

AB 617 COMMUNITY STEERING COMMITTEE

Wilmington, Carson, West Long Beach
August 18, 2021



AB 617 WCWLB

CSC Member Updates



AB 617 WCWLB

Outreach Updates





AB 617 TRUCK INCENTIVES WORKSHOP FOR HEAVY-DUTY TRUCKS

WALTER SHEN

PLANNING AND RULES MANAGER



BACKGROUND AND RECAP

Why a project plan for truck incentives?

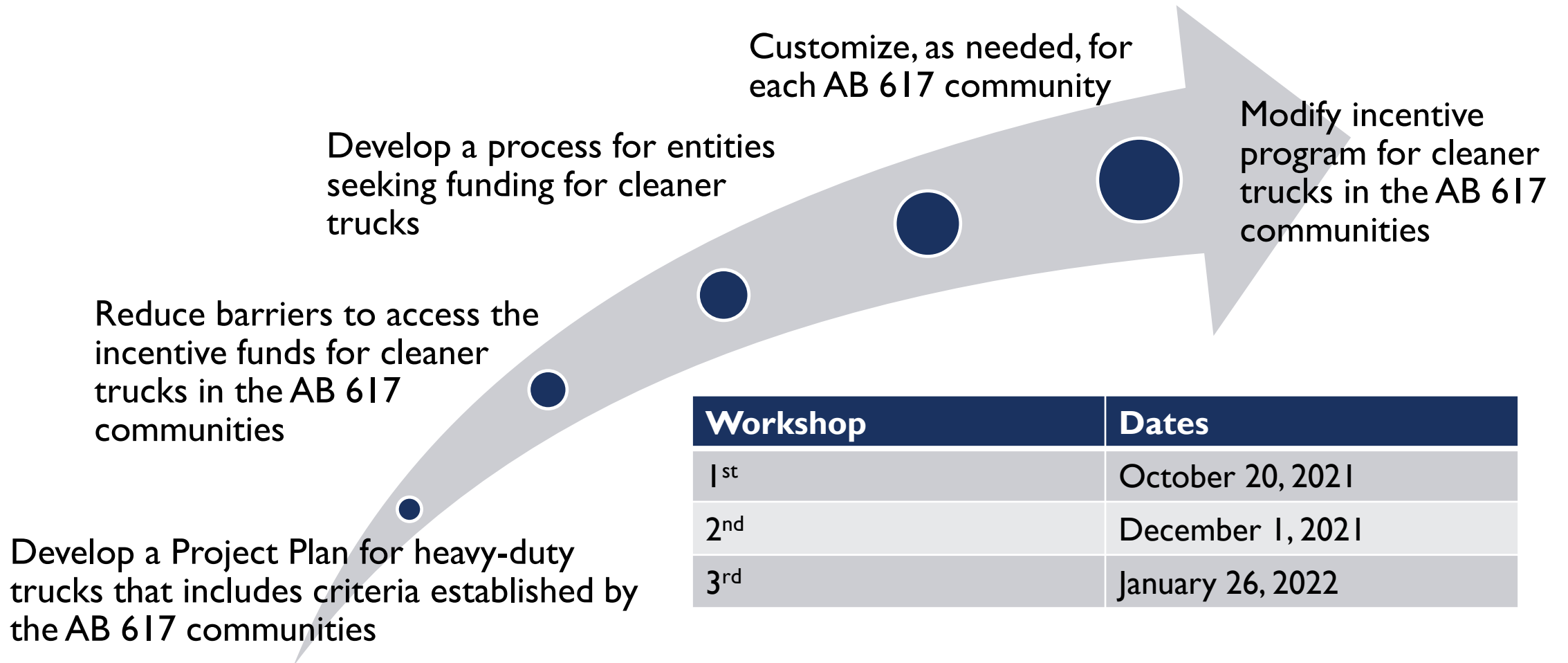
Existing incentive programs are not working for certain fleets and small businesses in AB 617 communities

Incentive program changes are needed to attract more participants

Customize incentives to meet the needs of the community (e.g., prioritize small businesses)

Prioritize funding for trucks in the AB 617 communities

TRUCK INCENTIVES WORKSHOP (OBJECTIVES AND DATES)



WHAT'S NEXT

- Upcoming workshop information will be provided
 - Agenda
 - ZOOM link
- Ryan Stromar (rstromar@aqmd.gov)

South Coast AQMD AB 617 Community Steering Committee Meeting

August 18, 2021



Corporate social responsibility pillars



Enabling electric transportation

Commitment to making the world a more sustainable place by driving electric vehicle adoption through infrastructure and education



Environmental sustainability

Commitment to being carbon-neutral or better, powering our stations with renewable energy and building infrastructure sustainably



Community support

Unlocking electrification for all, including investments and education in disadvantaged, low income and rural areas



Equality & diversity

Striving to achieve diversity and inclusion in everything we do, from investing to hiring and supplier relationships



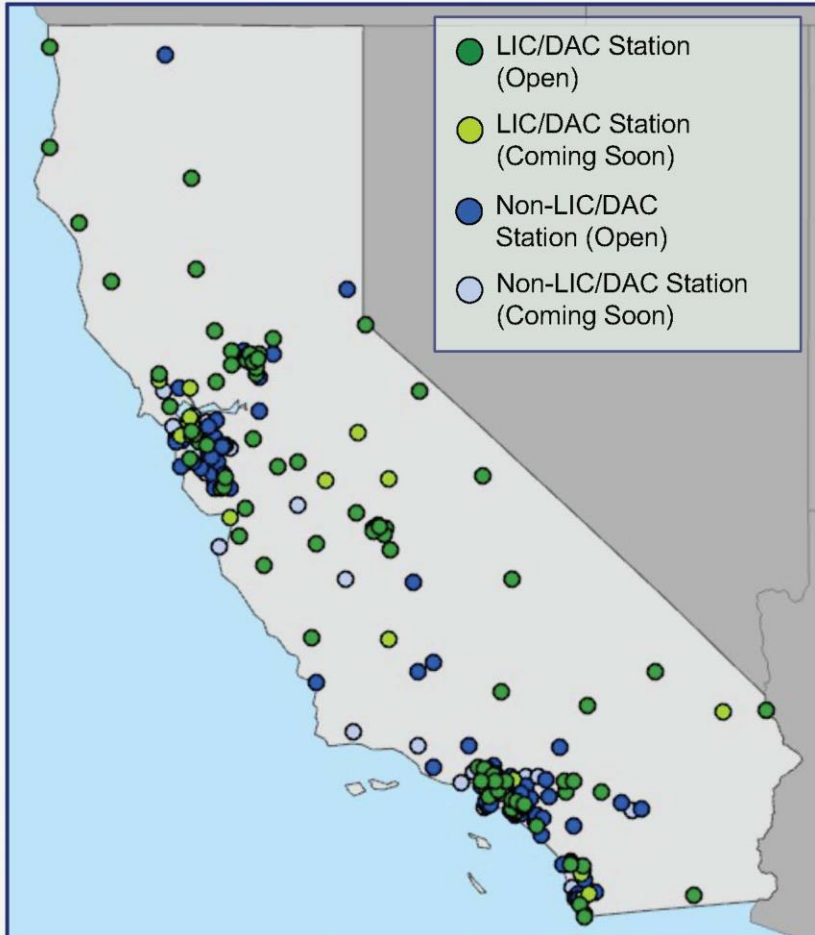
Progress to date

- ⚡ Largest and most powerful open fast charger network
- ⚡ Reaching all California communities, including rural and disadvantaged communities
- ⚡ Award winning network with highest customer satisfaction
- ⚡ Expanding the market and access through education and outreach



Electrify America has over 750 chargers at 192 stations open in California

By end of 2021, Electrify America plans for > 230 stations open or under development



Network as of 12.31.2020

Electrify America's California Network

Station spacing: 9 mi. (avg.), 42 mi. (hwy avg.)

Chargers per site: 3-10

Charging speed: 3-20 miles/minute

Access: 90% of Californians live within 15 miles of a charger, 96% within 25 miles

Priority Communities: 50% of Electrify America Charging Stations are in disadvantaged and low-income communities

A Green City Investment

Electrify America will be creating a Second Green City beginning in 2022.

A Green City investment can include:

- ZEV car share
- ZEV transit
- ZEV freight transport

The second Green City will be in a community with:

- ~500,000 people
- Predominately consists of Disadvantaged Communities

CARB guidance encourages a Green City investments that “promote a broad conceptual transformation of transportation systems to ZEVs”



Green City 2

→ Projects located in Long Beach and Wilmington communities

- ⚡ \$25 million investment
- ⚡ Focused on freight and transit electric vehicle charging deployment
- ⚡ Freight charging depots will serve operators of all sizes, from large to small/independent
- ⚡ New, innovative technology and business models will be tested and implemented, including smart energy solutions to increase overall energy efficiency and to limit grid impact



Infrastructure investments Long Beach – Wilmington

Investing \$25MM in transit, medium- and heavy-duty fleet charging to expand transportation, electrification and benefits in the Long Beach – Wilmington area.

Municipalities and transit agencies are looking to electrify their fleets, but face barriers:

- ⚡ Limited knowledge of charging technologies and station deployment
- ⚡ Limited funding
- ⚡ Limited expertise in energy / utility management

Medium- and heavy-duty electrification is a top priority for both stakeholders and regulatory bodies:

