Working Group Meeting #2

May 27, 2026, 2:00 PM

PROPOSED AMENDED RULE 1460 – CONTROL OF PARTICULATE EMISSIONS FROM METAL RECYCLING AND SHREDDING OPERATIONS

Join Zoom Meeting

https://aqmd.zoomgov.com/j/1615498699

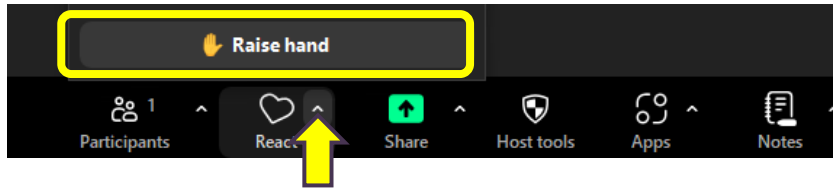
Zoom Webinar ID: 161 549 8699

Teleconference Dial-In: +1 669 254 5252

If the Zoom link does not work, please cut and paste it into your browser

Meeting Information

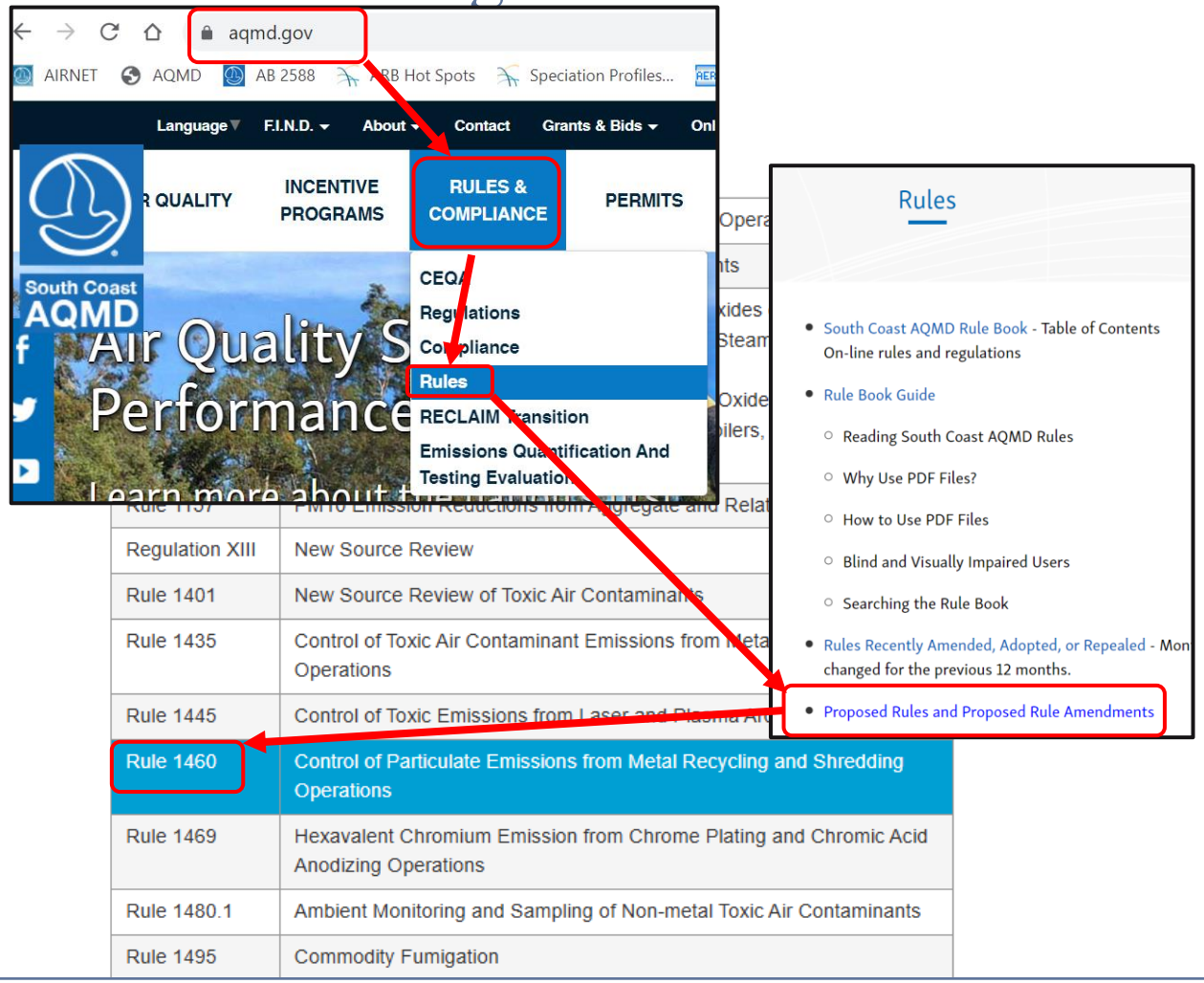
- To speak in today's meeting:



