

AGENDA NO. 26



# INCIDENT RESPONSE OVERVIEW AND EFFORTS RELATED TO 2025 LOS ANGELES WILDFIRES

Governing Board Meeting, April 4, 2025

TERRENCE  
MANN

DEO, Compliance &  
Enforcement

NAHAL  
MOGHARABI

ADEO, Communications

SARAH  
REES, Ph.D

DEO, Planning, Rule  
Development, &  
Implementation

JASON  
LOW, Ph.D

DEO, Monitoring &  
Analysis Division



TUSTIN HANGER FIRE





## SOUTH COAST AQMD INCIDENT RESPONSE

- Robust agency-wide approach
- On standby, ready to deploy
- Air quality incident and/or agency request for assistance
- “Secondary Responders”
- Resource intensive - After hours and weekends
- In addition to regular responsibilities





Los Angeles Times

A fire burning deep inside an L.A. County landfill is raising new alarms over toxic air



Chiquita Canyon Landfill

## Common Response Activities:

- Respond to public complaints
- Air measurements and laboratory testing of airborne contaminants
- Meteorological analysis and modeling
- Develop communication and outreach strategies

## Protect the Public!

# PHASES OF INCIDENT RESPONSE



## ASSESSMENT

- Air Quality Incident
- Executive Briefings
- Response/Safety Evaluation
- EO approval



## DEPLOYMENT

- Inspectors Go On-Scene
- Interface/Integrate with Command Structure
- Offer Agency Support



## MONITORING

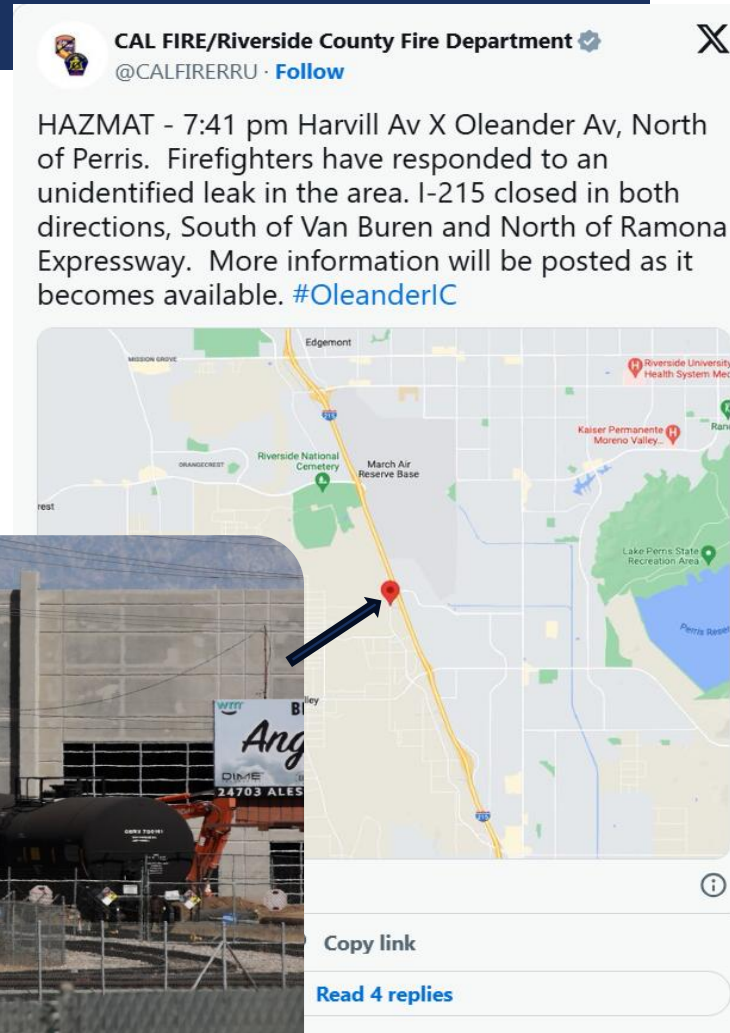
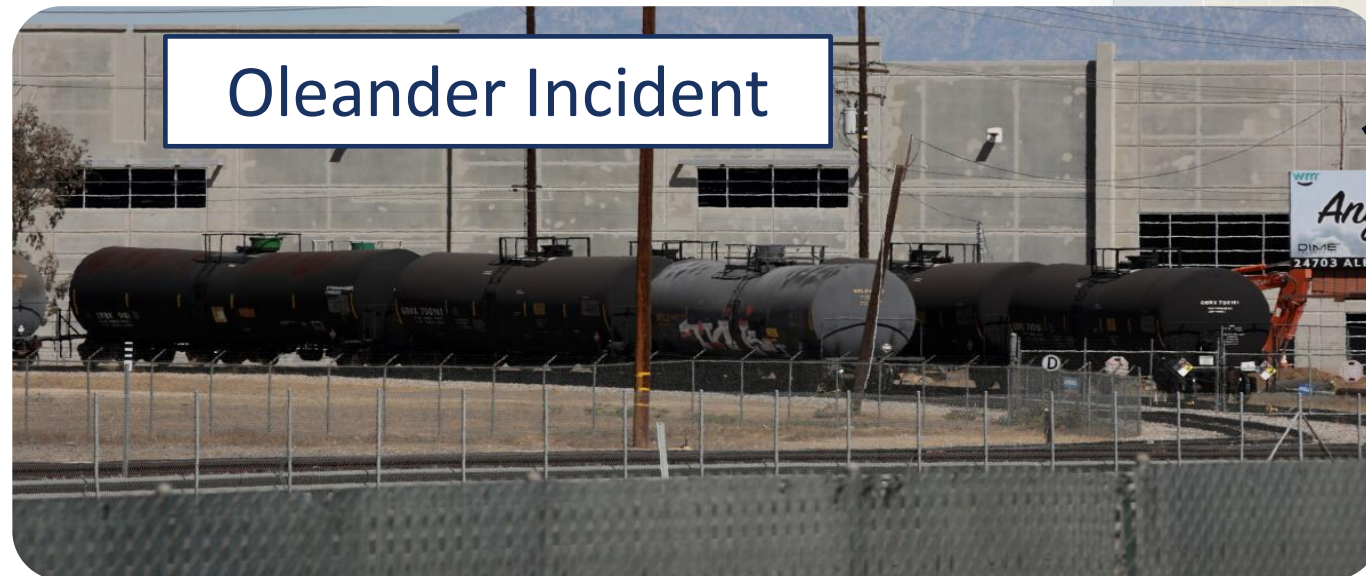
- Deploy Equipment
- Review Data in Context
- Potential Health Impacts
- Reevaluate Deployment

