Coastline High Performance Coatings, Ltd.
AB 2588 Public Meeting

South Coast Air Quality Management District
August 4, 2022
Purpose of Meeting

- South Coast AQMD and AB 2588 “Hot Spots” Program
- Coastline High Performance Coatings, Ltd.
- Potential air toxics health risk from facility
- Steps taken to reduce the health risks
- Estimated health risks today
- Public input and comments
South Coast Air Quality Management District

- Multi-County Air Pollution Control Agency
- Governed by 13-member Board of local elected and appointed officials
- 16+ million people
- ~28,000 permitted sources
South Coast AQMD’s Air Toxics Program

- Over 25 rules to reduce toxic air contaminants
- Public meetings and complaint response (1-800-CUT-SMOG)
- Assesses new or modified equipment
- Toxics Rules
- Toxics Hot Spots Program
- Ambient Air Monitoring and AB 617
- Permitting
- Multiple Air Toxics Exposure Study
- Compliance
- Monitoring near facilities and in communities
- Ensures facilities are complying with South Coast AQMD rules
- Assesses all sources of toxic air contaminants in Air Basin
The Air Toxics “Hot Spots” Information & Assessment Act (AB 2588)

• State law enacted in 1987
• Public Right-to-Know Program
• Purpose
  • Collect emissions data with updates every 4 years
  • Identify facilities having localized impacts
  • **Evaluate potential health risks through Health Risk Assessments**
  • Notify residents of those potential health risks, if above South Coast AQMD notification thresholds
  • Reduce health risks below certain thresholds, if above South Coast AQMD risk reduction thresholds
• Rule 1402
  • Implements requirements of AB 2588
  • More stringent requirements for reducing health risk

AB 2588 HRA Includes:
• Air pollutants designated as toxic by the state
• All onsite emissions sources
• Does not include mobile sources (e.g., emissions from trucks) or off-site emissions
About Health Risk Assessments (HRA)

Estimates the chance that a person may experience a health effect from toxic air contaminant emissions

“Snapshot” based on toxic air contaminant emissions from one year of operation
Assumes 2019 emissions levels for 30 years

Snapshot can change if toxic air contaminant emissions change through time

Conservative assumptions people are outdoors 24 hours, 7 days a week in one location
HRA Process

Hazard Identification
Identifies health problems and potency of toxic air contaminants.

Dose-Response
Accounts for the increased chances of having health effects when pollutant levels are higher.

Exposure
Estimates the amount of time a person could be exposed to toxic air contaminants. Residential exposure is 30 years, and off-site worker exposure is 25 years.

Sensitivity
Accounts for children being more sensitive to the health effects of air toxics.

Potential Health Risk Estimate*

* Uses methodology established by the California Office of Environmental Health Hazard Assessment
3 Key Health Risk Elements of Rule 1402

Cancer Risk
- Estimates the increased probability for cancer
- Expressed in additional “chances in-one-million”

Cancer Burden
- Estimates the increase in the occurrence of cancer cases in a population subject to a cancer risk of 1 in a million or greater

Non-Cancer Risk
- Estimates non-cancer health effects
- Acute non-cancer effects are from short-term exposure
- Chronic non-cancer effects are from long-term exposure
- Expressed using a Hazard Index (HI)
Rule 1402 Health Risk Thresholds

Cancer Risk Thresholds
- **Significant Risk**: Cancer Risk ≥ 100 in one million
- **Risk Reduction**: Cancer Risk ≥ 25 in one million
- **Public Notification**: Cancer Risk ≥ 10 in one million

Cancer Burden Threshold
- **Risk Reduction**: Cancer Burden ≥ 0.5

Non-Cancer Risk Thresholds
- **Significant Risk**: Non-Cancer Hazard Index ≥ 5
- **Risk Reduction**: Non-Cancer Hazard Index ≥ 3
- **Public Notification**: Non-Cancer Hazard Index ≥ 1
Rule 1402 Risk Reduction Plans

Early Action Reduction Plan – Required if Risk > Significant Risk Level

• Measures that can be implemented immediately to reduce the facility-wide health risk below 100 in-one-million