- ⚡ Requires dedicated sites due to footprint and safety considerations





Cycle 3 Timeline & Next Steps

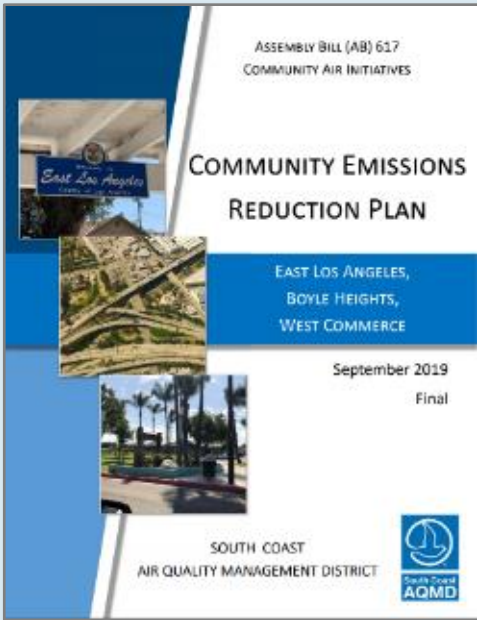
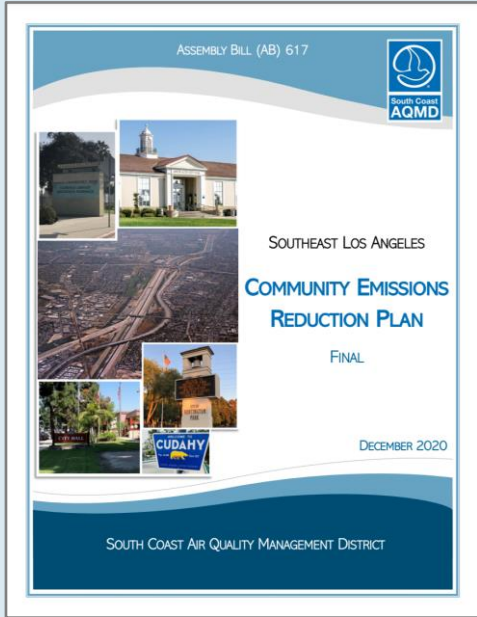
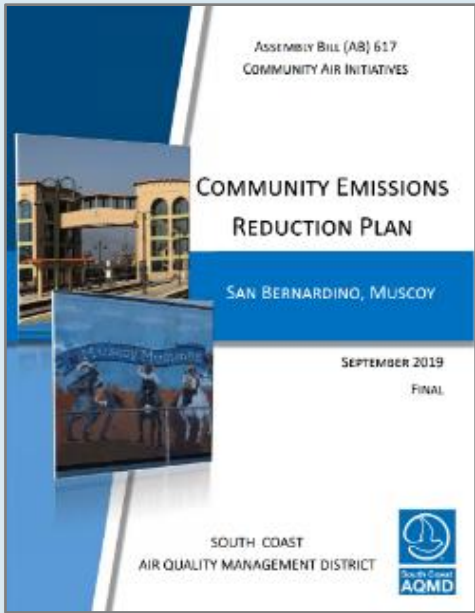
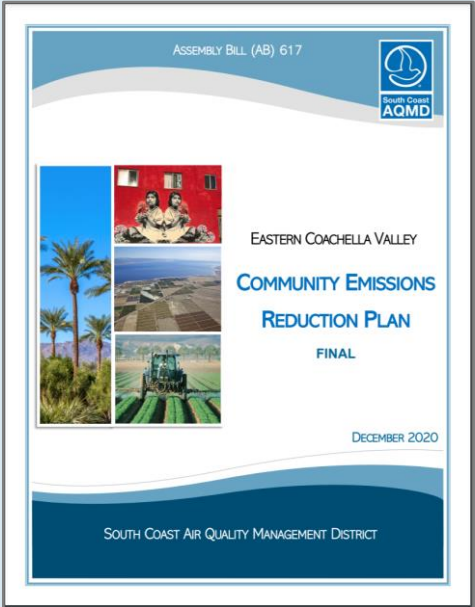
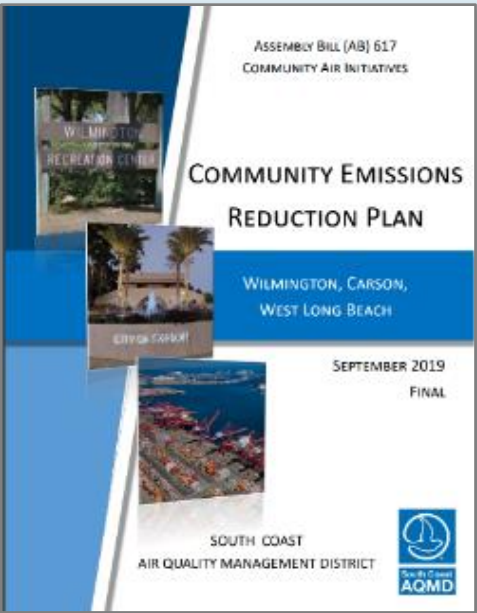
We hope to invest as quickly as possible to help accelerate transportation electrification in California

- Real estate acquisition (July 2021)
- Site design & development (starting September 2021)
- Cycle 3 officially begins (Q1 2022)
- First Cycle 3 sites live (Q2 2022)

Thank you.



Contact:
Matthew Nelson, Electrify America
Matthew.Nelson@electrifyamerica.com



ANNUAL PROGRESS REPORT

NICOLE SILVA

PROGRAM SUPERVISOR



OVERVIEW



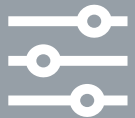
AB 617* requires air districts to annually report the progress of CERP implementation



Report will be updated to include implementation totals to-date



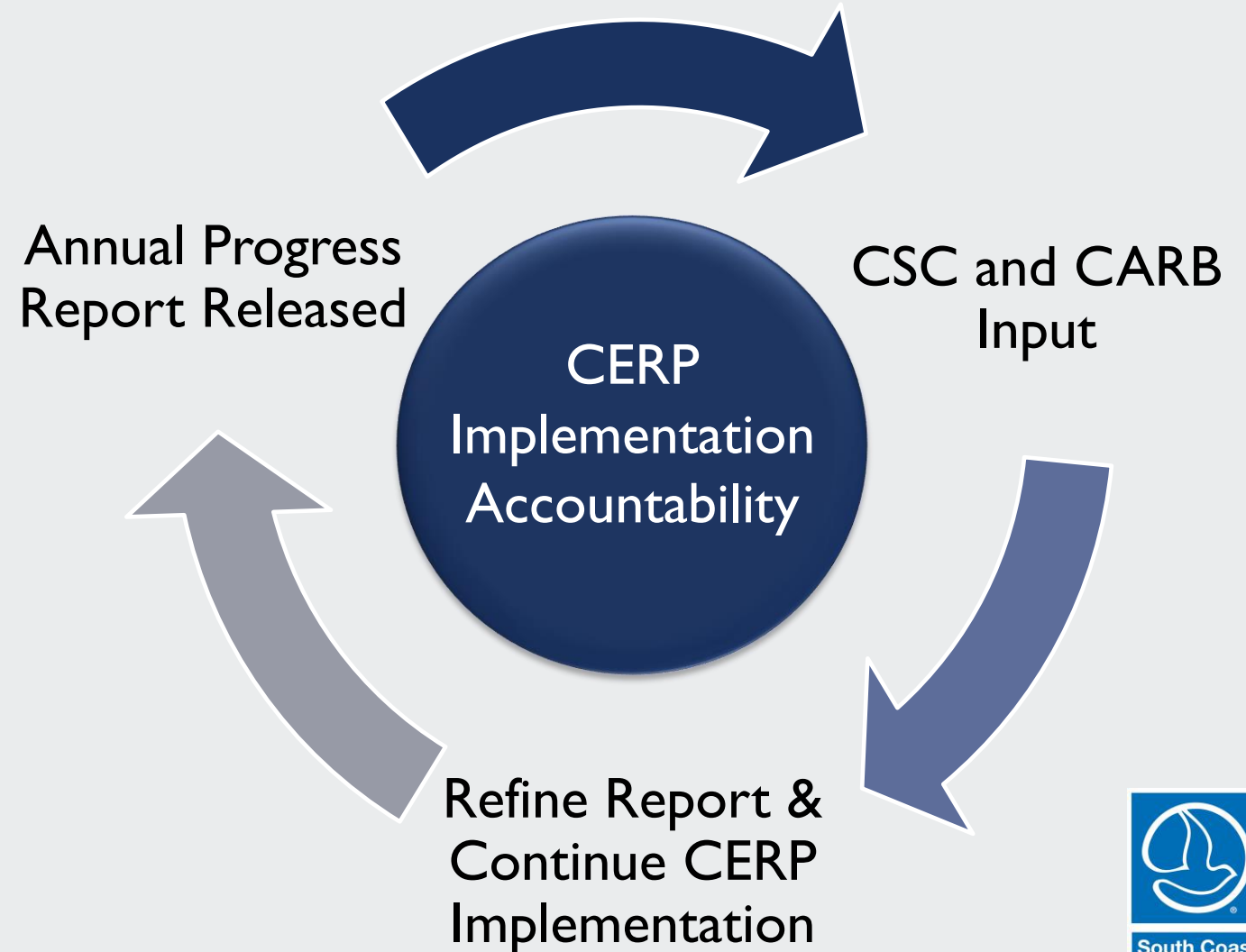
Annual reports sent to CSC and CARB for review



CARB may suggest plan revisions to air districts

*Health and Safety Code §44391.2(c)(7)

PURPOSE



OVERVIEW OF REPORT ELEMENTS

ANNUAL PROGRESS REPORT FOR
AB 617
COMMUNITY EMISSIONS
REDUCTION PLANS

October 2021



South Coast Air Quality Management District

Community Profile Updates

Overview of CERP Framework

Status of CERP Actions, Goals and Strategies

Metrics for Tracking Progress

Qualitative Assessment

Summary of Key Plan Adjustments

WCWLB IMPLEMENTATION HIGHLIGHTS



- Rule 2305 – Warehouse Indirect Source Rule (ISR) – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program was adopted in May 2021
- Proposed Amended Rule 1178 - Further Reductions of VOC Emissions From Storage Tanks At Petroleum Facilities began development
- \$2.4 million in Year 2 Community Air Protection Program (CAPP) Incentive funds recognized for school air filtration systems
- ~\$77.7 million allocated for cleaner technology mobile sources
 - \$5.57 million in Year 3 CAPP Incentive funds for Community-Identified Projects (split evenly between trucks and ships/harbor craft projects)
- Collaboration with LBACA to inform LBUSD about asthma triggers and school air filtration systems
- Community Air Monitoring Display tool available online [here](#)

South Coast AQMD - AB 617 Community Air Monitoring

AB 617 COMMUNITY AIR MONITORING

Community Air Monitoring is being conducted in selected communities as part of the AB 617 program. The locations and types of pollutants being monitored is unique to each community and was determined through close collaboration with stakeholders. Data collected from air monitoring can provide valuable information about sources of air pollution, types of pollutants, and air quality impacts in AB 617 communities. Monitoring data resulting from the implementation of the Community Air Monitoring Plans (or CAMPs) can be used to support and track air quality actions prioritized by the community to reduce local exposure to harmful air pollutants.

