

# CERP IMPLEMENTATION

UPDATE – 1<sup>ST</sup> QUARTER 2020

Wilmington, Carson, West Long Beach  
January 16, 2020

ASSEMBLY BILL (AB) 617  
COMMUNITY AIR INITIATIVES

## COMMUNITY EMISSIONS REDUCTION PLAN

WILMINGTON, CARSON,  
WEST LONG BEACH

SEPTEMBER 2019  
FINAL



SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT



# CERP IMPLEMENTATION - UPDATES

Partnerships are key for a successful CERP implementation

CSC involvement and input is critical

**Thank you for  
your continued commitment!**



# EXAMPLES OF CSC INVOLVEMENT



Participate in CARB  
and South Coast  
AQMD rule  
development process



Disseminate  
information on how  
to report idling  
trucks in the  
community



Prioritize which  
schools receive air  
filtration systems



# AIR QUALITY PRIORITY: REFINERIES

MICHAEL KRAUSE

PLANNING AND RULES MANAGER



South Coast  
AQMD

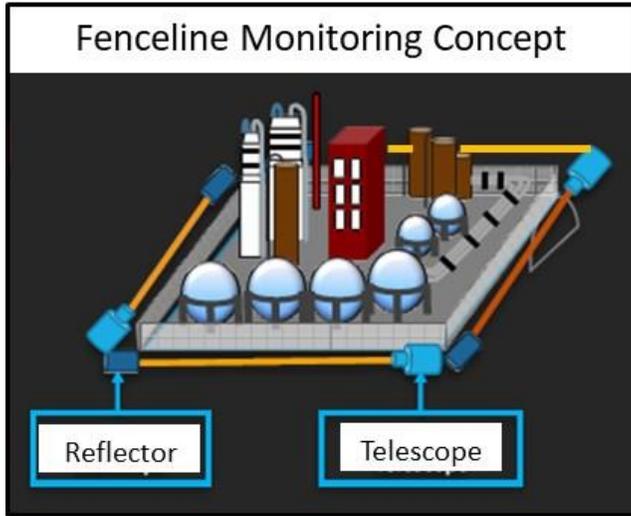
# RULE 1180 REFINERY COMMUNITY AND FENCELINE AIR MONITORING



Rule 1180 mandates the implementation of real-time observations of air quality:

- At the fenceline of all major petroleum refineries in the SCAB
- In nearby communities

This will allow for quick identification of leaks and unplanned fugitive emissions of VOC and other air toxics



## Fenceline Air Monitoring

- Refineries to submit a Fenceline Air Monitoring Plan in accordance with approved Guidelines
- Refineries to install and operate near real-time and continuous fenceline air monitoring systems one year after Plan approval
- Refineries to make data available to the public through a dedicated website

## Community Air Monitoring

- South Coast AQMD to operate a network of air monitoring stations in accordance to a Community Air Monitoring Plan (CAMP)
- Near real-time and continuous air monitoring in communities neighboring refineries
- Data made available to the public through a dedicated website

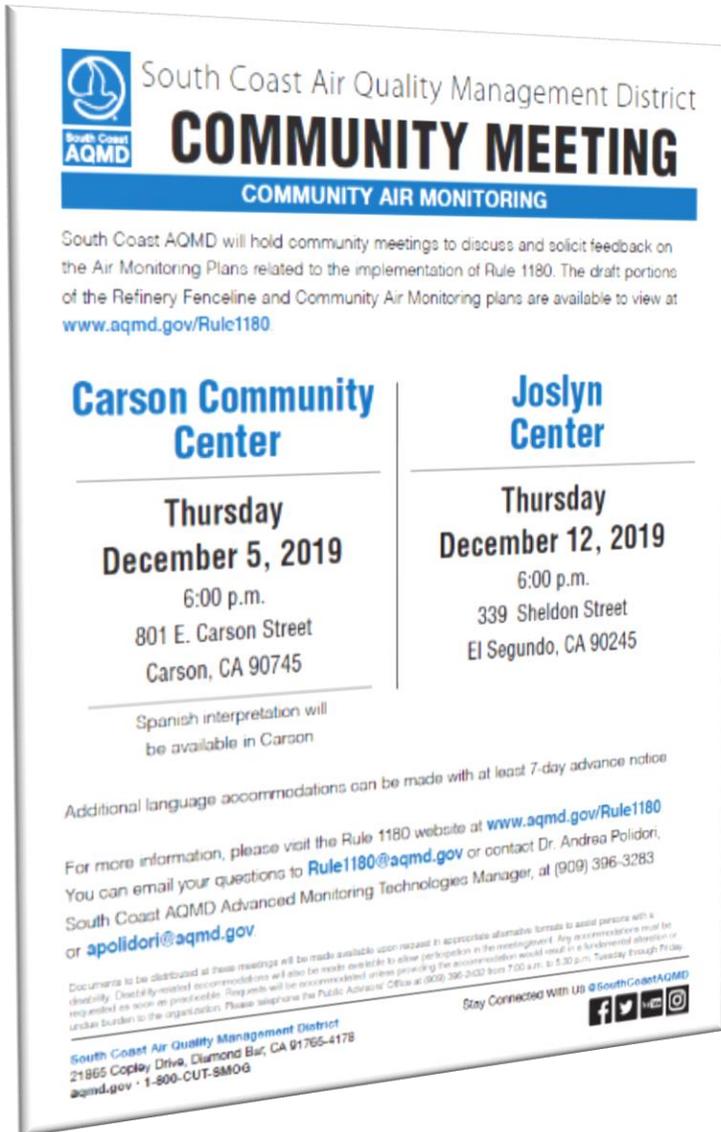
Requirements for **data notification** and **quality assurance/quality control** for both fenceline and community monitoring

AQ Priority: Refineries

Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3-Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Carbonyl Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride*

# RULE 1180 COMMUNITY WORKSHOPS

- South Coast AQMD hosted two community workshops
  - Update on the implementation of the refinery fenceline air monitoring plans
  - Collected public feedback on the draft Rule 1180 CAMP
  - For more information visit [www.aqmd.gov/Rule1180](http://www.aqmd.gov/Rule1180)



**South Coast Air Quality Management District**  
**COMMUNITY MEETING**  
COMMUNITY AIR MONITORING

South Coast AQMD will hold community meetings to discuss and solicit feedback on the Air Monitoring Plans related to the implementation of Rule 1180. The draft portions of the Refinery Fenceline and Community Air Monitoring plans are available to view at [www.aqmd.gov/Rule1180](http://www.aqmd.gov/Rule1180)

Carson Community Center	Joslyn Center
<b>Thursday</b> <b>December 5, 2019</b> 6:00 p.m. 801 E. Carson Street Carson, CA 90745	<b>Thursday</b> <b>December 12, 2019</b> 6:00 p.m. 339 Sheldon Street El Segundo, CA 90245

Spanish interpretation will be available in Carson

Additional language accommodations can be made with at least 7-day advance notice

For more information, please visit the Rule 1180 website at [www.aqmd.gov/Rule1180](http://www.aqmd.gov/Rule1180)  
You can email your questions to [Rule1180@aqmd.gov](mailto:Rule1180@aqmd.gov) or contact Dr. Andrea Polidori, South Coast AQMD Advanced Monitoring Technologies Manager, at (909) 396-3283 or [apolidori@aqmd.gov](mailto:apolidori@aqmd.gov)