← COMMUNICATIONS →

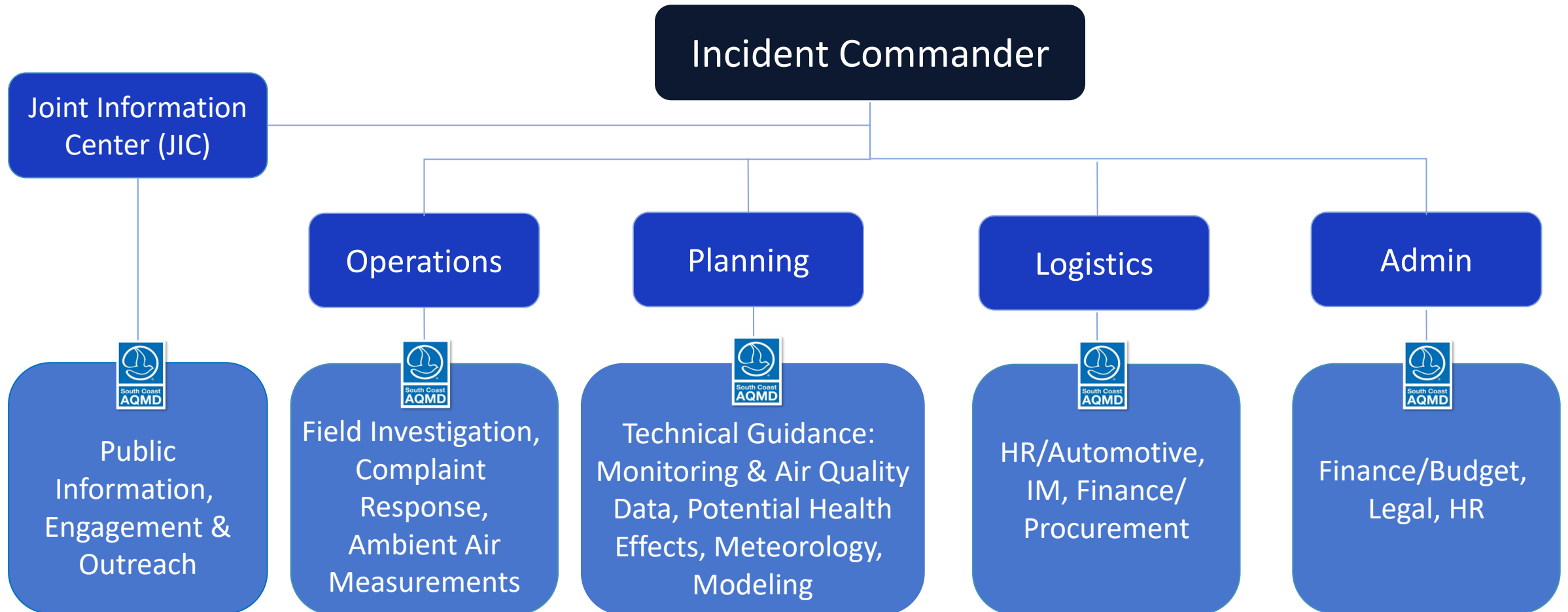
# THE INCIDENT COMMAND SYSTEM (ICS)

An **Incident Command (IC)** or **Unified Command (UC)** is a standardized emergency management framework that enables a coordinated response to an incident through the integration of personnel, equipment, procedures, facilities, and communications.

Common Acronyms:  
ER, IMT, JIC, PIO, SO,  
PHAU, OSC, CP/ICP



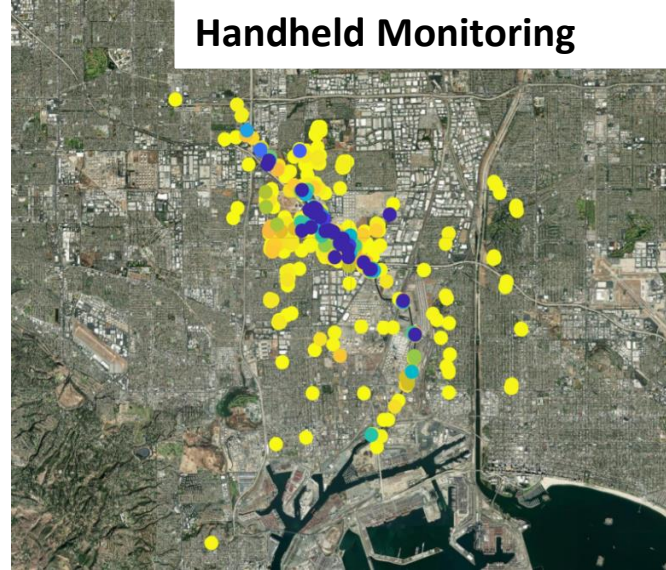
# THE INCIDENT COMMAND SYSTEM (Cont.)



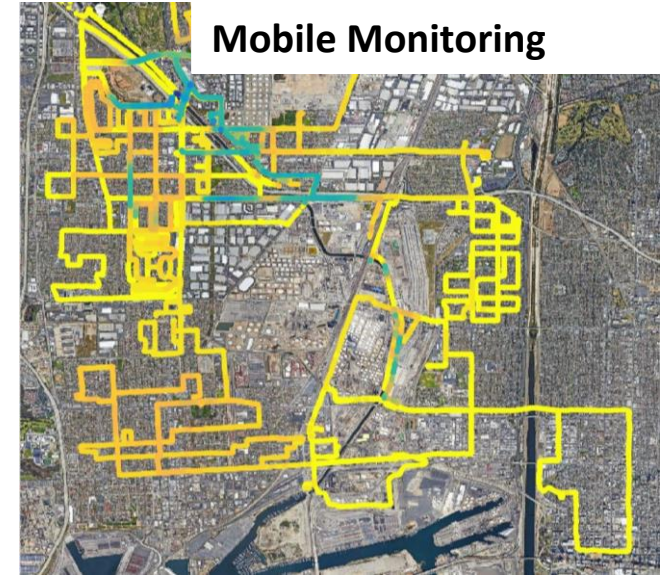




**H2S Odors**



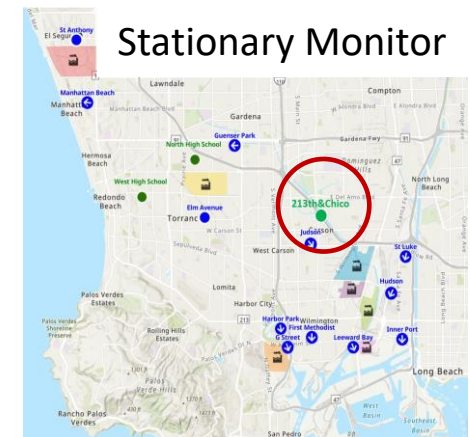
**Handheld Monitoring**



**Mobile Monitoring**

# INTERAGENCY COLLABORATION

## DOMINGUEZ CHANNEL ODOR EVENT



**Stationary Monitor**



# INTERAGENCY COLLABORATION (Cont.)

## Federal



**US Army Corps  
of Engineers.**



**FEMA**



## State



**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



**CalEPA**  
California Environmental  
Protection Agency



Department of Toxic  
Substances Control



California  
Department of Conservation  
Geologic Energy Management



Los Angeles - R4

## Local



# COMMUNICATIONS

## IMPORTANCE OF THE PUBLIC INFORMATION OFFICER:

Trained Staff

Integrate with Joint  
Information Center

Accurate & Timely  
Information

Communications Plan & Key  
Messages



Get the RIGHT information to the RIGHT people at the RIGHT time







# 2025 LOS ANGELES WILDFIRES

- **Eaton and Palisades fires began January 7**
  - Smoke
  - Windblown ash
  - Air Toxics from burned structures
- **Unique Response**
  - Large Population Impacted
  - Multiple Incident Commands
  - Overlapping efforts
  - Confusion about air toxics and air quality index






# LA WILDFIRES: COMMUNICATIONS

13

- IC/JIC Integration
- Stakeholder Outreach:
  - Elected Officials
  - Community Meetings
  - Townhalls
- Content Development
  - Webpage
  - Press Releases
  - Infographics



AIR QUALITY   INCENTIVE PROGRAMS   RULES & COMPLIANCE   PERMITS   NEWS, WEBCASTS, & CALENDAR   TECHNOLOGY ADVANCEMENT   RESOURCES   MEETING AGENDA

South Coast AQMD Wildfire Response

## 2025 Wildfire Response

Share:

South Coast AQMD is supporting ongoing federal, state and local efforts in response to the Los Angeles wildfires. We have issued Executive Orders to allow additional use of emergency standby generators and are providing support and technical guidance for cleanup efforts.

