

*PLAN DE REDUCCION DE EMISIONES
DE LA COMUNIDAD*

COMMUNITY EMISSIONS
REDUCTION PLAN

SAN BERNARDINO, MUSCOY

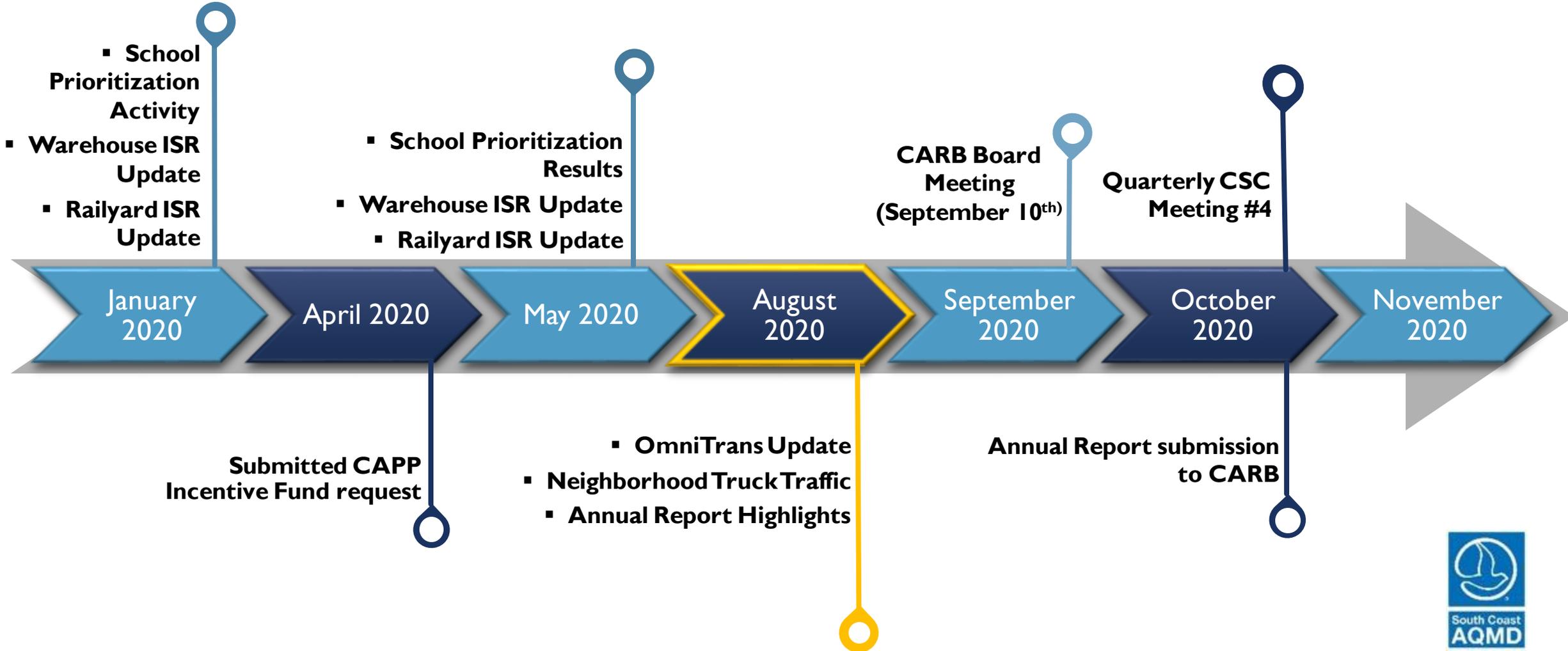
SEPTEMBER 2019
SEPTIEMBRE 2019
FINAL



CERP/CAMP
IMPLEMENTATION
*IMPLEMENTACIÓN
DEL CERP / CAMP*

3RD QUARTER 2020

CERP AND CAMP IMPLEMENTATION



AGENDA



- **OmniTrans Update**
 - Transition to Zero-Emission Equipment
 - Monitoring Update
- **Neighborhood Truck Traffic Update**
 - Automated License Plate Reader (ALPR) Systems
 - CARB Enforcement
- **CERP/CAMP Annual Progress Report**
- **Technical Advisory Group (TAG) Meeting Update**

Omnitrans Update

- Transition to Zero-Emission Equipment
- Monitoring Update

ONGOING MONITORING & INVESTIGATIONS NEAR THE OMNITRANS BUS YARD



UPDATE – 3RD QUARTER 2020

PAYAM PAKBIN, PhD

PROGRAM SUPERVISOR

CERP COMMITMENTS

- Chapter 5d, Action I – *All these actions are currently ongoing...*

Conduct air measurements near the Omnitrans bus yard to identify potential sources of emissions



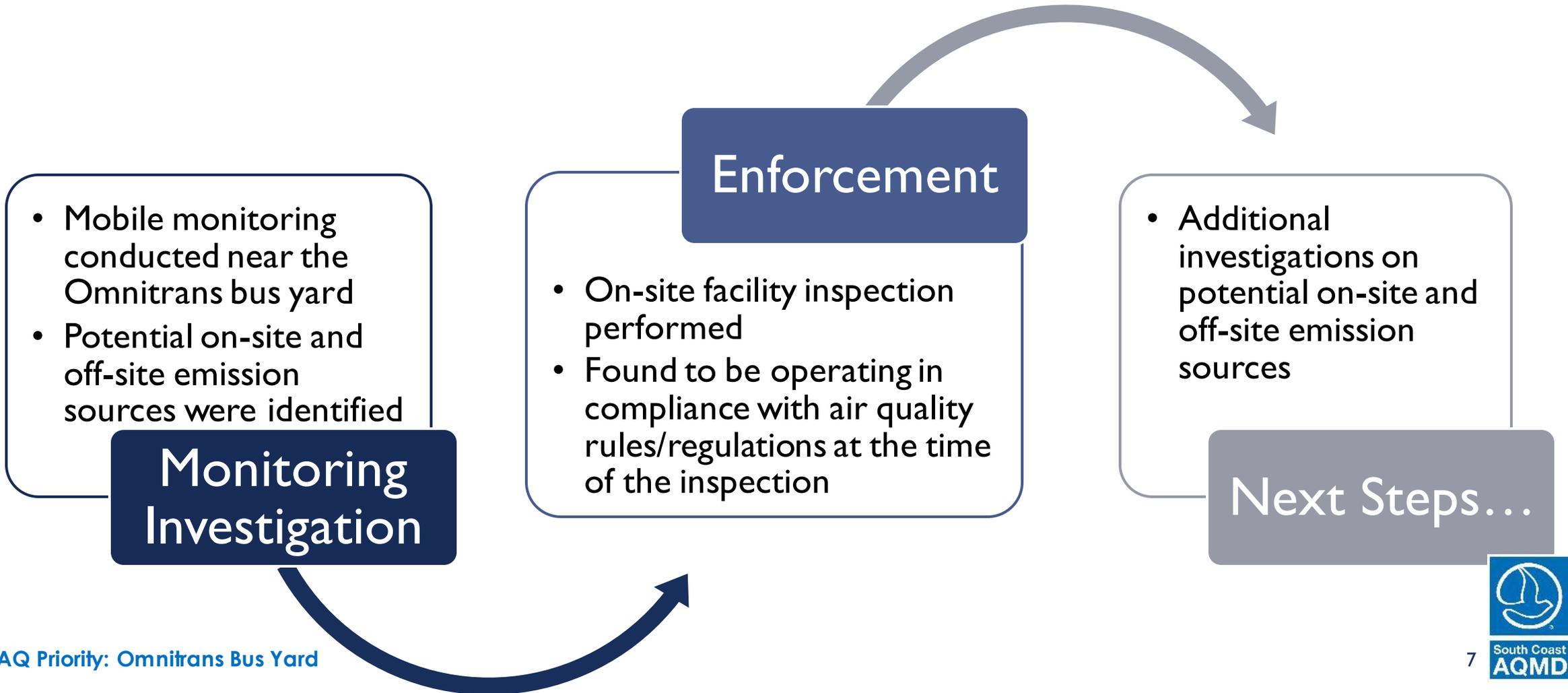
Gather information through facility inspections and outreach follow-up with enforcement actions, as needed



If persistent elevated levels of pollutants are detected conduct appropriate follow-up investigations



SUMMARY OF AIR MONITORING AND ENFORCEMENT ACTIVITIES



Monitoring Investigation

MOBILE SURVEYS AROUND OMNITRANS



Five mobile surveys conducted by the **South Coast AQMD**

- The average methane concentration near Omnitrans is within the typical ambient levels, around 2 ppm
- One location showed persistent elevated levels of methane, suggesting the presence of a potential source

Aerodyne Research
Mobile Laboratory
(contractor)



Four mobile surveys conducted by the **Aerodyne Mobile Laboratory**

- Observed persistent methane levels at the same location identified by the South Coast AQMD mobile platform
- On-site compressed natural gas (CNG) equipment could be a potential above-ground source of *thermogenic** methane

* **Thermogenic** methane is released as a consequence of oil and gas operations

OMNITRANS BUS YARD EMISSIONS INVESTIGATION

Enforcement

Next Steps...