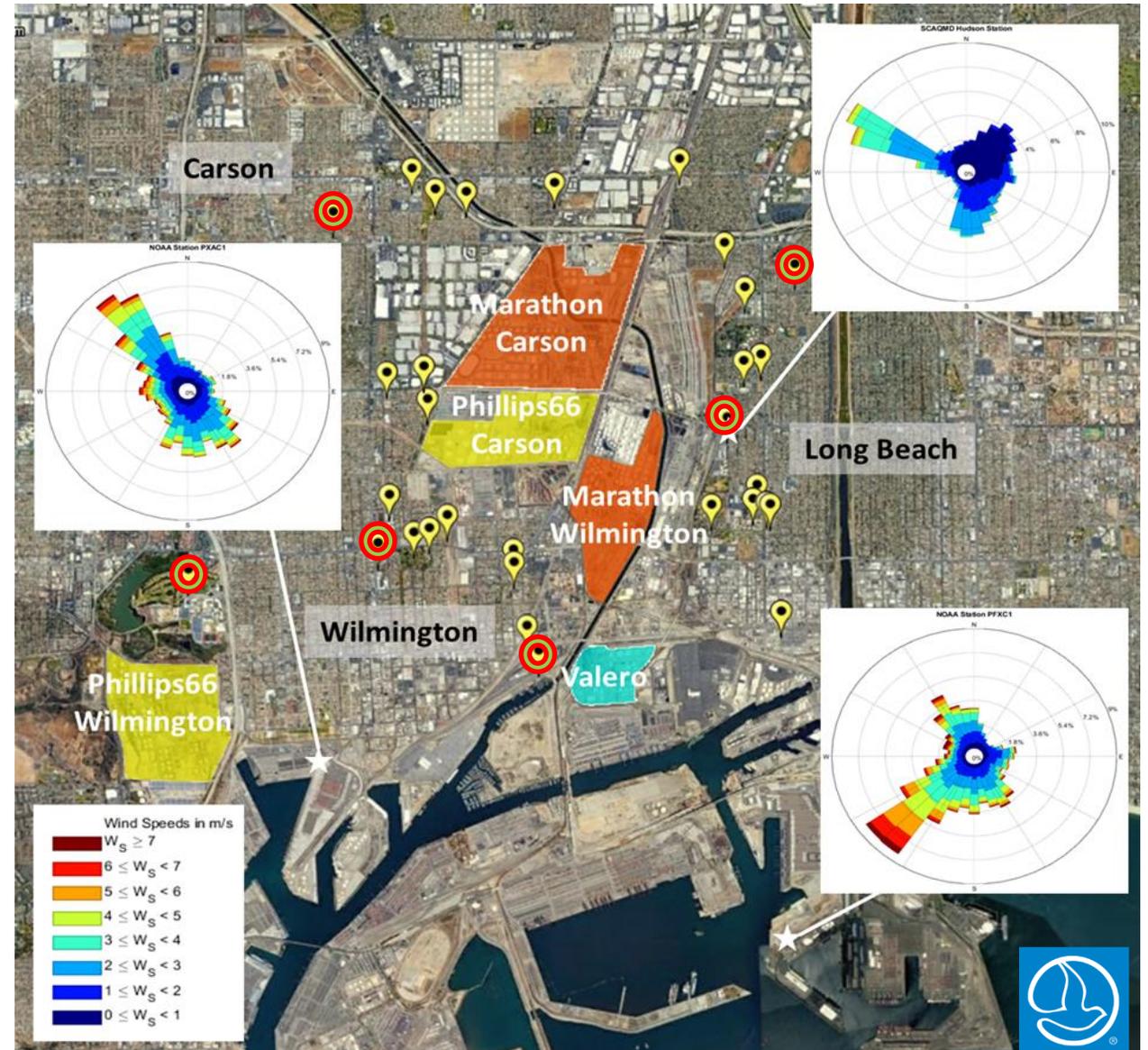
Documents to be distributed at these meetings will be made available upon request in appropriate alternative formats to assist persons with a disability. Disability-related accommodations will also be made available to allow participation in the meetings. Any accommodations must be requested as soon as practicable. Requests will be recommended unless providing the accommodation would result in a fundamental alteration or undue burden to the organization. Please telephone the Public Access Office at (909) 396-3400 from 7:00 a.m. to 5:30 p.m. Tuesday through Friday.

Stay Connected With Us @ South Coast AQMD

South Coast Air Quality Management District  
21865 Copley Drive, Diamond Bar, CA 91765-4178  
[aqmd.gov](http://aqmd.gov) • 1-800-CUT-SMOG

# COMMUNITY SITE SELECTION CRITERIA (WILMINGTON / CARSON / LONG BEACH)

- 5 refineries
  - Marathon Carson & Wilmington
  - Phillips 66 Carson & Wilmington
  - Valero Wilmington
- Complex wind patterns
- South Coast AQMD staff evaluated ~30 potential sites
- Six sites have been secured



# COMMUNITY AIR MONITORING TIMELINE

Community meetings to collect public feedback on refinery and community monitoring

Draft CAMP released for public review

Public Meetings to collect additional feedback

Community air monitoring began

Community air monitoring network fully implemented

June 2019

November 2019

December 2019

January 2020

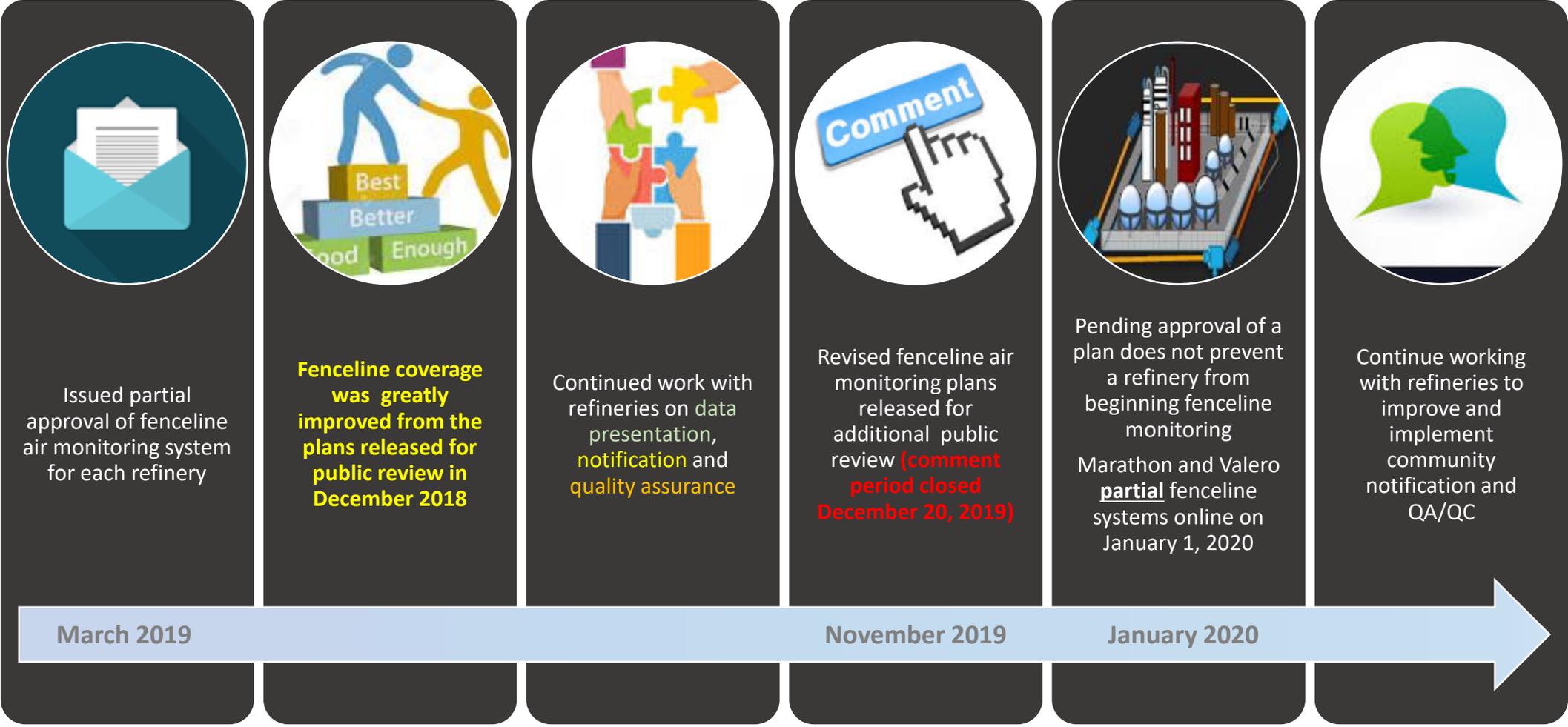
March 2020

Set-up Rule 1180 community air monitoring network  
Ongoing dialogue with community groups and other stakeholders