During the wildfire recovery process, remaining ash and debris can affect air quality. By moving quickly to remove wildfire debris from residential property, its safe disposal, federal, state and local experts are working to minimize impacts. For local property owners who choose to opt out of the go removal program, South Coast AQMD requires that the debris be tested for presence of asbestos before being removed, according to the process on our [dedicated webpage](#).

Our deepest sympathies and condolences go out to everyone impacted by devastating fires.

Eaton Air Monitoring

Palisades Air Monitoring


Mobile Air Monitoring

Air monitoring sites were chosen based on first survey results, clean air (residential areas and schools), meteorological conditions, and access to power and water to help evaluate potential health impacts to communities close to cleanup efforts in the vicinity of staging areas and truck routes.

Public Inquiries


- [wildfireliaison@aqmd.gov](mailto:wildfireliaison@aqmd.gov)

### JOIN PUBLIC HEALTH'S VIRTUAL TOWN HALLS




Post-Fire School Impact  
**PALISADES**  
Submit questions at:  
[TinyURL.com/PostFirePalisadesSchools](https://tinyurl.com/PostFirePalisadesSchools)

**MARCH 25**  
TUESDAY  
5:30 PM



Post-Fire School Impact  
**EATON**  
Submit questions at:  
[TinyURL.com/PostFireEatonSchools](https://tinyurl.com/PostFireEatonSchools)


**MARCH 26**  
WEDNESDAY  
5:30 PM



LA COUNTY POST-FIRE  
AIR, SOIL, AND WATER  
ASSESSMENT PLAN  
Submit questions at:  
[TinyURL.com/PostFireTownHall](https://tinyurl.com/PostFireTownHall)

**MARCH 27**  
THURSDAY  
6:00 PM

For more information, visit:  
[ph.lacounty.gov/wildfires](https://ph.lacounty.gov/wildfires)

 County of Los Angeles Public Health

### UPCOMING WEBINAR

## Understanding Air Quality After the LA Fires

Please join local, state, and federal agencies for an informative webinar on air quality impacts in the wake of the Los Angeles wildfires. This important event will provide critical information about recovery operations, air quality concerns and monitoring, and public health impacts. Experts will also discuss available resources and steps individuals can take to protect themselves.

Monday, February 10, 2025  
6:00 p.m. - 7:00 p.m. PST  
Join Webinar:  
[bit.ly/LAfiresAQ](https://bit.ly/LAfiresAQ)  
Registration not required  
Spanish translation available



Photocourtesy of NOAA



4:44 | 48°



# South Coast AQMD IN THE NEWS



## What areas are affected? As the fires continue this weekend?

About 17 million people living across dust advisories issued for the three Management District.

The smoke advisory was expected to be in effect until late Wednesday as gusty winds and further worsen air conditions.

The worst conditions were in the vicinity of gray smoke. In East Los Angeles, the air quality is considered to be 50 or less.

A veil of wildfire smoke covered communities Friday as conditions worsened on mountains.

The South Coast Air Quality Management District (AQMD) issued a smoke advisory Saturday, marking the fifth day of the Eaton fire in Altadena.

## The New York Times



The fresh air came after days of acrid smoke as officials warned that conditions could worsen.

Air quality, measured on a scale from good to moderate on Monday and mostly good on Tuesday, according to data from the South Coast Air Quality Management District. A smoke advisory expired at 10 p.m. Sunday. Similar advisories are in place as long as wildfires do not intensify or spread.

Los Angeles residents might be breathing easier outside, but Dr. Scott Epstein, the air quality manager for the Air Quality Management District, said the air can suddenly change and that windblown ash remains a concern. The lightest of winds can pick up ash and carry it across the county.

## Los Angeles Daily News

### Why wildfire ash's impact on air quality doesn't show up on AQMD's air quality map

Story by Mona Darwish, Rianne Mena, Los Angeles Daily News • 2mo • 3 min read

Despite Tuesday's green map from the South Coast Air Quality Management District, Angeles County was "good," people should continue to take precautions outdoors, as the advisory remains in effect until Wednesday evening.

"In most situations (the AQMD map) provides the whole picture. This is sort of a unique situation where a lot of ash down at levels where people live that could pose a health issue and won't show up on the AQMD map," Dr. Scott Epstein, air quality assessment manager at AQMD.



## Did LA fires dump ash on your home? Here's your guide to safely cleaning it up

By Cato Hernández  
Published Jan 17, 2025 5:00 AM

### How do I clean up ash inside my home?

Scott Epstein, an air quality assessment manager with South Coast AQMD, said the overall goal when you're cleaning is to avoid stirring up the ash. For ash on the ground, that means:

- Don't sweep it dry (this will kick it back into the air)
- Instead, lightly mist it and sweep it up or use a vacuum with a HEPA filter (most regular vacuums don't have them; they're specially sold in stores)

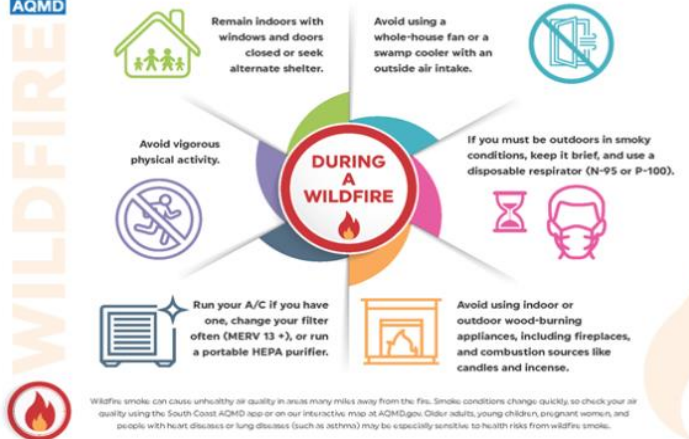
"A HEPA filter is designed to capture those particles," Epstein said. "Some vacuums without a HEPA filter, the small particles kind of make it back out into the air. That's sort of defeating the purpose and actually can make things worse because then you can inhale it again."



