

# Community Air Initiatives

## San Bernardino, Muscoy Community Steering Committee Meeting #5

*Thursday, April 18, 2019  
San Bernardino, CA*



# Committee Business

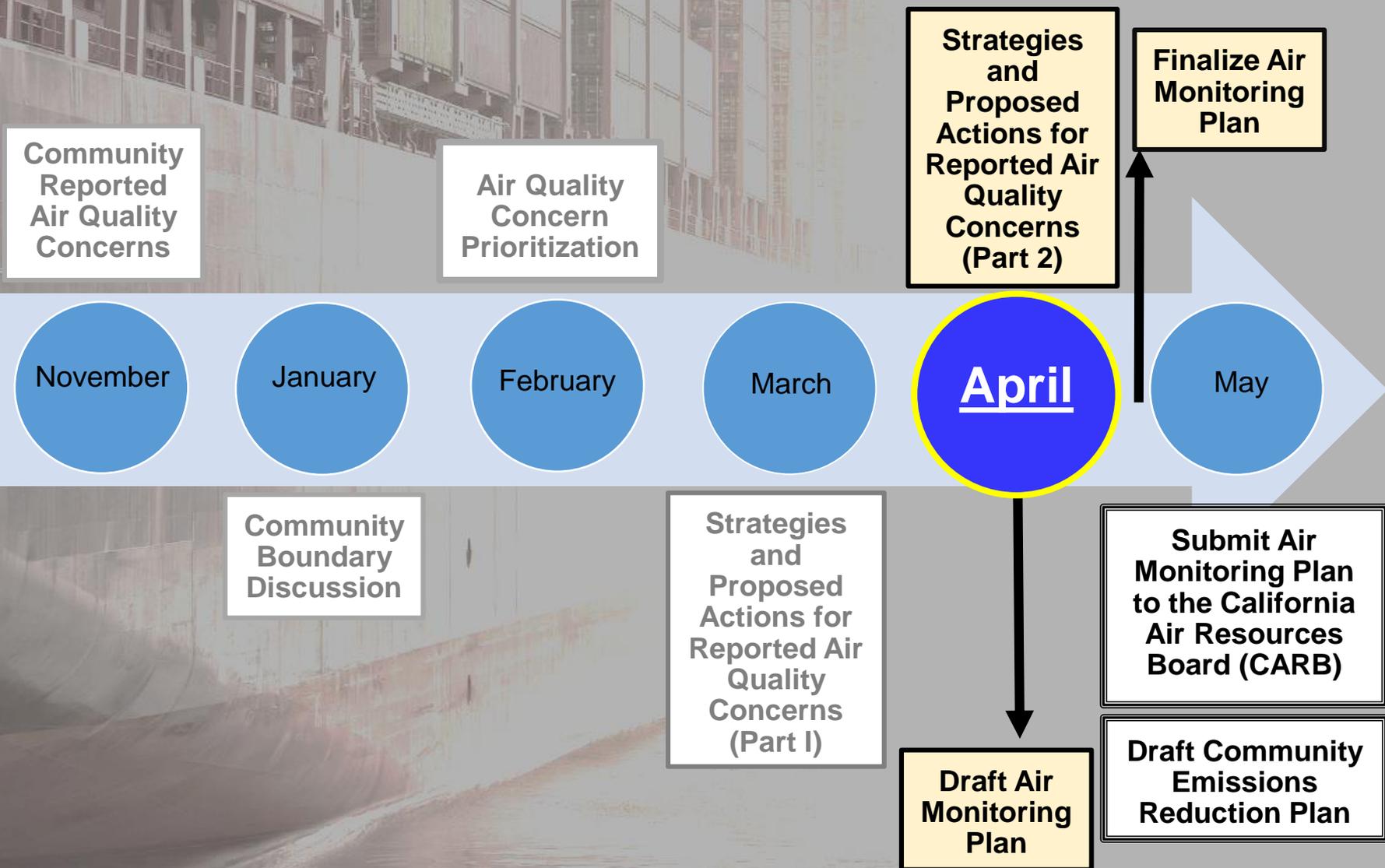
- Finalize Roster
- Meeting Format and Length
  - Survey
- Suggestion Box
- Community Tour



# Committee Presenters

- AB 617 is a collaborative effort
- Seeking volunteer Community Steering Committee (CSC) members to present
- Highlight efforts within the San Bernardino, Muscoy (SBM) community that could be part of the AB 617 Community Emission Reduction Plan (CERP)
- Who would you like to hear from?
  - Let us know!

