

AB 617 COMMUNITY STEERING COMMITTEE

Wilmington, Carson, West Long Beach
February 11, 2021



CSC MEMBERSHIP 2021



- Welcome & Introductions

CSC Member Updates

CERP IMPLEMENTATION

1ST QUARTER 2021

Wilmington, Carson, West Long Beach
February 11, 2021

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





INCENTIVES BUDGETING WORKSHOP

NICOLE SILVA
PROGRAM SUPERVISOR



PROJECT FUNDING PROCESS – OVERVIEW



Incentive Strategies Workshop

- Overview of Past CAPP incentives
- Overview of funding across all 5 AB 617 communities

October 15, 2020



CSC Meeting – Incentives Strategy

- Guideline Requirements for Year 3 CAPP Incentives
- Overview of staff recommendation for Year 3 CAPP Incentives

December 9, 2020



Governing Board Meeting

- Recognized Year 3 CAPP incentive funds
- Approved Year 3 CAPP Incentive funds for mobile source and other eligible projects

January 8, 2021



Incentives Budgeting Workshop

- CSC input to develop eligible project list supported by WCWLB CERP

Today



Submit funding request to CARB for approval

May 1, 2021

DECEMBER CSC MEETING RECAP – INCENTIVES STRATEGY FOR YEAR 3 CAPP FUNDS

MOBILE SOURCE PROJECTS* (~\$37.7 MILLION)

- \$18.5 million for mobile source projects in WCWLB
 - 66.6 tons of NOx
 - 1.60 tons of DPM reductions
- Staff received CSC input on funding for mobile source projects (e.g., zero emission, near-zero, and disadvantaged communities near AB 617 communities)

* Full list of Year 3 CAPP Incentive Awarded Projects may be found at:

<http://www.aqmd.gov/home/programs/business/community-air-protection-incentives/year-3-capp-incentives>

DECEMBER CSC MEETING RECAP – INCENTIVES STRATEGY FOR YEAR 3 CAPP FUNDS *(CONTINUED)*

COMMUNITY-IDENTIFIED* AND OTHER ELIGIBLE PROJECTS (~\$36.7 MILLION)

- Staff suggested equal distribution among the 5 communities with adopted CERPs to fund eligible projects
- Staff received input from CSC on suggested equal distribution among the 5 communities with adopted CERPs

* Community-identified projects are described in Chapter 6 of CARB's CAPP Incentive Guidelines:
https://ww2.arb.ca.gov/sites/default/files/2020-10/cap_incentives_2019_guidelines_final_rev_10_14_2020_0.pdf

DECEMBER CSC MEETING RECAP – INCENTIVES STRATEGY FOR YEAR 3 CAPP FUNDS *(CONTINUED)*

Cost-effectiveness

- Select cost-effective projects and projects that have greatest impact

Small Business

- Ensure incentive opportunity information is distributed to owner-operators or small businesses
- Prioritize investments in small businesses

Cleaner Technology

- Invest in replacing vehicles and infrastructure for zero emissions (ZE) or near-zero emissions (NZE)

Health Benefits

- Invest in other measures and projects that reduce health risks (aside from air filtration systems and outreach)

INCENTIVES STRATEGY FOR REMAINING YEAR 3 CAPP FUNDS

- \$36.7M remain and will be available for community-identified and other eligible projects across all 5 AB 617 communities
 - Communities receiving ~\$5.57M:
 - Wilmington, Carson, West Long Beach
 - Boyle Heights, East Los Angeles, West Commerce
 - Eastern Coachella Valley
 - Communities receiving ~\$10M:
 - San Bernardino, Muscoy
 - Southeast Los Angeles
- Work with the WCWLB CSC to develop the recommendations on the types of CERP projects to pursue with these funds

INCENTIVES STRATEGY FOR REMAINING YEAR 3 CAPP FUNDS – CERP INCENTIVE OPPORTUNITIES

AQ Priority	CERP Incentive Opportunities
Ports	Replace older ship and harbor craft engines with cleaner models
Ports	Replace older ports equipment with cleaner models
Truck Traffic and Freeways	Replace older trucks with cleaner models, support related infrastructure
Railyards	Zero-emission infrastructure installation Replace diesel equipment with cleaner models
Schools, Childcare Centers, etc.	School air filtration systems and/or replacement filters
Schools, Childcare Centers, etc.	Home air filtration systems
Schools, Childcare Centers, etc.	Tree planting (native, drought tolerant)