AB 1647 deadline

[www.aqmd.gov/Rule1180](http://www.aqmd.gov/Rule1180)

# FENCELINE AIR MONITORING TIMELINE



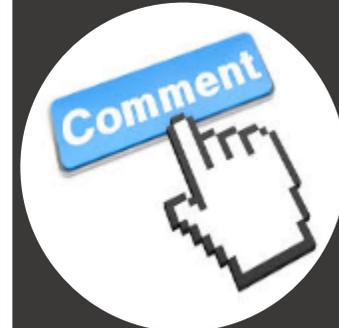
Issued partial approval of fenceline air monitoring system for each refinery



**Fenceline coverage was greatly improved from the plans released for public review in December 2018**



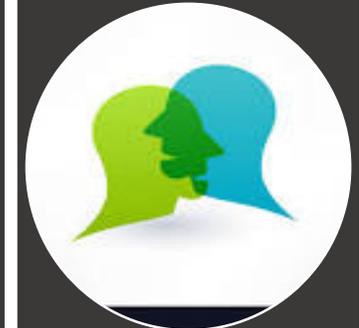
Continued work with refineries on data presentation, notification and quality assurance



Revised fenceline air monitoring plans released for additional public review (**comment period closed December 20, 2019**)



Pending approval of a plan does not prevent a refinery from beginning fenceline monitoring  
Marathon and Valero **partial** fenceline systems online on January 1, 2020



Continue working with refineries to improve and implement community notification and QA/QC



## NEXT STEPS

- Partial refinery and community monitoring have already begun
- Email announcements
  - When community air monitoring is fully deployed and implemented
  - Instructions on how to sign-up for notifications
- Continue working with refineries to improve and finalize community notification and QA/QC
- Additional information on refinery fenceline and community air monitoring can be found at [www.aqmd.gov/Rule1180](http://www.aqmd.gov/Rule1180)

### Contacts

Dr. Andrea Polidori  
Advanced Monitoring Technologies Manager  
909-396-3283  
[apolidori@aqmd.gov](mailto:apolidori@aqmd.gov)

Dr. Olga Pikelnaya  
Program Supervisor  
909-396-3157  
[opikelnaya@aqmd.gov](mailto:opikelnaya@aqmd.gov)

# FLARE EVENT NOTIFICATION SYSTEM (FENS)

- Rule 1118 requires refineries to notify planned and unplanned flare events that exceed certain thresholds
- Interested public subsequently gets notified (via e-mail, subscribe: <http://www.aqmd.gov/sign-up>)



# FENS PUBLIC PORTAL

- A new public portal has been created and is accessible through [www.aqmd.gov/FENS](http://www.aqmd.gov/FENS)
- FENS includes a web-based Flare Map:
  - Displays all the South Coast AQMD facilities with flares
  - Provides current information as it is submitted to South Coast AQMD
  - Provides historical information for each facility's flaring notification submitted

AQ Priority: Refineries

# E-MAIL NOTIFICATIONS



Similar to current email system, notifications will be sent for flare events exceeding rule thresholds

Those already signed up to receive flare event notifications will automatically receive email notifications in FENS

Those interested in signing up for notifications can do so by visiting:  
<http://www.aqmd.gov/sign-up>

Emails contain similar information; however, new system now requires refineries to include the reason for flaring

# SUMMARY OF FENS FEATURES

System Feature	Current System	New Web Application
Public E-mail Generated*	✓	✓
Single E-mail Notification per Flare Event but Updates Provided via Flare Event Map	x	✓
Flare Event Map Displays all Current Flare Events	x	✓
Flare Event Map Includes Links to Facility Flare History (Past, Current, and Future Flare Events)	Public Records Request	✓
Staff is Requesting Refineries include the Reason for Flare Event in the Notification	Public Records Request	✓



## NEXT STEPS

- Staff will hold meetings with members of the public after the launch of FENS to solicit input on areas of improvement
- Implementation of future enhancements plan to deploy in the fourth quarter of 2020

### Contact

Michael Krause  
Planning and Rules Manager  
909-396-2706  
[mkrause@aqmd.gov](mailto:mkrause@aqmd.gov)



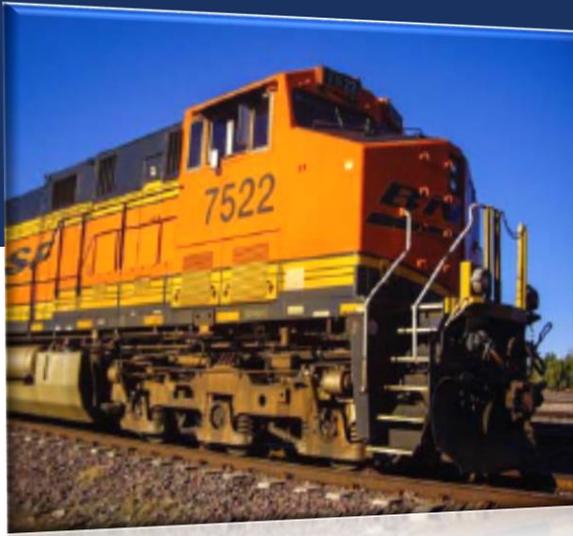
# AIR QUALITY PRIORITY: RAILYARDS

DR. SARAH REES, PH.D.

ASSISTANT DEPUTY EXECUTIVE OFFICER



South Coast  
AQMD



# INDIRECT SOURCE RULE - RAIL

## Proposed Indirect Source Rule (ISR) for Locomotives

- CARB & South Coast AQMD jointly held community workshops to discuss concepts to reduce emissions from locomotives and railyards (Nov. & Dec. 2019)
  - Video from San Bernardino meeting available: <https://youtu.be/uWrCDZEFvII>

### Different Authorities:

#### U.S. EPA



- Can regulate locomotive engine emission standards

#### CARB



- Can regulate locomotive activities within California
- Primary Mobile Source Authority

#### South Coast AQMD



- Primarily Stationary and Indirect Source Authority (facilities that attract mobile sources)

# PROPOSED NEW STRATEGIES

## CARB Concepts

### 1. Establish a Locomotive Emissions Reduction Spending Account

- Funding provided by railroads

### 2. In-Use Locomotive Remanufacture Limit

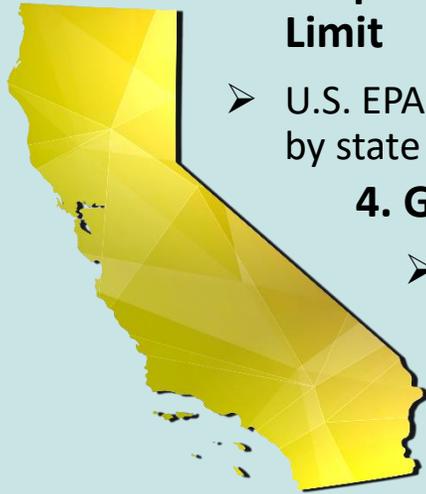
- Would allow only one remanufacture using older engine technologies

### 3. Adopt U.S. EPA 30 Minute Idling Limit

- U.S. EPA rule becomes enforceable by state (and potentially air districts)

### 4. Genset Repurposing

- Replace older switchers at smaller railroads with cleaner, used switchers from BNSF/UP



## South Coast AQMD Concepts

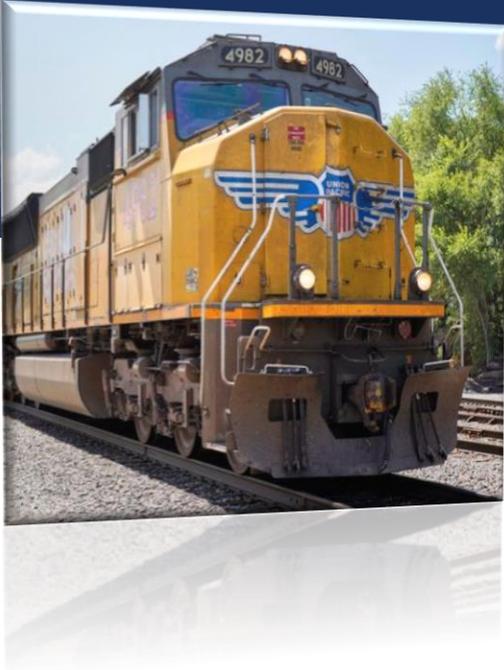
### 1. Indirect Source Rule (ISR) to Reduce Exposures from Locomotive Maintenance and Service Emissions