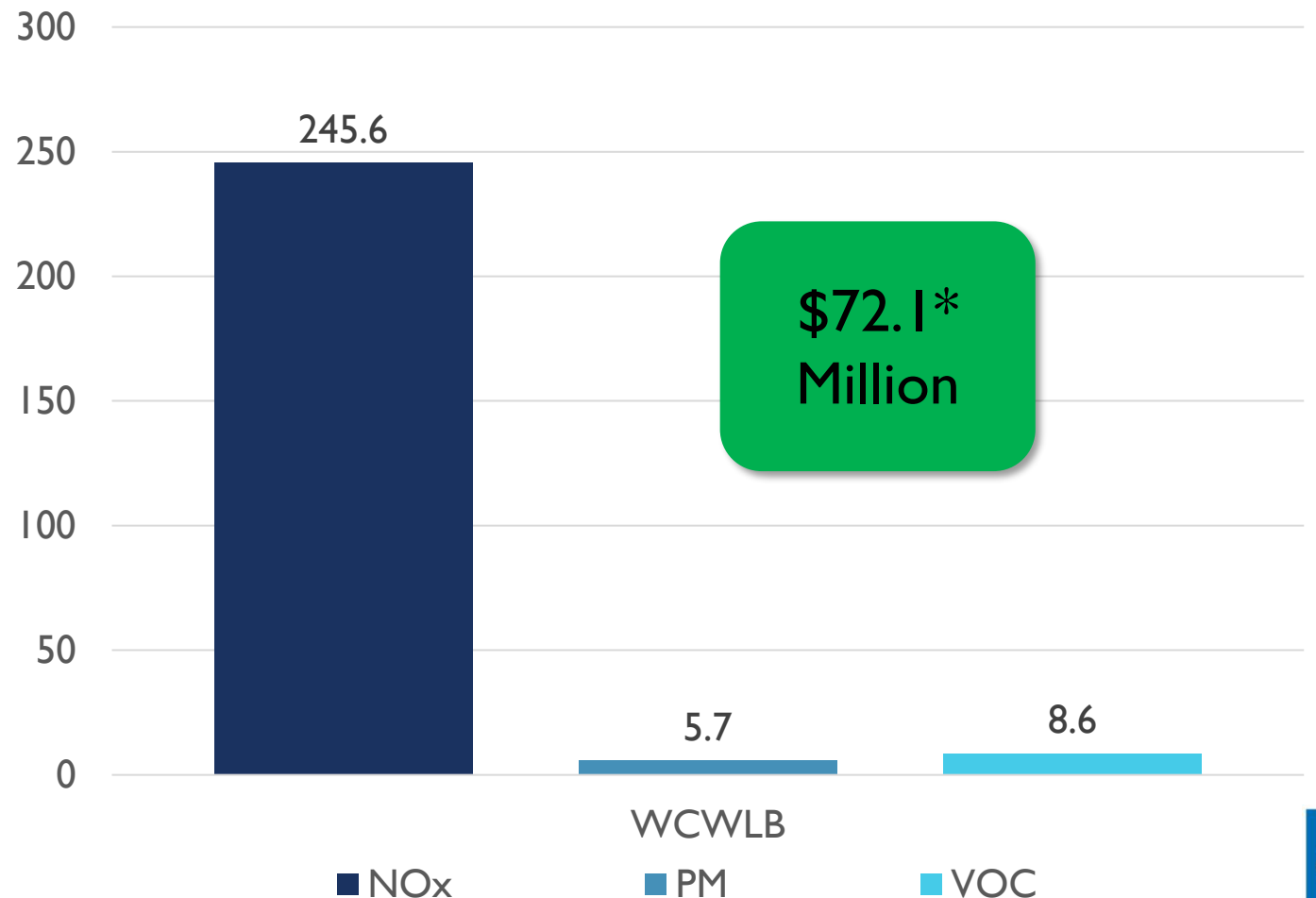
Main Goals & Objectives

- To help provide critical information used to guide investigations or provide public information
- To expand South Coast AQMD's understanding of air quality priorities

TOTAL INVESTMENT IN INCENTIVES

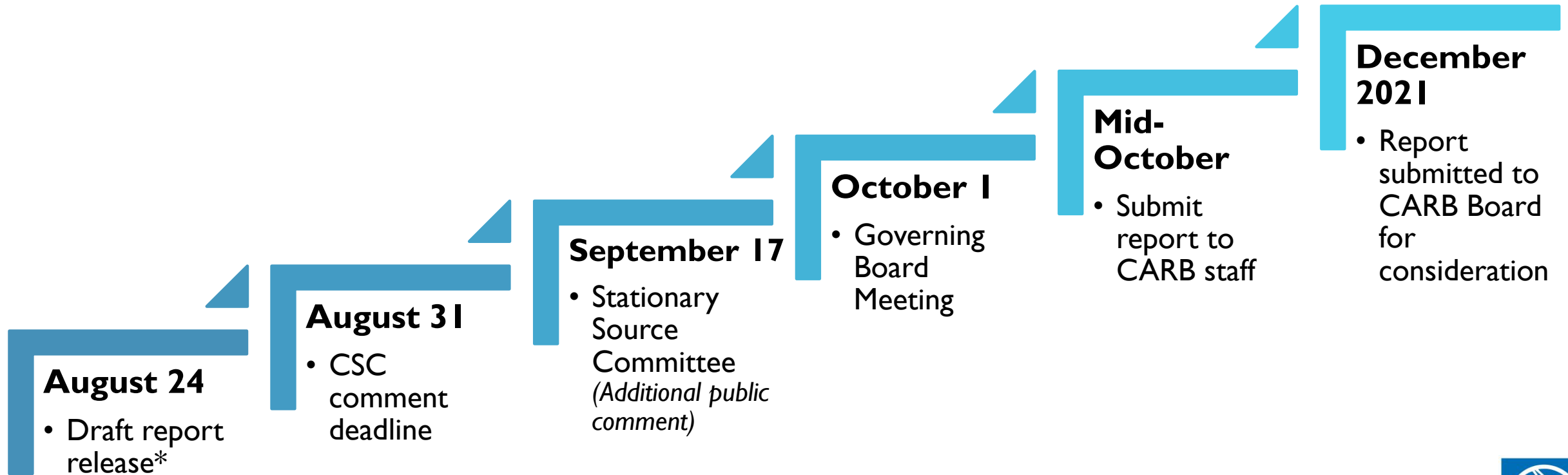
- Future incentive-based emission reductions dependent on program funding

Approximate Emission Reductions (tons/year) to date based on Pollutant and Total Investment



*Actual totals will be reflected in the annual report and do not include funds allocated for community-identified projects

ANNUAL PROGRESS REPORT TIMELINE



*2020-2021 Draft Annual Progress Report will be available online at

<http://www.aqmd.gov/docs/default-source/ab-617-ab-134/2020-2021-draft-progress-report.pdf>

QUESTIONS OR COMMENTS?

- Please submit comments by **August 31, 2021**

Please contact:
Nicole Silva
nsilva@aqmd.gov
909-396-3384





AB 617 BUDGET OVERVIEW

CERP IMPLEMENTATION

AB 617

<i>ELABAWC</i>	<i>ECU</i>	<i>SLA</i>
<i>SBM</i>	<i>SELA</i>	
<i>WCVLB</i>		

AB 617 BUDGET OVERVIEW

Incentives



~\$260 Million

- Total amount awarded since 2017
- Community Air Protection Program
 - Mobile Source Projects
 - Community Identified Projects
- Carl Moyer Program
- Prop 1B
- Discussions in 4th quarter 2020 and 1st quarter 2021

Implementation



~\$50 Million

- Total amount awarded since 2017
- CSC Stipends
- Air monitoring equipment, contractors (e.g., ACLIMA), and data visualization
- Interpretation and facilitation services
- Staff salaries
- Today's discussion

For a review of incentives budget please see:

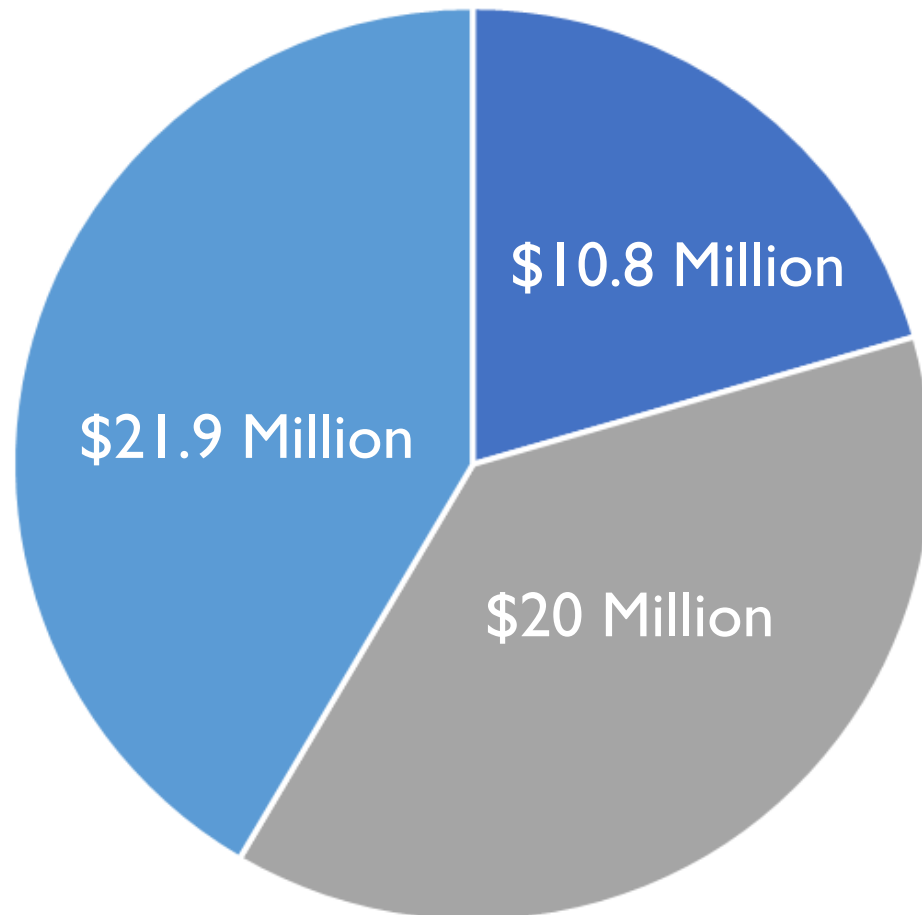
<http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/meeting-presentation-feb-11-2021.pdf>

<http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/meeting-presentation-dec-9-2020.pdf>

AB 617 IMPLEMENTATION BUDGET

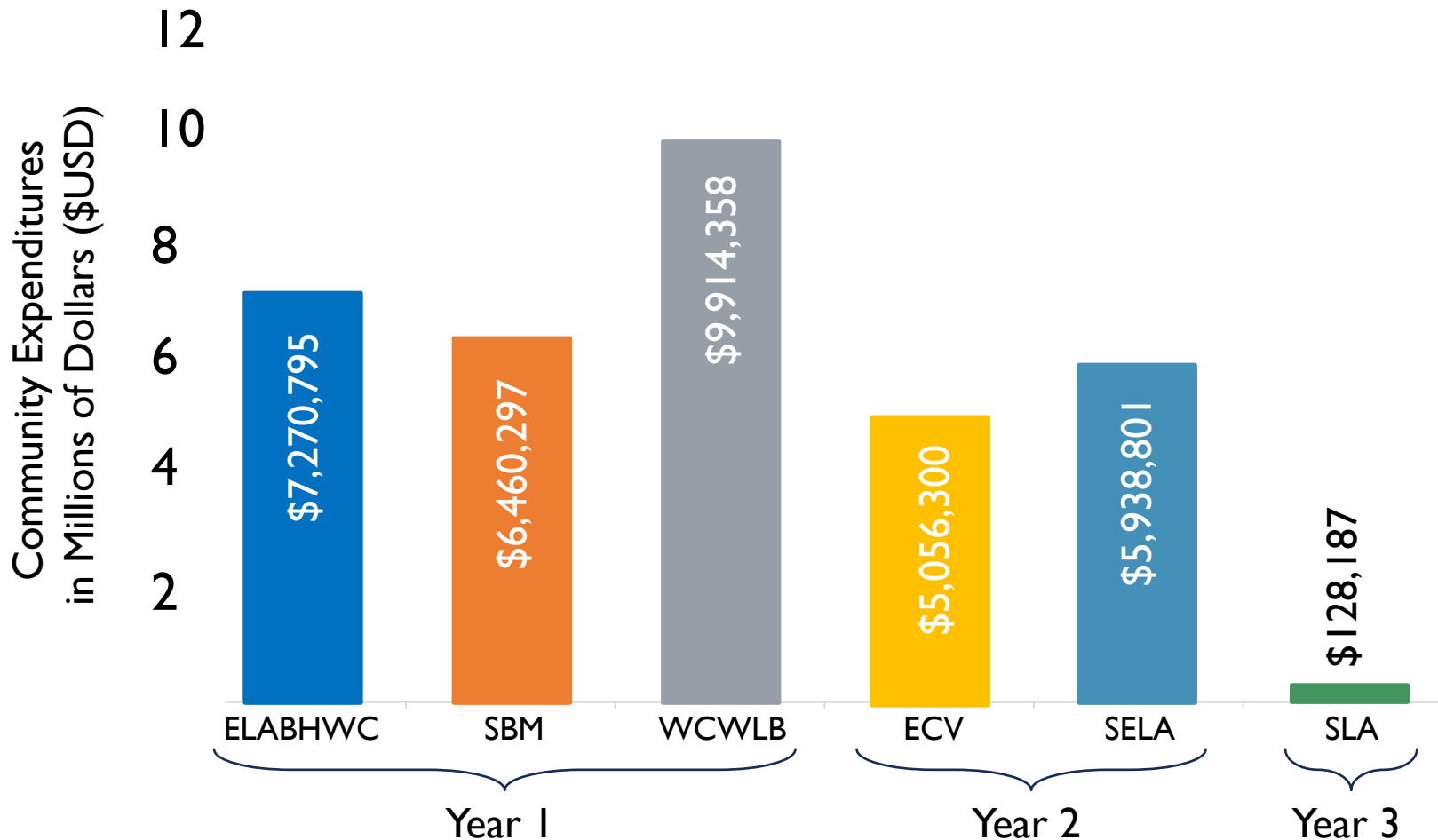
Grant Years

- Year 2017
- Year 2018
- Year 2019



- Grant funds awarded through June 2021 total \$52.7 Million
- Grant funds awarded for implementation across all South Coast AQMD AB 617 communities
- Grant 2020 was received July 2021 for \$21.9 Million