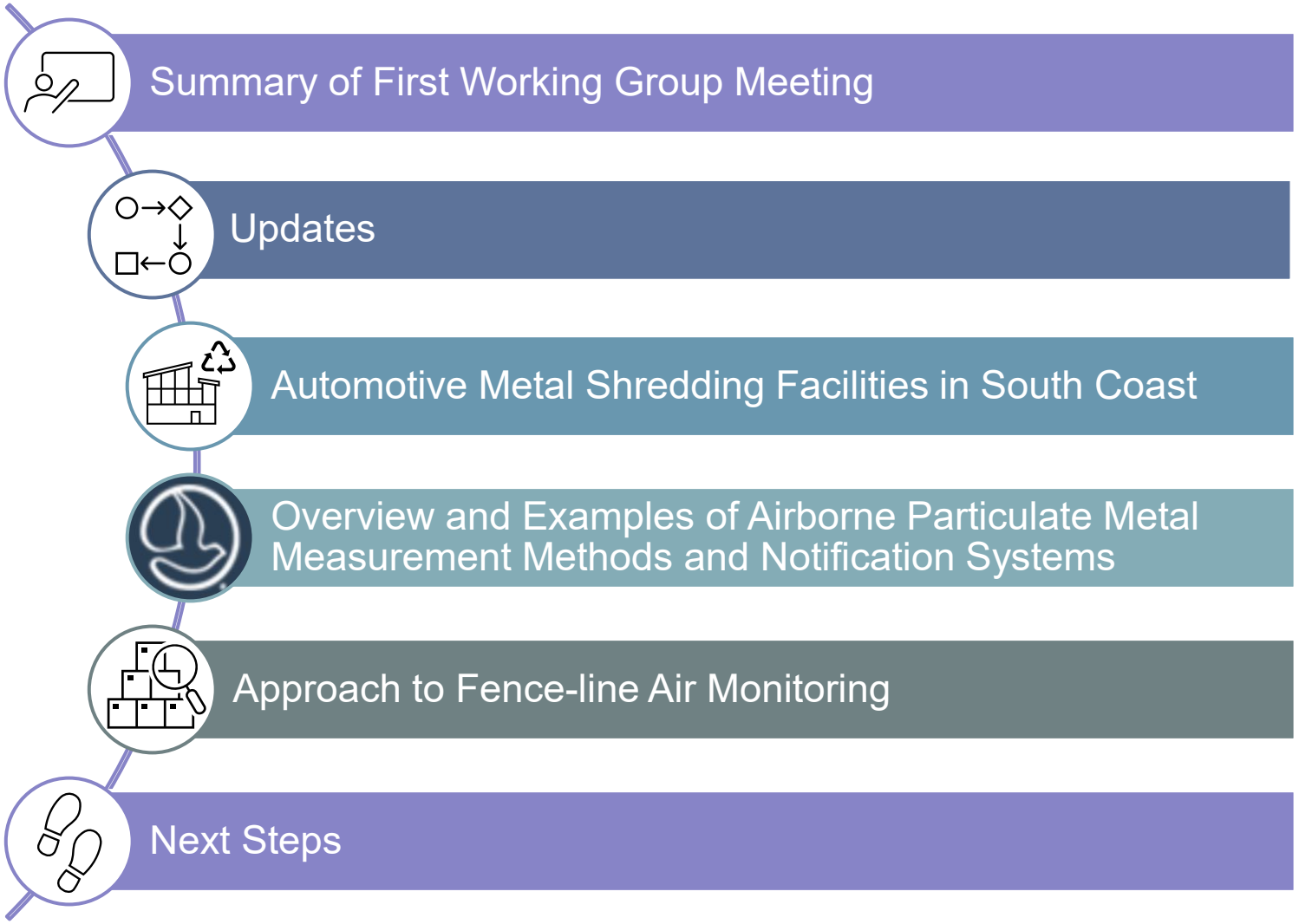
OR

Dial *9 to raise hand
Then dial *6 to unmute

- For meeting materials:



Agenda


Summary of First Working Group Meeting
Updates
Automotive Metal Shredding Facilities in South Coast
Overview and Examples of Airborne Particulate Metal Measurement Methods and Notification Systems
Approach to Fence-line Air Monitoring
Next Steps

SUMMARY OF FIRST WORKING GROUP

Previous Working Group Meeting

- Overview of the rule development process
- Background on Metal Recycling Operations and Rule 1460
- Background on 2024 Assembly Bill 2851 (AB 2851)
  - Mandates air districts to implement fence-line metal monitoring requirements
  - Air districts to collaborate with Office of Environmental Health Hazard Assessment (OEHHA) and Department of Toxic Substances Control (DTSC)
  - Only applies to automotive and appliance metal shredding facilities
  - Three facilities identified in South Coast based on AB 2851 definition
- Stakeholder comments and questions
  - Questions on OEHHA development and timeline of threshold values for air districts
  - Potential metal monitoring technologies used
  - South Coast AQMD collaborations with other regulatory agencies

UPDATES

Meetings with Other Agencies

Ongoing interagency meetings to discuss AB 2851 to clarify mandates for agencies

- Which facilities would be subject to fence-line monitoring?
- What are the deadlines?
- Key requirements
  - Metals to monitor
  - Notification
  - Enforceable actions
- OEHHA will develop threshold values that would be basis for
  - Notification to public
  - Trigger for enforceable actions