### 2. ISR to Require Facility-Specific Engineering Plans for Zero Emissions Operations

### 3. New Incentive Program Focused on Cleanest Locomotive Use Rather than Locomotive Replacement

### 4. Evaluate New Monitoring Approaches for In-Use Locomotives





## NEXT STEPS - RAIL

- Continue stakeholder outreach
  - CARB plans to hold additional workshops statewide
- ISR to South Coast AQMD Board for consideration in Dec. 2020
- Air Resource Board considers locomotive rules in 2021

### Contacts:

CARB Freight Team

916-322-8382

[freight@arb.ca.gov](mailto:freight@arb.ca.gov)

[www.arb.ca.gov/rail\\_concepts](http://www.arb.ca.gov/rail_concepts)

South Coast AQMD

Ian MacMillan

Planning and Rules Manager

909-396-3244

[imacmillan@aqmd.gov](mailto:imacmillan@aqmd.gov)

[www.aqmd.gov/fbmsm](http://www.aqmd.gov/fbmsm)



# AIR QUALITY PRIORITY: PORTS

DR. SARAH REES, PH.D.

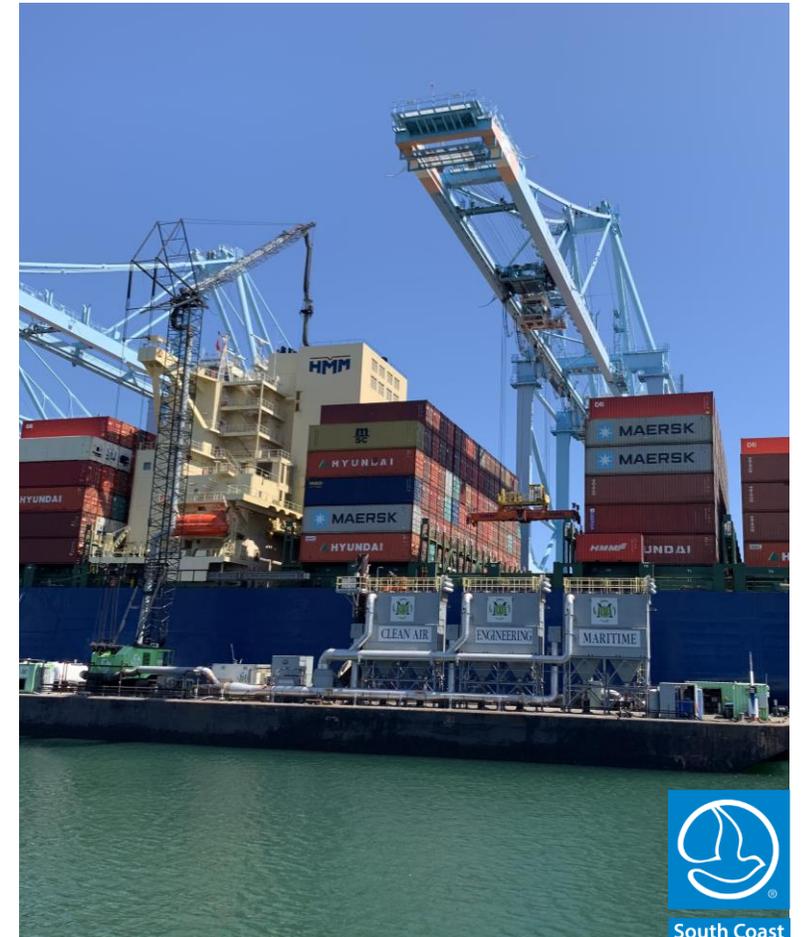
ASSISTANT DEPUTY EXECUTIVE OFFICER

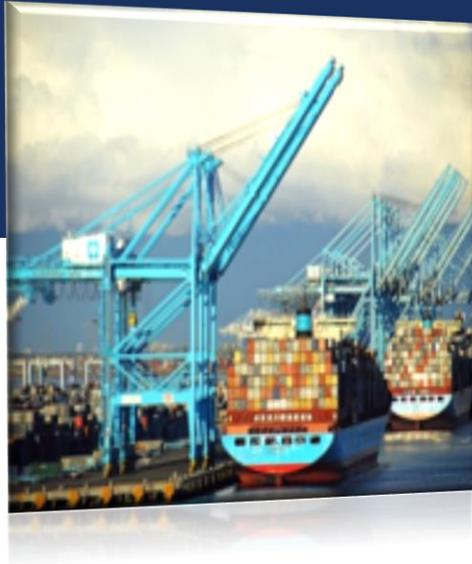


South Coast  
AQMD

# CARB OCEAN GOING VESSEL AT-BERTH REGULATION

- Proposed regulation to further reduce emissions from ocean going vessels while at berth
- Key changes to existing regulation
  - Expand applicability to additional vessel types (RoRos and tankers)
    - Container, cruise and reefer vessels covered under existing regulation
  - Flexibility in emission control technologies
    - Shore power, capture and control systems, alternative fuels, on-board technologies
  - Additional compliance options (terminal/vessel incident events, remediation fund)
  - To take effect January 1, 2021





## SOUTH COAST AQMD PORTS MOU

- South Coast AQMD Governing Board directed staff to pursue Memorandum of Understanding (MOU) approach for marine ports
- Contractual agreement between South Coast AQMD and Ports of Los Angeles and Long Beach to reduce emissions
- Based on the 2017 San Pedro Bay Ports Clean Air Action Plan (CAAP) measures
- MOU measures to quantify emission reductions from implementation of the CAAP

# DRAFT MOU SCHEDULES



## 1 - Drayage Trucks

- Implement Clean Trucks Program

## 2 - Cargo Handling Equipment (CHE)

- Accelerate Zero Emission (ZE) and Near Zero Emission (NZE) CHE deployment with a 100% ZE CHE goal by 2030

## 3 - Ocean-Going Vessels (OGV)

- Reduce OGV emissions through new and enhanced incentive programs: Vessel Speed Reduction, Green Ship Incentives and Clean Ship Program

## 4 - Harbor Craft

- Develop incentive program to upgrade harbor crafts with cleanest engines

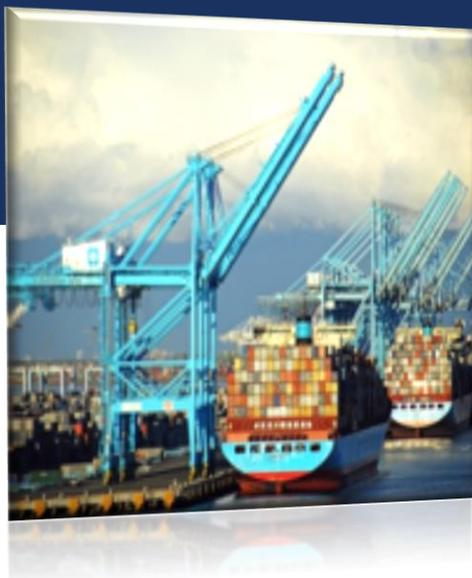
## 5 - Locomotives

- Increase on-dock rail cargo moves to 35% and seek to utilize cleanest locomotives

# CLEAN TRUCKS PROGRAM

- Only CAAP measure in the MOU with potential SIP creditable emission reductions in 2023
- Truck rate (\$/TEU) will be charged on trucks with loaded containers at port terminal gates
- Revenues collected will be used to fund truck replacements with clean trucks (zero and near-zero emission trucks)





## SOUTH COAST AQMD'S ENFORCEABLE COMMITMENT

- Commit to achieve projected NO<sub>x</sub> reductions in 2023
- Monitor implementation of the CAAP measures in the MOU based on annual reports submitted by the Ports
- Report to EPA on implementation of SIP creditable CAAP measures and actual emission reductions achieved
- Make annual reports and relevant data publicly available
- Adopt and submit substitute measure to U.S. EPA in the event of any shortfall through public process