# Making Progress



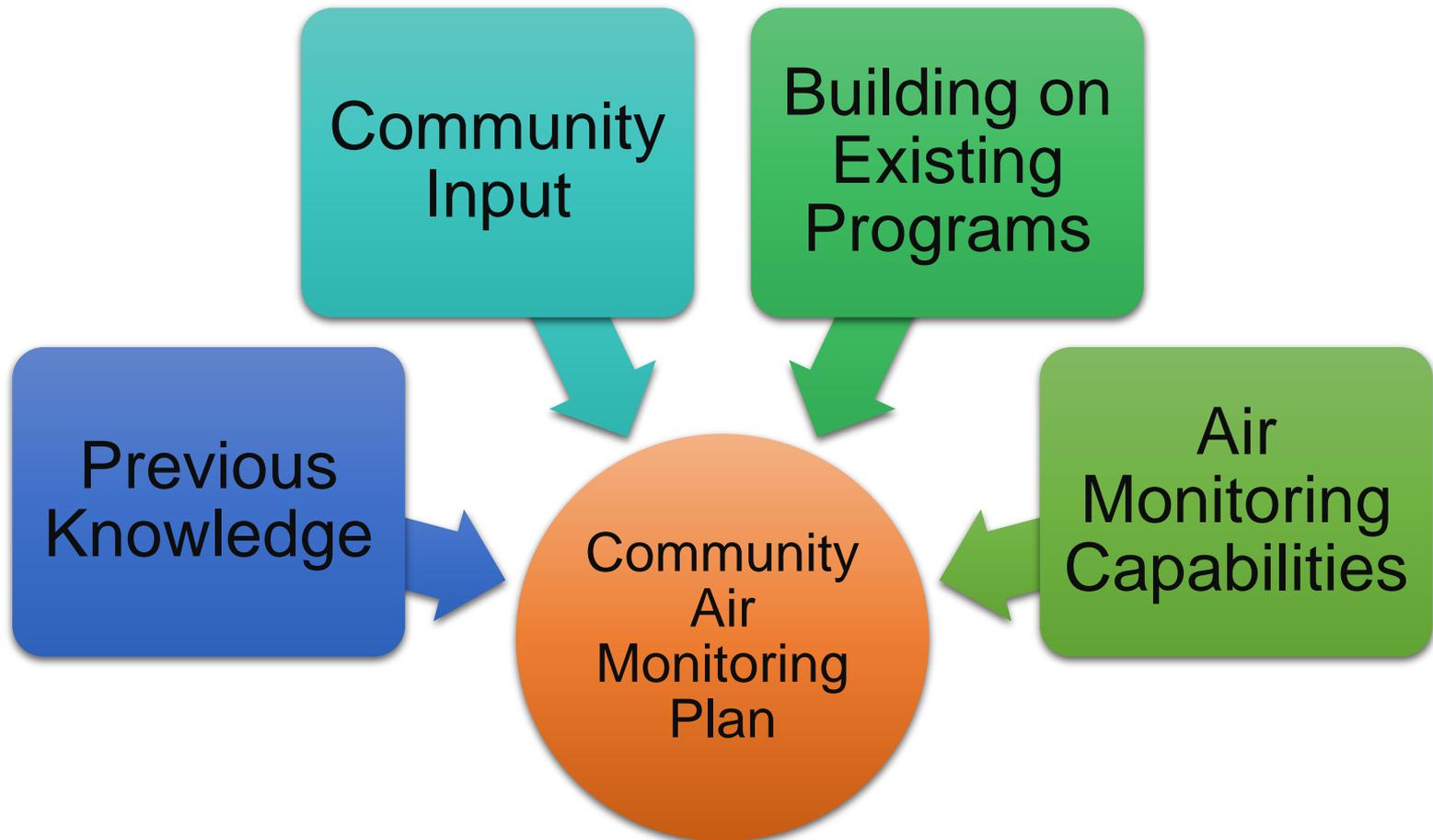


# Community Air Monitoring Plan