AVERAGE COST-EFFECTIVENESS* FOR CERP INCENTIVE PROJECT TYPES – MOBILE SOURCE PROJECTS*

Project Type	Project Cost	South Coast AQMD Funding Amount *	Avg. Cost Effectiveness (\$/ton)	Avg. NOx Reductions (tpy)	Avg. ROG Reductions (tpy)	Avg. PM Reductions (tpy)
Class 8 Low-NOx Truck	\$150,000 - \$190,000	\$51,618 - \$100,000	\$31,085	0.42	0.05	0.00
Class 8 Zero Emission Truck	\$380,000 - \$550,000	\$17,438 - \$200,000	\$79,972	0.39	0.03	0
Marine Vessel Engine Repower	\$93,000 - \$1 million	\$276,763	\$13,485	1.79	0.03	0.07
Zero Emission Cargo Handling Equipment	\$1 million	\$240,046	\$80,141	0.59	0.15	0.01
Tier 4 Hybrid Cargo Handling Equipment	\$640,200 - \$2.5 million	\$449,156	\$30,000	2.27	0.21	0.03
Tier 4 Locomotives (Freight)	\$2.5 million	\$1.9 million	\$21,830	4.7	0.25	0.08

* Based on averages from previously awarded incentive projects. Averages are subject to change given new project applications, incentive program criteria and/or funding limits.

ESTIMATED COST-EFFECTIVENESS FOR CERP INCENTIVE PROJECTS – EXPOSURE REDUCTIONS AND OTHER PROJECTS

Project Type	Cost	Cost-Effectiveness	Air Quality Benefit
Air Filtration System	\$30,000 - \$300,000*	N/A	Exposure Reductions
Tree Planting	\$250 - \$290**	N/A	Other

* Cost varies by school type, school size, and years of maintenance provided

** Cost per tree plus installation cost

INCENTIVES STRATEGY FOR REMAINING YEAR 3 CAPP FUNDS – PROJECT EXAMPLES

- ~\$5.57 million dollars may cover:
 - a) Installation of air filtration systems at ~45 more schools*, or
 - b) Replacement of ~9 class 8 zero emission trucks, or
 - c) Replacement of ~29 Low-NOx trucks



* Cost varies by school type, school size, and years of maintenance provided

Priority #1

Which project would you rank as your #1 priority?

- Trucks (Diesel reductions)
- Locomotives (Diesel reductions)
- Port Equipment (Diesel reductions)
- Ships or Harbor Craft (Diesel reductions)
- Air Filtration Systems (Schools, exposure reductions)
- Trees (Green Space)

Priority #2

Which project would you rank as your #2 priority?

- Trucks (Diesel reductions)
- Locomotives (Diesel reductions)
- Port Equipment (Diesel reductions)
- Ships or Harbor Craft (Diesel reductions)
- Air Filtration Systems (Schools, exposure reductions)
- Trees (Green Space)

Priority #3

Which project would you rank as your #3 priority?

- Trucks (Diesel reductions)
- Locomotives (Diesel reductions)
- Port Equipment (Diesel reductions)
- Ships or Harbor Craft (Diesel reductions)
- Air Filtration Systems (Schools, exposure reductions)
- Trees (Green Space)