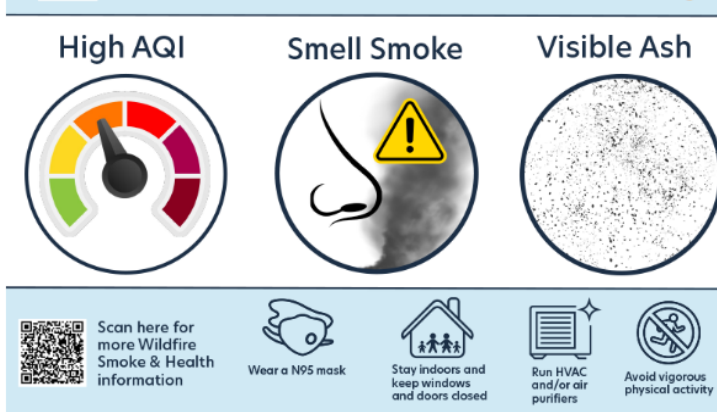
# 2025 LA WILDFIRES: INFOGRAPHICS

## DURING A WILDFIRE - PROTECT YOURSELF

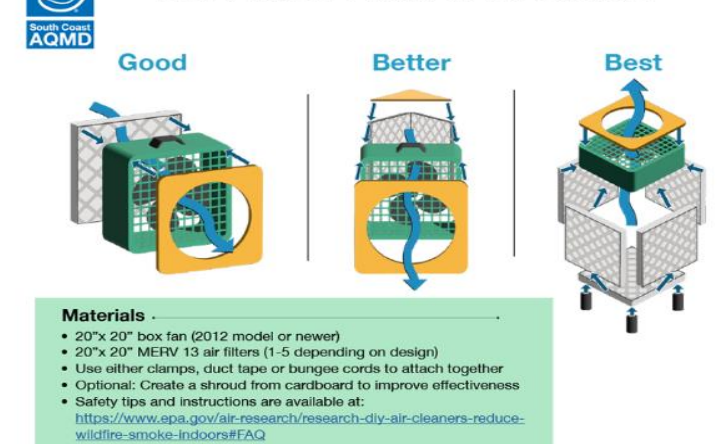
IF YOU SMELL SMOKE OR SEE ASH DUE TO A WILDFIRE, HERE ARE WAYS TO LIMIT YOUR EXPOSURE:



## DURING WILDFIRES WHEN TO TAKE PRECAUTIONS



## DIY AIR CLEANER DESIGNS



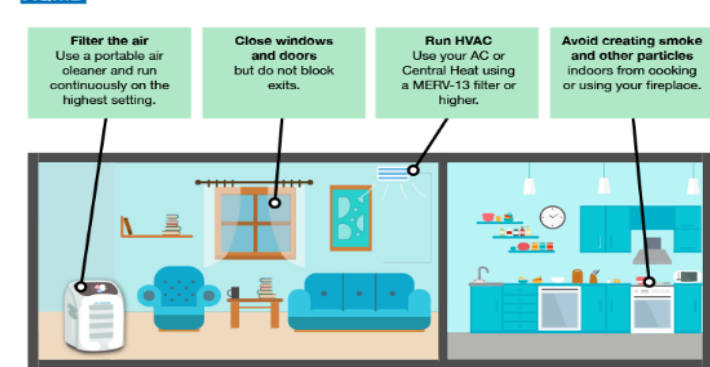
## AFTER A WILDFIRE - SAFE CLEAN-UP

WHEN CLEANING UP ASH:



## KEEP A CLEAN SPACE DURING A WILDFIRE

The most effective way to avoid harmful particles from wildfire smoke and ash is to stay indoors.



## Ash During A Wildfire

### What is Ash?

- Dust that is gray or white
- Large enough to see
- Can be the size of sand or larger
- Visible in the air or on surfaces
- Contains hazardous toxics

Ash particles are too large to be detected by air quality monitors and are not reflected in the Air Quality Index (AQI) map. Although the AQI may show green, hazardous ash may be present in the air.


### If you see ash, take proper precautions:

- Wear a N95 mask.
- Stay indoors with windows/doors closed.
- Run your HVAC system, or air purifier if available.
- Don't use a leaf blower.
- If cleaning up ash, wear goggles, gloves, long-sleeved shirts and long pants.

More tips: [www.aqmd.gov/home/air-quality/wildfire-health-info-smoke-tips](http://www.aqmd.gov/home/air-quality/wildfire-health-info-smoke-tips)



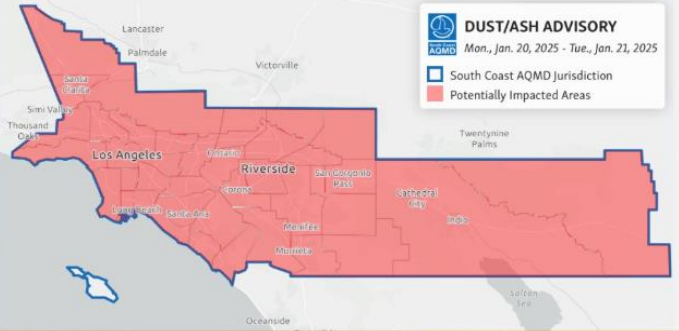
# AIR QUALITY ADVISORIES




## South Coast AQMD Windblown Dust and Ash Advisory

Los Angeles / Orange County / San Bernardino /  
Riverside Counties


Valid Monday 10:00 AM until Tuesday 10:00 AM





**DUST/ASH ADVISORY**  
Mon., Jan. 20, 2025 - Tue., Jan. 21, 2025

- South Coast AQMD Jurisdiction
- Potentially Impacted Areas

To limit exposure in impacted areas, please:

**Avoid Physical Activity**

**Remain Indoors**

**Close all Windows & Doors**

For more info, visit [www.aqmd.gov/advisory](http://www.aqmd.gov/advisory) or download the South Coast AQMD app.



FOR IMMEDIATE RELEASE: January 14, 2025  
MEDIA CONTACT:  
Nahal Mogharabi, (909) 396-3773, Cell: (909) 837-2431  
Connie Villanueva (909) 396-2409, Cell: (909) 215-5601  
[press@aqmd.gov](mailto:press@aqmd.gov)

### South Coast AQMD Advises Residents to take Precautions as Ash Remains a Concern due to Wildfires

**DIAMOND BAR** – Smoke production from the Eaton and Palisades fires has significantly decreased, as confirmed by satellite imagery, webcam visuals, and local monitors. This has been reflected in the Air Quality Index (AQI), which has been good to moderate in the South Coast Air Basin on Tuesday. With Santa Ana winds in the forecast, conditions may worsen, and the public is urged to remain cautious.


Windblown ash particles may be too large to be detected by air quality instrumentation and will not influence AQI levels. However, ash particles are typically visible to the naked eye either in the air or on outdoor surfaces. Windblown ash from burned structures contain air toxics. If you see windblown ash, take precautions to reduce exposure. In short, although the AQI may show green, it is best to reduce exposure as the forecasted high wind events can carry ash throughout the region from the active Palisades and Eaton wildfires as well as Hurst, Kenneth, Line, Airport, and Bridge fire burn scars.

The South Coast Air Quality Management District (South Coast AQMD) reminds residents to take precautions under any of the following conditions:

- If AQI is elevated
- If you see or smell smoke
- Visible ash (even if AQI is not elevated)

### PROTECT YOUR LUNGS

- **Wear a mask:** A tight-fitting [mask](#) (such as a N-95 or P-100 respirator mask) can provide protection.
- **Stay Indoors:** Close windows and doors or find alternate shelter to avoid smoke and ash exposure.
- **Limit Physical Activity:** Avoid strenuous activities outdoors when smoke is present.
- **Use your HVAC:** Running your HVAC with a clean high-efficiency filter can keep smoke and ash out.
- **Create a Filtered Space:** Use a HEPA air purifier to improve indoor air quality in a room where you spend time.
- **Avoid Bringing Outside Air In:** If possible, do not use whole-house fans or swamp coolers that bring in outside air.