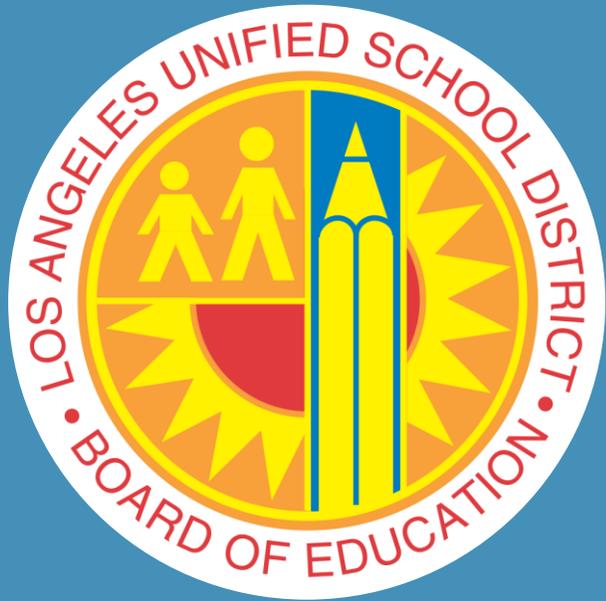
# MOU TENTATIVE DEVELOPMENT TIMELINE



Milestone	Date
Ports MOU Working Group Meeting #4	Feb 2020
Mobile Source Committee Meeting	Spring 2020
Ports Boards MOU Adoption	Spring 2020
South Coast AQMD Board Adoption	Spring 2020

## Contact

Zorik Pirveysian  
Planning and Rules Manager  
909-396-2431  
[zpirveysian@aqmd.gov](mailto:zpirveysian@aqmd.gov)



# AIR QUALITY PRIORITY: SCHOOLS, CHILDCARE CENTERS, HOMES

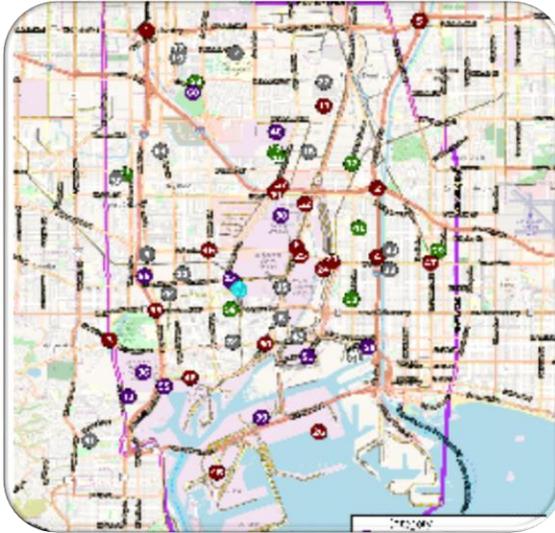
NICOLE SILVA

PROGRAM SUPERVISOR



South Coast  
AQMD

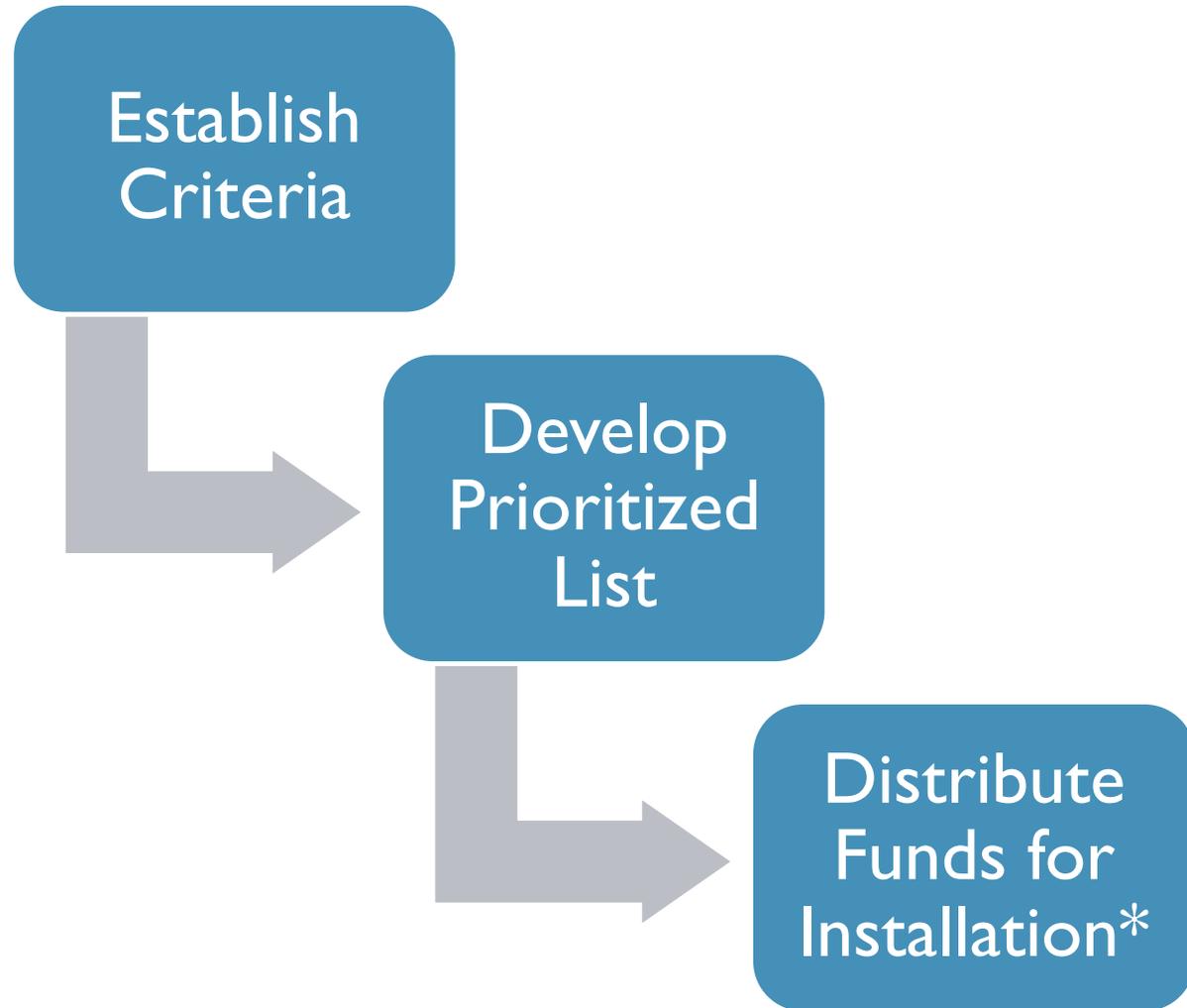
# REDUCE EXPOSURE HARMFUL AIR POLLUTANTS



## Reduce Exposure to Harmful Air Pollutants at Schools (Chapter 5g, Action 2 of the CERP)

- Continue installation of air filtration systems at schools identified by the CSC
- Priority given to schools near truck routes, railyards and/or major freeways
- Explore opportunities for funding of filtration systems and filter replacements

# AIR FILTRATION INSTALLATION PROCESS



\*Installation of air filtration systems is dependent on funding criteria, potentially affecting the order of the prioritized list.