Update

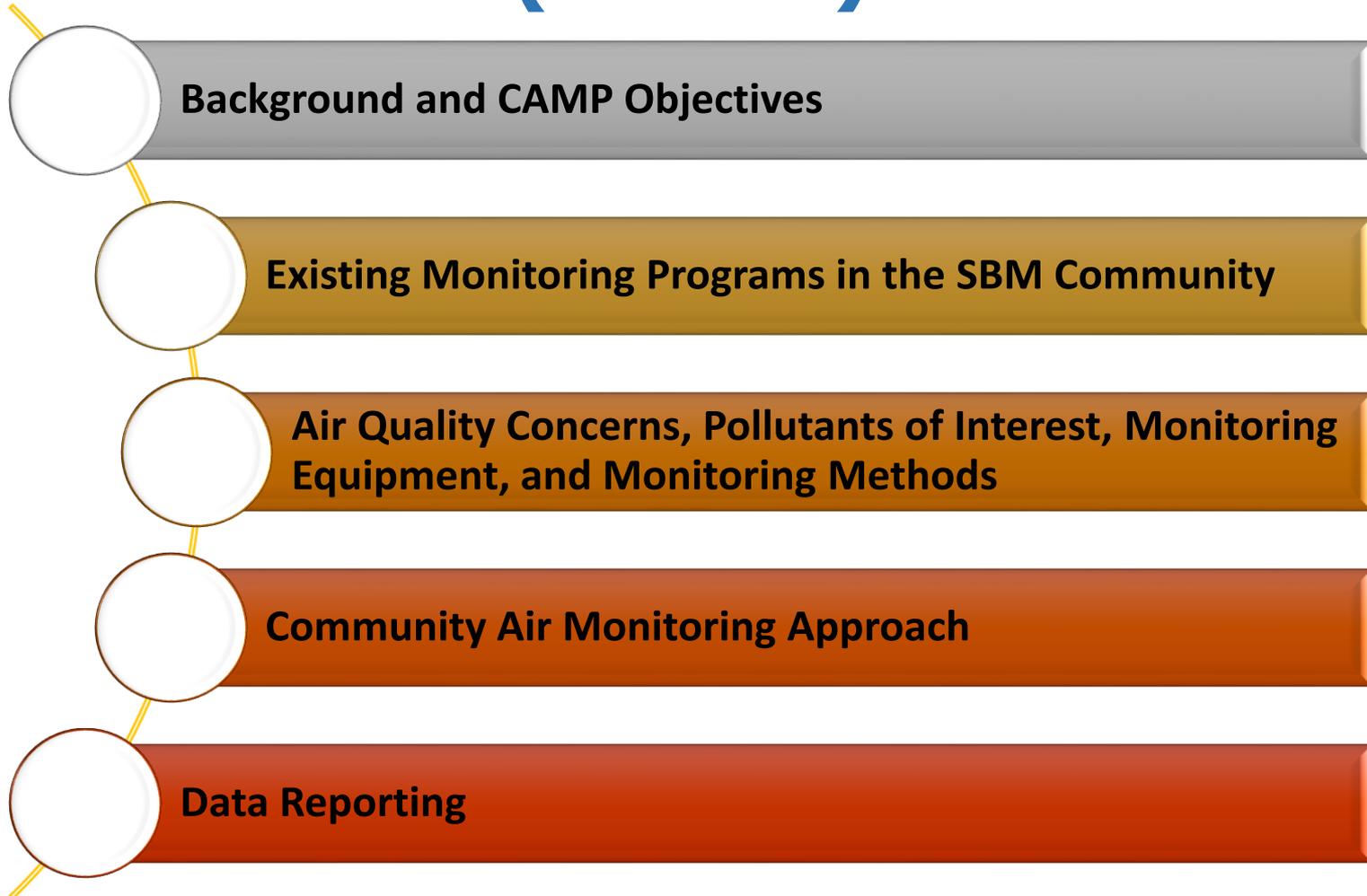
***Thursday, April 18, 2019  
PAL Charter Academy***