AB 617 IMPLEMENTATION EXPENDITURES BY COMMUNITY



- Total AB 617 expenditures through June 2021: \$51,648,938*
- Cross community expenditures totaled \$16,880,200
- Remaining balance: \$1,031,062†

*Expenditures are currently unaudited

†Remaining balance as of 6/30/21 equal to: \$52,680,000 - \$51,648,938

WCWLB IMPLEMENTATION EXPENDITURES

Staff Salaries

Services and Supplies

- Facilitator and Interpreter services
- Aerodyne contract (Ship emissions)
- Fluxsense contract (Refineries)
- CSC Stipends
- Rent and leases

Capital outlays

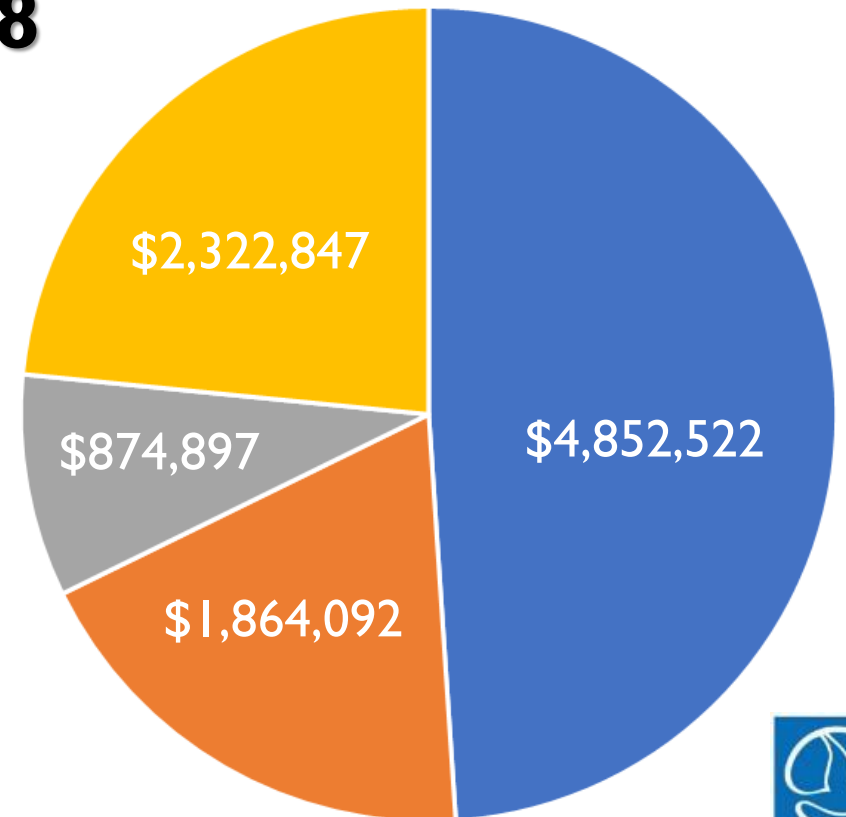
- Lab supplies
- Air pollution instrumentation (e.g., BC, ozone, NOx, particle counters)
- Data visualization

Indirect Costs

- Overhead costs
- Legal, finance, administration, etc.

\$9,914,358

*Total expenditures
through June 2021*



AB 617 COMMUNITY EXPENDITURES

Community Needs

- Community expenditures differ based on community needs, for example:
 - Unique air quality concerns - WCWLB Ports and Refineries require special monitoring contracts
 - Approach to community engagement - ECV had additional community working groups

Years in AB 617 Program

- Year 1, 2, and 3 communities have different implementation budgets due to the amount of time they have been in the program
 - Year 1 communities have been under implementation since 2020
 - Year 2 communities have been under implementation since 2021
 - Year 3 communities are still in development phase

CERP IMPLEMENTATION

Wilmington, Carson, West Long Beach
August 18, 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



CERP COMMITMENTS

- Neighborhood Truck Traffic: Chapter 5d, Action I

CARB's Regulation development for phase-in: 2024-2030
(including Transport Refrigeration Unit and Advanced Clean Fleets)



- Railyards: Chapter 5f, Action I

Between 2020 and 2022, CARB to consider new regulations
(e.g., amendment of the regulation for zero-emission transport refrigeration units (TRUs))





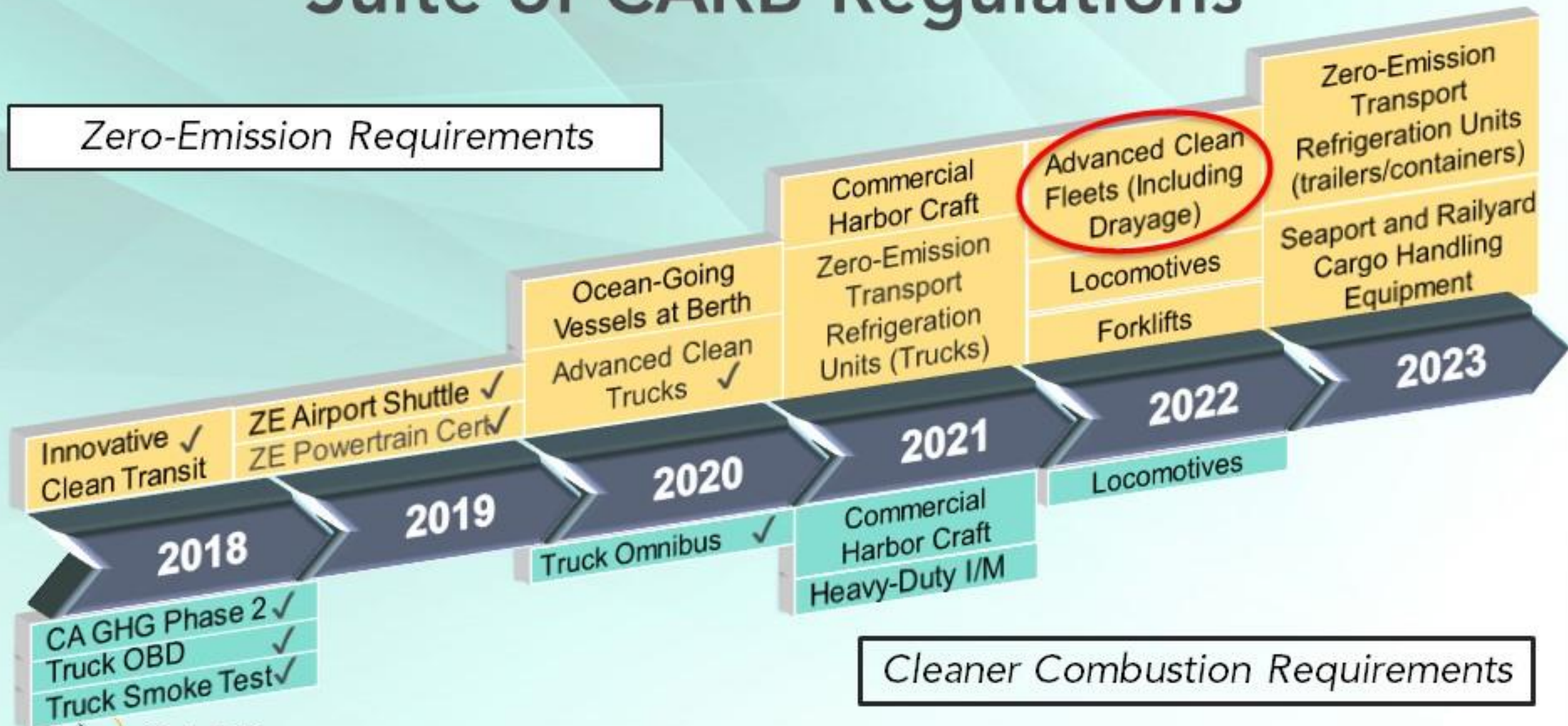
Advanced Clean Fleet (ACF) Regulation

Wilmington, Carson, West Long Beach
Community Steering Committee

August 18, 2021

Suite of CARB Regulations

Zero-Emission Requirements



Cleaner Combustion Requirements

Cleaning Up Existing Diesel Trucks

Heavy-Duty Inspection & Maintenance

Requires emission related inspections



New DMV Verification

Requires CARB compliance check upon registration



Omnibus Regulation

Tightens manufacture warranty and smoke test requirements

Advanced Clean Fleets Regulation

- **What is it?** A medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible.
- **Who is regulated?** Drayage trucks, public agencies, federal governments, and private companies that own or control trucks, buses, and shuttles.
- **What else?** 100% zero-emission vehicle sales requirement by 2040

ACF – High Priority Fleets

- “High-Priority Fleets” must phase-in zero-emission vehicles by body type and suitability
- **Who are “High-Priority Fleets”?**
 - Private or federal entities with over \$50 million in revenue,
 - Who operate a fleet of more than 50 vehicles,
 - Or dispatches more than 50 vehicles per year.