Follow-up
Investigation

Persistent elevated methane levels lead to a follow-up investigation (ongoing)

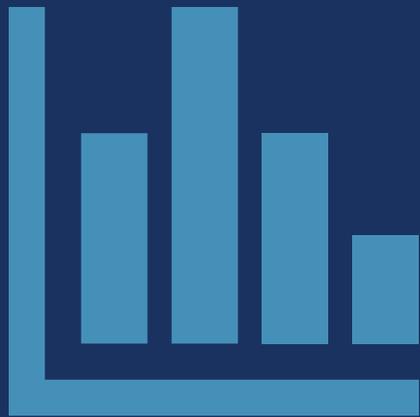
Inspection &
Enforcement
Action

- On-site inspection in August 2019
- Notice to Comply issued to obtain records
- No violations of air quality rules/regulations

Next Steps...

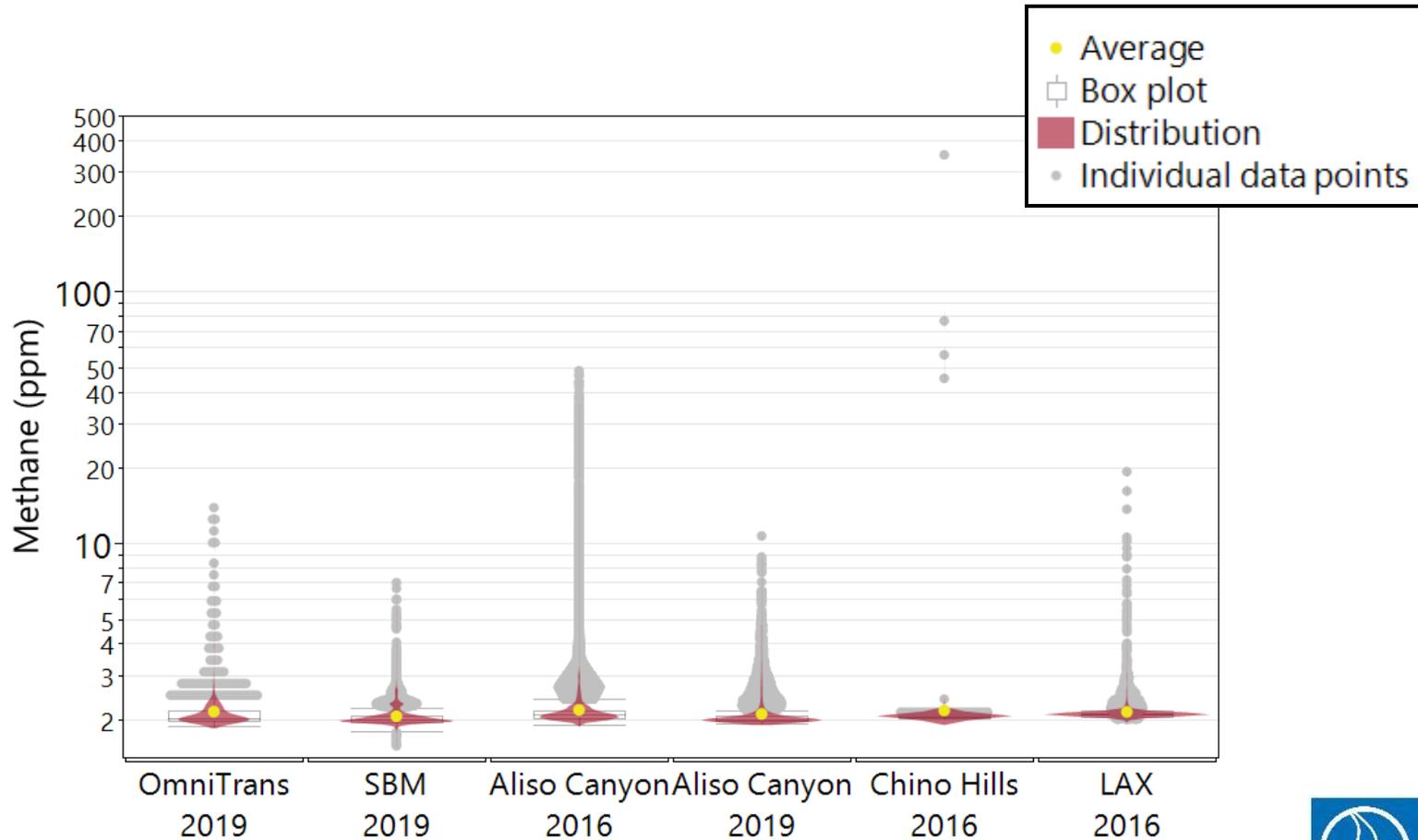
Contact SoCalGas to investigate the presence of a potential leak in their high-pressure pipeline

All these actions are currently ongoing...



HOW DO THE AMBIENT
METHANE LEVELS
COMPARE TO OTHER
AREAS IN THE BASIN?

METHANE LEVELS AROUND OMNITRANS AND IN THE OTHER PARTS OF THE BASIN



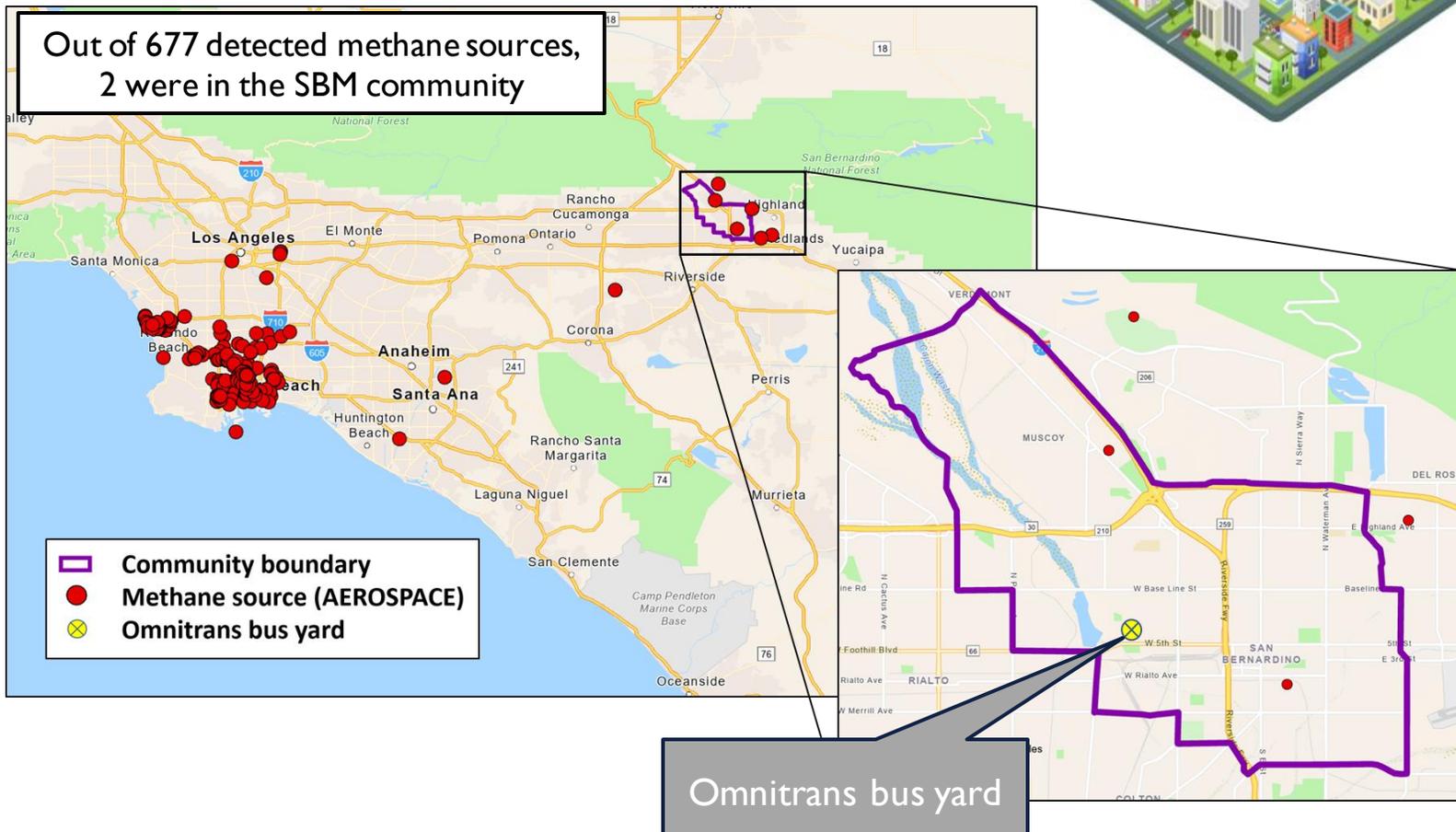
Previous methane mobile monitoring campaigns