South Coast Air Quality Management District

Bay Area Air Quality Management District

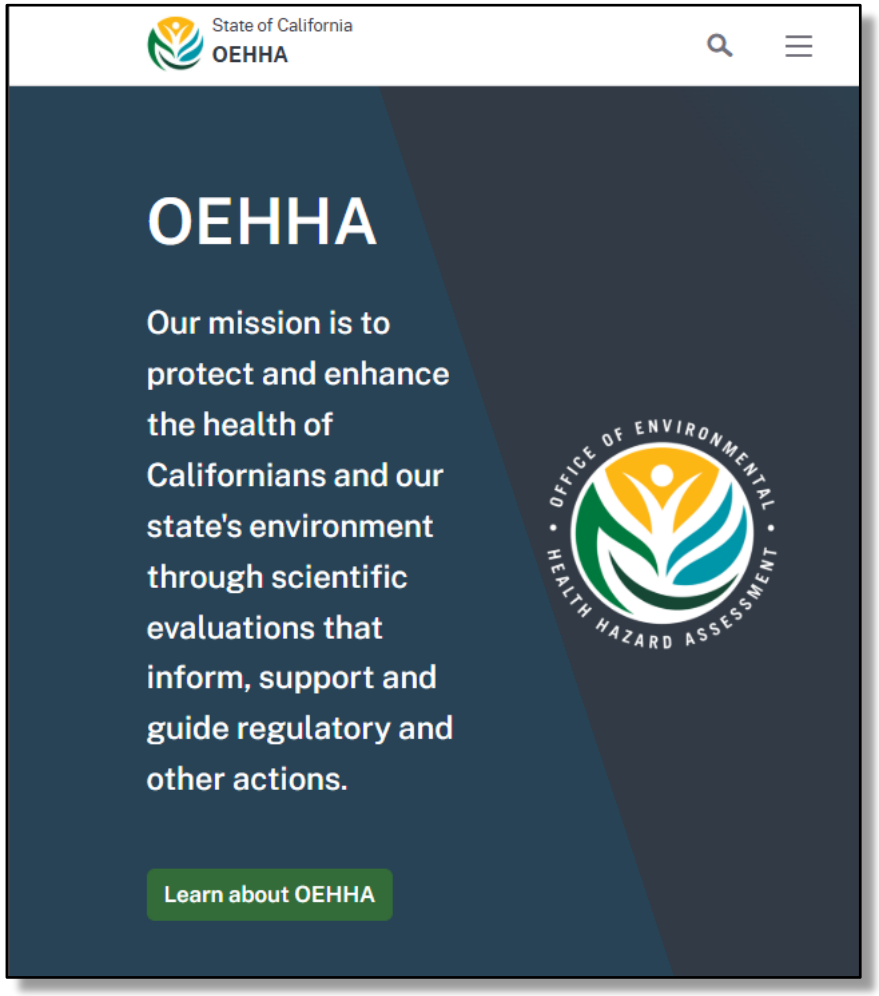
San Joaquin Valley Air Pollution Control District

Department of Toxic Substances Control

Office of Environmental Health Hazard Assessment

Threshold – Development by OEHHA

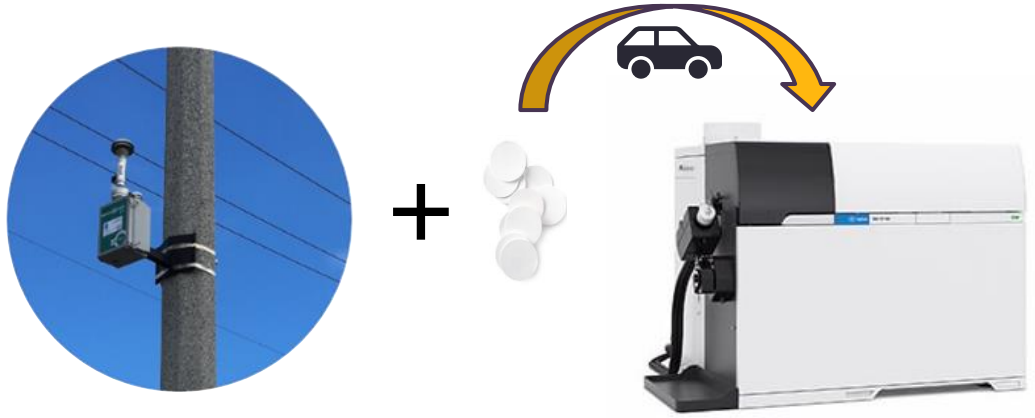
- South Coast AQMD provided list of four metals (lead, zinc, cadmium, and nickel) specified in AB 2851 for OEHHA to develop threshold values
- OEHHA will develop provisional health guidance values for air districts specifically for use as thresholds for AB 2851
  - Expedited process largely based on Study of Neighborhood Air near Petroleum Sources (SNAPS)*
  - Thresholds expected before end of year



* https://ww2.arb.ca.gov/resources/documents/snaps-overview-videos

Thresholds and Monitoring Requirements

- PAR 1460 would require use of monitoring technology capable of quantifying concentrations below thresholds provided by OEHHA
- Evaluation of appropriate monitoring technologies ongoing
  - Capabilities (e.g., pollutants, time resolution, etc.)
  - Limitations (e.g., siting, operation, detection limit, etc.)
  - Costs (initial capital and recurring)