***Andrea Polidori, PhD  
Atmospheric Measurements Manager  
South Coast Air Quality Management District***

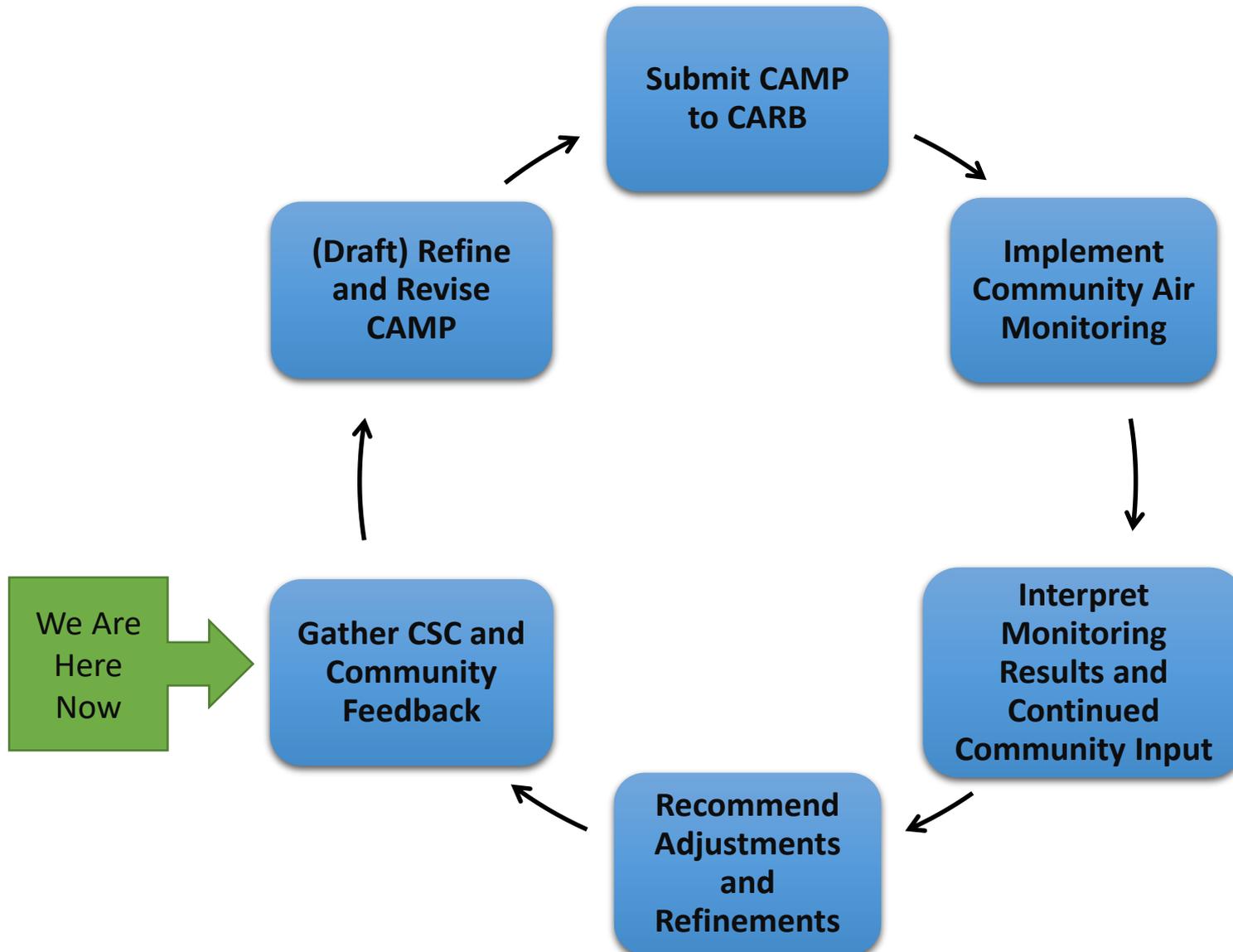
# Considerations for Community Air Monitoring Plan