Purpose:

- Survey large areas
- Detect plumes and emissions
- Identify hotspots and unknown sources



Out of 677 detected methane sources,
2 were in the SBM community



FLIGHT-BASED METHANE MEASUREMENTS

Also see aerial methane
measurements conducted by
NASA/JPL: methane.jpl.nasa.gov

DISCUSSION

- Comments, Questions, Concerns?

Please contact:
Payam Pakbin
ppakbin@aqmd.gov
909-396-2122



AIR QUALITY PRIORITY: NEIGHBORHOOD TRUCK TRAFFIC

AUTOMATED LICENSE PLATE READER (ALPR) SYSTEMS UPDATE

Robert Dalbeck
Air Quality Specialist



AUTOMATED LICENSE PLATE READER (ALPR) SYSTEMS

- CERP Chapter 5b, Action 3 includes the use of ALPR systems to help reduce emissions from trucks with incentives
- ALPR can be used to:
 - Identify fleet characteristics
 - Identify truck routes
 - Notify truck operators of incentives



CURRENT ALPR EFFORTS



South Coast AQMD is developing an ALPR usage and privacy policy

- Seeking advice from other agencies with operational ALPR systems
- Soliciting information from vendors

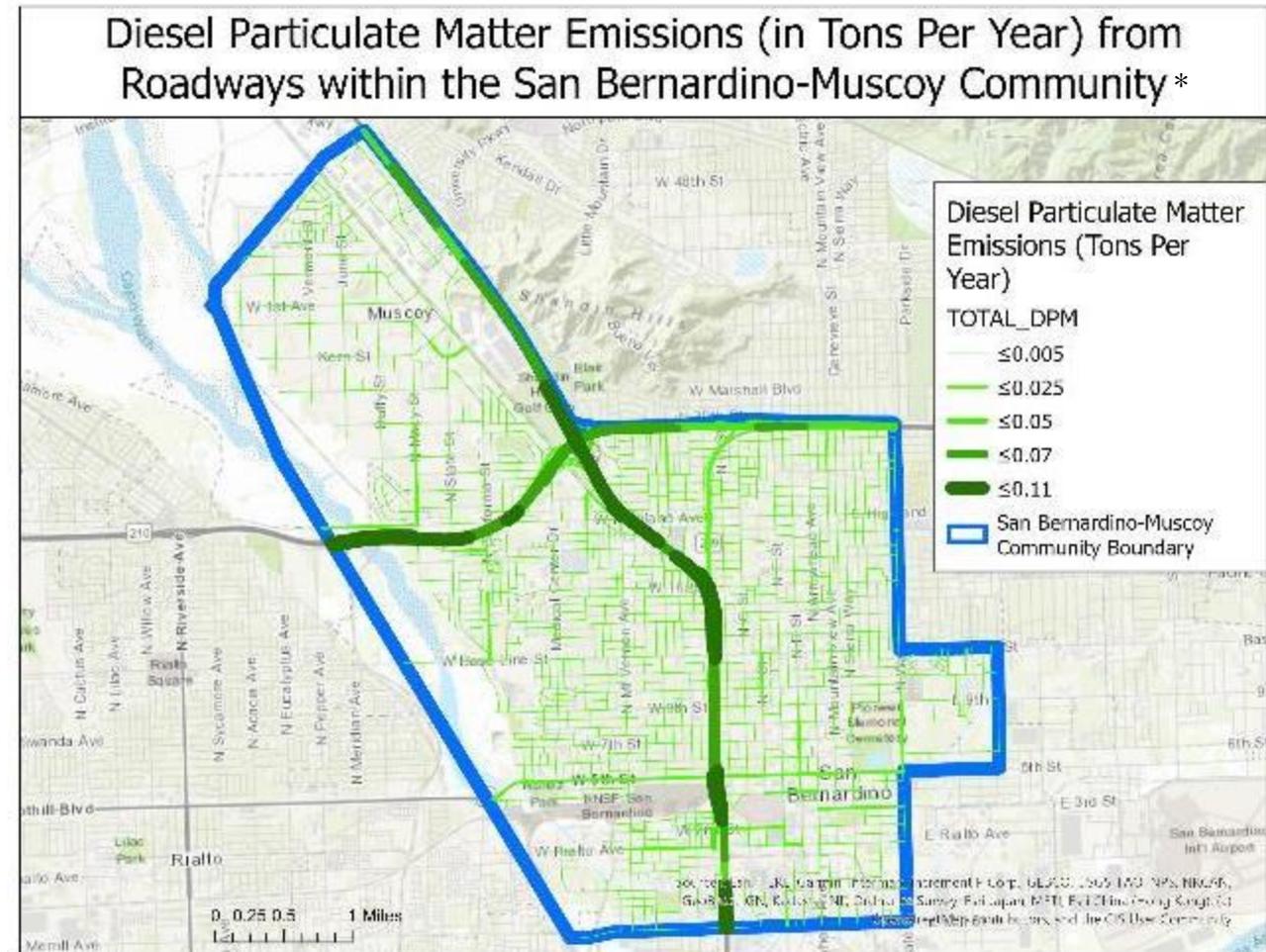
Working with CSC to prioritize specific locations for ALPR systems