AUTOMOTIVE METAL SHREDDING FACILITIES IN SOUTH COAST

SA RECYCLING - ANAHEIM

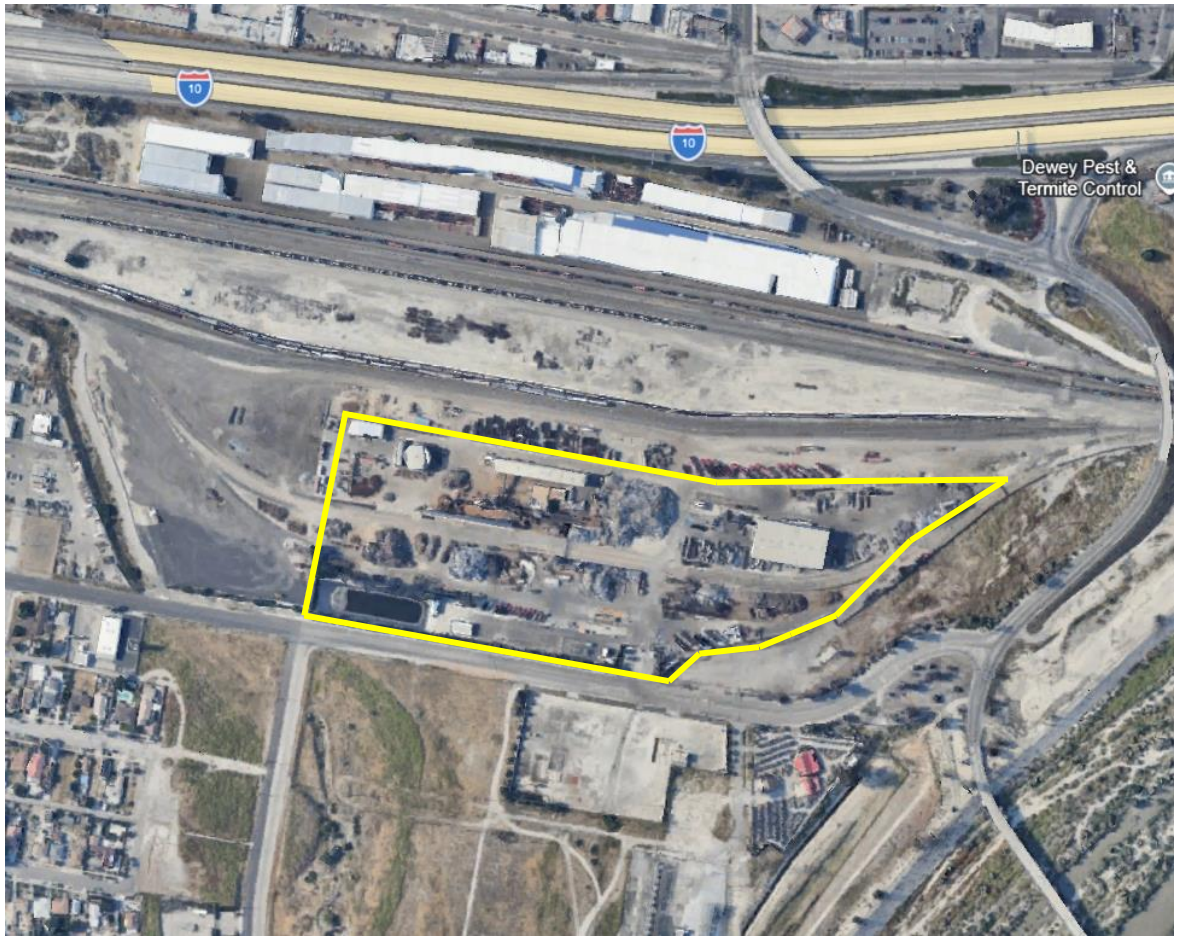
- **Location:** 3200 E Frontera St, Anaheim
- **Shreds:** Automobiles and appliances
  - Permitted up to 56,160 tons per month
  - 7,000 hp metal shredder
- **Size:** ~20 acres
- **Nearest sensitive receptor:** Hospital ~200ft northeast of the facility property line

SA RECYCLING – TERMINAL ISLAND

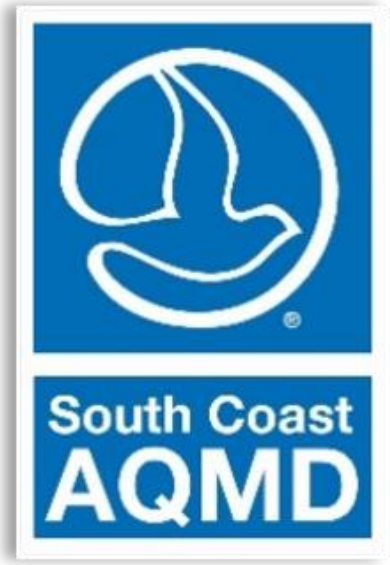
- **Location:** 901 New Dock St, San Pedro
- **Shreds:** Automobiles and appliances
  - Permitted up to 108,333 tons per month
  - 9,000 hp metal shredder
- **Size:** ~27 acres
- **Nearest sensitive receptor:** Residential ~1 mile northwest of the facility property line

ECOLOGY / AMERICAN IRON & METAL

- **Location:** 785 E M St, Colton
- **Shreds:** Automobiles and appliances
  - Permitted up to 40,000 tons per month
  - 6,000 hp metal shredder
- **Size:** ~22 acres
- **Nearest sensitive receptor:** Residential ~210ft southwest of the facility property line



OVERVIEW AND EXAMPLES OF AIRBORNE PARTICULATE METAL MEASUREMENT METHODS AND NOTIFICATION SYSTEMS



Main Approaches

Time-Integrated Sampling

Pros

- Relatively lower capital cost
- Lower detection limits compared to continuous methods
- Highly defendable data for potential compliance purposes or health impact assessments

Cons

- Typically collected over 24-hr period
- Labor intensive
- Significantly higher operation costs
- Turnaround time from days to weeks

Continuous Measurements

Pros

- High time-resolution measurements (for example can provide hourly data)
- Ability to detect short-term spikes
- Data can be used for near-real time notification
- Preliminary data can stream in real-time on dashboards

Cons

- Higher detection limits compared to time-integrated sampling method
- Higher capital cost
- Typically, not as accurate as time-integrated measurements
- Data gaps due to instrument down time