ACF – High Priority Fleets

Percentage of fleet that must be ZEVs	10%	25%	50%	75%	100%
Box trucks or vans, two-axle buses, yard tractor	2025	2028	2031	2033	2035
Work trucks, day cab tractors, three-axle buses	2027	2030	2033	2036	2039
Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042

ACF – Drayage Fleets

- **2023** - All drayage trucks registering for the first time in the CARB Drayage Truck Registry must be a zero-emission vehicle
- **2035** - 100% zero-emission operations in intermodal railyards and seaports



ACF – Public Fleets

- Zero-emission vehicle purchase requirements for city, county, special district, and state agency fleets
- **2024** – 50% of new vehicle purchases must be zero-emission
- **2027** – 100% of new vehicle purchases must be zero-emission



Voluntary Recognition Program

- Recognition for fleets who exceed zero-emission fleet standards
- Recognition for entities that hire fleets who meet or exceed zero-emission fleet standards
- Branding and marketing to accelerate the deployment of medium- and heavy-duty zero-emission vehicles



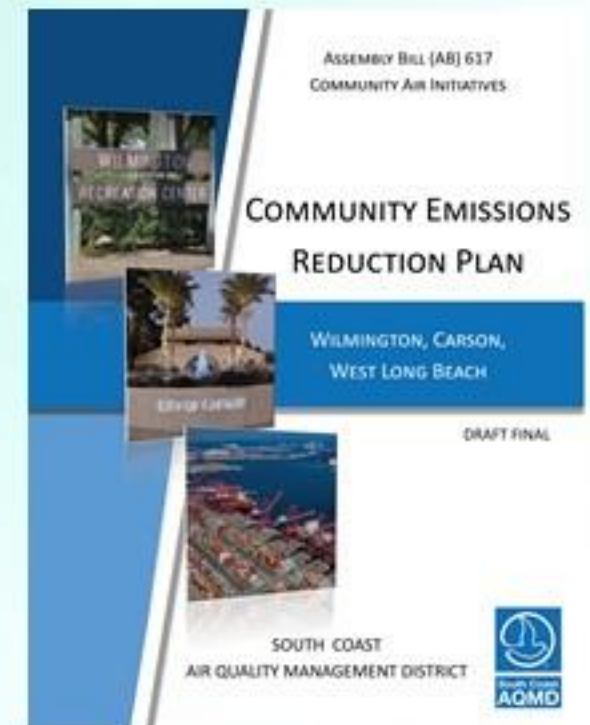
How will ACF be enforced?

- Reporting requirements
- Fleet audits
- Crosschecking databases
- Roadside inspections
- High priority entity/government agency hold responsible



How will ACF align with your Air Quality Priorities?

- **Ports – Action 3:**
Reduce emissions from port equipment and drayage trucks
- **Neighborhood Truck Traffic – Action 2:**
Reduce emissions from heavy-duty trucks



How to Get More Information

- Email – zevfleet@arb.ca.gov
- Advanced Clean Fleet Rule website:
<https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>



Transport Refrigeration Unit Regulatory Update

AB 617 Community Steering Committee Meeting
Wilmington/Carson/West Long Beach

August 18, 2021

Current TRU ATCM

- Adopted in 2004 (amended in 2010 and 2011)
- Requires TRU engines to meet in-use particulate matter (PM) standards by the end of the 7th year after the engine model year
 - All TRUs ultimately required to meet the Ultra-Low-Emission TRU (ULETRU) In-Use Performance Standard (85% diesel PM reduction)
- Requires CARB registration of California-based TRUs

Need for Additional TRU Emission Reductions

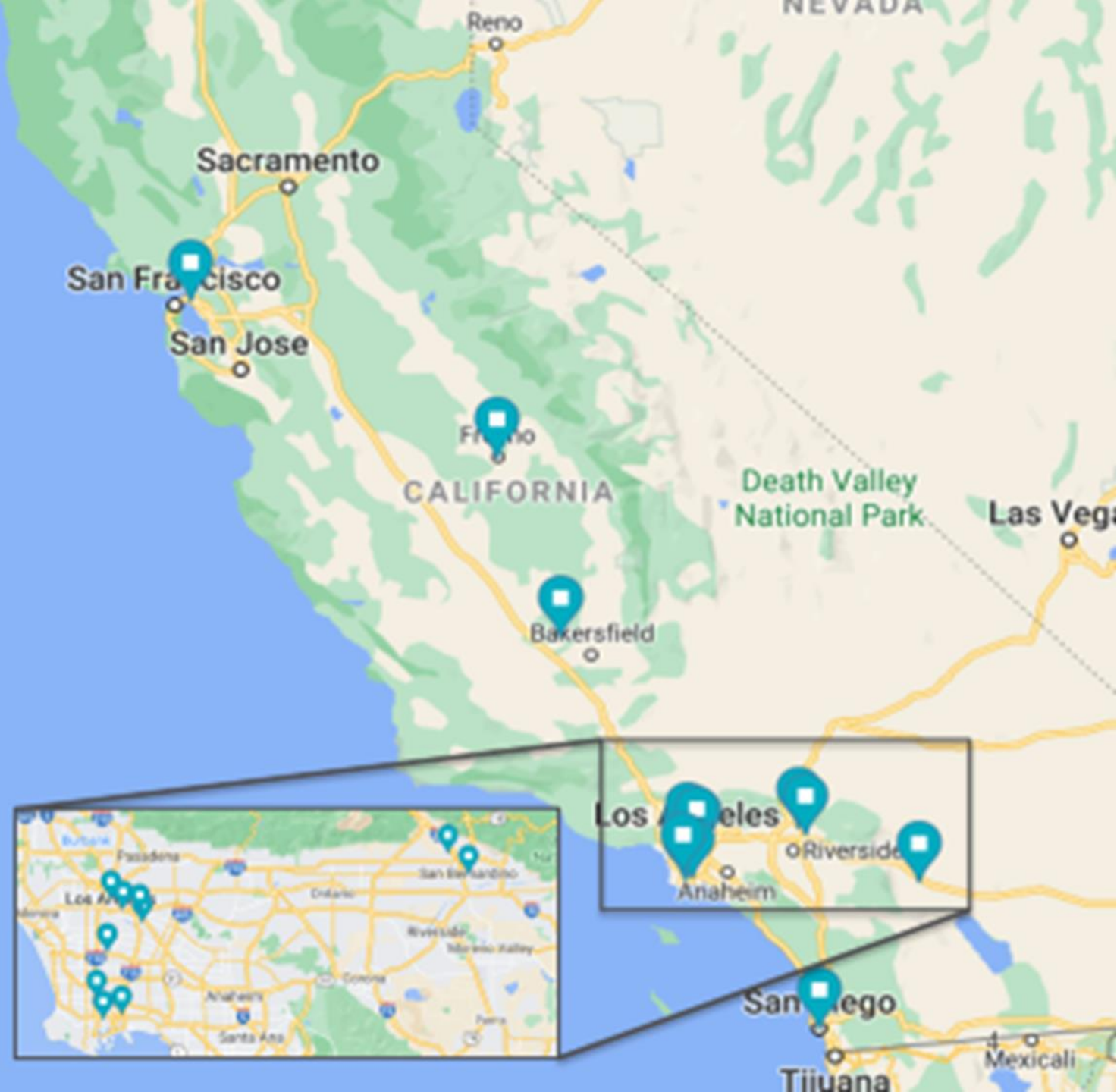
- Elevated health risk to nearby communities
- SIP attainment (South Coast, San Joaquin Valley)
- Multiple risk reduction, air quality, and climate goals
- Executive Order N-79-20

Near Source Health Risk from TRUs



Assembly Bill 617 Communities with TRU Concerns

- Boyle Heights
- Carson
- Eastern Coachella Valley
- East Los Angeles
- Muscoy
- San Bernardino
- San Diego Portside Environmental Justice Neighborhoods
- Shafter
- South Central Fresno
- Southeast Los Angeles
- West Commerce
- West Long Beach
- West Oakland
- Wilmington



Staff Propose to Transition TRUs to Zero-Emission in Two Rulemakings



Part 1: Truck TRUs (Board consideration in September 2021)

- California-based
- Local and regional operations
- Return-to-base operations



Part 2: Trailer TRUs, container TRUs, railcar TRUs, TRU generator sets (Board consideration in 2024)

- California and out-of-state-based
- Often used in long-haul operations
- Typically do not return-to-base each day
- Staff also plan to address direct-drive refrigeration units in Part 2

Key Elements of Part 1

- Zero-emission truck TRUs
- PM emission standard for newly-manufactured TRU engines
- Lower-global warming potential refrigerant

Key Elements of Part 1 (continued)

- Additional requirements to support enforcement
 - Expanded TRU reporting
 - TRU compliance labels
 - Facility registration
 - Facility reporting or turn-away of non-compliant TRUs
 - Vehicle owner and driver requirements

Applicable Facility Types and Size Thresholds

Refrigerated
Warehouses or
Distribution
Centers

Building size greater than or equal to 20,000 square feet and has TRU activity

Grocery Stores

Building size greater than or equal to 15,000 square feet and has TRU activity

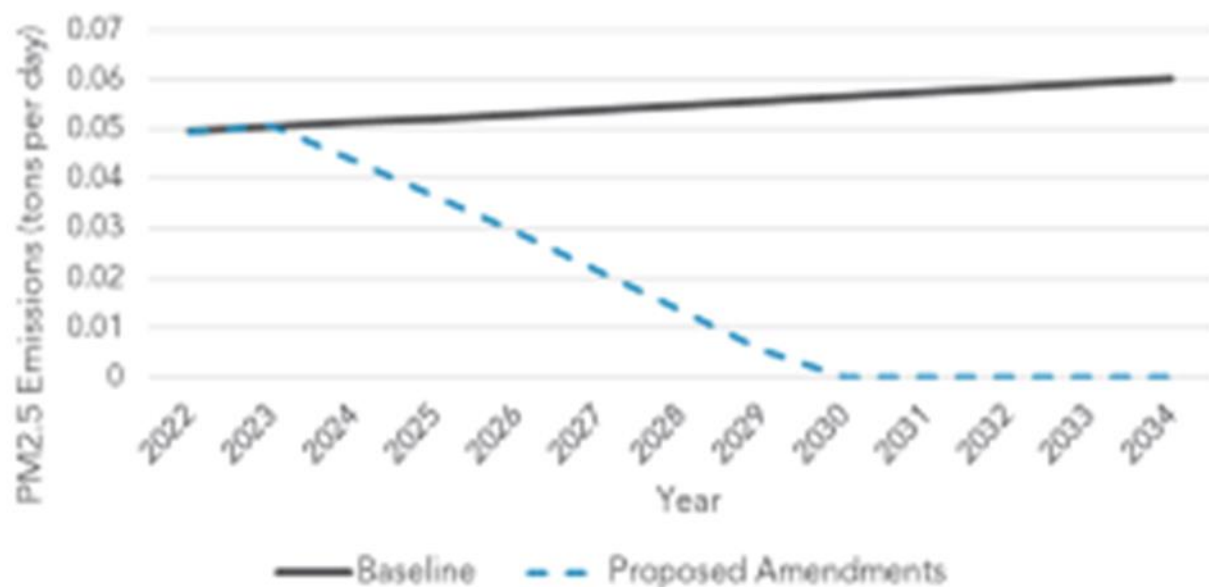
Seaport Facilities
and Intermodal
Railyards

No square foot size threshold – All seaport facilities and intermodal railyards with TRU activity