Submit

PRIORITIZATION OF PROJECT TYPES

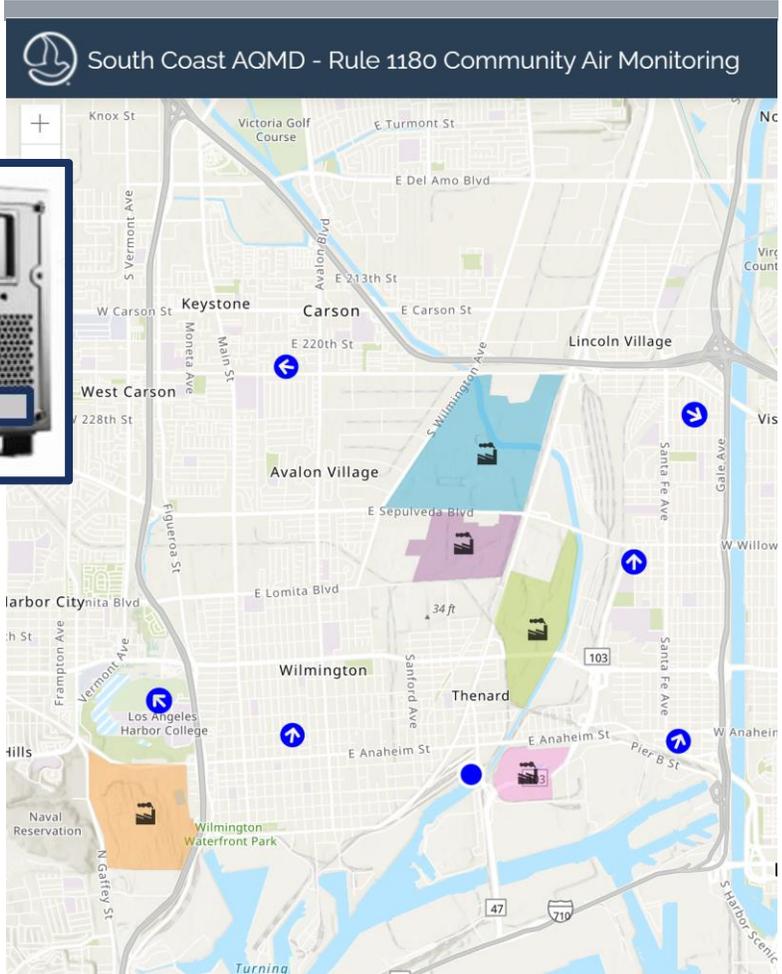
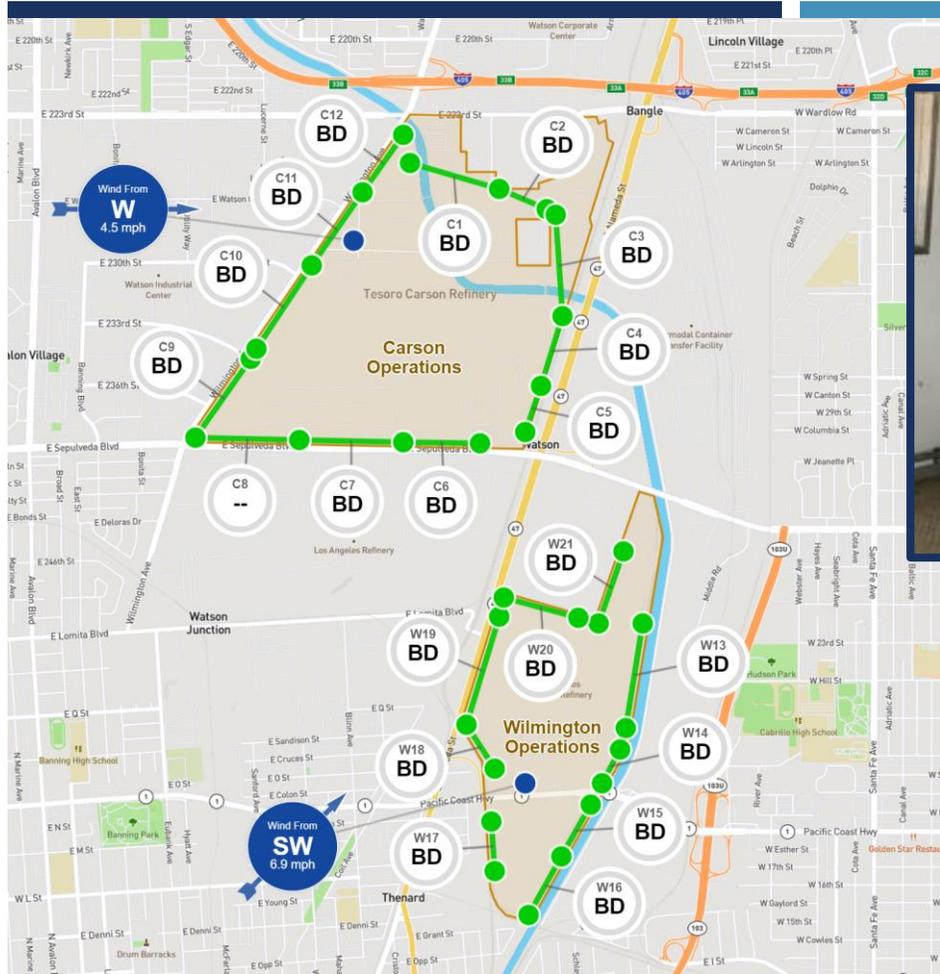
- Please rank your top three priorities (#1 is highest priority)
- Zoom polls to select rankings
 - Select one option per poll
 - If you are participating by phone, please email your rankings to ab617comments@aqmd.gov

DISCUSSION

Are there any additional projects* that you want to suggest that support actions in the WCWLB CERP?