# The Major Elements in the Community Air Monitoring Plan (CAMP)



# Ongoing CAMP Process



# Working with the CSC Group



**Recommend  
Appropriate  
Monitoring  
Strategies**



CSC Meeting  
#4



**Provide CAMP  
Updates to CSC  
and Gather  
Input**



CSC Meeting  
#5



**Submit Draft  
CAMP to CARB**



By May 1<sup>st</sup>, 2019



**Begin Air  
Monitoring in  
Priority Areas**



July 1<sup>st</sup>, 2019

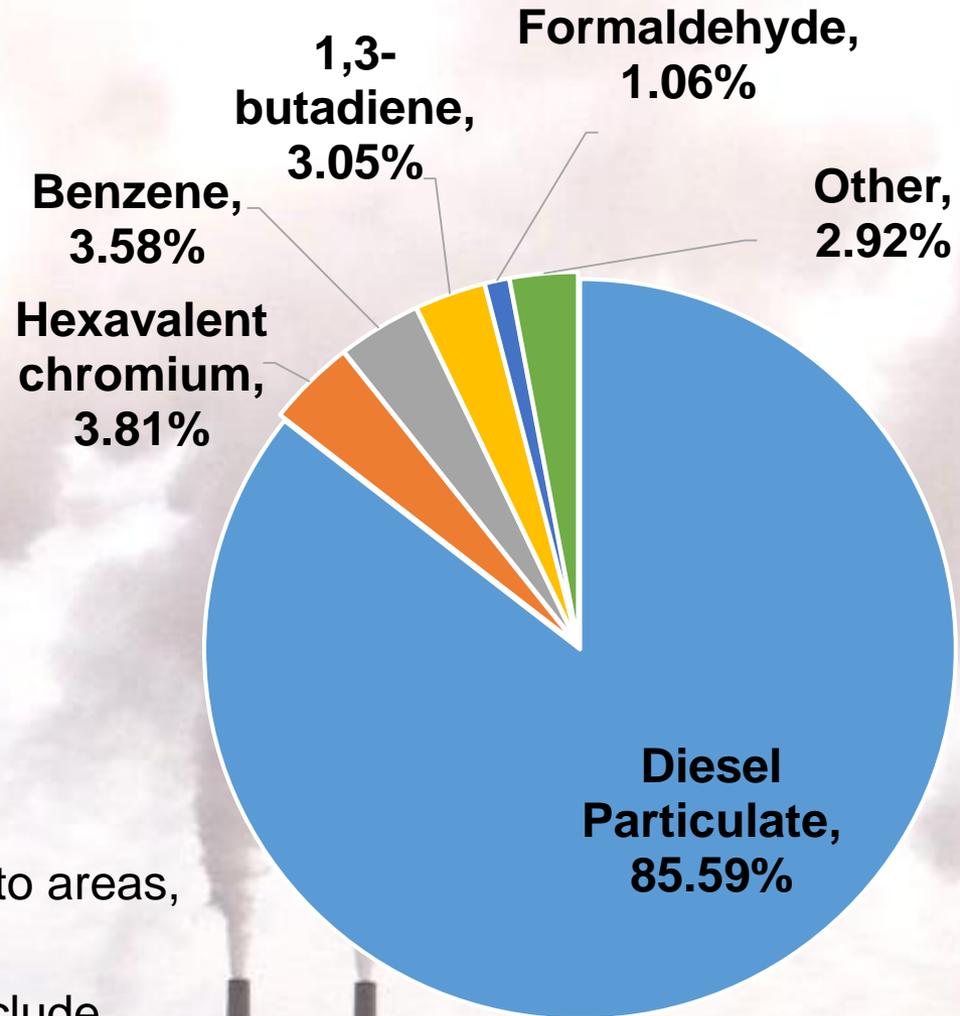
# What are the sources of air pollution?



