to be phased out

Regulations

- Type I and Type II Tanks
CRVI AIR EMISSIONS - SCAQMD

Regulations

- Prohibition on Air Sparging
- Beginning 180 days after rule adoption, no Tier II Tank shall be air sparged unless:
  - Owner or operator demonstrates that air sparging is necessary to meet a military specification; and
  - Approved in writing by the Executive Officer
- For Exception:
  - Facilities permitted before rule adoption to conduct air sparging shall submit to the Executive Officer documentation demonstrating military specification needed for air sparging no later than 30 days after rule adoption
Freeboard Height

- Proposed requirement to maintain a tank freeboard height of at least **8 inches** for any new or modified Tier I or Tier Tank
  - Tank freeboard is the space between the bath surface level and lip of tank
  - District Rationale:
    - Height of 8 inches is recommended in Industrial Ventilation, A Manual of Recommended Practice for Design, published by the American Conference of Governmental Industrial Hygienists
    - Current SCAQMD practice for permitting new tanks requires this freeboard height

Modification for this requirement defined as:

- Physical change to dimensions of the tank; or
- Increase in permitted annual amp-hrs or hexavalent chromium concentration; or
- Tank temperature increase above 140°F
Building Enclosures – both Tier I and Tier II Tanks

Tanks to be located within a building enclosure

Total of all openings in a building enclosure shall not exceed 3% of the building enclosure envelope

Envelope calculated as the total surface of the building enclosure’s exterior walls, floor and horizontal projection of the roof on the ground

District Rationale:

- Based on EPA’s Method 204 which allows 5% for Permanent Total Enclosures with negative air
- PAR 1469 requires 3% since it does not require negative air
- Adding provision that would allow 5% openings if the building meets EPA Method 204 which requires negative air and the building is vented to pollution controls

Total enclosures are required by SCAQMD Rules 1420.1, 1420.2, and 1430
Regulations

- Building Enclosures – both Tier I and Tier II Tanks
- Additional requirements:
- Facility must ensure that any building enclosure opening that is on opposite ends of the building enclosure where air movement can pass through are not simultaneously open
- Except during the passage of vehicles, equipment or people by closing or using one or more of the following methods:
  - Automated roll-up door;
  - Overlapping plastic strip curtain;
  - Vestibule;
  - Airlock system; or
  - Alternative methods approved by the Executive Officer
CRVI AIR EMISSIONS - SCAQMD

**Regulations**

- Building Enclosures – both Tier I and Tier II Tanks
- Additional requirements:
- Close all roof openings located within 30 feet above the edge of any Tier I or II Tank
- Except - openings that:
  - Allow access of equipment or parts; or
  - Provide intake air that does not impact air pollution control equipment
- Prohibit operation of devices in any roof opening that pulls air from the building enclosure to the outdoor air
- Monthly inspections of building enclosures for breaks, cracks, gaps, or other deterioration that could or results in fugitive dust
- Alternative compliance measures if facility cannot comply with PAR 1469 due to OSHA requirements for worker safety
Conditional Requirements for Permanent Total Enclosures (PTE)

Facility required to install a Permanent Total Enclosure (vented to add-on air pollution controls) for a Tier II Tank if:

- More than one incident of conducting a non-passing source test within a 48-month period; or
- More than one incident of failing to cease operation of an electroplating or anodizing line associated with a failed measurement of the collection system of an add-on air pollution control device, or
- A failed smoke test within a 48-month period

PAR 1469 includes provision for facility to provide evidence that the above conditions have not been met by providing:

- Incidences of non-compliance did not occur; and
- Resolved incidences of non-compliance in a timely manner; and
- Implemented specific measures to minimize hexavalent chromium emissions
Regulations

- Housekeeping Requirements – Facilities must:
  - Increase from weekly to daily cleaning of surfaces within the enclosed storage area, open floor area, walkways around Tier I and II Tanks, or any surface potentially contaminated with hexavalent chromium
  - Keep containers containing chromium-containing waste material closed except when being filled or emptied
  - Clean floors within 20 feet of a buffing, grinding, or polishing workstation and any entrance/exit point of a building enclosure within 1 hour of the end of the last operating shift for when buffing, grinding, or polishing was conducted
  - Eliminate flooring made of fabric (e.g., rugs, carpet) on walkways in the tank process area
Best Management Practices – Facilities must:

Dragout provisions modified to incorporate Tier I and Tier II Tanks (previously only applied to plating and anodizing tanks)

• Facilities with automated lines:
  • Install drip trays, or other containment methods, between Tier I and II Tanks such that liquid containing chromium does not fall through space between

• Facilities without automated lines:
  • Handle parts so that liquid containing chromium is not dripped outside of a Tier I or II Tank

Regulations

• Best Management Practices
Best Management Practices – Facilities must:

Spray rinsing of parts

- Operator shall not spray rinse parts or equipment that have chromium-containing liquid unless the parts or equipment are fully lowered inside a tank where all liquid is captured inside the tank.