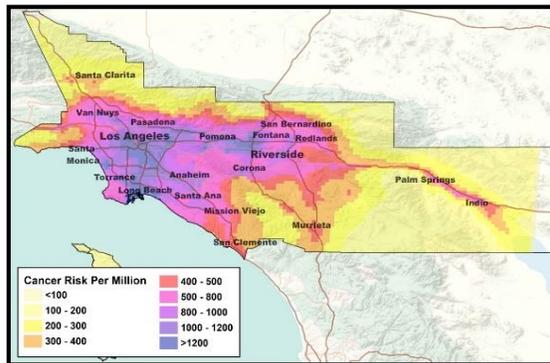
# PURPOSE OF DEVELOPING A PRIORITIZED LIST

- To seek community input on school site selection within the CERP boundary
- Reduce the time necessary for site selection as funding becomes available
- Continue to demonstrate the need for additional funding

# PRIORITIZATION FOR AIR FILTRATION SYSTEMS

- Some public school districts use the following criteria or information to prioritize school locations in greatest need of air filtration systems:

## ***Existing Criteria:***



**Multiple Air Toxics Exposure Study (MATES) III – 2008**

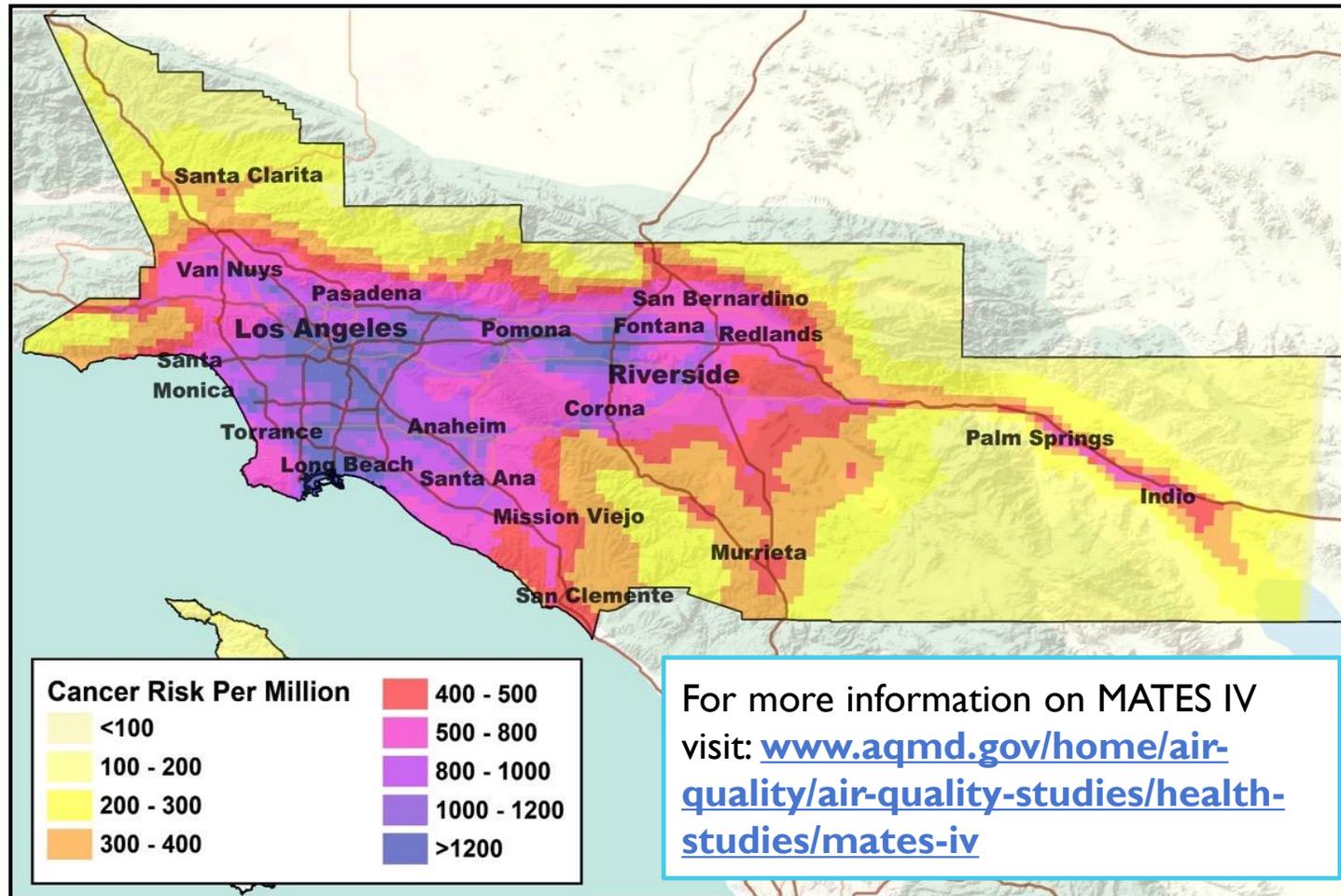