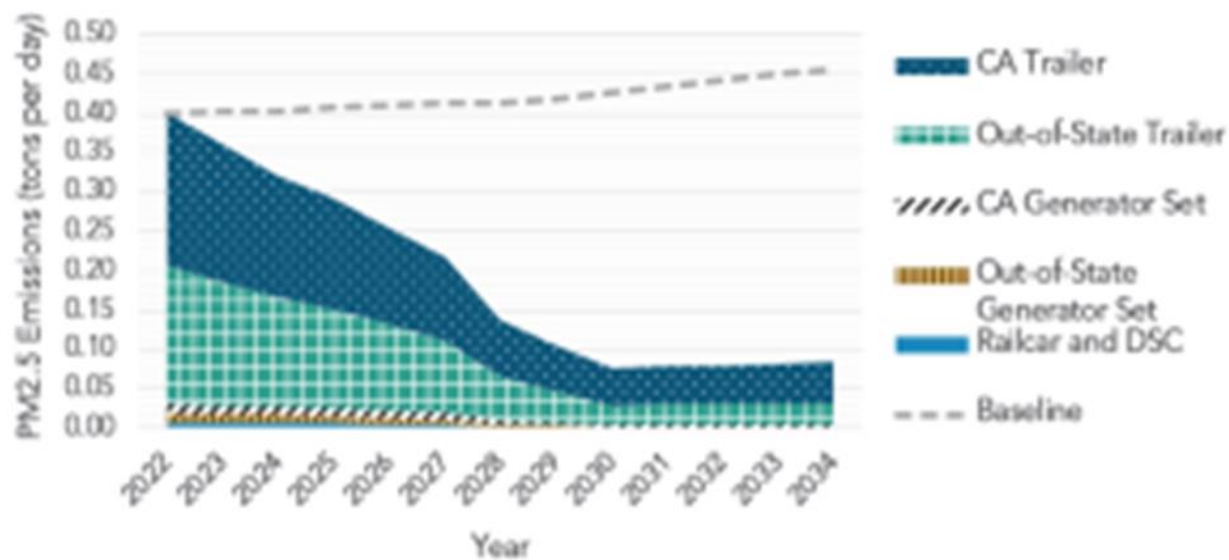
Estimated Emission Reductions from 2022 to 2034

- 1,258 tons of PM2.5
- 3,515 tons of NOx
- 1.42 million metric tons of carbon dioxide equivalents

Statewide PM2.5 Emissions from Truck TRUs under the Proposed Amendments

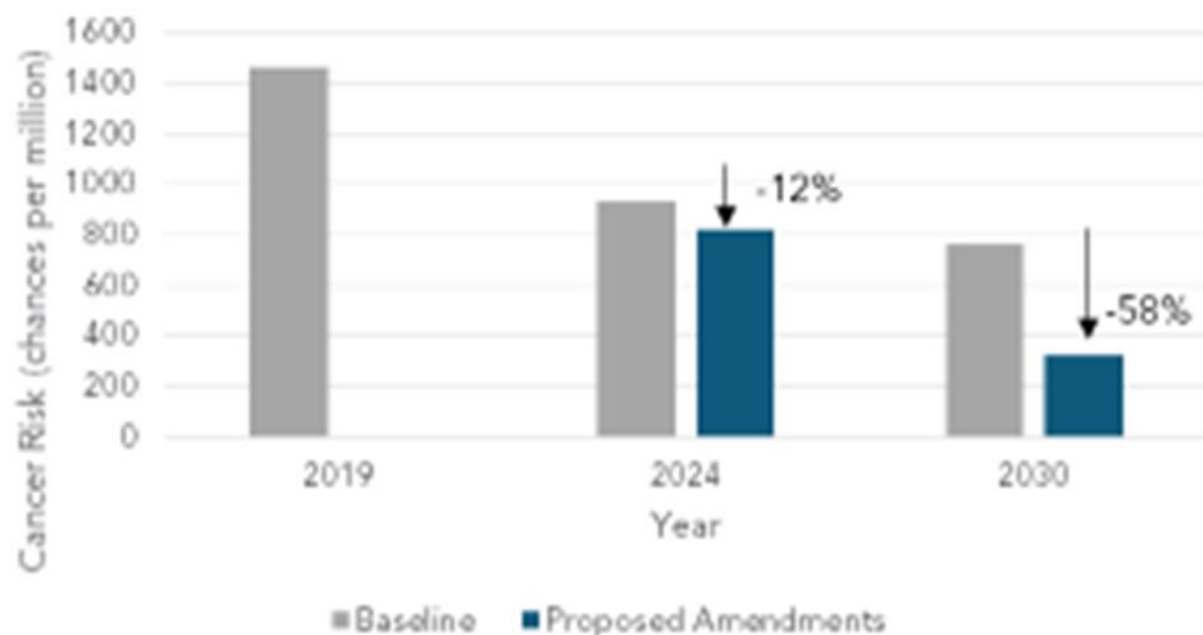


Statewide PM2.5 Emissions from TRUs (excluding Truck TRUs) under the Proposed Amendments

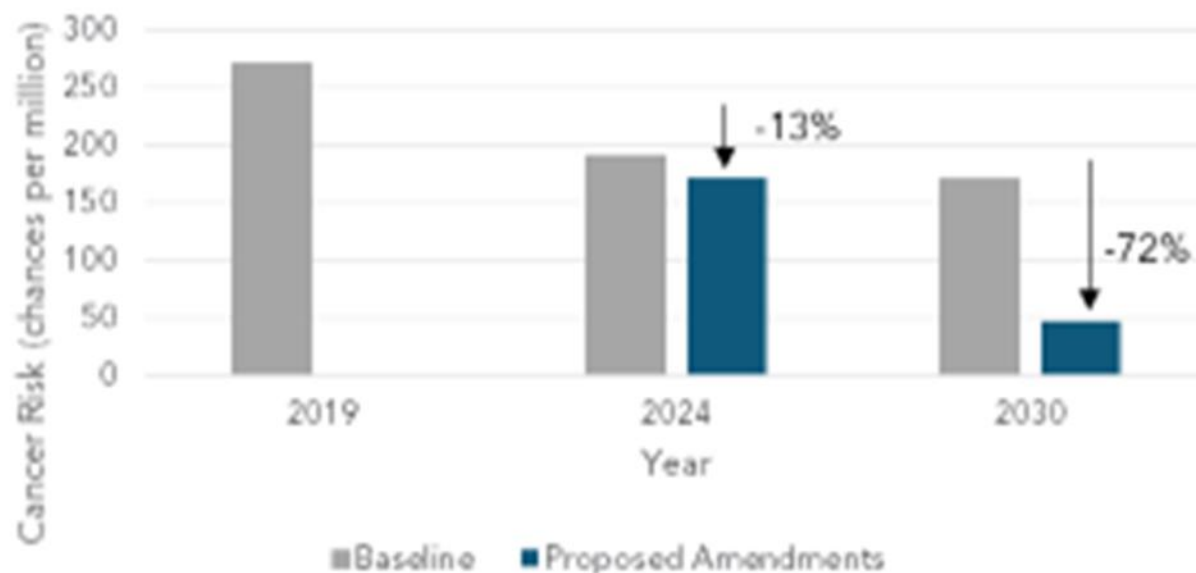


Estimated Individual Resident Cancer Risk and Risk Reduction

Cold Storage Warehouses



Grocery Stores (7 Trucks, 2 Trailers, 1 Seasonal Scenario)



Next Steps

- Part 1
 - September 13, 2021 – Public comment period ends <https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=tru2021>
 - September 23, 2021 – First Board Hearing
 - Early 2022 – Second Board Hearing
- Part 2 technology assessment

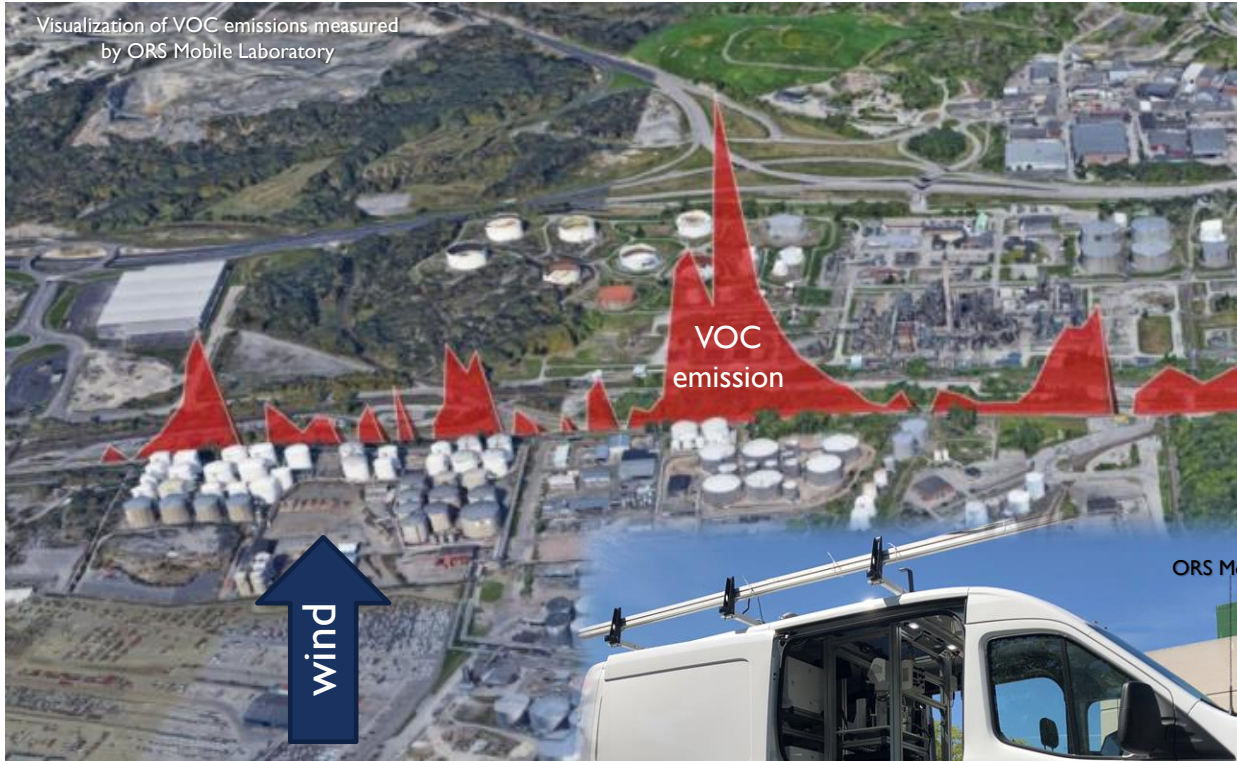
Additional Information

- TRU webpage: <https://www.arb.ca.gov/TRU>
- Contacts:

Lea Yamashita, Lead Staff
Lea.Yamashita@arb.ca.gov

Cari Anderson, Chief, Freight Transport Branch
Cari.Anderson@arb.ca.gov

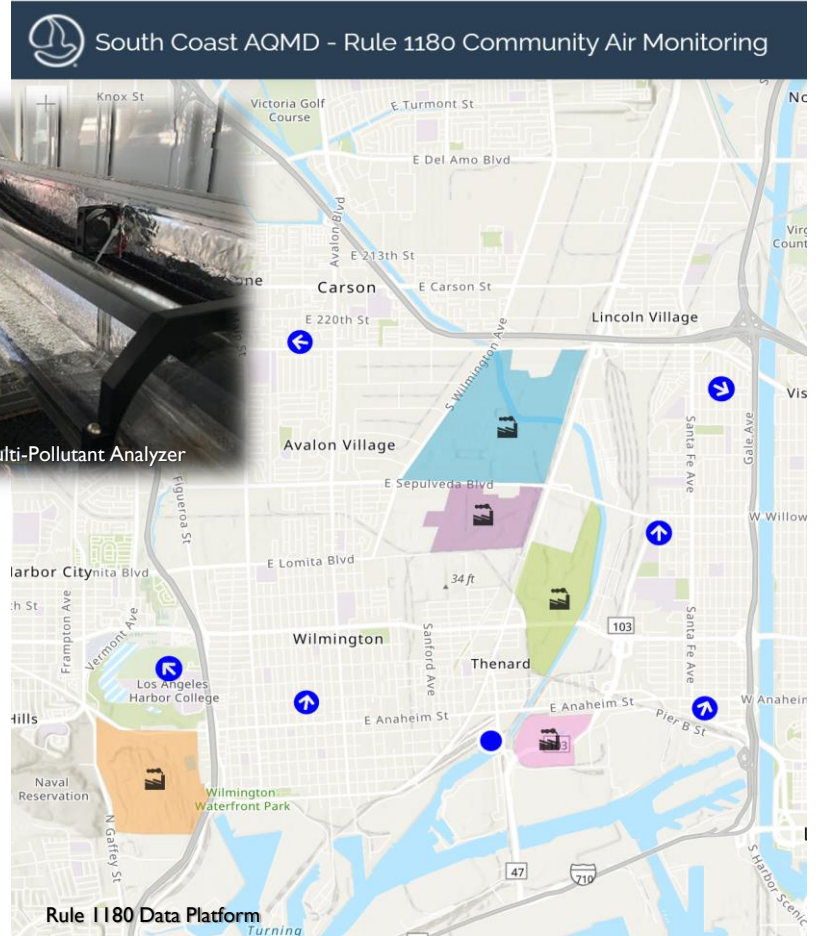
Visualization of VOC emissions measured by ORS Mobile Laboratory