- Operator can alternatively ensure that chromium-containing liquid is captured and returned to the tank when rinsing above a tank by:
  
  - Installing splash guards at the tank that is free of holes, tears, and gaps that is cleaned at least daily; or
  
  - For tanks located within a process line utilizing an overhead crane system restricting installation splash guards, use a low pressure spray nozzle such that water flows off of the part or equipment and into the tank.
Best Management Practices – Facilities must:

- Maintain clear labeling of each tank within the tank process area indicating:
  - Tank number or other identifier & SCAQMD permit number
  - Bath contents
  - Maximum hexavalent chromium concentration (ppm)
  - Operating temperature range; and
  - Agitation methods used
- Maintain visible indicator of freeboard height for applicable Tier I and II Tanks
- Conduct all buffing, grinding, and polishing within a building enclosure
- Prohibit compressed air cleaning or drying operations within 15 feet of all Tier I or II Tanks unless a barrier separates those areas from the compressed air cleaning or drying operation
Regulations

Source Testing

Other SCAQMD rules have periodic source testing requirements such as Rules 1420.1, Rule 1420.2, and Rule 1430.

Source Testing Requirements

- Periodic source testing – once at least every 36 months (previously only tested once)
- Source test protocol for initial source test to be submitted based on facility permitted annual ampere-hour limit
- Initial source test to be conducted no later than 120 days after approval of the initial source test protocol
- After initial source test, facility may conduct “emissions screening” test in lieu of full source test that:
  - Follows source test protocol previously approved by District; and
  - Consists of one run to evaluate capture and control; and
  - Is representative of operating conditions at the facility
- Failure of emissions screening test requires conducting full source test
CRVI AIR EMISSIONS - SCAQMD

Regulations

- Slot Velocity Measurements

Additional Requirements for Capture Efficiency of Control Equipment

- Measurement velocities of all collection slots and the pressure of the push air manifold, or at alternate locations based on the most recent District-approved source test
  - Conducted at least once every 180 days; in conjunction with existing smoke test requirement
  - Ensures continuous compliance with the capture efficiency of the add-on air pollution control device

- Repairable measurements specified by the rule requires operators to repair or replace, and re-measure within 3 calendar days

- Failing measurements specified by the rule requires immediate shutdown of tanks associated with control equipment
Chemical Fume Suppressants and Surface Tension Requirements

- For consistency with the federal NESHAP for Chromium Electroplating, PAR 1469 requires that:
  - PFOS-containing chemical fume suppressant cannot be added to any chromium electroplating or chromic acid anodizing bath
  - Required surface tension values decreased to 40 dynes/cm and 33 dynes/cm, for stalagmometer and tensiometer measurements, respectively
  - PAR 1469 modifies monitoring of bath surface tensions from weekly to once every third operating day

District is concerned that non-PFOS based fume suppressants degrade faster than those containing PFOS of tanks associated with control equipment
Parameter Monitoring

- Requirements for pressure drop ranges modified so that ranges are established during the permitting process
- Additional requirements for the monitoring device for pressure drops across HEPA filters
- New requirements for the installation and maintenance of mechanical gauges to measure and meet pressures and flows at:
  - Push manifold;
  - Collection manifold; and
  - Across each stage of the control device
- Ensure that any air velocity within 10 feet of a Tier II Tank vented to an add-on air pollution control device is less than one-tenth of the collection slot velocity as specified by the most recent successful source test
Recordkeeping and Reporting

- Additional recordkeeping and reporting requirements for newly added or modified proposed requirements

- **New Requirement for “Notification of Incidents”** that requires operator to notify the Executive Officer by calling 1-800-CUT-SMOG within one hour of:
  - Any failed smoke test or source test;
  - An exceedance of a permitted ampere-hour limit; or
  - A malfunction of a non-resettable ampere-hour meter

- Notification to be **followed up with a report** to the Executive Officer
Regulations

- **Socioeconomic Impact Assessment**

California Health & Safety Code (H&SC) Section 40440.8(a)

- **Law requires that a socioeconomic impact assessment** be prepared for any proposed rule or rule amendment that "will significantly affect air quality or emissions limitations."