## South Coast AQMD Smoke Advisory

Palisades Fire / Eaton Fire

Valid Saturday 3:00 PM - Sunday 10:00 PM





**WILDFIRE SMOKE ADVISORY**  
Sat., Jan. 11, 2025 - Sun., Jan. 12, 2025


- South Coast AQMD Jurisdiction
- Approximate Fire Location
- Areas of Potential Direct Smoke Impact

Smoke from the fire is expected to cause elevated PM2.5 levels in parts of Los Angeles County

To limit exposure in impacted areas, please:

**Avoid Physical Activity**

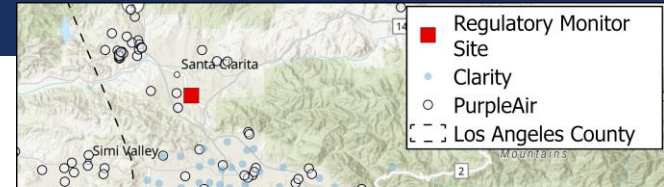
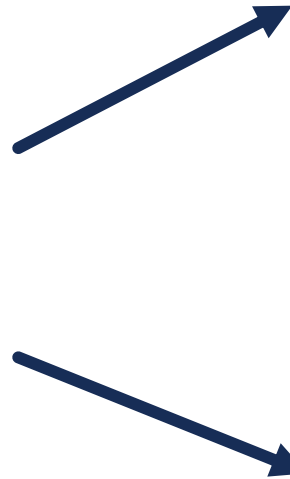
**Remain Indoors**

**Run the AC or Air Purifier**

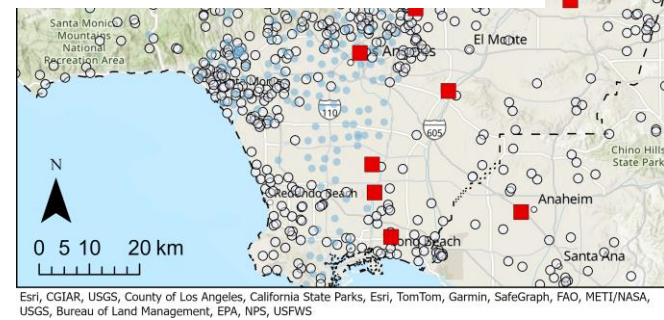
For more info, visit [www.aqmd.gov/advisory](http://www.aqmd.gov/advisory) or download the South Coast AQMD app.

# AIR POLLUTANTS OF CONCERN DURING FIRES

- **PM2.5/10**
  - Smoke, metals, etc.
  - Small enough to be inhaled
- **Ash**
  - Large particles are visible to the naked eye; not inhalable
- **Gaseous air toxics**
  - Typically present along with odorous compounds