Time-Integrated Sampling

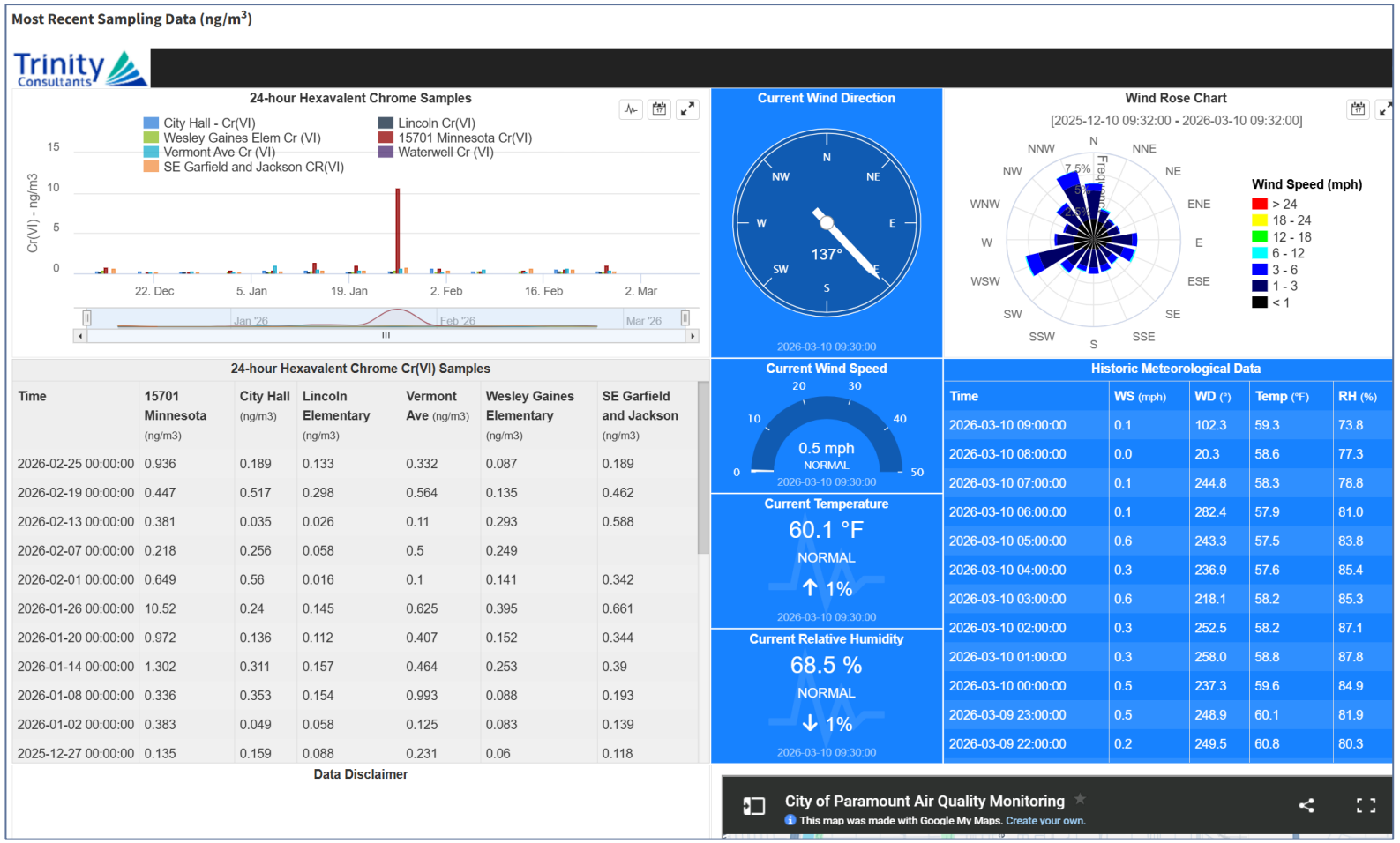
- **Method:** Sample collection → Sample pretreatment →Metal detection by chemical analysis in the laboratory
- **Sampling and analysis:** Samples are usually collected for 24 hours followed by lab analysis
- **Sampling frequency:** Typically, 1-in-3 or 1-in-6 days
- **Possible sample size:** PM2.5, PM10, TSP
- **Detection limits:** Can detect metals at lower concentrations
- **Siting:** More flexible siting requirements

Example of Time-Integrated Metals Monitoring Network

Paramount Cr VI Monitoring Network

https://paramountenvironment.org/air/

- Facility and community air monitoring
- Time-integrated sample collection and chemical analysis used to detect hexavalent chromium
- Data access and visualizations
- Subscription based notification system