- **Socioeconomic impacts are defined as:**
  - **Type** of affected industries
  - **Impact** on employment and the regional economy
  - **Range of probable costs**, including those to industry
  - **Availability and cost effectiveness** of alternatives to the rule
  - **Emission reduction potential**
  - **Necessity** of adopting, amending or repealing the rule in order to attain state and federal ambient air quality standards
Regulations

Socioeconomic Impact Assessment

California Health & Safety Code (H&SC) Section 40440.8(a)

- SCAQMD’s Governing Board to actively consider the socioeconomic impacts of regulations and make a good faith effort to minimize adverse socioeconomic impacts
- Socioeconomic analysis to include small business impacts
- Socioeconomic impact assessment is currently being prepared for PAR 1469
  - Based on the universe of ~120 potentially affected facilities identified
  - Vast majority of affected facilities classified under the industry of Electroplating, Plating, Polishing, Anodizing, and Coloring (NAICS 332813)
  - Evaluating potential cost impacts of proposed amendments
  - Identifying small businesses based on PAR 1469 facility survey, proprietary Dun and Bradstreet data, and potentially benchmarking to Census Bureau’s business data
  - Will be released for public review and comments no later than 30 days before the Public Hearing date
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Engagement

- Legal Efforts & Arguments

- Failure to Comply with Public Record Act Requests
- Unfair targeting of plating shops
- Arbitrary and capricious enforcement
- District incentive to levy fines to support its budget
- Collusion with other agencies in conducting inspections
- Requests for information not related to enforcement or rulemaking
- Pre-determined outcomes
- Regulatory requirements placing platers located in the district at a disadvantage to those located elsewhere
- Possible legal challenge to regulations once adopted
SCAQMD is Using 1975 Data

- Using data from 1975, SCAQMD is pursuing a hexavalent chromium (CrVI) level of 1.0 nanogram per cubic meter for the community near the plants.
- This doesn’t add up:
  - Occupational Safety and Health Administration (OSHA) has set a 5,000 nanograms (one-billionth of a gram) per cubic meter for workers in general industry, including metal finishing companies.
  - National Institute of Occupation Safety and Health has set a recommended exposure limit of 200 nanograms per cubic meter as a guideline (not a regulation) specifically for health protection.
  - Current European guideline set by the Scientific Committee on Occupational Exposure Limits (SCOEL) is 1,000 nanograms per cubic meter.
District’s Cancer Risk Methods Are Outdated

- ToxStrategies scientific review identified significant limitations of the SCAQMD risk assessment, casting doubt on the use of SCAQMD’s methods for quantifying cancer risk associated with Cr(VI) exposure.

- The model used to quantify dose of chemicals in the air used by SCAQMD assumes that chemicals in particles can be accidently consumed from dust particles settling out of air and becoming entrained in water, and ultimately into fruit and vegetables, which would subsequently be consumed by humans.

- However, for Cr(VI) these pathways do not contribute to a carcinogenic hazard because:
  - Cr(VI) is not stable and will be converted to the non-toxic trivalent form in produce, and
  - Cr(VI) is converted to non-toxic trivalent chromium in stomach fluid at relevant environmental exposure levels.
Model for Inhalation Cancer Risk Based on Outdated Data

- Model used by District for evaluating inhalation cancer risk uses factors developed by OEHHA to assess the potential relationship between exposure to Cr(VI) in air and increased risk of developing lung cancer.

- Scientific basis for these risk factors are weak at best

  - Also - they are based largely on long-outdated data, which have been supplanted by newer, more robust data from more recent studies.

  - It also favors conclusions of higher risk being associated with lower exposures than assessments developed by other regulatory entities—these other agencies used updated and improved data sets that did not figure in OEHHA’s work.
Engagement

- Science Before Regulation

**USEPA Potency Factor is 12 Times Lower**

- Federal Environmental Protection Agency (EPA) evaluated the same data and calculated a cancer potency factor for Cr(VI) that is 12-times lower than the OEHHA value.
  - This means that cancer risk estimates calculated by the OEHHA model are 12-times higher than that which would be calculated using the Federal EPA's model at the same airborne concentration.

- Much better worker cancer studies currently exist and have been used to quantify the potential cancer risk posed by inhalation of Cr(VI) in ambient air.

- Several regulatory agencies in the US and abroad have used these data to recommend improved cancer risk estimates.
Socioeconomic impact report must be prepared if SCAQMD proposes to adopt, amend, or repeal a rule that will significantly affect air quality or emissions reductions as per Health & Safety Code Section 40440.8(a).

To be considered:
- Type of industries affected
- Impact on employment and the economy of the Basin
- Range of probable costs, including costs to industry
- Availability and cost-effectiveness of alternatives
Engagement

• Economic Arguments

• **Direct Costs:**
  
  **Monitoring** - a quick on-ramp to a requirement that metal finishers place and use multiple air emission monitoring devices in their facilities once every three days.
  