ORS Mobile Laboratory



Optical Multi-Pollutant Analyzer



UPDATE ON COMMUNITY AIR MONITORING IN WCWLB

OLGA PIKELNAYA PH.D

PROGRAM SUPERVISOR



South Coast
AQMD

OUTLINE

- Refinery Baseline Measurements:

CERP Refinery VOC Emission Reduction Goal: *“Baseline emissions to be assessed by advanced air monitoring techniques, and the progress identified as the ratio of baseline and future measurements using the same methods”*

- Overview of Baseline Measurements and Methodology

- Refinery Monitoring:

CERP / Action #2: *“Conduct refinery air measurements to identify and address VOC leaks”*

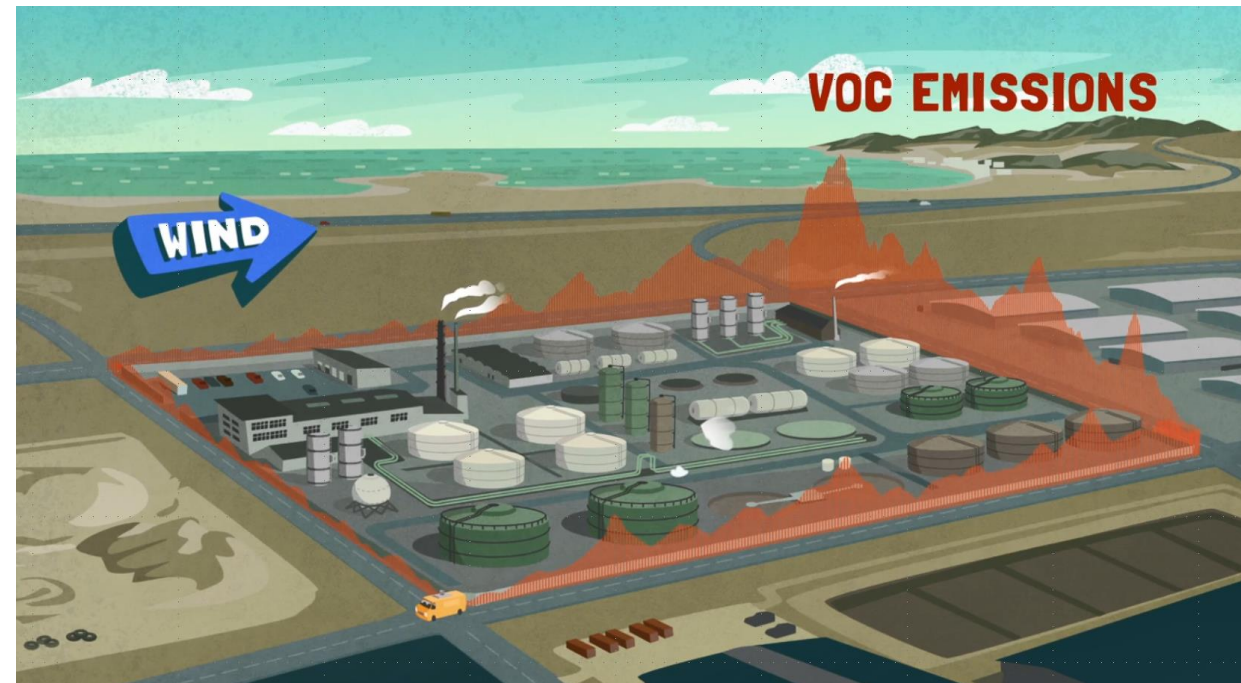
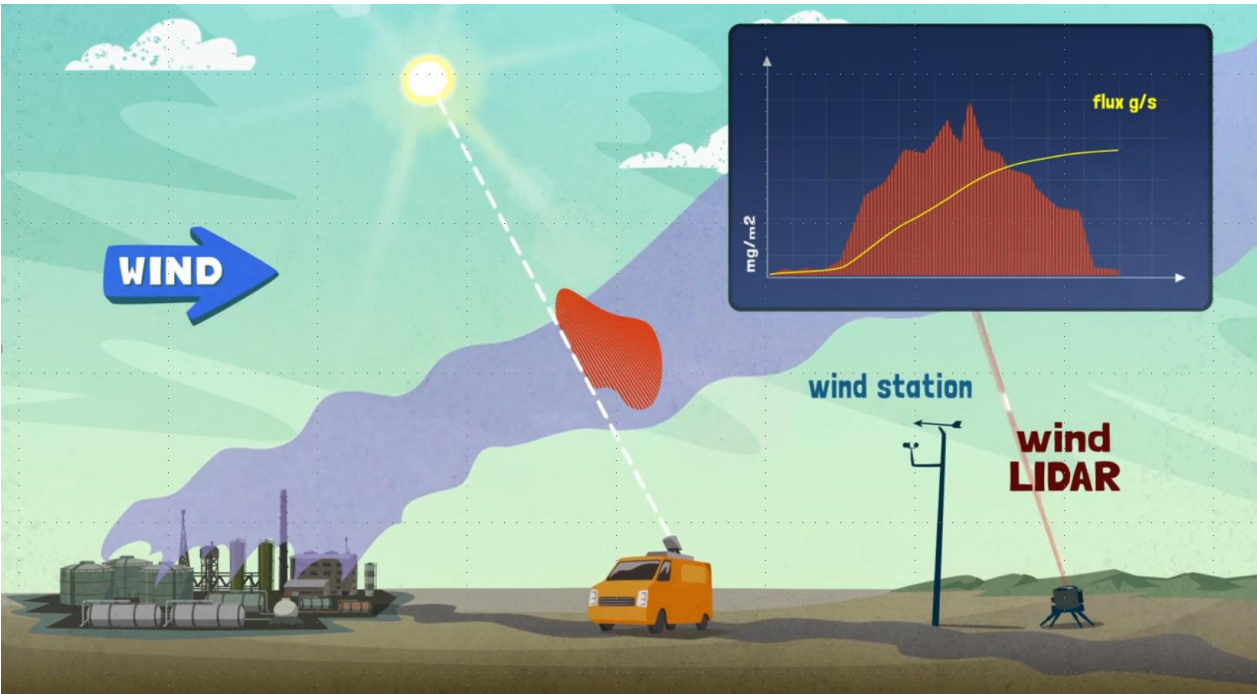
- Rule 1180 SO₂ refinery exceedance event

- Monitoring Near Oil Wells:

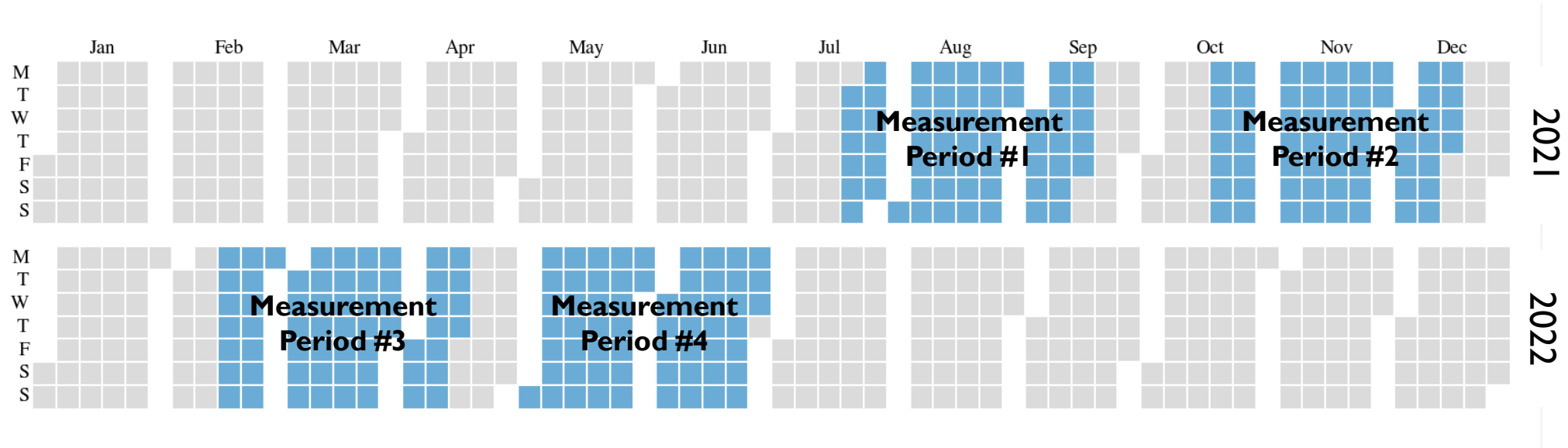
CERP / Action #5: *“Conduct mobile air measurements around active, idle and abandoned oil drilling sites to identify potential leaks”*

- Community Oil Wells Pilot Sampling Initiative

MOBILE ORS MEASUREMENTS REFINERY EMISSIONS: PRINCIPLE OF OPERATION



BASELINE REFINERY EMISSIONS: MEASUREMENTS PLAN



- Four 2-month measurement periods distributed over July 2021 through June 2022
 - First measurement period started on 7/20/21
- Minimum of five valid measurement days for each facility
- Highly localized wind data measured near refinery