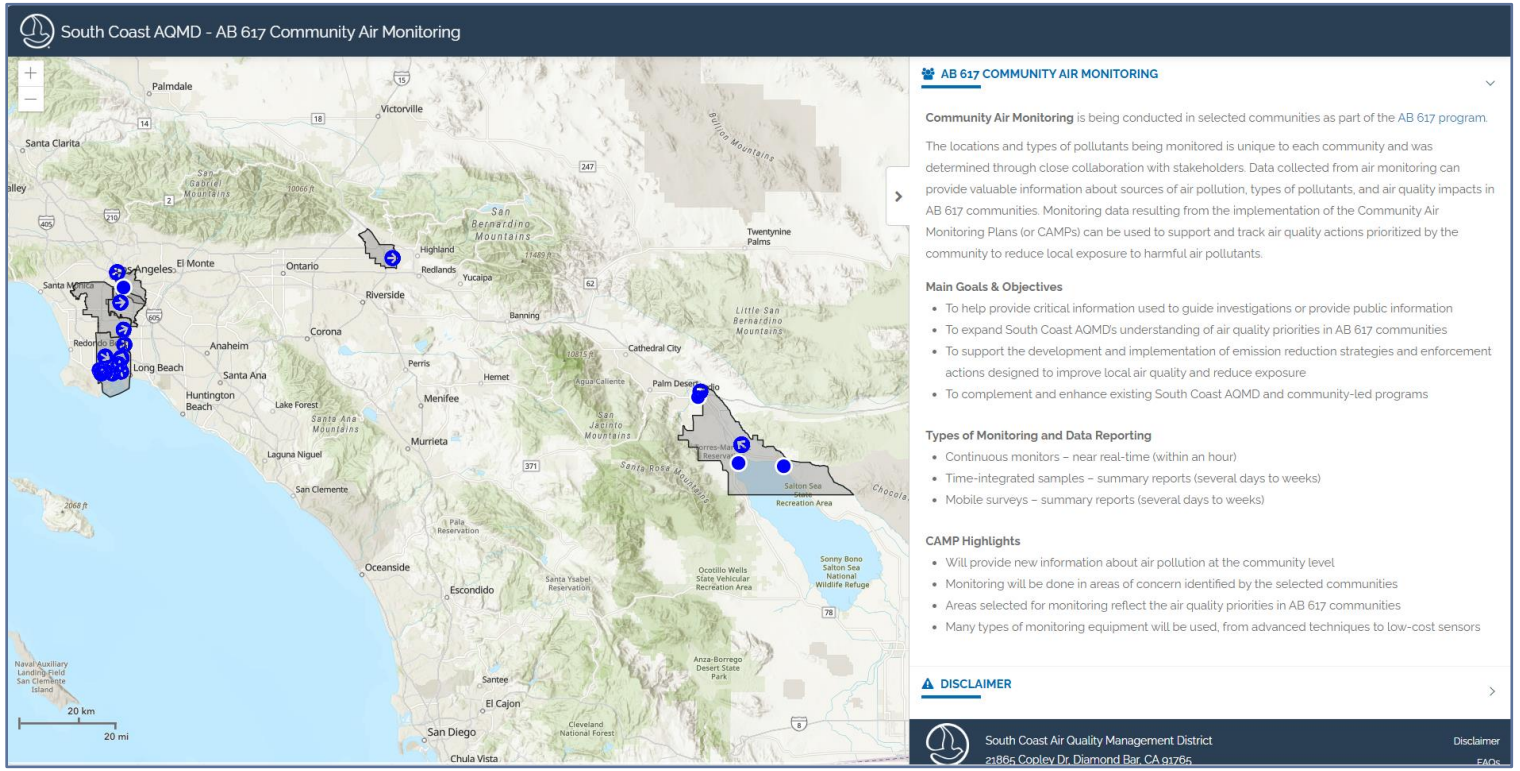
Continuous Metal Monitors

- **Method:** Sample collection → Metal detection in real-time with the instrument
- **Sampling and analysis:** Sample is typically collected for 1 hour continuously followed by chemical analysis by the instrument in near real time
- **Possible sample size:** PM2.5, PM10, TSP
- **Detection limits:** Detection limits are typically higher than laboratory-based methods
- **Siting:** Requires air-conditioned monitoring sheds/housing

Example of Continuous Metals Monitoring Network

https://xappprod.aqmd.gov/AB617CommunityAirMonitoring/Home/Index

- Continuous monitoring
  - PM, metals, black carbon, particle number, NOx
- Real-time data access and visualizations
- Continuous metals measurements at:
  - Saul Martinez (Coachella Valley)
  - Huntington Park
  - Compton
  - Wilmington
  - Resurrection Church (Los Angeles) - *concluded in December 2023*

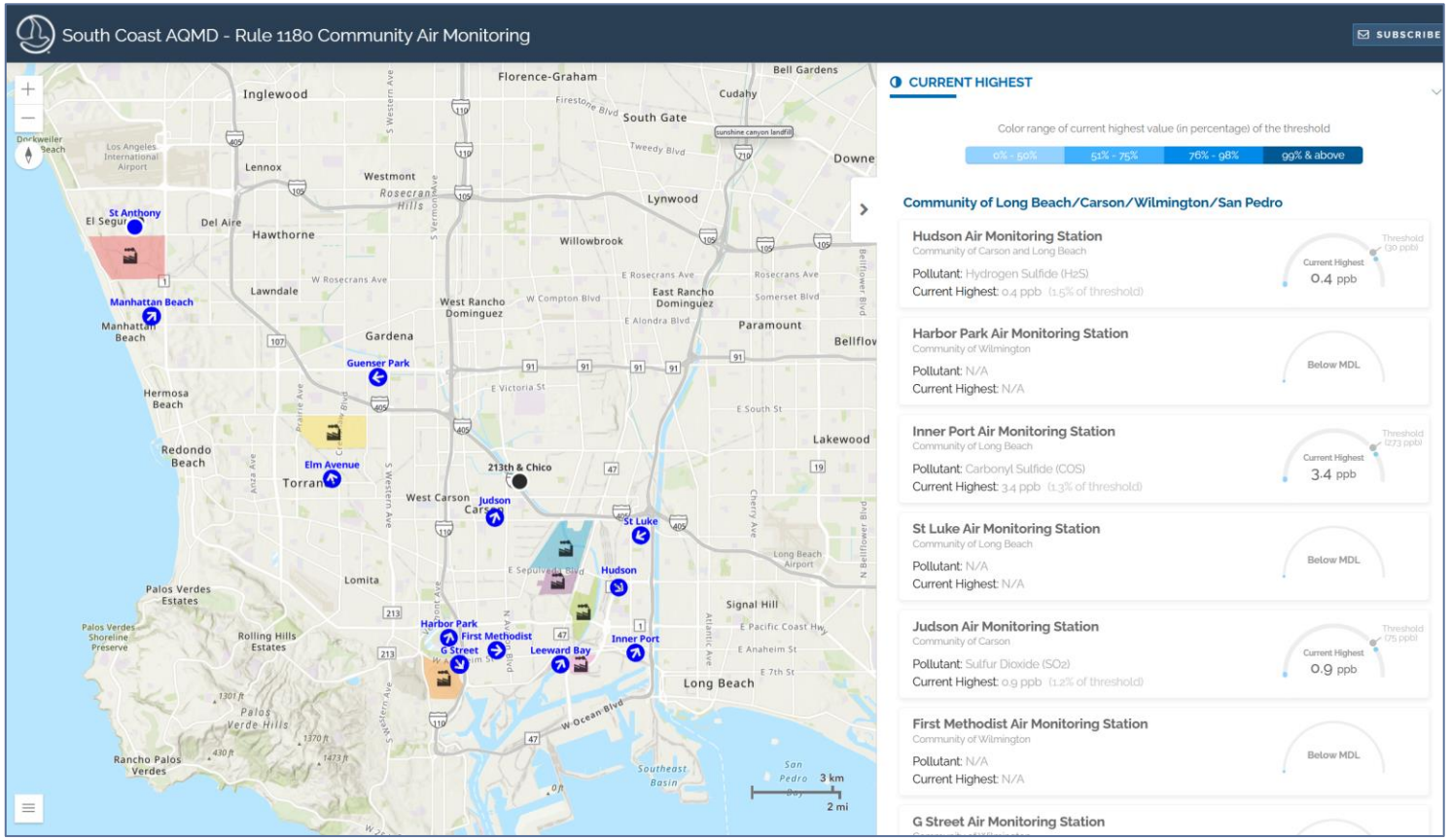


Example of Continuous Metals Monitoring Network

Rule 1180 – refinery fenceline and community air monitoring

https://xappprod.aqmd.gov/Rule1180CommunityAirMonitoring/

- Fenceline monitoring (by the refineries) and community air monitoring (by the South Coast AQMD)
- Continuous monitoring
  - VOCs, PM, metals, black carbon, H2S, HF (at select stations)
- Real-time data access and visualizations
- Automated and subscription based alert systems
- Root cause assessment when thresholds exceeded