- ALPR location worksheet provided this meeting for CSC input

POTENTIAL ALPR LOCATION – TRAFFIC DATA

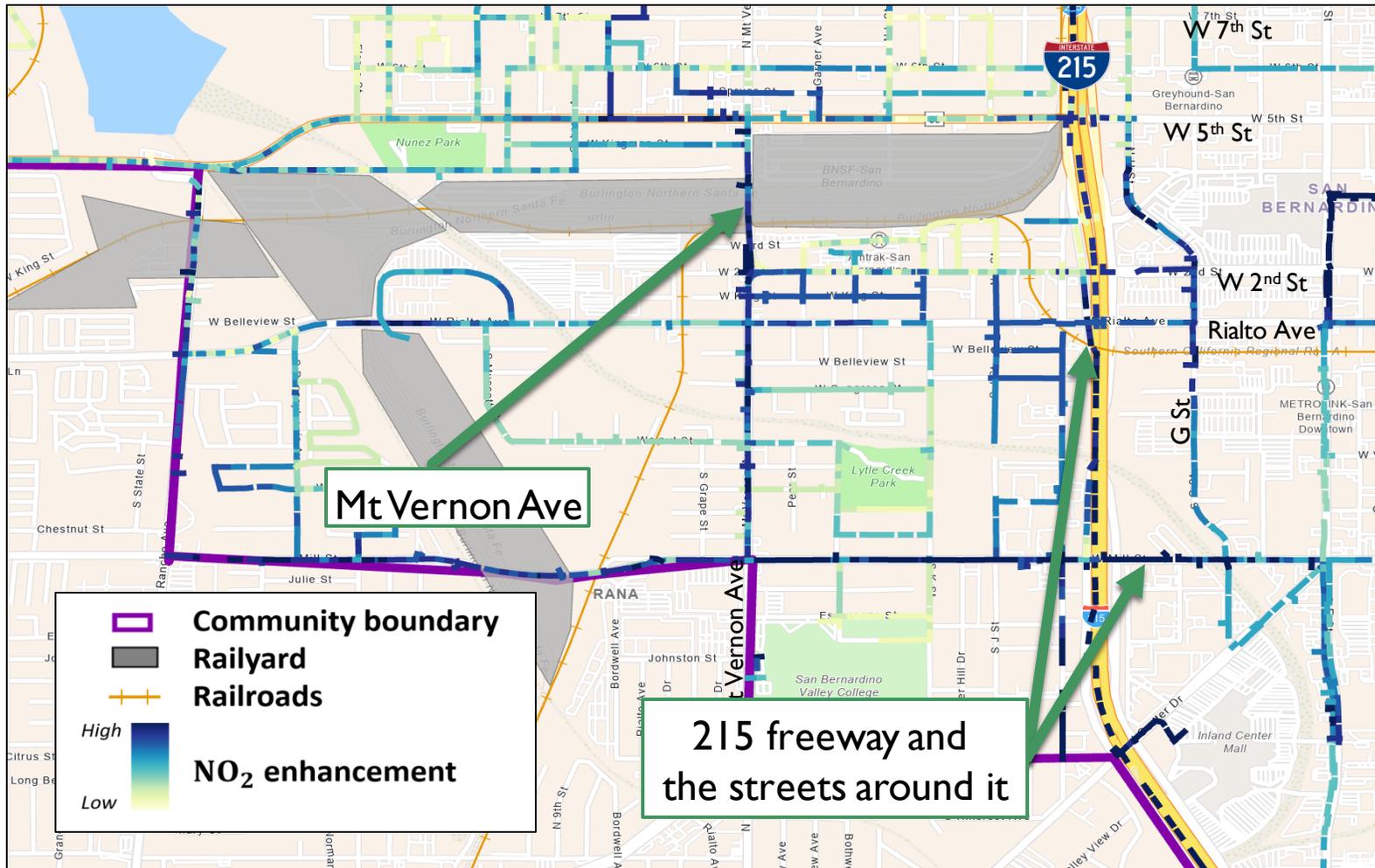
CSC has expressed that ALPR locations should be in:

- Areas with or generating high truck traffic (e.g., warehouses)
- Areas where trucks travel near residences or schools
- Areas with elevated concentrations of diesel particulate matter (DPM)