* If needed, a plan will be developed for community-identified projects for approval by CARB



RULE 1180 IMPLEMENTATION UPDATE

OLGA PIKELNAYA PH.D

PROGRAM SUPERVISOR

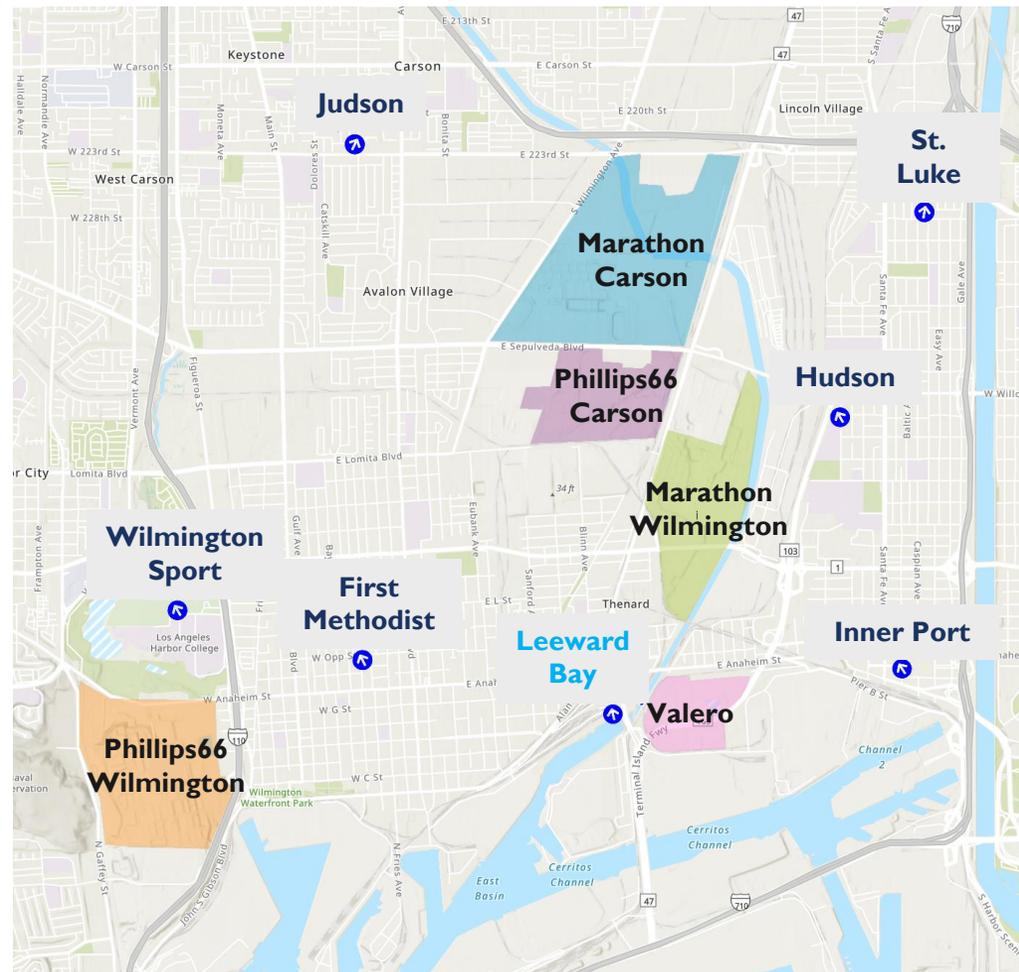
AIR MONITORING AT A GLANCE

Refinery Fenceline Air Monitoring

- 5 refineries in WCWL community
- Nearly complete fenceline coverage
- Real-time monitoring for all required compounds
- Dedicated public data portal and notification system

Community Air Monitoring

- 6 permanent community stations in WCWL community
- Real-time monitoring for all required compounds
- Dedicated public data portal and notification system



FENCELINE AND COMMUNITY AIR MONITORING

Fenceline Air Monitoring

Rapid Response
Updated every 5 minutes

- Open Path FTIR and UV-DOAS
- Point monitors for Hydrogen Sulfide and Black Carbon
- Wind speed and wind direction and visibility



LP DOAS Instrument

Community Air Monitoring

Rapid Response
Updated every 5 minutes

- Optical FTIR and UV-DOAS
- Point monitors for Hydrogen Sulfide, Black Carbon and Hydrogen Fluoride
- Wind speed and wind direction