Cost Comparison

	Capital Outlay	Siting Needs	Labor (Sample Retrieval and Lab Analysis)	Consumables and Services	Data QA/QC and Analysis	Development and Maintenance of Data Dashboard and Notification System
Time-integrated	High	Low	Very high	Moderate	Moderate	High
Continuous	Very high	High	Moderate	Moderate	High	High

Summary & Concluding Remarks

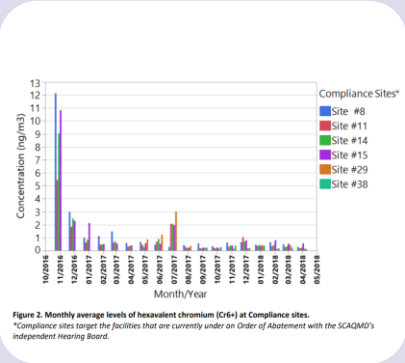
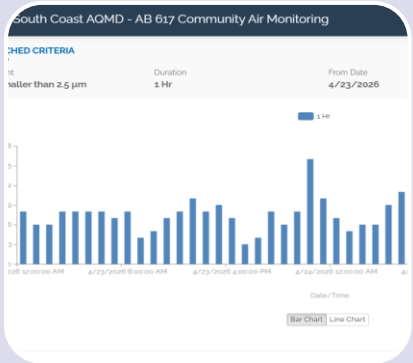


Figure 2. Monthly average levels of hexavalent chromium (Cr6+) at Compliance sites.
*Compliance sites target the facilities that are currently under an Order of Abatement with the SCAQMD's independent Hearing Board.



Time-integrated sampling approach has higher data quality, but significantly more costly over longer time periods

Time-integrated approach is EPA approved method and better suited for health impact assessments

Continuous methods have higher capital costs, but significantly lower operation costs for long term measurements

Although both technologies could be used for notification, continuous methods provide more timely notifications

The thresholds set by OEHHA for the target metals might impact the selected technology

APPROACH TO FENCE-LINE AIR MONITORING

Identifying Various Elements Needed for Fence-line Monitoring Implementation

Identify specified elements in AB 2581 required for fence-line monitoring

- AB 2851 only specified certain elements needed to implement fence-line air monitoring
  - ☑ Applicability (i.e., facilities)
  - ☑ Metals to be monitored
  - ☑ Thresholds to be developed (underway by OEHHA)
  - ❑ Public notification, *but not how to implement it*
  - ❑ Enforceable actions, *but no specific actions*

Non-specified elements will be determined by South Coast AQMD

- Identify and assess: Regulations with fence-line monitoring
- Review requirements for potential use in PAR 1460
  - ❖ South Coast has rules with fence-line monitoring
  - ❖ Non-specified elements for PAR 1460 will be developed after evaluation of South Coast rules

Collect data from South Coast rules for use in PAR 1460, that include:

- ❑ Monitoring technologies to conduct fence-line monitoring
- ❑ Process required of facilities to implement fence-line monitoring
- ❑ Public notification
- ❑ Enforceable actions tied to monitoring results
- ❑ Duration of fence-line monitoring for intended purpose

Key South Coast AQMD Monitoring Rules Currently Being Evaluated

Staff evaluating rules with monitoring requirements for potential use in PAR 1460

- **Rule 1180** – Fenceline and Community Air Monitoring for Petroleum Refineries and Related Facilities
- **Rule 1180.1** – Fenceline and Community Air Monitoring for Other Refineries
- **Rule 1405** – Control of Ethylene Oxide Emissions from Sterilization and Related Operations
- **Rule 1420.1** – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities
- **Rule 1420.2** – Emission Standards for Lead from Metal Melting Facilities
- **Rule 1480** – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

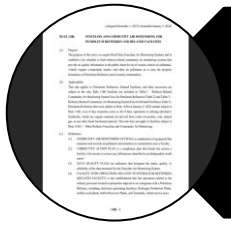
Results to be presented at future working group meeting

- Overview of regulatory framework for fence-line monitoring requirements
- Initial rule concepts for fence-line monitoring in PAR 1460