**Proximity to Major Stationary Sources of Air Pollution**

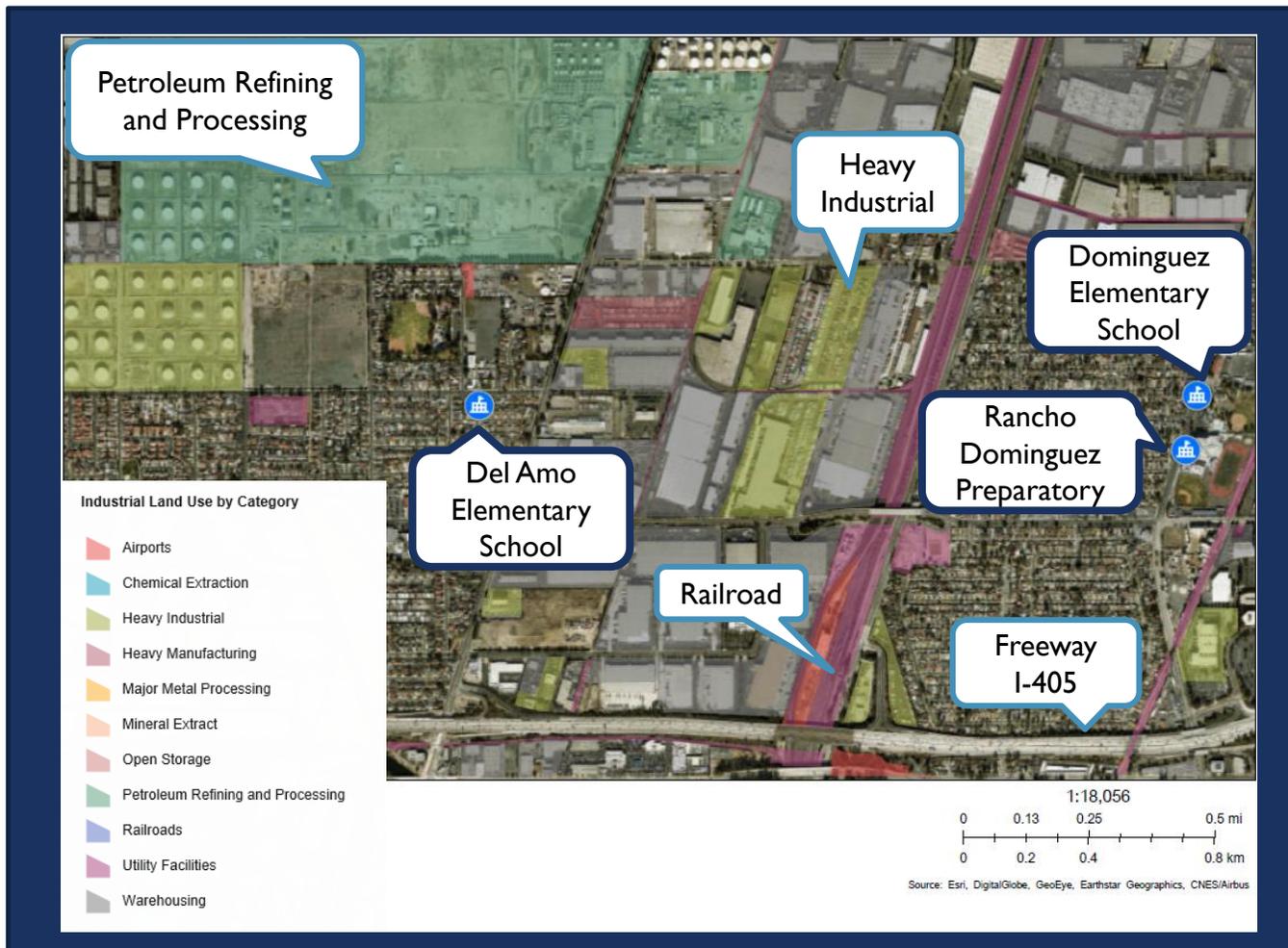


**Proximity to Freeways**

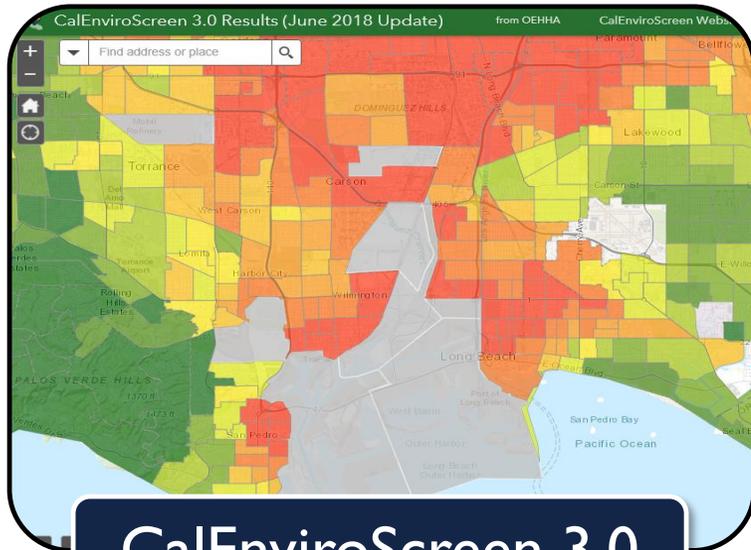
# MULTIPLE AIR TOXICS EXPOSURE STUDY (MATES)



# PROXIMITY TO SOURCES OF AIR POLLUTION OR FREEWAYS



# ADDITIONAL PRIORITIZATION CRITERIA



CalEnviroScreen 3.0

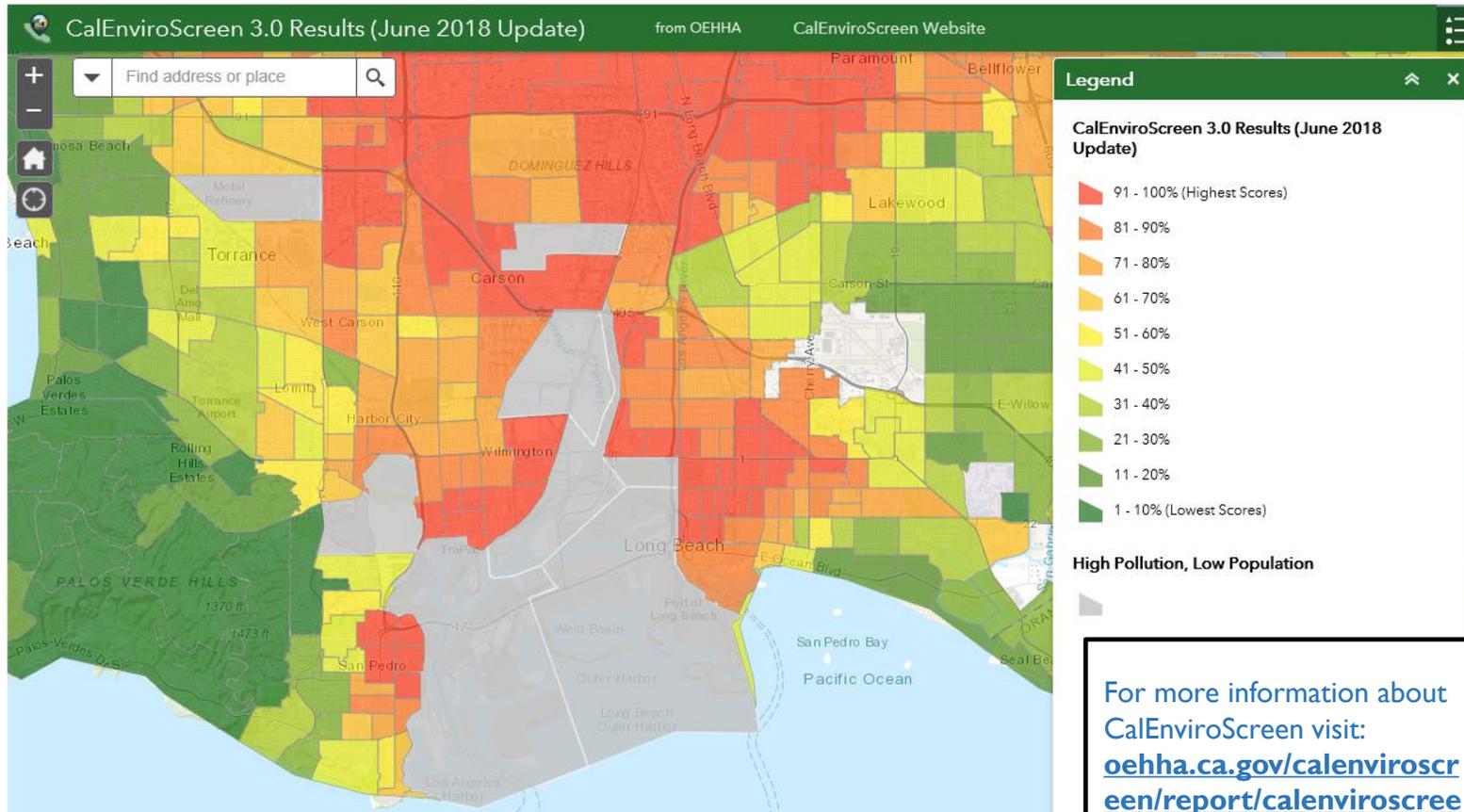


CalTrans Traffic Data



School Characteristics

# CALENVIROSCREEN 3.0 (OEHHHA)



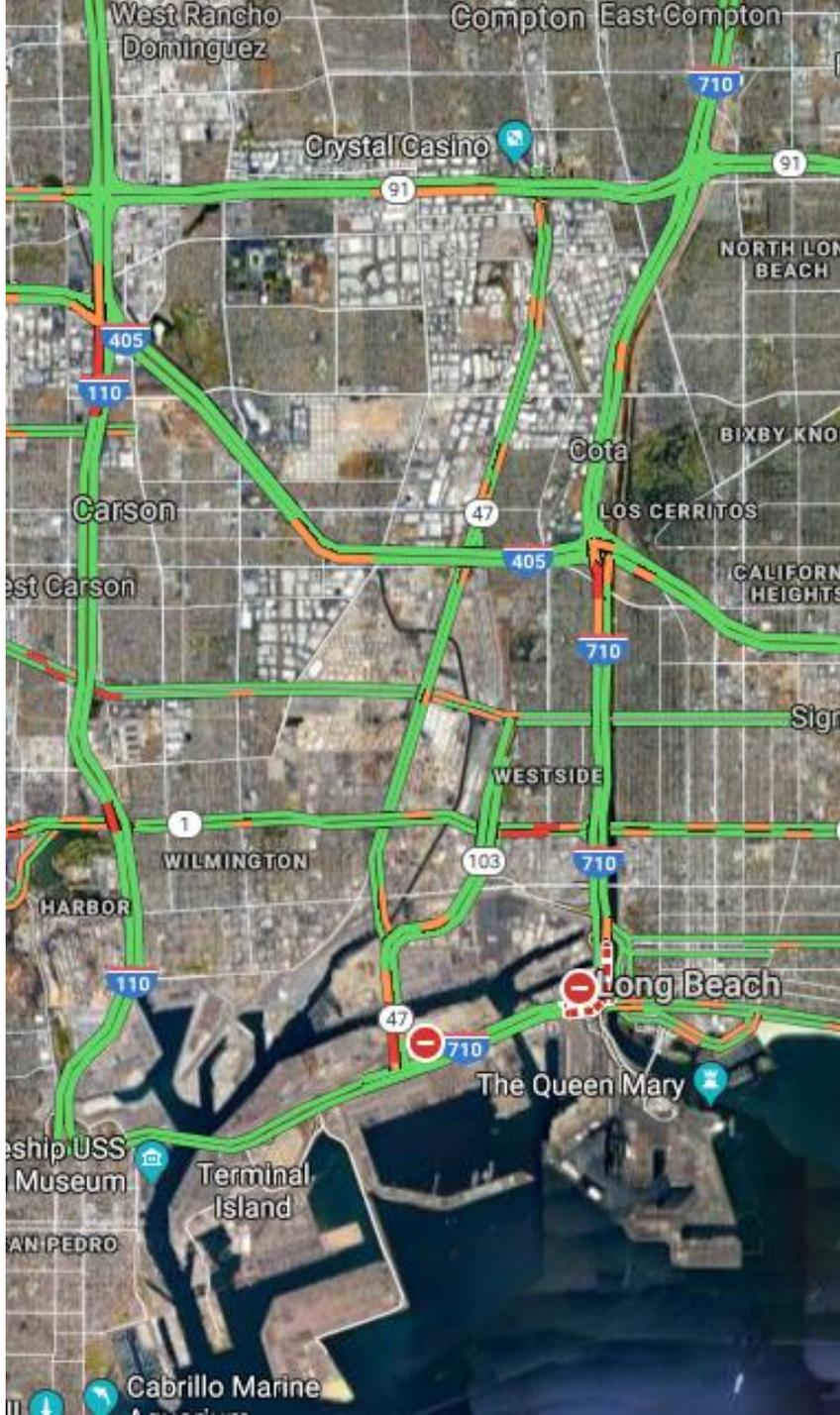
For more information about CalEnviroScreen visit: [oehha.ca.gov/calenviroscreen/report/calenviroscreen-30](http://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30)