PM2.5 Monitoring Network

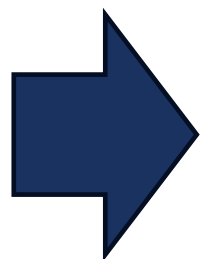


Ash resuspension is a concern during high winds or ground activity

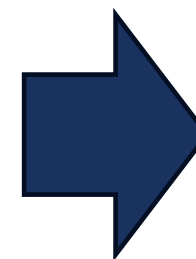




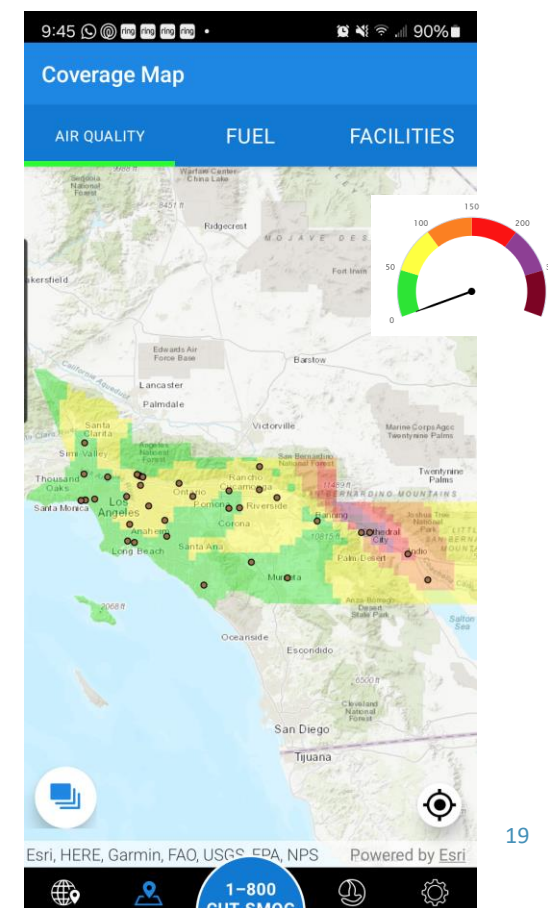
# AIR QUALITY INDEX



Health effects research



Recommended precautions  
based on air pollution levels

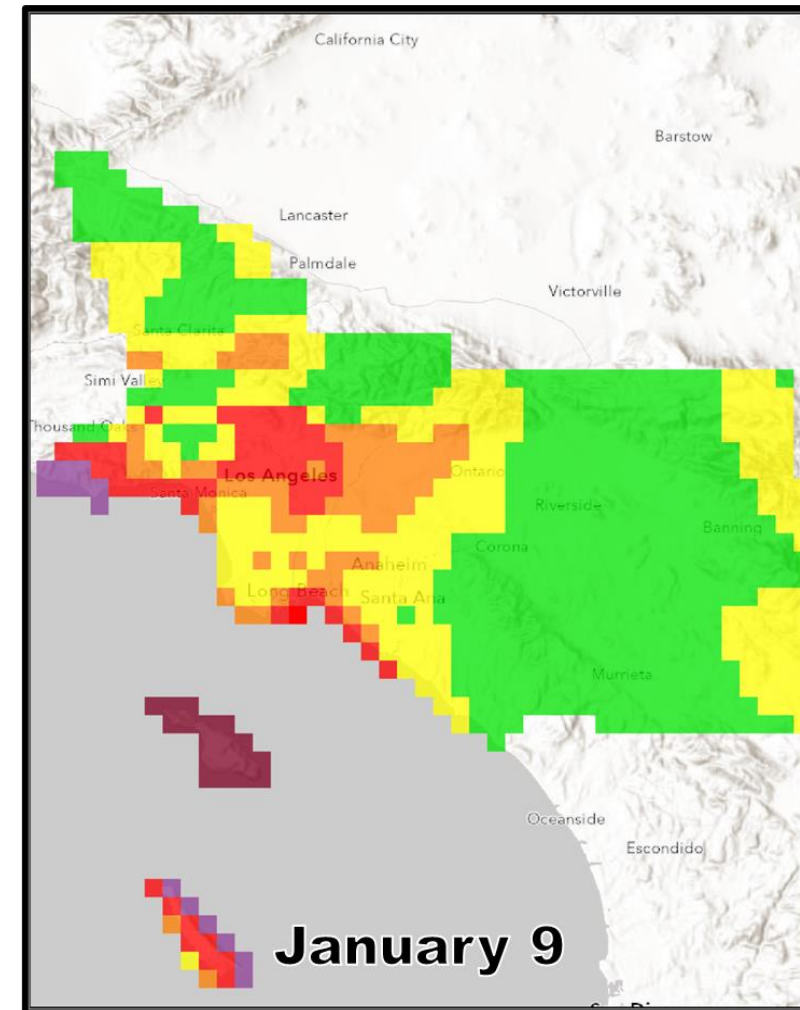
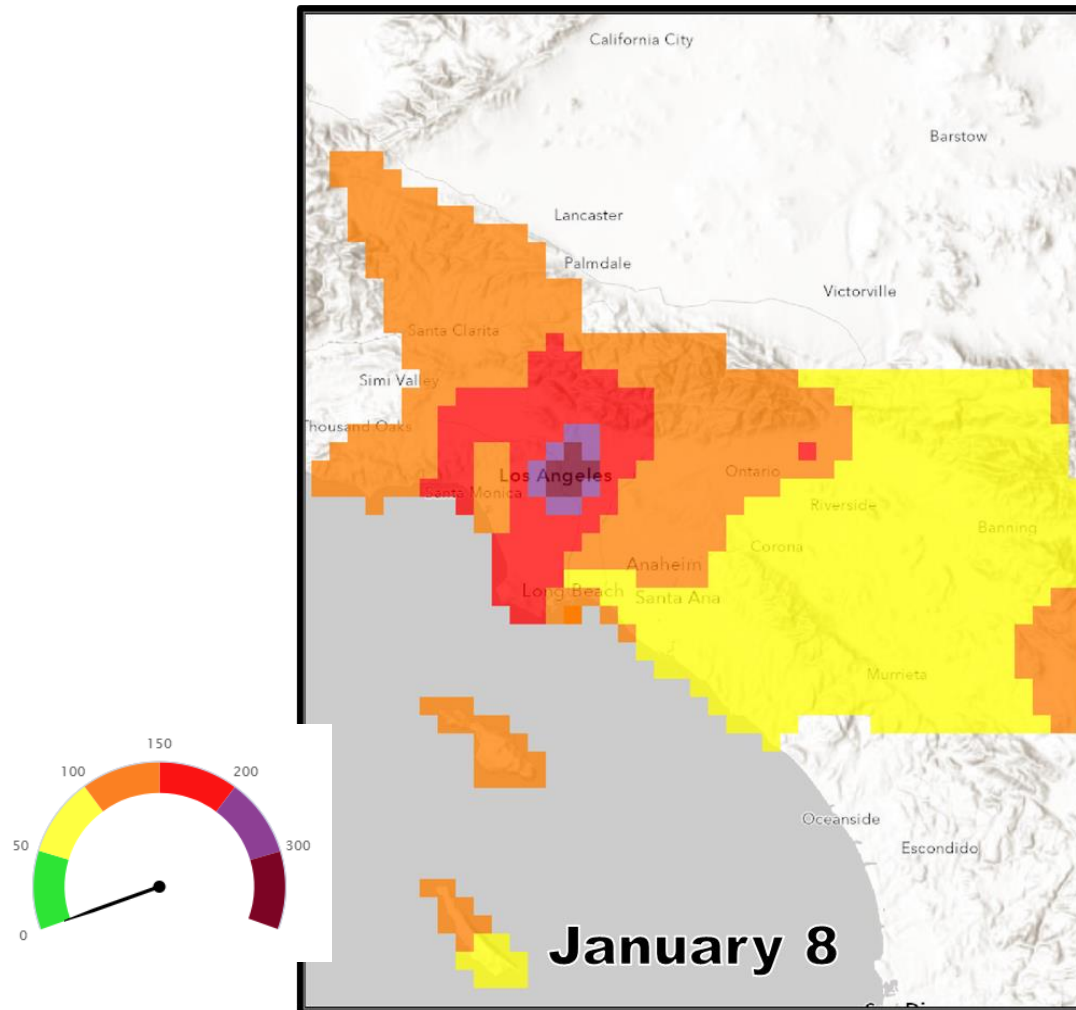


- PM 2.5
- PM 10
- Ozone (smog)
- Carbon monoxide
- Nitrogen dioxide

Inhalable  
*criteria* air  
pollutants

Note: other pollutants not included in AQI

# AIR QUALITY INDEX MAPS DURING WILDFIRES



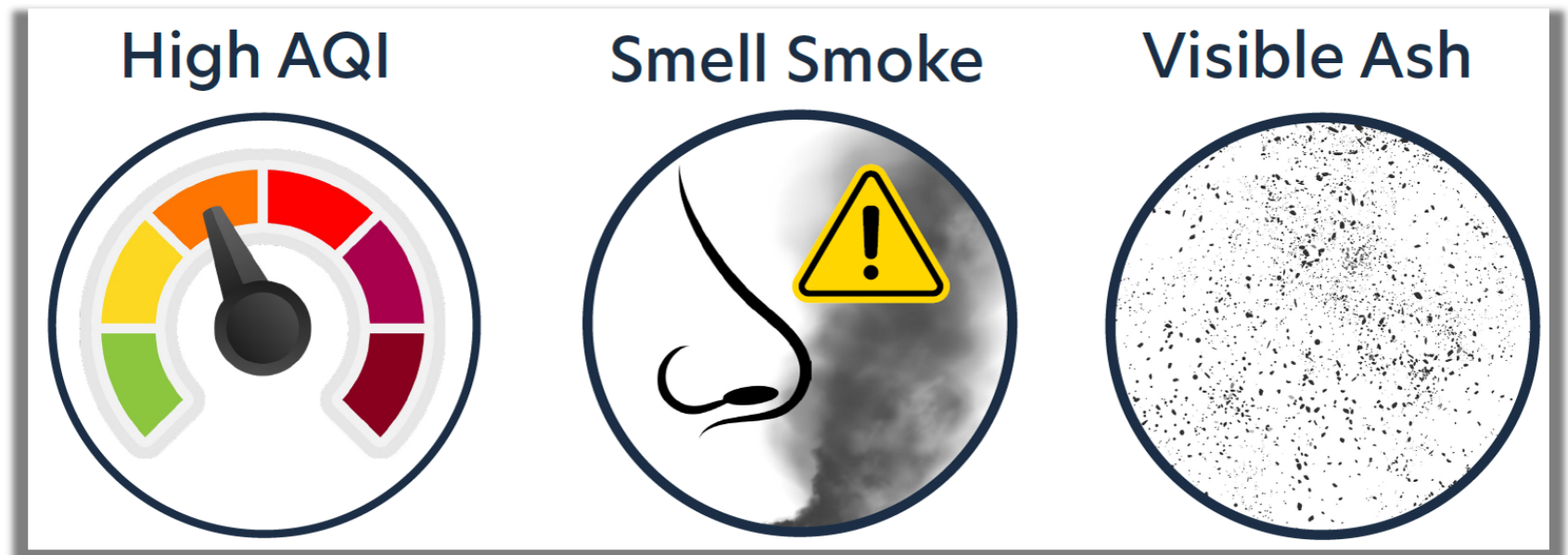


# TOOLS TO REDUCE EXPOSURES DURING/AFTER WILDFIRES

During or after fires, take precautions when any one of the following occurs:

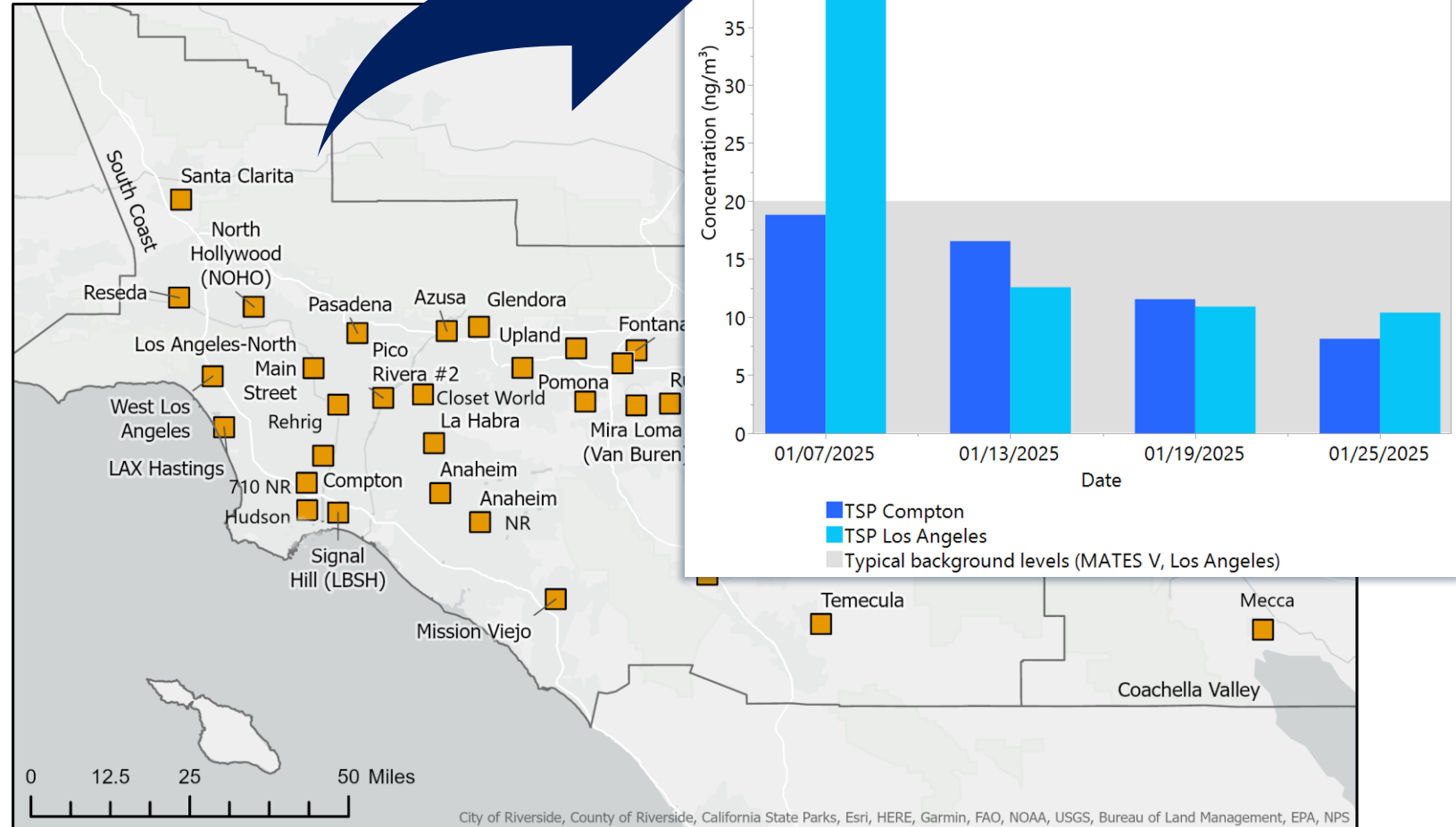
## AQI does not include:

- Ash (noninhalable)
- Metals
- Volatile Compounds
- Asbestos



## REGIONAL AIR MONITORING NETWORK

- ~35 Permanent Air Monitoring Stations
  - Lead measurements at seven locations in the Basin
  - Lead, arsenic, and other air toxic metals also measured at several Los Angeles sites
- Year-round data showing the potential impact of wildfires and other unexpected events/incidents on regional air quality





# AIR MONITORING TOOLS

23

- State-of-the-art and research-grade equipment
  - Mobile monitoring platforms
  - Hand-held monitors
  - Air quality sensors
  - Regulatory and non regulatory methods
- Require specific training for equipment operation, and data validation, analysis and interpretation



# MOBILE PLATFORM MONITORING

## ■ Strengths

- Survey large areas and locations that are difficult to access
- No siting requirements
- Can be deployed quickly

## ■ Limitations

- Instantaneous measurements
- Must follow-up with more accurate monitoring techniques
- High capital cost
- Require specialized personnel