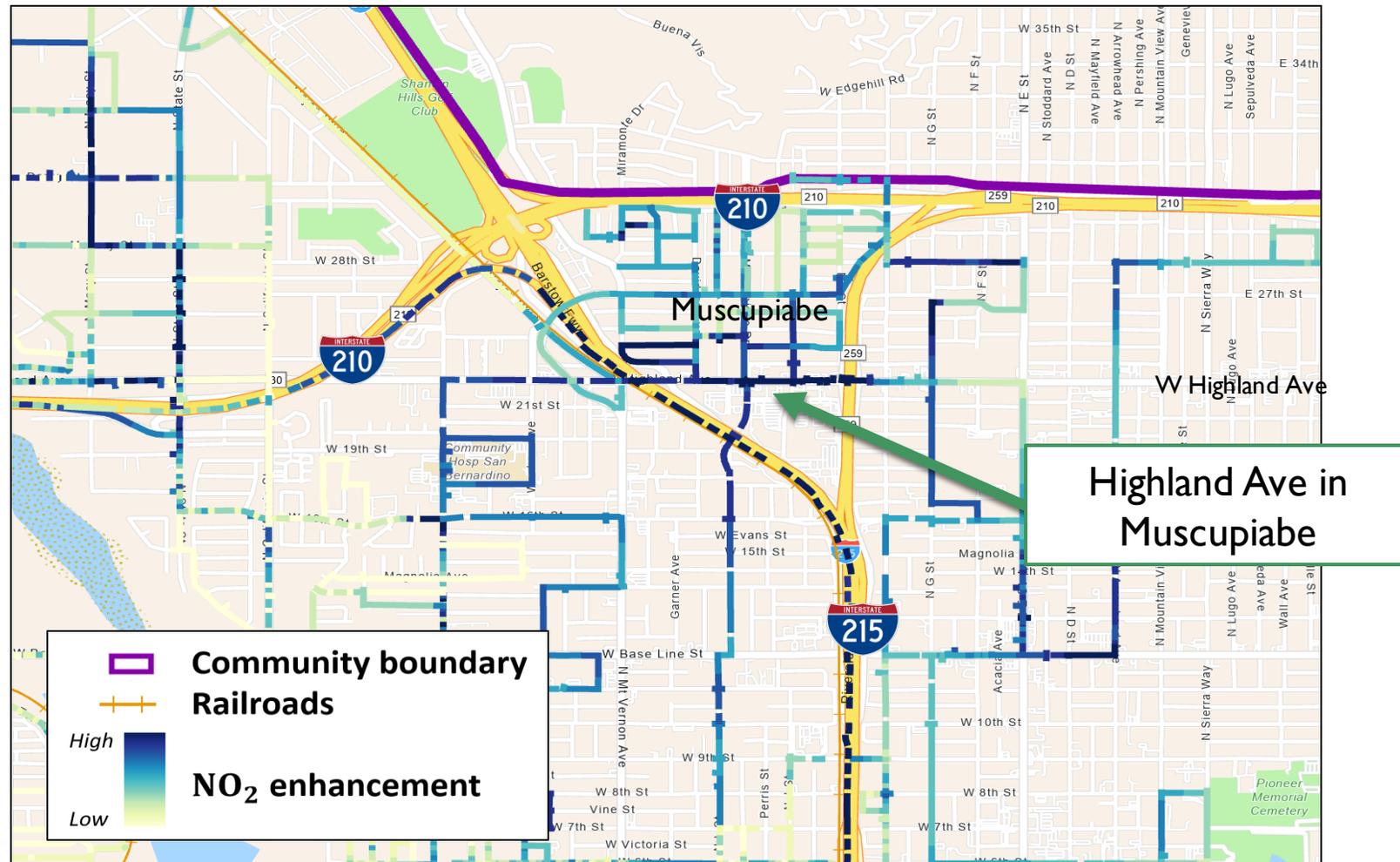


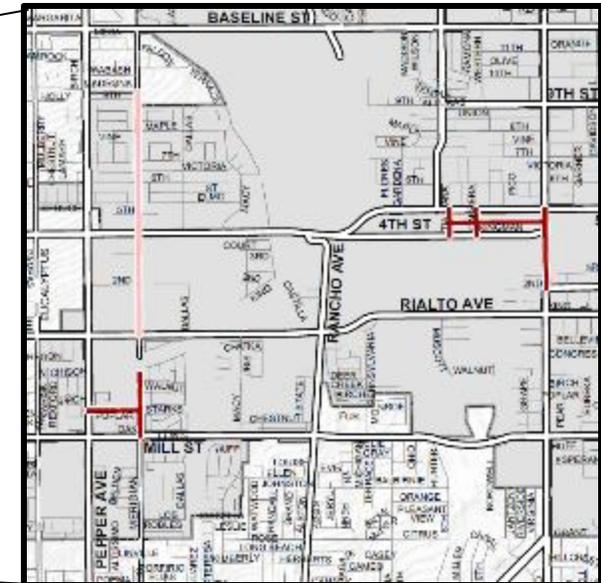
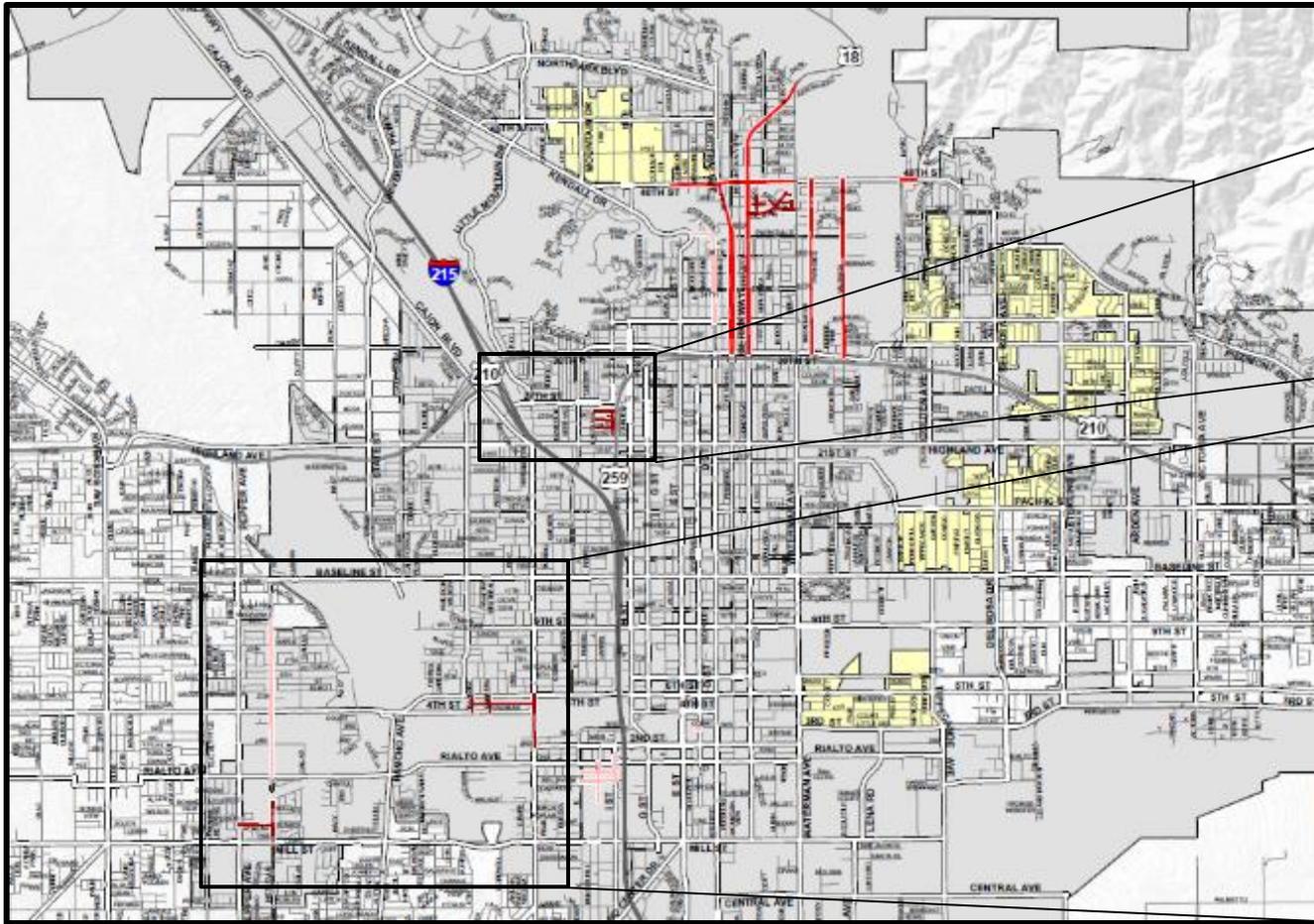
* Source: CARB on-road emissions estimations

POTENTIAL ALPR LOCATIONS – NO2 DATA



POTENTIAL ALPR LOCATIONS – NO2 DATA





- Commercial Vehicle Restrictions**
-  Commercial Vehicles Prohibited
 -  Commercial Vehicles Weighing over 5 Tons Prohibited
 -  Commercial Vehicles Weighing over 15 Tons Prohibited

TRUCK RESTRICTIONS MAP*

* Source: City of San Bernardino Public Works Department – Traffic Engineering Division



ALPR DEPLOYMENT LOCATION WORKSHEET

Purpose:

CSC to identify potential ALPR system locations in the SBM community*

How will this information be used:

Input collected will help prioritize where the ALPR systems will be deployed

Example:

Location (intersection, city block, address, etc.)	Comments
<i>Highland Ave. and Lincoln Dr.</i>	<i>Concerned about truck emissions around residential areas</i>
<i>3900 block of University Parkway</i>	<i>Many warehouses in this area which may attract trucks from freeway</i>
<i>I-215 and West 2nd St.</i>	<i>Many trucks coming off the freeways</i>

*There may be restrictions where such systems can be placed

Questions and/or Comments?

AB617comments@aqmd.gov



California Air Resources Board
Truck Enforcement Efforts in Your Community -
CERP Implementation Update

August 20, 2020

San Bernardino - Muscoy

AB 617 Community Steering Committee Meeting

CARB's CERP Enforcement Commitments for San Bernardino, Muscoy

Action	Frequency
(5B: Action 2) Drayage Truck and Truck and Bus Regulations Enforcement	Conduct focused enforcement of our Truck and Bus and Drayage Truck rules
(5B: Action 1) Idling Enforcement Sweeps	Conduct focused enforcement for idling trucks at a minimum quarterly
(5B: Action 1) Collaborate with the CSC to inform community members on how to report idling trucks	Engage in two outreach events and provide outreach materials to community members how to report idling trucks
(5B: Action 2) Provide training on complaint reporting for trucks transiting the community to the CSC and members of the community for effectively reporting complaints about heavy-duty trucks with excessive exhaust emissions in coordination with South Coast AQMD	None specified
Report back to CSC	Report back to CSC bi-annually (twice a year) and adjust enforcement efforts

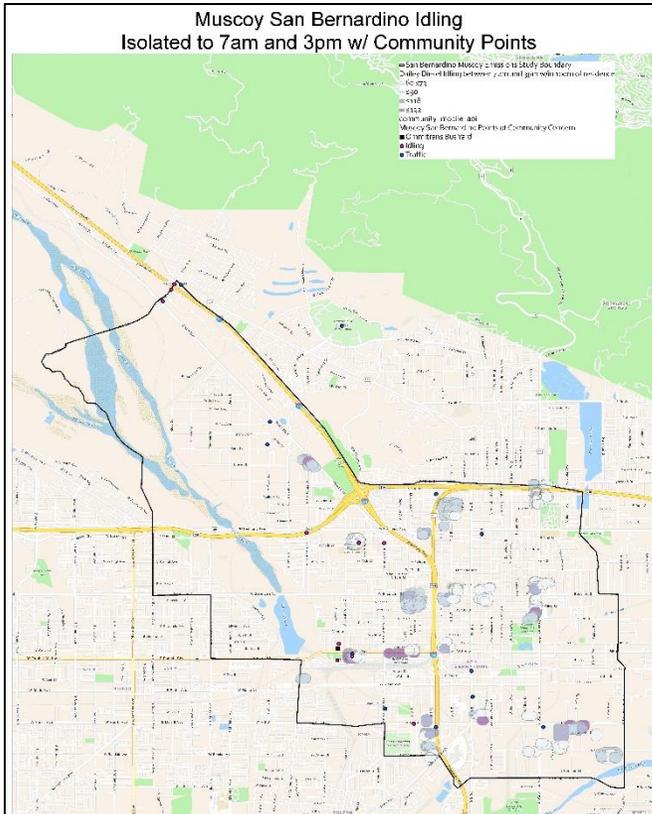
CARB 2019 Focused Enforcement Summary – San Bernardino, Muscoy Community

Year/Type	Truck and Bus ¹	Drayage	HDVIP (all) ²	TRUs
2019 Field Inspections	203	378	243	13
2019 Compliant	202	370	236	10
2019 % Compliance	98%	98%	97%	77%
Total 2016 – 2018 Inspections	112	1499	249	5
Total 2016 - 2018 Non-compliant	8	57	11	0
Total 2016 - 2018 % Compliance	93%	96%	96%	100%

¹SB1 Update: Of 2,783 HHDVs; 149 Non-compliance/NOV letters (126 registration holds, 18 brought into compliance)

²Heavy-Duty Vehicle Inspection Program (HDVIP) covers emissions control labels (ECL), excessive smoking (**40% limit lowered to 5% in 2019**), and tampering.