Pollution Burden	Pollution Burden
<b>Exposures</b> Ozone PM2.5 Diesel PM Pesticide Use Traffic Drinking Water Contaminants Toxic Releases from Facilities	<b>Environmental Effects</b> Solid Waste Sites and Facilities Cleanup Sites Groundwater Threats Impaired Water Bodies Hazardous Waste Generators and Facilities

Population Characteristics	Population Characteristics
<b>Sensitive Populations</b> Asthma Cardiovascular Disease Low Birth-Weight Infants	<b>Socioeconomic Factors</b> Poverty Unemployment Educational Attainment Linguistic Isolation Housing Burdened Low Income Households

AQ Priority: Schools

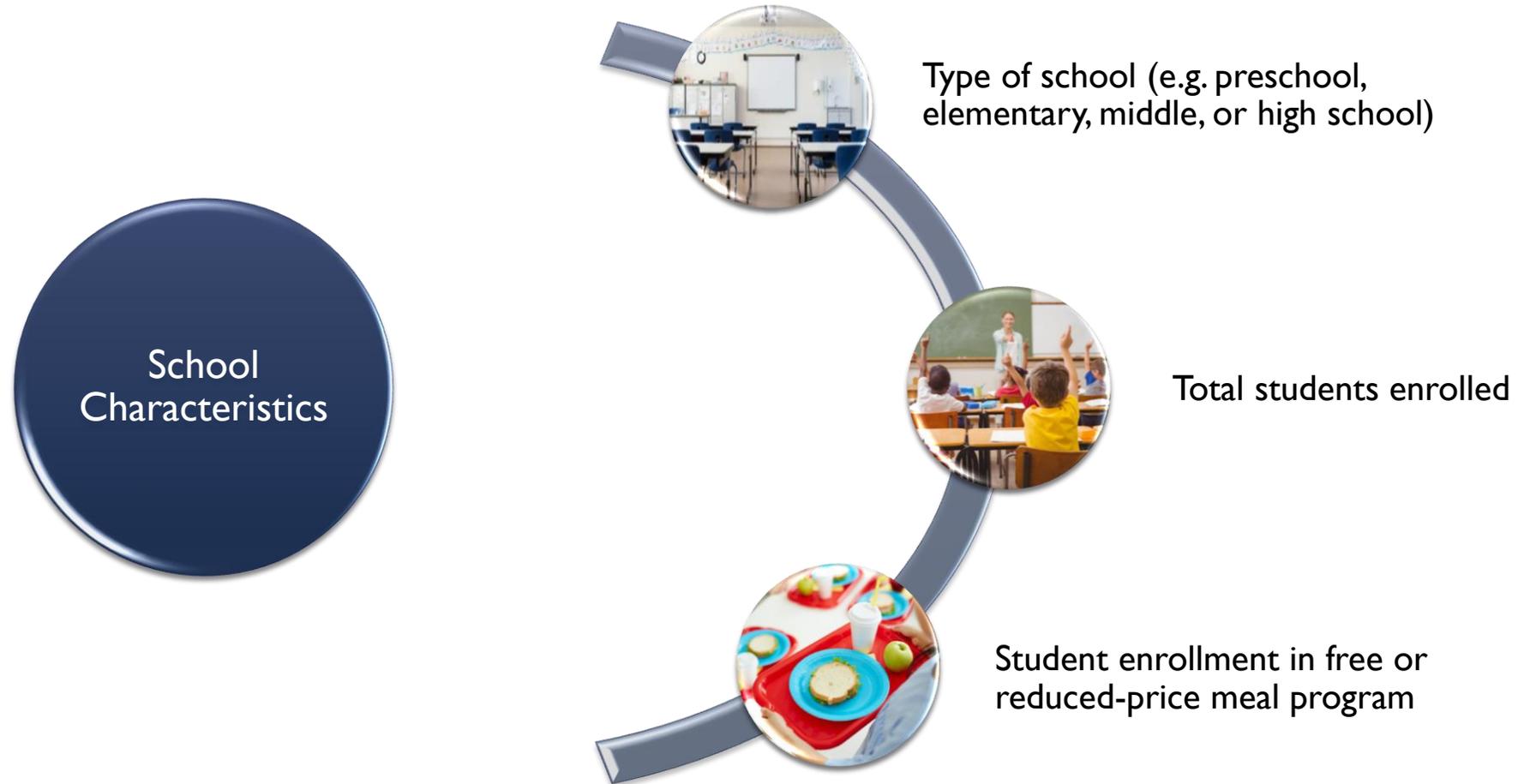
**OEHHHA: Office of Environmental Health Hazard Assessment**  
(State agency)



# TRAFFIC CONGESTION SURROUNDING SCHOOL



# SCHOOL CHARACTERISTICS



# PRIORITIZATION FOR AIR FILTRATION SYSTEMS ACTIVITY

**Example:**

Criteria and Brief Description	Rank # (1 – 5)*
<b>Multiple Air Toxics Exposure Study IV (MATES IV)</b> Focuses on the cancer risk from exposure to air toxics across the South Coast Air Basin.	2
<b>CalEnviroScreen 3.0</b> Identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution.	5
<b>CalTrans Traffic Data</b> Traffic data can show where congestion occurs. Congestion can result in idling vehicles and create an increase in emissions around nearby schools.	3
<b>School Characteristics</b> <i>(Please check the box next to the school characteristic you think should be included)</i> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Highest priority for preschools, followed by elementary, middle, then high schools</li> <li><input type="checkbox"/> Higher priority for schools that have more students</li> <li><input type="checkbox"/> Higher priority for schools with higher percent of students enrolled in free or reduced-price meal program</li> </ul>	4
<b>Nearby Sources of Air Pollution</b> <i>Please list which three sources of air pollution that are of most concern when they are near schools. For example, air pollution sources can be refineries, railyards, industrial facilities, and freeways.</i> <ul style="list-style-type: none"> <li>1) <u>Freeways</u></li> <li>2) <u>Railyards</u></li> <li>3) <u>Industrial Facilities</u></li> </ul>	1

\*There should be no duplicate values in your ranking.

# South Coast AQMD's AB 617 web page:

[www.aqmd.gov/AB617](http://www.aqmd.gov/AB617)

Download  
South Coast  
AQMD's  
Mobile App

### APPLICATION FEATURES



**Detailed Monitored Data**

**Real-time & Forecasted Air Quality**

**Connect with SCAQMD**

**AQI on Your Wrist (Apple Watch)**

#### ADDITIONAL FEATURES

- Configurable air quality notifications
- Integrated temperature
- Animated weather background
- Interactive air quality map
- Alternative fuel
- Call 1-800-CUT-SMOG at the touch of a button

Follow Us on  
Social Media