## STAGE ONE: MOBILE MONITORING FOR LA WILDFIRES

### Four Mobile Monitoring Surveys

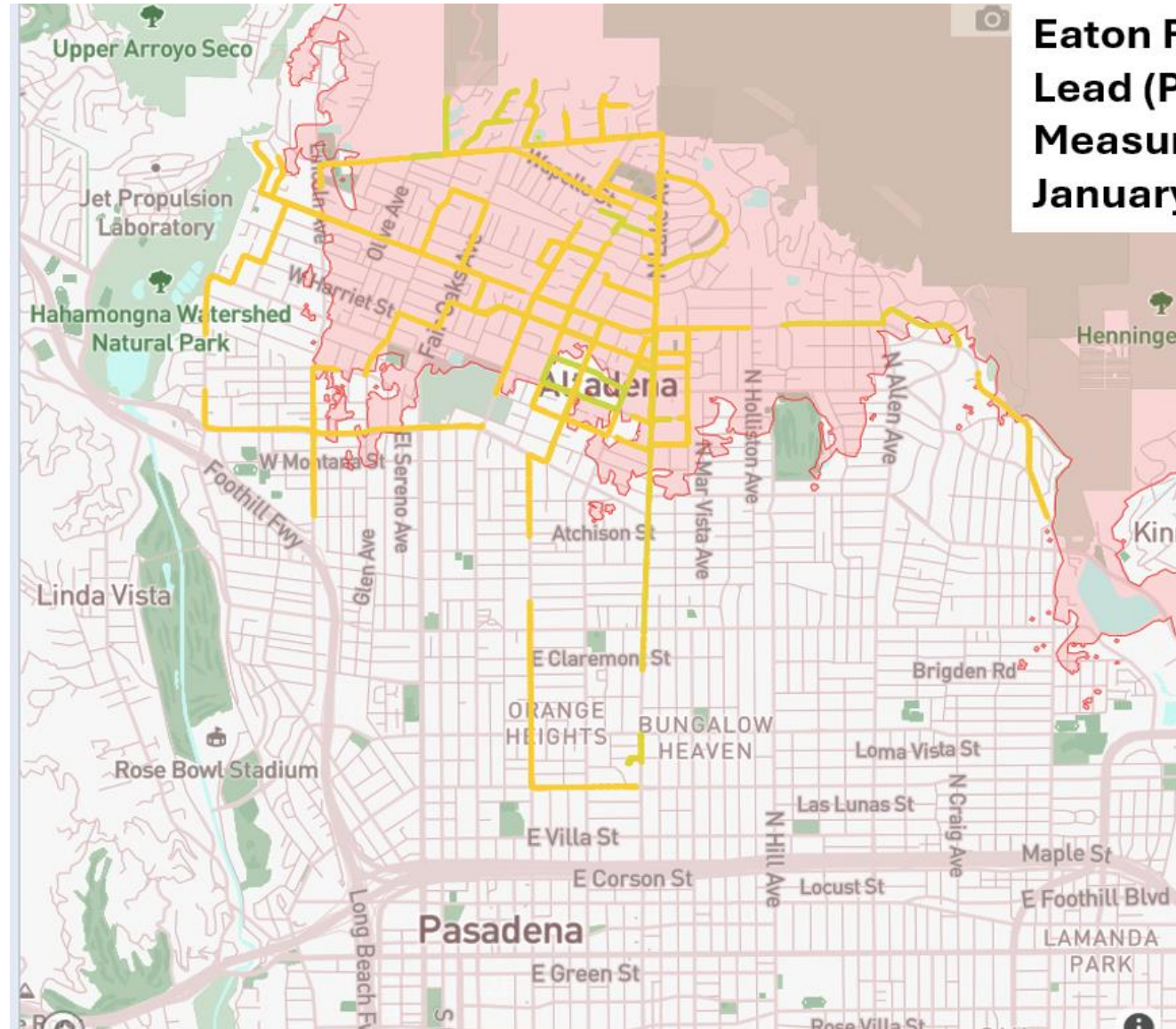
Two for Eaton

Two for Palisades

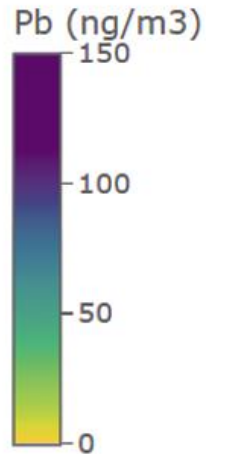
Measurements for air toxic metals and volatile organic compounds (VOCs)

Identified pollutants that may have concerning elevated levels

Results helped identify temporary stationary air monitoring locations



**Eaton Fire Area  
Lead (Pb) Mobile  
Measurements  
January 31, 2025**



# STAGE TWO: STATIONARY AIR MONITORING FOR LA WILDFIRES



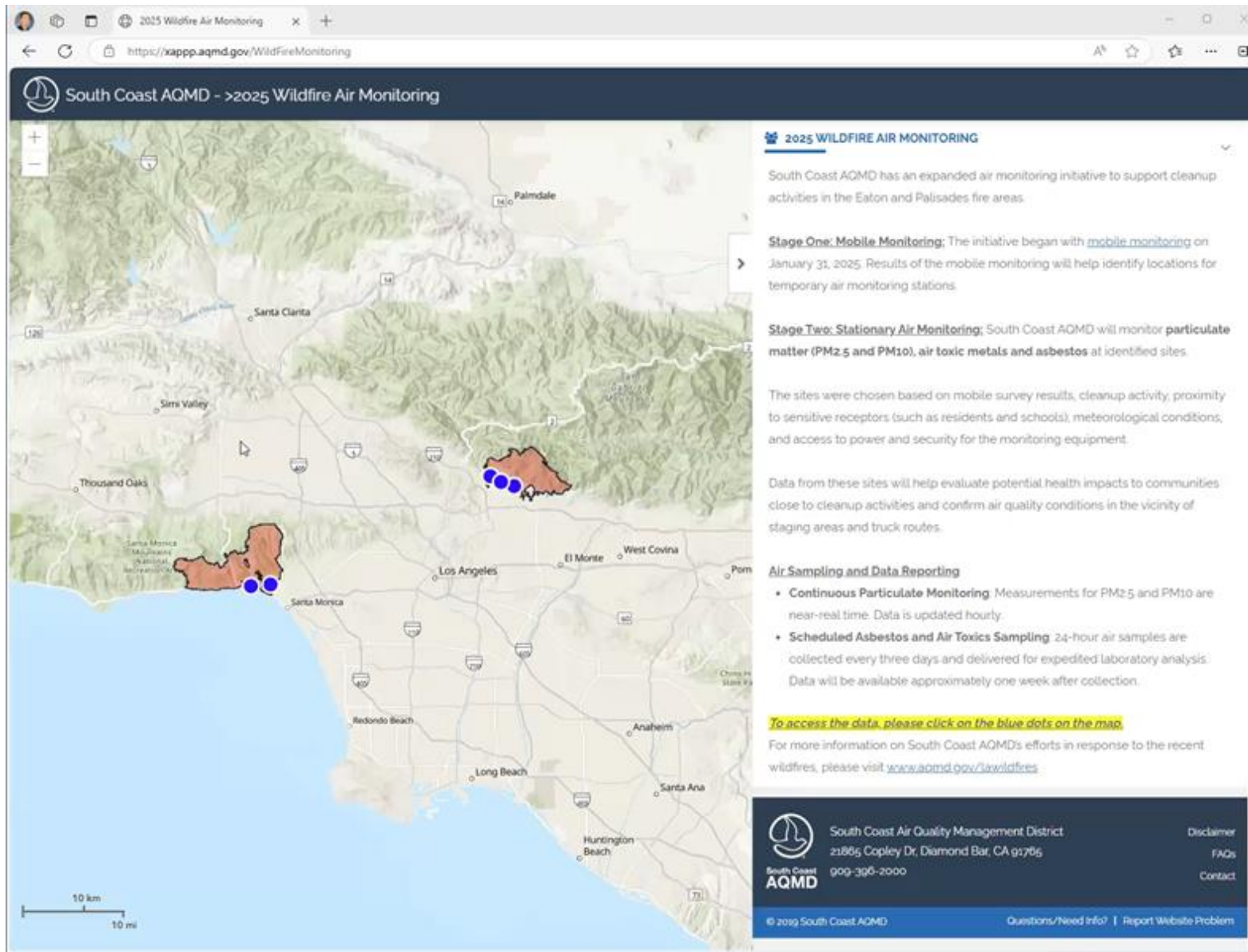
**Placement of monitoring stations were determined based on:**

- Mobile monitoring results
- Cleanup activity
- Sensitive receptors (residents/schools)
- Meteorological conditions

**Air monitors provide data for:**

- Toxic metals, including lead and arsenic
- Asbestos, and
- Particulates (PM2.5 and PM10 levels)





## DATA DASHBOARD FOR LA WILDFIRE

- Interactive map to visualize and display data from STAGE 2 monitoring
- Continuous PM data reported in real-time
- Laboratory analysis results posted within a week from sampling
- Data and laboratory reports are public available

# Hyperion Water Reclamation Plant (2021)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)





# Orange County Oil Spill (2021)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)



Source: OC Register



# Dominguez Channel Odor Event (2021)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)



# Oleander Incident (2022)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)



Source: Press Enterprise



# Chiquita Canyon Landfill (2023)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)



Source: LA Times



# Tustin Hangar Fire (2023)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)



Source: KTLA



# Tijuana River Incident, San Diego (2024)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)

Source: VoiceofSanDiego.org



# Los Angeles Wildfires (2025)

## Major air quality incidents now occur annually:

- Hyperion Water Reclamation Plant (2021)
- Orange County Oil Spill (2021)
- Dominguez Channel Odor Event (2021)
- Oleander Incident (2022)
- Chiquita Canyon Landfill (2023)
- Tustin Hangar Fire (2023)
- Tijuana River Incident, San Diego (2024)
- Los Angeles Wildfires (2025)

Source: CNN



**2026?**



# RESOURCE CHALLENGES

- Resource Challenges
  - Equipment/Technology
  - Training (E.g. Tabletop Exercises)
  - Staffing
  - Interagency Coordination
  - Funding