Idling Enforcement 2019 – 2nd Quarter 2020



CARB/South Coast AQMD both conducted at least one sweep

- Fall 2019 and Winter 2020

South Coast AQMD 3 sweeps in 2019

- Observed total 55 trucks; 2 NOVs issued (96% compliance)

South Coast AQMD 2 sweeps (March, June 2020) along Rancho, Mill, Mt. Vernon, Baseline, Rialto, and at Kendall and Palm

- Observed 26 trucks; 18 had Clean Idle stickers; Zero NOVs (100% compliance)

CARB conducted 95 vehicle inspections in 2019, 2 out of compliance (98% compliance rate) in comparison to 17 total vehicle inspections from 2016 – 2018, 1 out of compliance (94% compliance rate)

Next step(s)?

- Continue sweeping these areas?
- Add/change to new areas?
- Create and distribute flyers on benefits of not idling even for Clean Idle certified trucks?

No Idling Signage Project Status



- Working with South Coast AQMD to better determine how to reach schools
- CARB has newly designed “No Idling” signs for schools
- CARB ordered more “No Idling” street signs in February
- CARB has been in contact with City of San Bernardino to discuss placement of “No Idling” signs in their communities

Reporting Air Pollution Concerns

Spring 2019: Created business card sized “Reporting Air Pollution Concerns” in English and Spanish; Distribute(d) at monthly CSC Meetings; More available from COES@arb.ca.gov

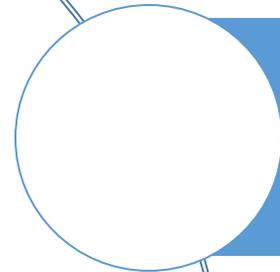
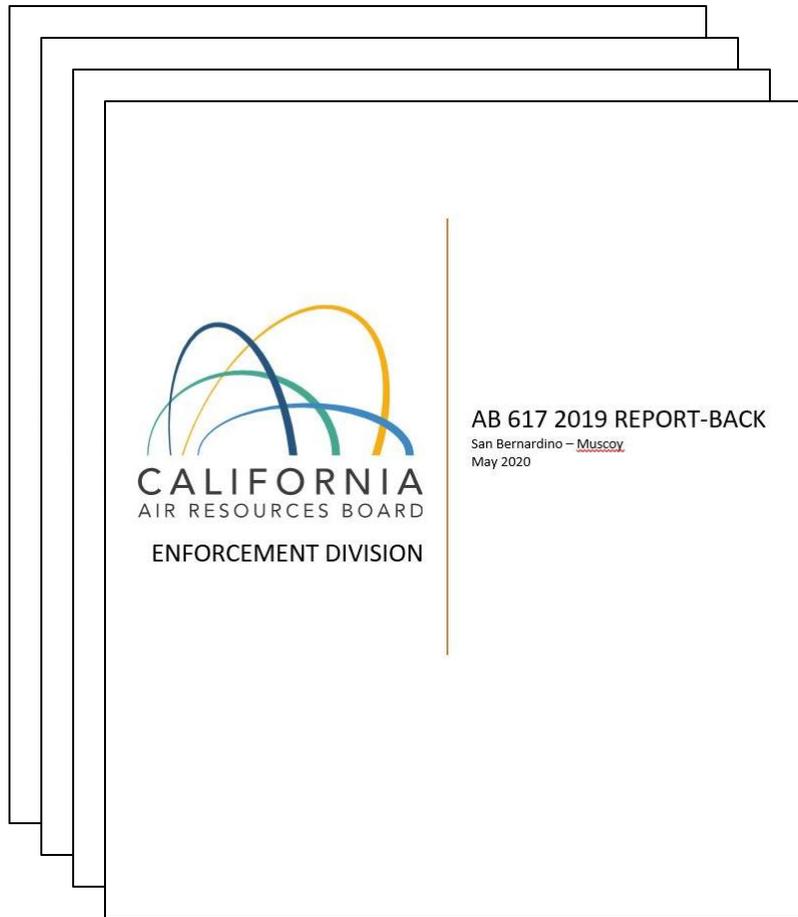


Spring 2020: Created new Community Idling flyer in English and Spanish; More available from COES@arb.ca.gov

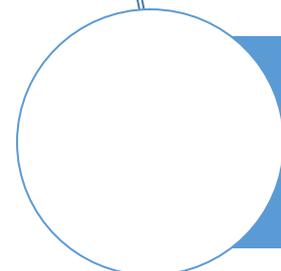
Summer/Fall 2020: Working on CARB Community Guide to Rule Enforcement booklet in English and Spanish and YouTube videos on idling and other enforcement issues

Seeking input on where these events should be or how they should look? (Get contact numbers to enforcement agencies? Speak at PTAs? Booth at a community event?)

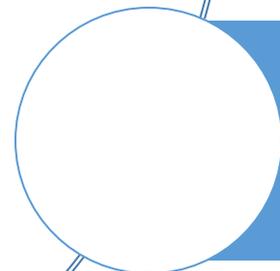
AB 617 Report Back to Communities on 2019 Enforcement Efforts



Report Back to South Coast AQMD on CARB 2019 enforcement actions for AB 617 communities



Include all metrics from CERPs related to enforcement efforts



Contact Crystal.Reul-Chen@arb.ca.gov for more details and to provide additional feedback

Questions and/or Comments?

AB617comments@aqmd.gov

ASSEMBLY BILL (AB) 617
COMMUNITY AIR INITIATIVES

COMMUNITY EMISSIONS REDUCTION PLAN

SAN BERNARDINO, MUSCOY

SEPTEMBER 2019
FINAL

SOUTH COAST
AIR QUALITY MANAGEMENT DISTRICT



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



ASSEMBLY BILL (AB) 617
COMMUNITY AIR INITIATIVES

COMMUNITY EMISSIONS REDUCTION PLAN

EAST LOS ANGELES,
BOYLE HEIGHTS,
WEST COMMERCE

September 2019
Final

SOUTH COAST
AIR QUALITY MANAGEMENT DISTRICT



ANNUAL PROGRESS REPORT FOR AB 617 COMMUNITY EMISSIONS REDUCTION PLANS

August 2020



South Coast Air Quality Management District

ANNUAL PROGRESS REPORT



ANNUAL PROGRESS REPORT

Available online:

<http://www.aqmd.gov/docs/default-source/ab-617-ab-134/2019-20-draft-cerp-progress-report.pdf>