UV-DOAS optical cell

Community Air Monitoring

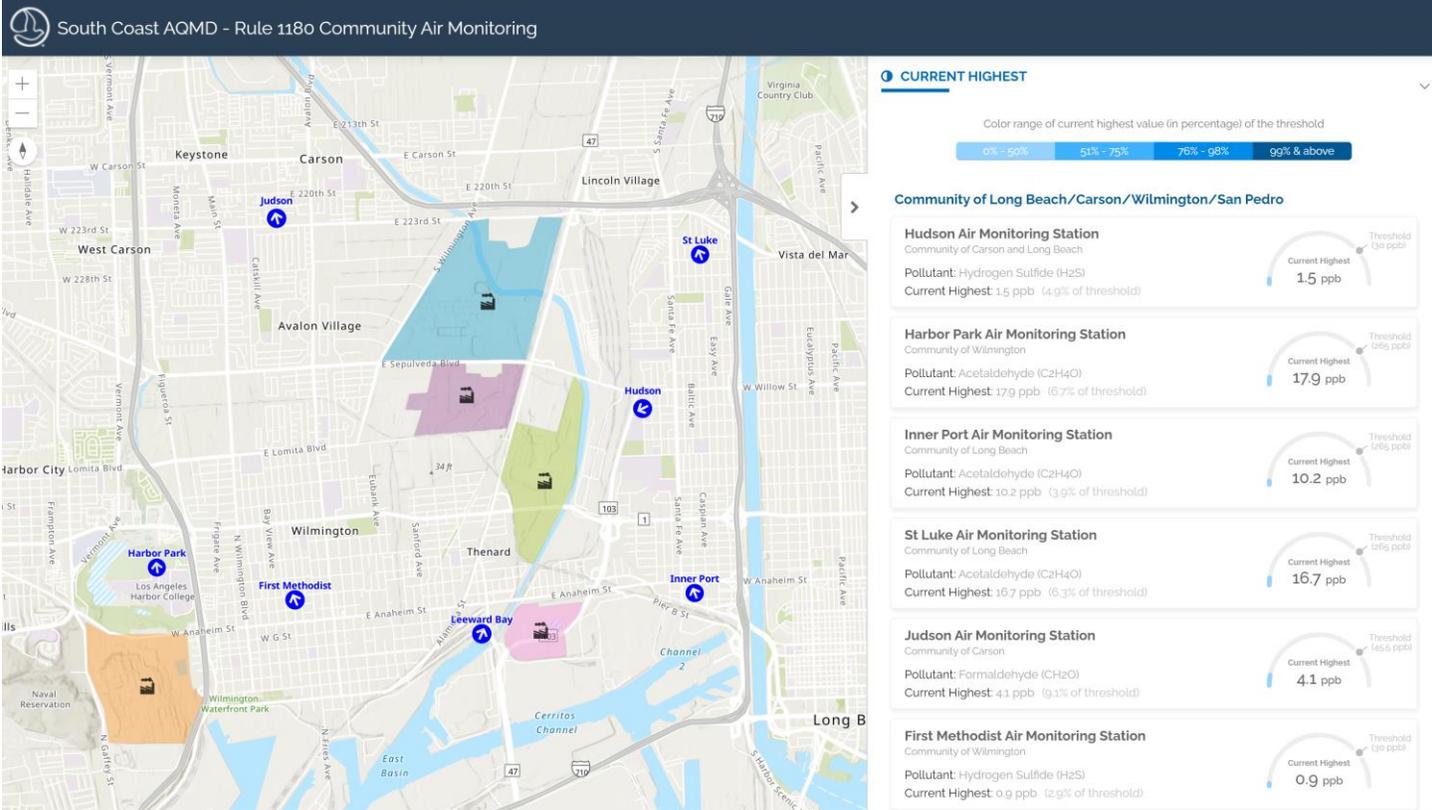
Semi-continuous
Increased sensitivity

- Automated GC (1-hour average) for BTEX and extensive list of VOC's
- ~0.1 ppb detection limits!