REFINERY MONITORING: RULE 1180 PROGRAM



South Coast AQMD - Rule 1180 Community Air Monitoring

■ Rule 1180 Refinery Fenceline and Community Air Monitoring

Fenceline Air Monitoring

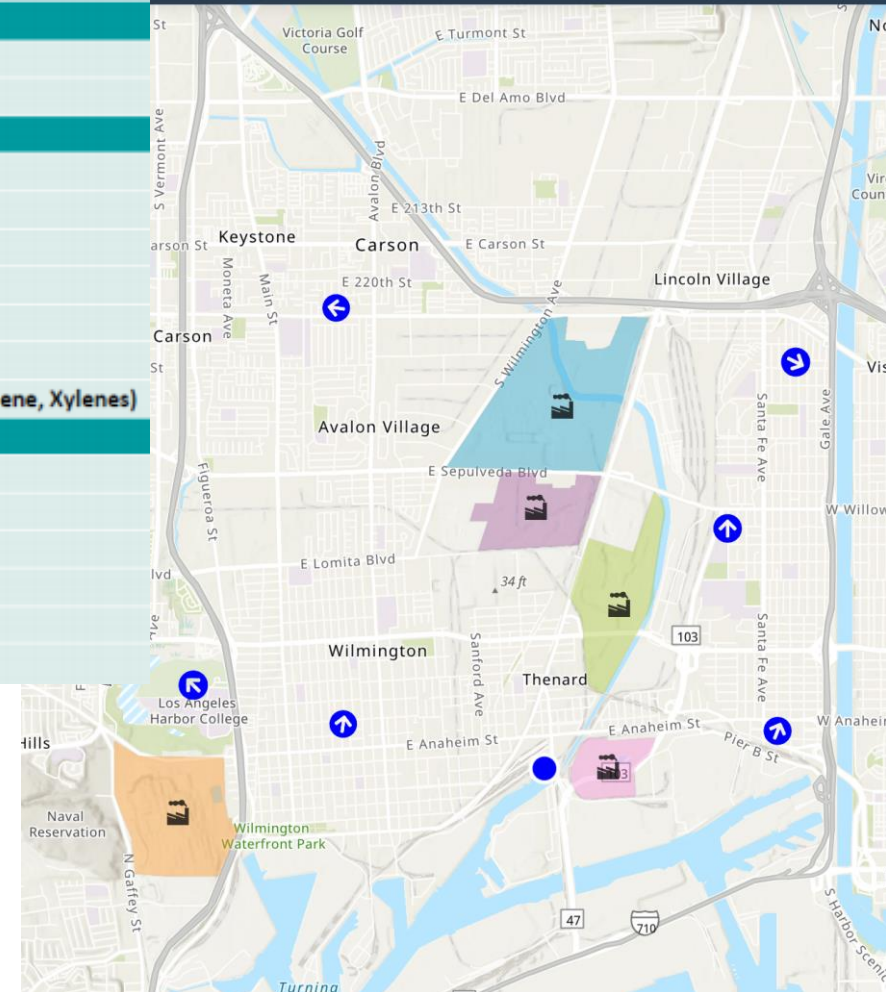
- Refineries: fenceline air monitoring of air toxics and other pollutants

Community Air Monitoring

- South Coast AQMD: network of air monitoring stations in communities adjacent to 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*

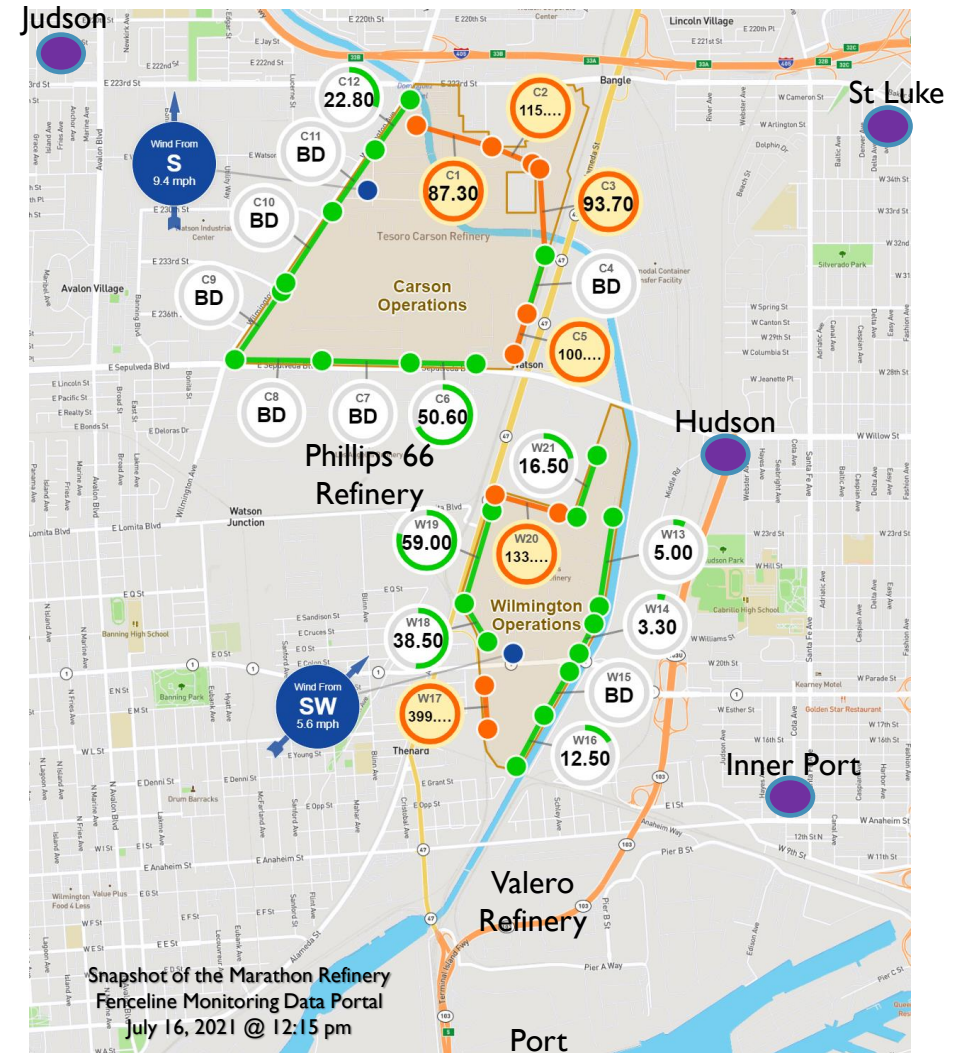
*For refineries using Hydrogen Fluoride



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

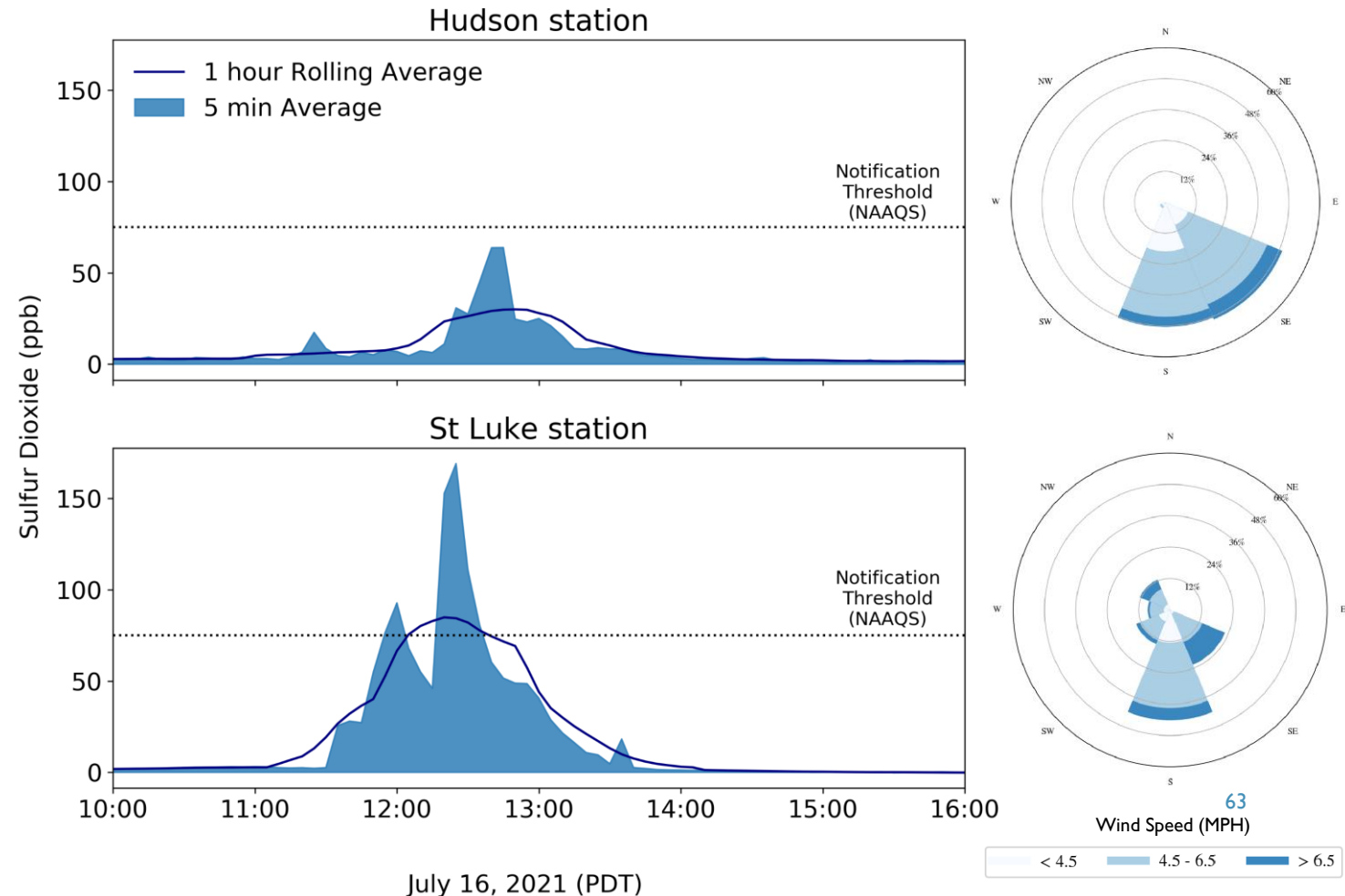
REFINERY MONITORING: RULE 1180 FENCELINE SULFUR DIOXIDE EXCEEDANCE

- SO₂ exceedances recorded at the Marathon Refinery Complex along 6 fence line paths on July 16, 2021 between ~11:30 am and ~1:30 pm
 - Exceedance level for sulfur SO₂ is 75ppb (1-hr NAAQS and CAAQS); measured as a 1-hr rolling average
 - No exceedances recorded after 1:30 pm
- South Coast AQMD inspectors initiated an on-site investigation, including conducting inspections at Marathon and other refineries in the area; the investigation is still ongoing



COMMUNITY MONITORING: SULFUR DIOXIDE CONCENTRATIONS IN THE COMMUNITY

- Rule 1180 notification threshold was exceeded at St Luke between ~12:00 pm and ~1:00 pm
- All other pollutants remained within typical levels at all monitoring stations in WCWLB
- Winds were coming predominantly from the South



COMMUNITY OIL WELLS PILOT SAMPLING INITIATIVE



- Oil Well emissions are often intermittent and variable in magnitude
- Community member involvement helps address oil well concerns more effectively
- South Coast AQMD has identified and is in the process of procuring suitable hand-held VOC devices for this task
- Collaborative pilot project with C.F.A.S.E. is scheduled to begin in late August



Picture of a neighborhood oil well.
Source: <https://www.theatlantic.com/photo/2014/08/the-urban-oil-fields-of-los-angeles/100799/>

Hand-held VOC analyzer

DISCUSSION

- Comments, Suggestions, Questions

Please contact:
Olga Pikelnaya
opikelnaya@aqmd.gov
909-396-3157



NEXT STEPS

Future Announcements

- Newsletters or emails
- Continue CERP implementation

Future Meeting

- Tentatively October 14, 2021 (virtual)
- AQ Priority Updates & Agenda Topics
 - What would you like to hear about?

Public Comment

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