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



Annual reports submitted to CARB for review

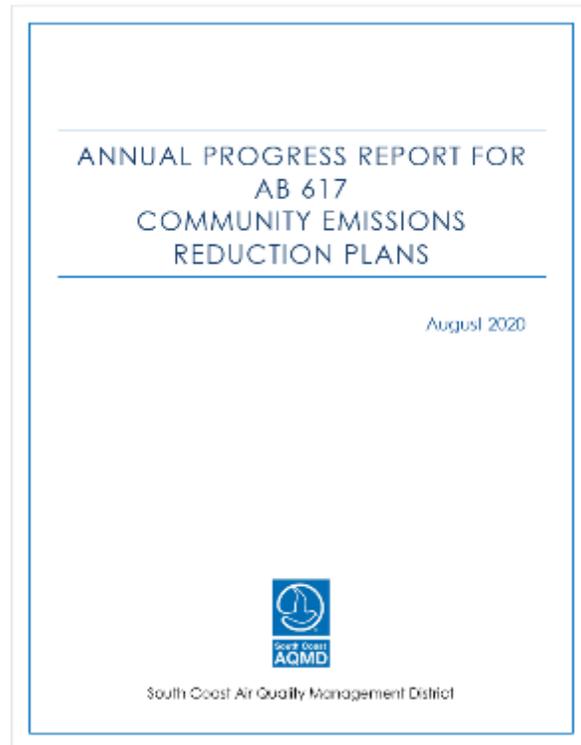


CARB may suggest plan revisions to air districts

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

OVERVIEW OF ANNUAL PROGRESS REPORT

Report Elements



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



SBM IMPLEMENTATION HIGHLIGHTS

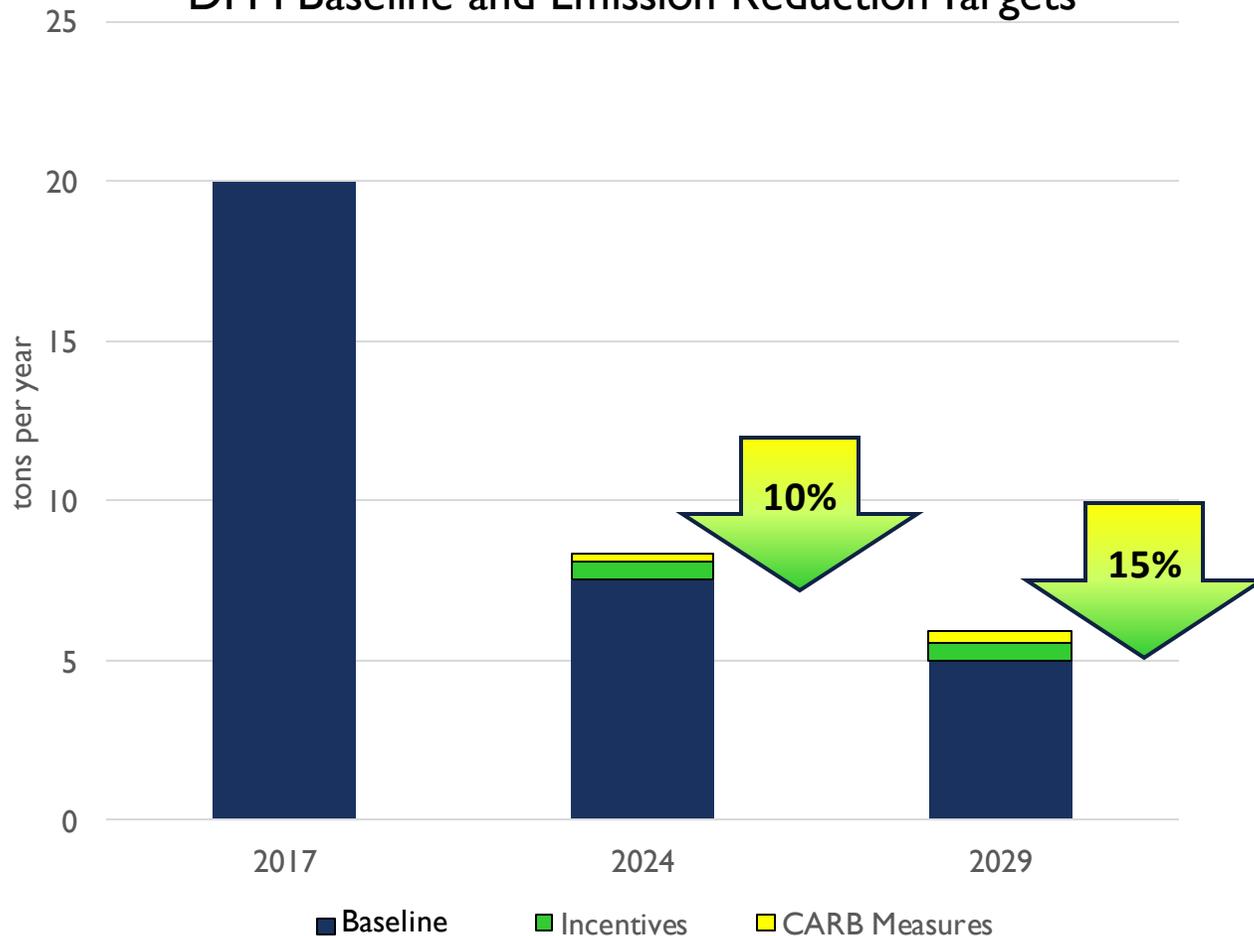
- \$1.9 million requested for school air filtration systems
- \$300,000 for 21 Low-NOx repower projects at Omnitrans
- \$9.3 million invested in 15 off-road equipment unit replacements, and 5 off-road equipment unit repower projects
- Multiple quarterly sweeps for illegal truck idling
- Monitoring and inspections conducted at all Concrete Batch Plants, Asphalt, and Aggregate Plants in SBM
- Multiple mobile air monitoring campaigns throughout community, including near the BNSF railyard and Omnitrans facilities

SBM CERP Actions

Air Quality Priority	Examples of Actions, Goals, and Strategies Required (September – June 2020)	Status of CERP
	<p>Neighborhood Truck Traffic</p> <ul style="list-style-type: none"> • Conduct truck idling sweeps • Develop Indirect Source Rules (ISR) 	<ul style="list-style-type: none"> • 4 enforcement sweeps, 61 trucks inspected, 2 NOVs • ISR community workshop for railyard conducted December 2019, initial concepts released, public hearing expected second quarter 2021; Proposed Rule 2305 (ISR for warehouses) preliminary draft rule language released November 2019, public hearing expected first quarter 2021
	<p>Railyard</p> <ul style="list-style-type: none"> • Conduct air measurements • Continue ISR development for railyards 	<ul style="list-style-type: none"> • Monitoring conducted around BNSF railyard mid 2019 to Winter 2019, discussed with CSC • ISR community workshop for railyard conducted December 2019, initial concepts released, public hearing expected second quarter 2021
	<p>Warehouses</p> <ul style="list-style-type: none"> • Develop Indirect Source Rules (ISR) and hold public meeting in Inland Empire to discuss • Conduct outreach to support zero emission equipment 	<ul style="list-style-type: none"> • Proposed Rule 2305 preliminary draft rule language released November 2019, public hearing expected first quarter 2021, public meeting in Inland Empire delayed due to COVID-19 • Provided outreach to existing warehouses
	<p>OmniTrans</p> <ul style="list-style-type: none"> • Conduct air measurements • Support transition to zero emission buses 	<ul style="list-style-type: none"> • Monitoring conducted Summer 2019 and ongoing, discussed with CSC • Provided two letters of support for grant proposals
	<p>Concrete Batch, Asphalt Batch, and Rock and Aggregate Plants</p> <ul style="list-style-type: none"> • Conduct air monitoring; if needed, follow-up investigations • Conduct public outreach on rules and complaint process 	<ul style="list-style-type: none"> • Monitoring conducted Summer 2019, discussed with CSC • Provided complaint process information to CSC, outreach event affected by COVID-19
	<p>Schools and Community Areas</p> <ul style="list-style-type: none"> • Implement Clean Air Rangers Education (CARE) and Why Healthy Air Matters (WHAM) programs at schools • Install air filtration systems at schools 	<ul style="list-style-type: none"> • WHAM/CARE affected by COVID-19 • CAPP fund requested April 2020 for air filtration systems

SBM EMISSION INVENTORY

DPM Baseline and Emission Reduction Targets



- Chapter 5a, Table 5a-I provides baseline for multiple pollutants
- 2017 is base year
- CARB Guidance required targets for future years: 5 and 10 years
- Status of targets will be evaluated annually

Emission Reductions Targets

Emissions ^a	NOx	DPM
2017 Emissions (tpy)	1140	19.97
Projected 2024 Emissions Baseline (tpy)	726	8.37
Emission Reductions from CERP, by 2024 (tpy)	75.1	0.86
Emission Reductions from CERP, by 2024 ^b (%)	10	10
Projected 2029 Emissions Baseline (tpy)	602	5.95
Emission Reductions from CERP, by 2029 (tpy)	127.9	0.91
Emission Reductions from CERP, by 2029 ^c (%)	21	15

^aPer CARB guidance, the emissions baseline was estimated for 2017, and milestone years 2024 and 2029