Mini Auto-GC

AIR MONITORING DATA PORTAL



<https://xapprod.aqmd.gov/Rule1180CommunityAirMonitoring/>

Community Air Monitoring

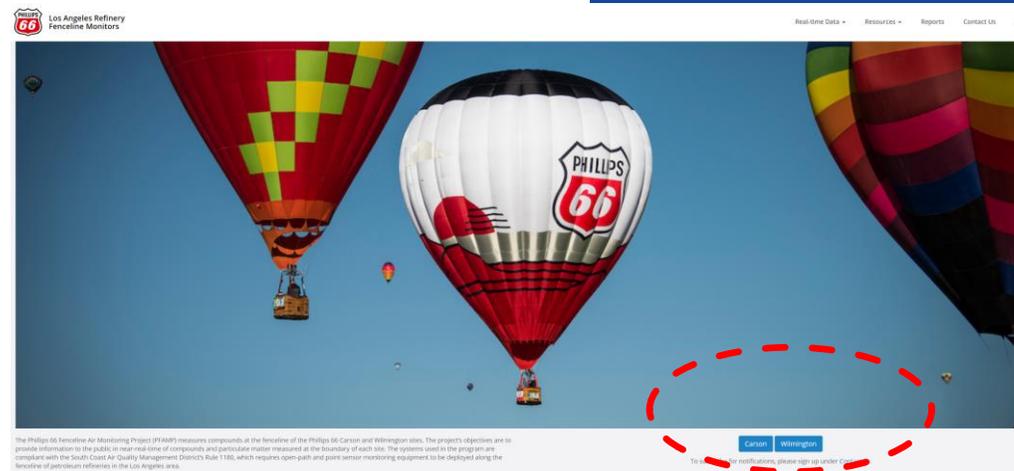
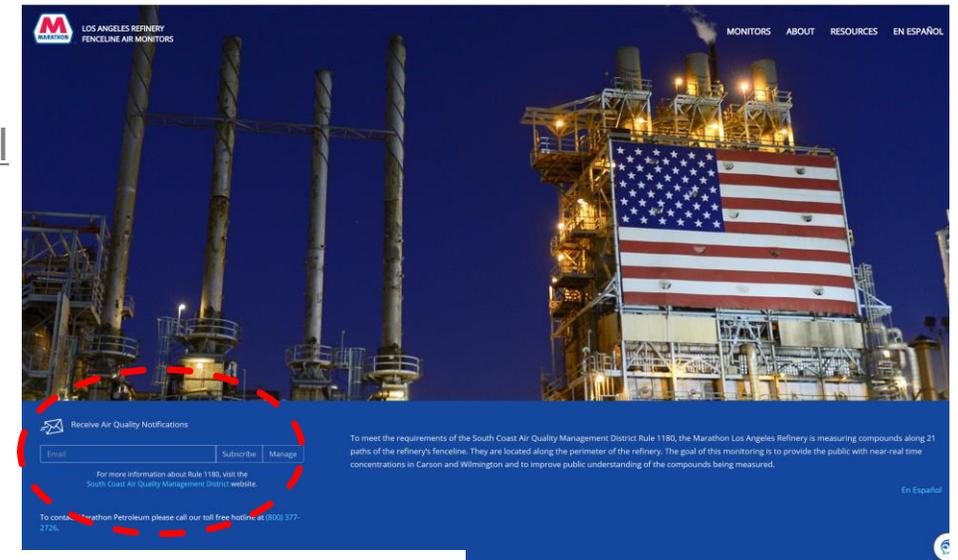
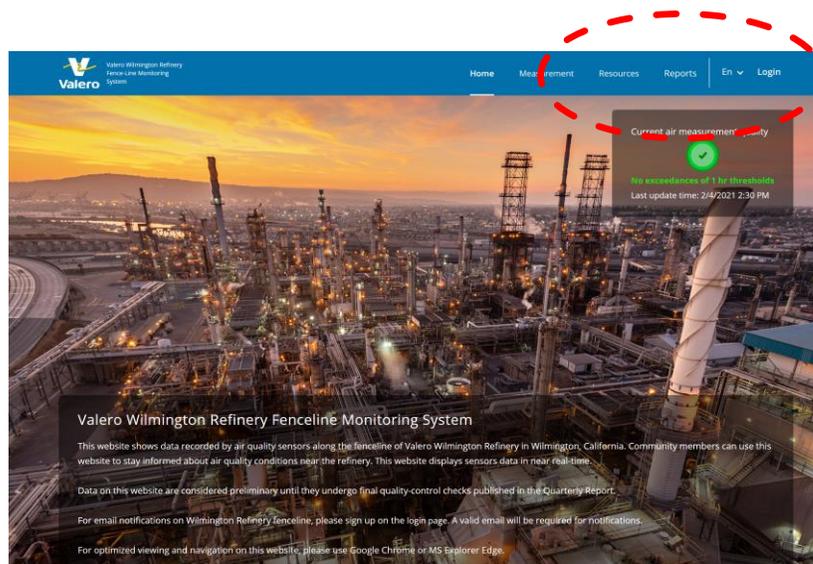
- “At a glance” air quality display **New**
- View current and historical data
- Data download
- Frequently Asked Questions

Refinery Fenceline Air Monitoring

- Links to each refinery fenceline air monitoring portal **New**
- Refinery fenceline data summary reports
- Future plans for integration of refinery air monitoring data