NEXT STEPS

Next Steps

Continue collaboration with Air Districts, DTSC, and OEHHA



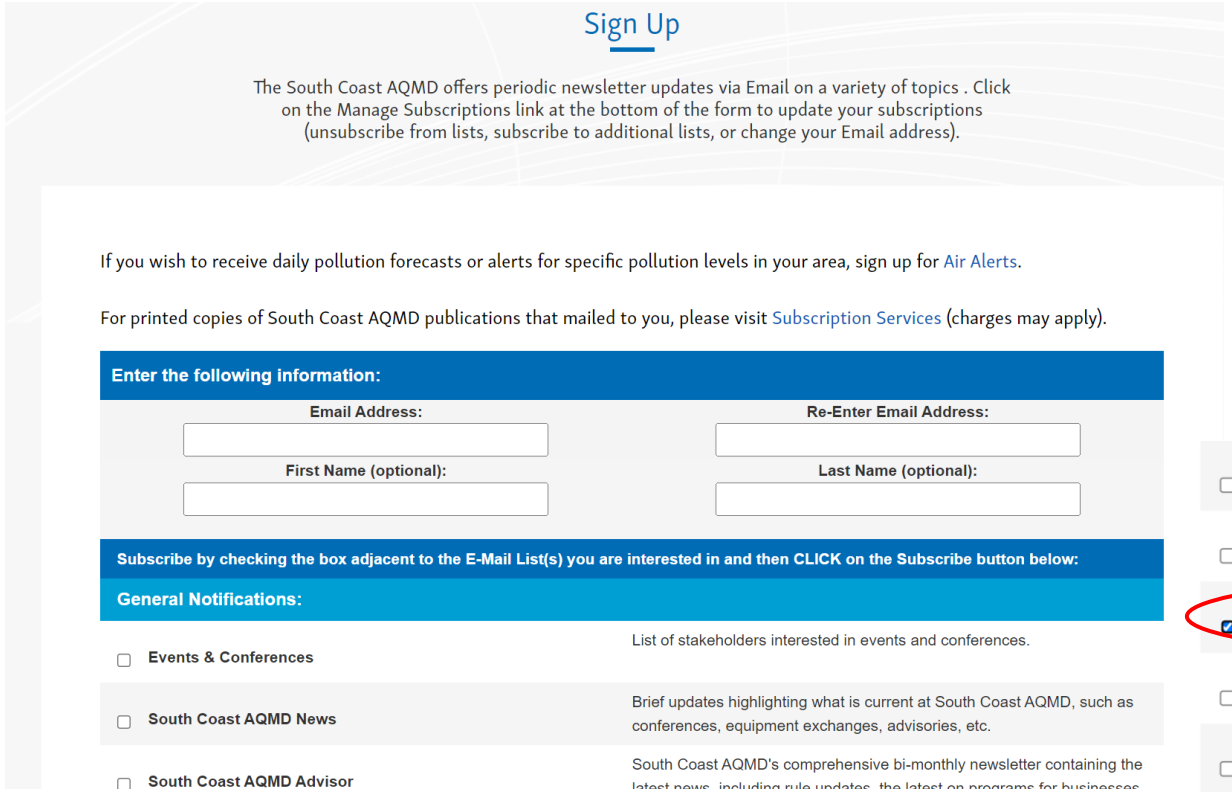
Finalize assessment of South Coast monitoring rules

Present updates during Working Group #3

Estimated Public Hearing –
First Quarter of 2027

Staying Updated

- Sign up to receive e-mail updates via http://www.aqmd.gov/sign-up



Sign Up

The South Coast AQMD offers periodic newsletter updates via Email on a variety of topics . Click on the Manage Subscriptions link at the bottom of the form to update your subscriptions (unsubscribe from lists, subscribe to additional lists, or change your Email address).

If you wish to receive daily pollution forecasts or alerts for specific pollution levels in your area, sign up for Air Alerts.

For printed copies of South Coast AQMD publications that mailed to you, please visit Subscription Services (charges may apply).

Enter the following information:

Email Address: | Re-Enter Email Address:

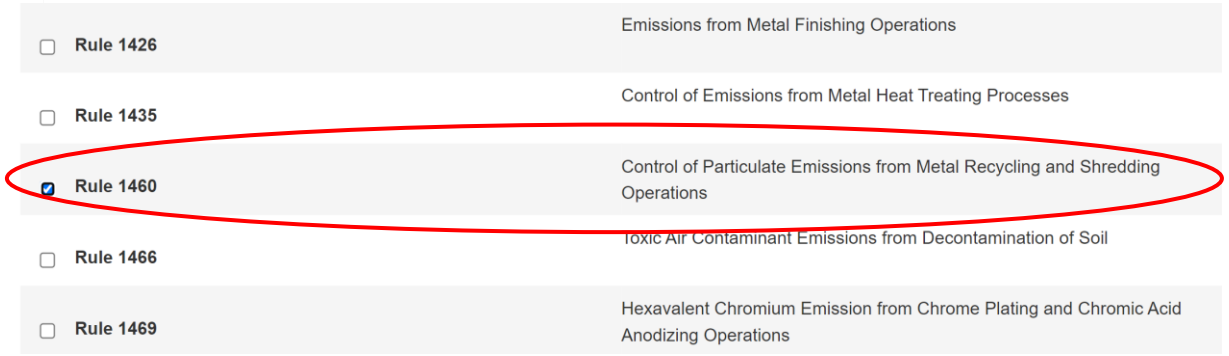
First Name (optional): | Last Name (optional):

Subscribe by checking the box adjacent to the E-Mail List(s) you are interested in and then CLICK on the Subscribe button below:

General Notifications:

☐ Events & Conferences	List of stakeholders interested in events and conferences.
☐ South Coast AQMD News	Brief updates highlighting what is current at South Coast AQMD, such as conferences, equipment exchanges, advisories, etc.
☐ South Coast AQMD Advisor	South Coast AQMD's comprehensive bi-monthly newsletter containing the latest news, including rule updates, the latest on programs for businesses

Subscribe by scrolling down the page and checking off the box for **Rule 1460** to receive future meeting notices and links to documents



☐ Rule 1426	Emissions from Metal Finishing Operations
☐ Rule 1435	Control of Emissions from Metal Heat Treating Processes
☑ Rule 1460	Control of Particulate Emissions from Metal Recycling and Shredding Operations
☐ Rule 1466	Toxic Air Contaminant Emissions from Decontamination of Soil
☐ Rule 1469	Hexavalent Chromium Emission from Chrome Plating and Chromic Acid Anodizing Operations

Staff Contacts

Min Sue
Air Quality Specialist
☎ (909) 396-3241
msue@aqmd.gov

Tiffani To
Air Quality Specialist
☎ (909) 396-2738
tto@aqmd.gov

Shawn Wang
Program Supervisor
☎ (909) 396-3319
swang@aqmd.gov

Neil Fujiwara
Program Supervisor
☎ (909) 396-3512
nfujiwara@aqmd.gov

Michael Krause
Assistant Deputy Executive Director
☎ (909) 396-2706
mkrause@aqmd.gov