^bPercent calculated based on 2024 emissions baseline

^cPercent calculated based on 2029 emissions baseline

EMISSION REDUCTIONS TARGETS

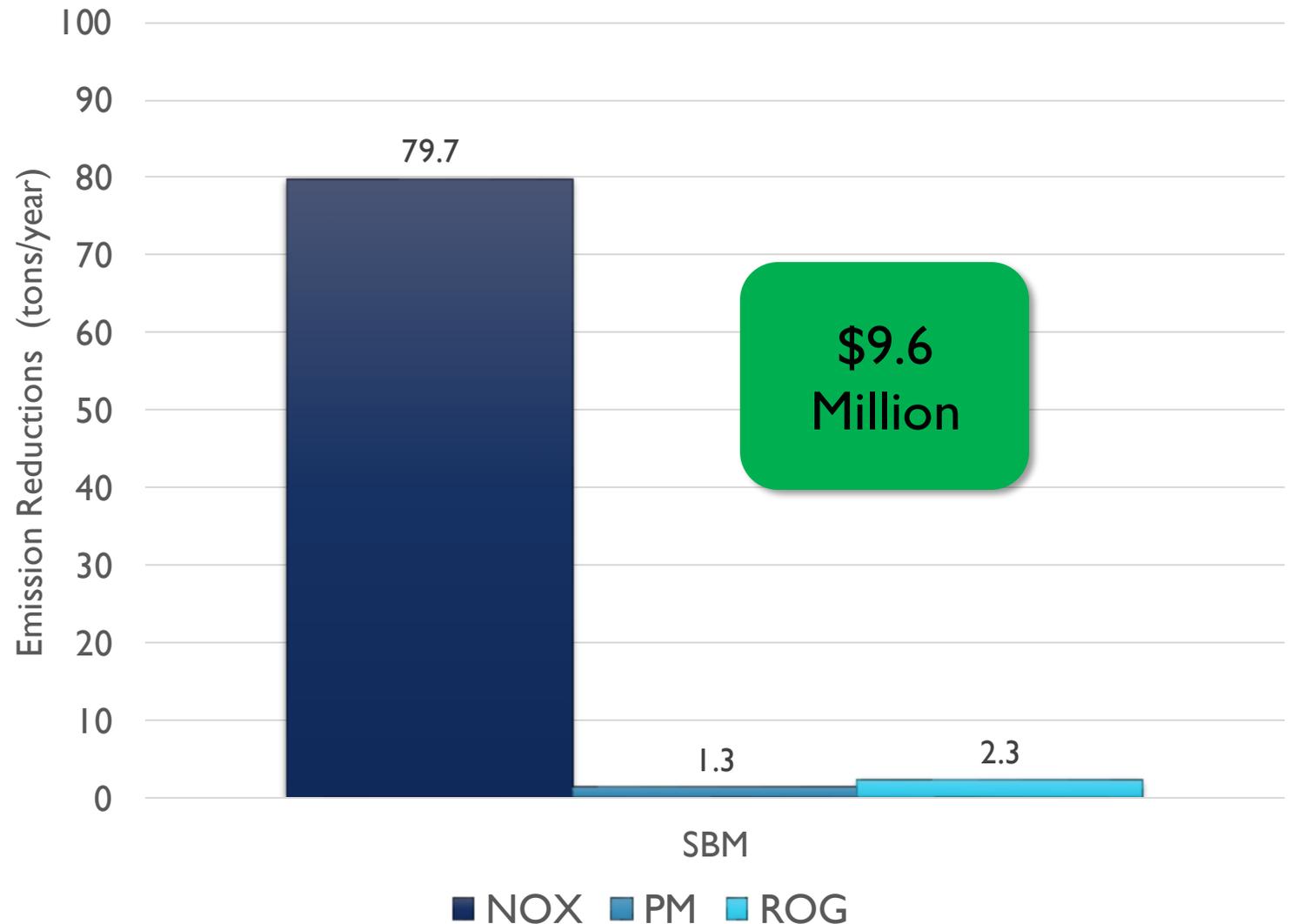


- Emission reduction targets established in each CERP (e.g., NO_x, DPM, VOCs)
- Staff working with CARB, TAG, and CSC to quantify emission reductions for:
 - AB 617 incentives
 - CARB regulations
 - South Coast AQMD regulations
- Continue to refine metrics for AB 617 emission reductions

TOTAL INVESTMENT IN INCENTIVES

- Future incentive based emission reductions dependent on program funding

Approximate Emission Reductions based on Total Investment



ANNUAL PROGRESS REPORT TIMELINE



Questions and/or Comments?

Please submit by **August 28, 2020**
to rdalbeck@aqmd.gov
909-396-2139

AB617comments@aqmd.gov



CAMP IMPLEMENTATION & MONITORING PROGRESS REPORTS



UPDATE – 3RD QUARTER 2020

PAYAM PAKBIN, PhD

PROGRAM SUPERVISOR

AIR MONITORING PROGRESS REPORTS



Air monitoring activities are ongoing



Monitoring progress reports provide a status update on these activities



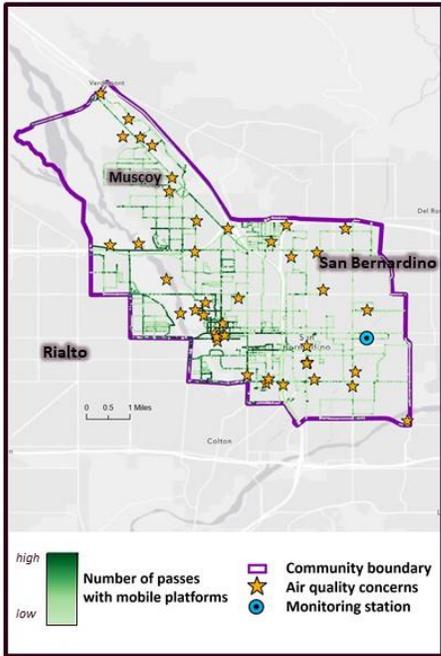
South Coast AQMD is seeking CSC input on the reports and next steps

Click each of air quality priorities to see the progress reports



South Coast AQMD staff updates on the implementation of the San Bernardino, Muscovy Community Air Monitoring Plan (CAMP) are provided below.

- 6/6 of air quality priorities surveyed
- 13 community surveys
- 510 miles traveled with the mobile platforms



To be Initiated Ongoing

Neighborhood Truck Traffic

- Mobile monitoring in the areas of traffic concern to identify pollution hotspots
- Work with California Air Resources Board and community to identify and prioritize locations for Automated License Plate Readers (ALPRs)

Railyards

- Fenceline and/or mobile monitoring around railyards to identify activities that may cause increased levels of air pollution
- Air monitoring in communities near the railyards

OmniTrans Bus Yard

- Mobile monitoring around Omnitrans Bus Yard to identify potential sources of emissions
- Air monitoring in nearby communities

Warehouse on-site Emissions

- Mobile monitoring around warehouses and nearby communities

Concrete Batch Plants, Asphalt, and Aggregate Plants

- Focused air monitoring near the concrete batch, asphalt batch, and rock and aggregate plants

Schools, Childcare Centers, Community Centers, and Homes

- Mobile and stationary monitoring at or near sensitive populations in schools, childcare centers and homes

*Last updated August 2020

AIR MONITORING PROGRESS REPORTS

Air monitoring updates for the period of June 2019 to August 2020 is now available online:

<http://www.aqmd.gov/ab-617/CAMP/infographics/SBM>



For more information, please visit AB 617 website: www.aqmd.gov/ab617



PROGRESS REPORTS FOR EACH AIR QUALITY PRIORITY

Progress report on the monitoring actions in the CERP

- Each report contains:
 - Background and objectives of air monitoring
 - Monitoring methods and strategies
 - Results of air monitoring
 - Next steps
 - Comprehensive reports and data interpretation

Questions and/or Comments?

AB617comments@aqmd.gov

SENSOR DEPLOYMENT

Ryan Sinclair

Loma Linda University

TECHNICAL ADVISORY GROUP (TAG) UPDATE

Andreas Beyersdorf

Cal State University, San Bernardino

CSC MEMBER STIPENDS

Fabian Wesson

**Assistant Deputy Executive Office / Public Advisor
Legislative, Public Affairs & Media
South Coast Air Quality Management District**

AGENDA ITEMS FOR NEXT MEETING & CSC MEMBER UPDATES

Agenda Items for Next Meeting & CSC Member Updates

AB617comments@aqmd.gov

PUBLIC COMMENT

AB617comments@aqmd.gov

THANK YOU

For more information, questions, or suggestions after this meeting:

Daniel Wong

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Legislative, Public Affairs & Media
South Coast Air Quality Management District

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909-396-3046