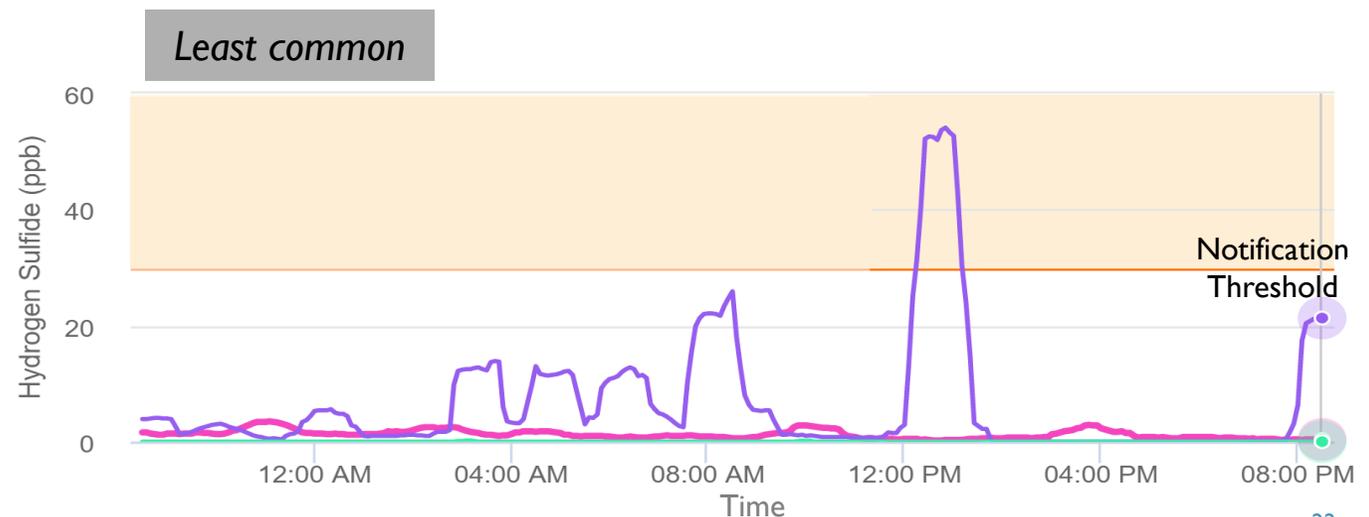
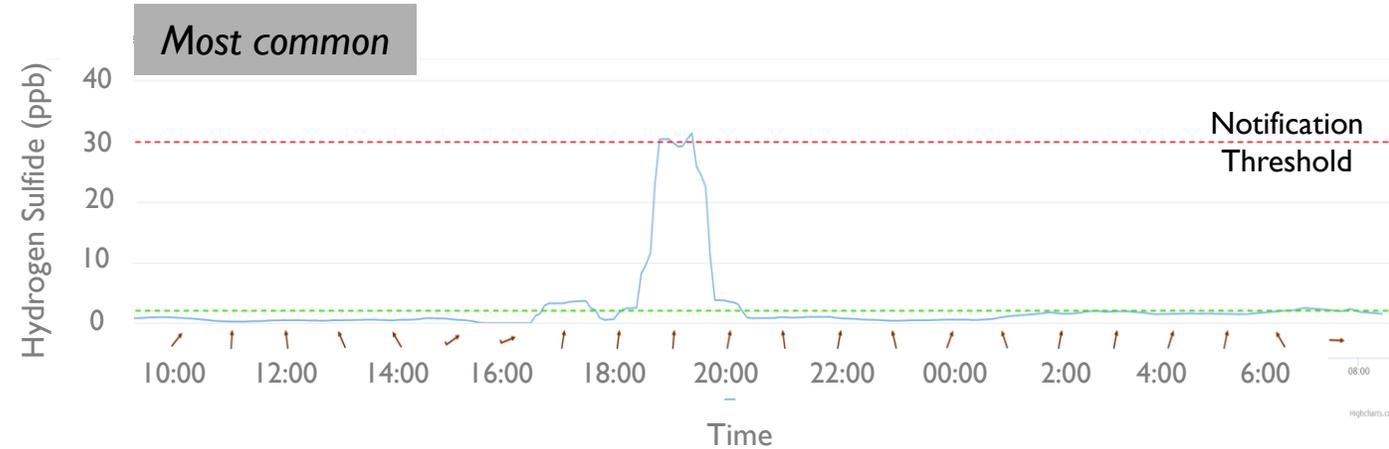
REFINERY NOTIFICATIONS SIGN-UP

- Marathon Refinery: <https://marathonlosangelesrefineryfencelinemonitoring.com/index.html>
- Phillips 66 Refinery: <https://p66la.argos-sci.info/>
- Wilmington Refinery: <https://wilmingtonrefinerymonitoring.org/>