# Main air toxics in the SBM community

**Diesel particulate has the highest impact in the community**

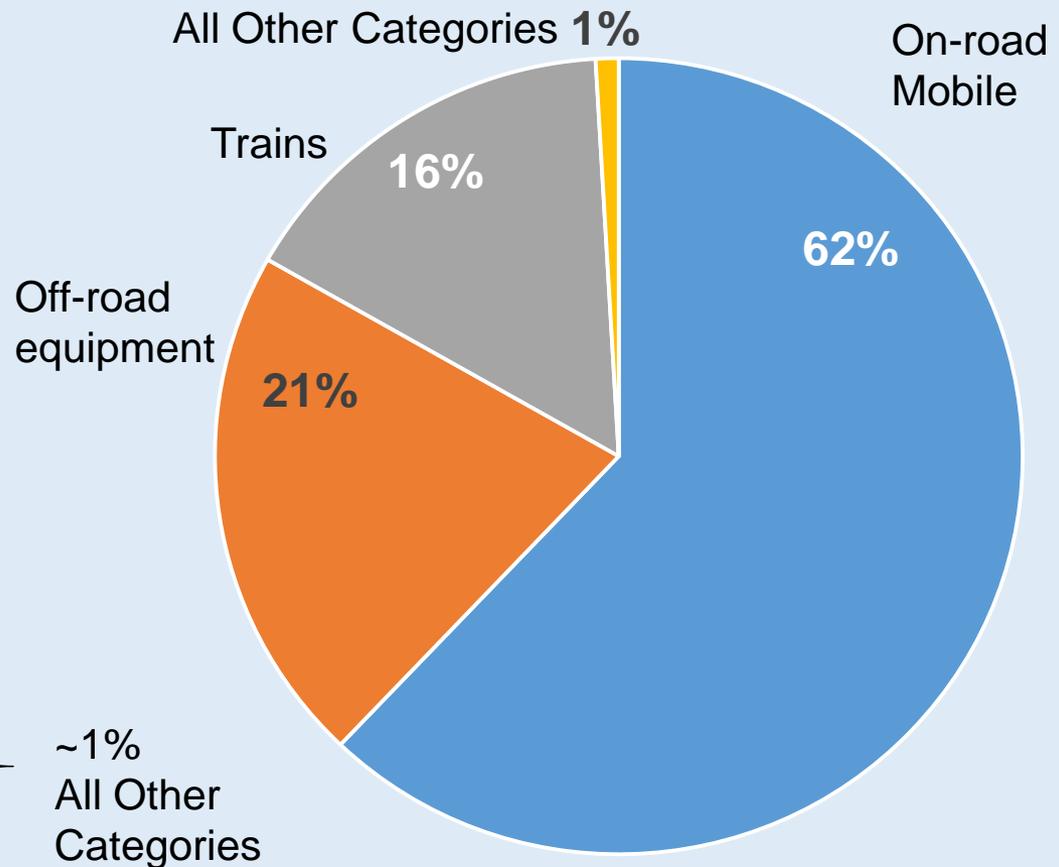
- Other toxics may have impacts to areas, if they are close to sources
- Emissions inventories do not include **unknown or unquantified leaks**



# What are the sources of diesel particulates in the SBM community?

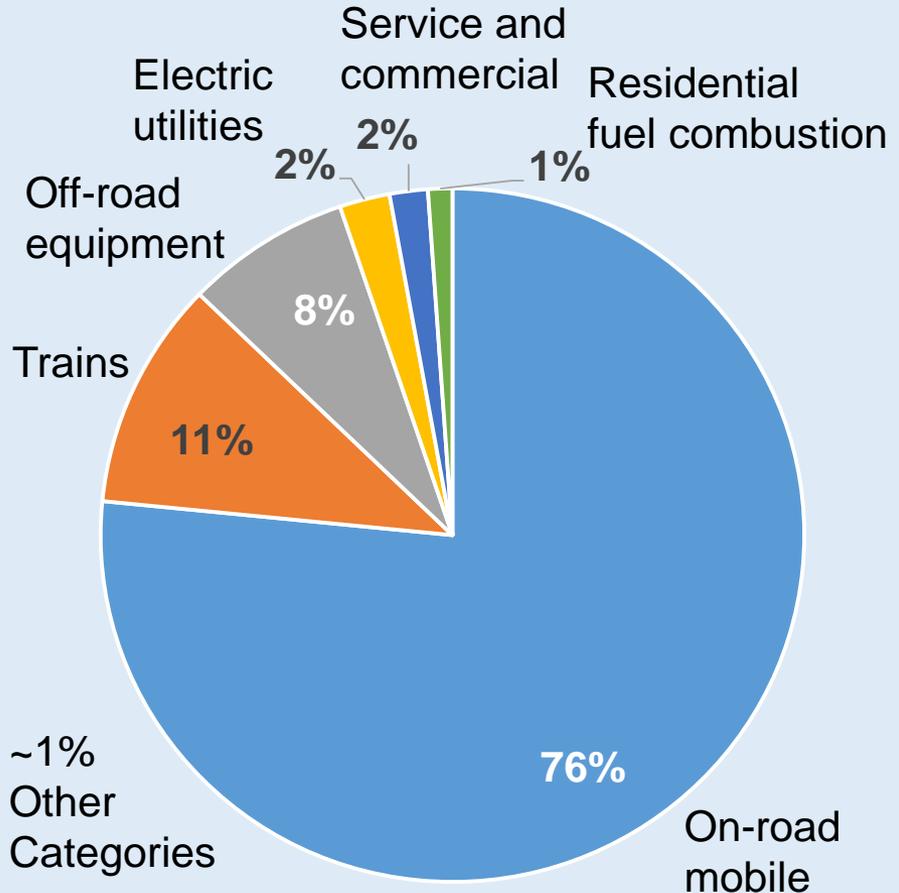
Diesel Source Category	% of Total Emissions**
ON-ROAD MOBILE	62
OFF-ROAD EQUIPMENT	21
TRAINS	16
SERVICE AND COMMERCIAL FARM EQUIPMENT	~1%
MANUFACTURING AND INDUSTRIAL	
FOOD AND AGRICULTURAL PROCESSING	
OTHER (FUEL COMBUSTION)	
RESIDENTIAL FUEL COMBUSTION	