Risk Reduction Plan – Required if Risk > Risk Reduction Threshold

• Permanent, verifiable and enforceable risk reduction measures
• Must be implemented within 2 years from the approval of plan or sooner
• Must reduce the facility-wide health risk below 25 in-one-million for cancer risk and a Hazard Index of 3 for non-cancer health effects
Coastline High Performance Coatings, Ltd. (Coastline)
Coastline

- Located at 7181 Orangewood Avenue in Garden Grove, CA
- Specializes in application of thermal control coatings, adhesive bonding primers and solid film lubricants for aerospace and related industries
Chromate Spray Operations at Coastline

- HRA required based on 2019 emissions
- Designated as a Potentially High Risk Level facility
- Primary source of risk is from hexavalent chromium contained in coatings used in three paint spray booths
- Main cause of risk was non-compliant use of chromate coating operations in two of the three paint spray booths

**Above picture is for illustration purposes only and is not an actual photo of processes at Coastline High Performance Coatings Ltd.**
Health Effects of Key Toxic Air Pollutant At Coastline

<table>
<thead>
<tr>
<th>Toxic Air Pollutant</th>
<th>Health Effect</th>
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<tbody>
<tr>
<td>Hexavalent Chromium</td>
<td>Long-term inhalation (years to decades) can increase the chance or probability of developing cancer (e.g., lung cancer)</td>
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Potentially High Risk Level Facilities

What is a Potentially High Risk Level Facility

- Facilities that are expected to or have exceeded the Significant Risk Level (Cancer Risk ≥ 100 in-one-million)
- Determination based on emissions data, source test, or ambient monitoring data

Addresses High Health Risks Early

- Submittal and implementation of Early Action Reduction Plan

Expedited Implementation

- Submittal of: Air Toxics Inventory Report (ATIR), HRA, Risk Reduction Plan

Better Overall Public Health Sooner

- Completes overall Risk Reduction sooner than traditional AB 2588 Program
Timeline of Key Events

2020
• Coastline notified to prepare and submit ATIR
• Notice of Violation issued to Coastline for non-compliant hexavalent chromium spraying operations, failure to obtain permits, and failure to submit ATIR

2021
• Coastline back in compliance with rules and permit conditions (January)
• Designated as a Potentially High Risk Level facility
• Coastline submitted the Early Action Reduction Plan, HRA, and Risk Reduction Plan (RRP) per Rule 1402

2022
• HRA and RRP approved; full implementation of RRP by 2024
Implementation of Key Risk Reduction Measures

• Discontinued chromate paint spray operations in two paint spray booths equipped with non-compliant filters (completed 2020)
• Limit use of chromium-containing coatings only in the existing paint spray booth equipped with HEPA filters capturing 99.97% of chromium emissions (completed 2020)
• Replace ducting for the air pollution controls on the two paint spray booths without HEPA filters (pending)
• Complete installation of HEPA filter system on the two paint spray booths prior to conducting chromate spraying operations (pending)
  • Hexavalent chromium emissions significantly reduced
Estimated Cancer Risk (2019 and now)

• 2019 estimated cancer risk is above Significant and Risk Reduction Levels
  • 2019 hexavalent chromium emissions from spray booths is 99% of the cancer risk
• Implementation of Early Action Reduction Plan in 2020 significantly reduced emissions and cancer risk below both Action Risk Level and Notification Risk Level
Rule 1402 Public Notification

- Requirements when an approved HRA shows risk beyond the Public Notification Level:
  - Approved HRA is made available on website;
  - Distribute the Public Notification Materials; and
  - Participate in a Public Meeting approved by South Coast AQMD (today)

- Coastline sent public notification to ~ 1,000 addresses
Residential Cancer Risk (2019 Emissions)

Residential Notification Area
Cancer risk ≥ 10 in-a-million chances

Facility Boundary
Worker Cancer Risk (2019 Emissions)

Worker Notification Area
Cancer risk ≥ 10 in-a-million chances

Facility Boundary
Next Steps

- Conduct facility inspections to verify continued compliance with all applicable rules and requirements
- Monitor progress of Risk Reduction Plan
- Finalize implementation of Risk Reduction Plan
More Information on the AB 2588 Program

- South Coast AQMD AB 2588 Website

- Link to the 2019 Conditionally Approved HRA

- Link to the 2019 Conditionally Approved RRP

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