  • Potential cost – hundreds of thousands of dollars per year for each facility.

  **Total Enclosures** - a quick on-ramp to a requirement that metal finishers totally enclose their buildings and draw air *into* the building.
  
  • Potential cost – millions of dollars per year for each facility.
**Engagement**

- **Economic Arguments**

- **Direct Costs:**
  - **Jobs** - metal finishing provides 10,000 jobs
  - Without metal finishing being available in Southern California, aerospace and related industries would eventually be forced to relocate
  - Using hexavalent chromium, metal finishers work with our customers to create some of California's most familiar, important and artistic products in the world - from airplane bodies, wings, and landing gear, medical devices, military equipment, electronic components, computers and laptops, smartphones, musical instruments, jewelry and guitars.
Engagement

- Political Arguments

- Inaccurate Background levels
  - District is using are neither accurate nor timely measurements of the situations at each facility

- Unfair Burden on Industry to Prove its Innocence
  - District is requiring facilities to prove the absence of another contributing source

- Pre-determined Outcomes
  - District ignores other operations but names metal finishing facilities and attributes emissions to them
Engagement

- Political Arguments

Other Sources Ignored
- District fails to identify and address unregulated and/or unidentified facilities that are contributing to monitored hexavalent chromium measurements

Premature District Action before State Develops a Plan
- District is moving forward while newly-enacted state law requires CARB to develop:
  - “A monitoring plan regarding the availability and effectiveness of TAC and criteria air pollutant advanced sensing monitoring technologies and existing community air monitoring systems, as well as the need for and benefits of establishing additional community air monitoring systems.”
Engagement
Legislative Day #2

- Tuesday, August 29
- Following up on May 9 Legislative Day

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ISSUE PAPER – SCAQMD RULE 1469
MAY 9, 2017

Air District Emission Rule Update – Concerns with Potential Provisions

The associations are urging the South Coast Air Quality Management District (SCAQMD) to ensure that, as it moves forward with revisions to its emissions rules that apply to hundreds of metal finishing businesses located within the district’s jurisdiction in Southern California, the provisions are reasonable and acknowledge the financial and operational impact on these businesses.

The district has initiated a workshop process that is expected to culminate in a decision prior to the end of 2017 to revise Rules 1467 and 1469. Once adopted by the SCAQMD, these requirements can be adopted by districts throughout the state.

Possible new regulatory provisions of concern to the associations include:

- Permanent total enclosures - for plating and anodizing operations with negative air pressure.
  - This would impose costs ranging from $2 to $6 million per facility, which would jeopardize the viability of many job-shop metal finishing businesses in the district.
  - This would contradict the requirements of CalOSHA that protect workers inside these facilities.

- Monitoring on the premises - using multiple monitors with immediate shutdown when levels reach threshold.
  - This would impose costs of $5,000 per monitor on each facility and the cost of continual expensive testing.
  - In addition, there is only one known laboratory capable of performing the analysis of the result. This single source situation could further drive up costs.
  - This would also have a tremendous, immediate financial impact on a plating facility in the event of an immediate cessation of operations.

- Lowered maximum levels of chrome – approaching the background levels for chrome.
  - These maximum levels are extremely low and approach naturally occurring background levels.
  - The emission reductions that could be realized are extremely small, especially in relation to the costs that would be imposed on the facilities.

It is important to acknowledge that existing local, state and federal air toxic regulations have already significantly reduced air toxics from the metal finishing industry. The industry has worked together with the district in the development of the original emissions rules, revisions to the rules, as well as in their implementation. We, as an industry, have implemented these rules, resulting in a 99% reduction in the emission of hexavalent chromium in the district from the operations of this industry.
Engagement

- Public Relations

Elevated levels of Chromium 6 found near Compton businesses, owners push back

AQMD finds elevated levels of Chromium 6 near metal finishing businesses

COMPTON, CA (FOX 11) - Elevated levels of the carcinogen known as Chromium 6 were found near several metal finishing businesses in Compton after a nearly two month investigation by air quality officials.

Chromium 6, also known as hexavalent chromium, is a known carcinogen to humans, and could cause certain types of cancers if exposed to it over a long period of time.

In June and July, South Coast Air Quality Management District representatives took readings from several...
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Engagement

• Public Relations
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Engagement

- Next Steps

- November 17
  - District Stationary Source Committee
- December 7
  - Second Public Workshop
- January 5
  - District Set Hearing
- February 2
  - District Public Hearing
THANK YOU

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