REFINERY NOTIFICATIONS

- In 2020 most notifications events were caused by H₂S exceedances
 - Occurred all WCWLB refineries
 - 44 events in total during 31 days
- H₂S levels at community air monitoring sites remained low
- Compliance staff followed-up as needed
- Refineries investigated and corrected the causes



CERP ACTIONS UPDATE

- CERP Refinery Action #2:
 - “Beginning January 2020 to January 2021, conduct periodic VOC measurements to obtain one full year of data and establish an emissions baseline”
 - Implementation was delayed due to COVID-19 restrictions
 - Baseline measurements tentatively scheduled to begin in summer 2021 (COVID-19 permitting)
- CERP Oil Wells Action #5:
 - “Conduct mobile air measurements around active, idle, and abandoned oil drilling sites to identify potential leaks”
 - Additional mobile oil wells surveys planned for first quarter of 2021 (COVID-19 permitting)
 - Collaboration with C.F.A.S.E. (COVID-19 permitting)

DISCUSSION

- Comments, Suggestions, Questions

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Draft Proposed Amendments to the Commercial Harbor Craft Regulation

**Proyecto de Enmiendas Propuestas de
Embarcaciones de Servicio del Puerto**

Background

- Communities near seaports experience cumulative exposure burden from multiple sources of freight pollution
- Emission reductions are needed from harbor craft additional to State Implementation Plan actions to:
 - Achieve reduction in community health risk
 - Attain regional air quality standards
 - Mitigate climate change

Los Antecedentes

- Las comunidades cercanas a los puertos marítimos experimentan una carga de exposición acumulativa de múltiples fuentes de contaminación del transporte.
- Se necesitan reducciones de emisiones de las embarcaciones de servicio del puerto además de las acciones del Plan de Implementación del Estado para:
 - Lograr la reducción del riesgo para la salud comunitaria
 - Lograr los estándares regionales de calidad del aire.
 - Mitigar el cambio climático.

Commercial Harbor Craft

- The proposed amendments aim to include more vessel categories and introduce more stringent requirements
- Compliance deadlines beginning in 2023 would require cleaner combustion “Tier 4 + DPF”
- Some advanced technology requirements: shore power at dock, full zero-emission short run ferries, zero-emission capability for new excursion vessels

Embarcaciones de Servicio del Puerto

- Las enmiendas propuestas tienen como objetivo incluir más categorías de embarcaciones e introducir requisitos más estrictos
- Los plazos de cumplimiento a partir de 2023 requerirían una combustión más limpia “Nivel 4 + filtrador de partículas de diésel”
- Algunos requisitos de tecnología avanzada: energía en tierra en el muelle, transbordadores de corto recorrido con cero emisiones, capacidad de cero emisiones para nuevas embarcaciones de excursión

Commercial Harbor Craft

- The amendments require operators to perform opacity testing every other year (biennially)
- Proposed 15-minute limits for main engine idling and auxiliary engine operation
- To increase compliance, the amendments propose facility reporting and vessel labeling

Embarcaciones de Servicio del Puerto

- Las enmiendas requieren que los operadores realicen pruebas de opacidad cada dos años
- Límites propuestos de 15 minutos para el motor principal al ralentí y el funcionamiento del motor auxiliar
- Las enmiendas contienen requisitos para informes de instalaciones y etiquetado de embarcaciones para aumentar el cumplimiento.

DPFs for Marine Vessels

- Tens of thousands of DPF retrofits have been installed on freight equipment
- DPF must be a Level 3 Verified Diesel Emission Control Strategy (VDECS) capable of reducing diesel PM by 85 percent or more
- Demonstration projects could help provide support for this statewide rule

Filtrador de Partículas de Diésel (DPF) para Embarcaciones Marinas

- Se han instalado decenas de miles de modificaciones de DPF en equipos de transporte
- El DPF debe ser una estrategia de control de emisiones de diésel verificada de nivel 3 (VDECS) capaz de reducir las partículas de diésel en un 85 por ciento o más
- Los primeros proyectos de demostración podrían ayudar a brindar apoyo a esta regla estatal

Contact Information

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CARB Commercial Harbor Craft
Website:

<https://www.arb.ca.gov/ports/marinevess/harborcraft.htm>

Información del Contacto

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Sitio web de CARB de
Embarcaciones de Servicio del
Puerto:

<https://www.arb.ca.gov/ports/marinevess/harborcraft.htm>

NEXT STEPS

Future Announcements

- Newsletters
- Continue CERP implementation

Future Meeting

- Tentatively May 2021 (virtual)
- AQ Priority Updates & Agenda Topics
 - What would you like to hear about?
(i.e., Community Air Grant updates)
- Other topics?

Public Comment



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