\*\*2012 Baseline Emissions



# What are the sources of Nitrogen Oxides (NOx) in the SBM community?

NOx Source Category	% of Total Emissions**
ON-ROAD MOBILE	76
TRAINS	11
OFF-ROAD EQUIPMENT	8
ELECTRIC UTILITIES	2
SERVICE AND COMMERCIAL	2
RESIDENTIAL FUEL COMBUSTION	1
MANUFACTURING AND INDUSTRIAL	
FARM EQUIPMENT	
OTHER (FUEL COMBUSTION)	
FOOD AND AGRICULTURAL	
PROCESSING	
FIRES	
MANAGED BURNING AND DISPOSAL	
OFF-ROAD RECREATIONAL VEHICLES	
COGENERATION...etc.	



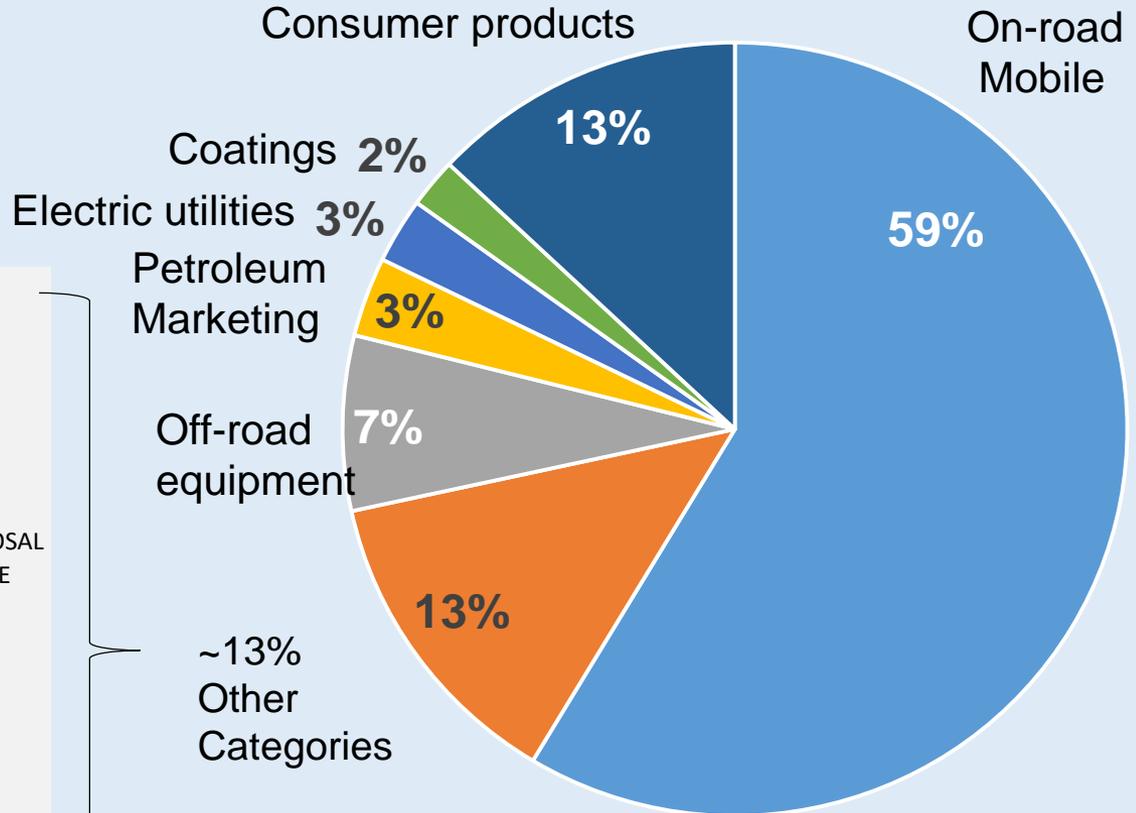
\*\*2012 Baseline Emissions

\*Numbers may not add up due to rounding

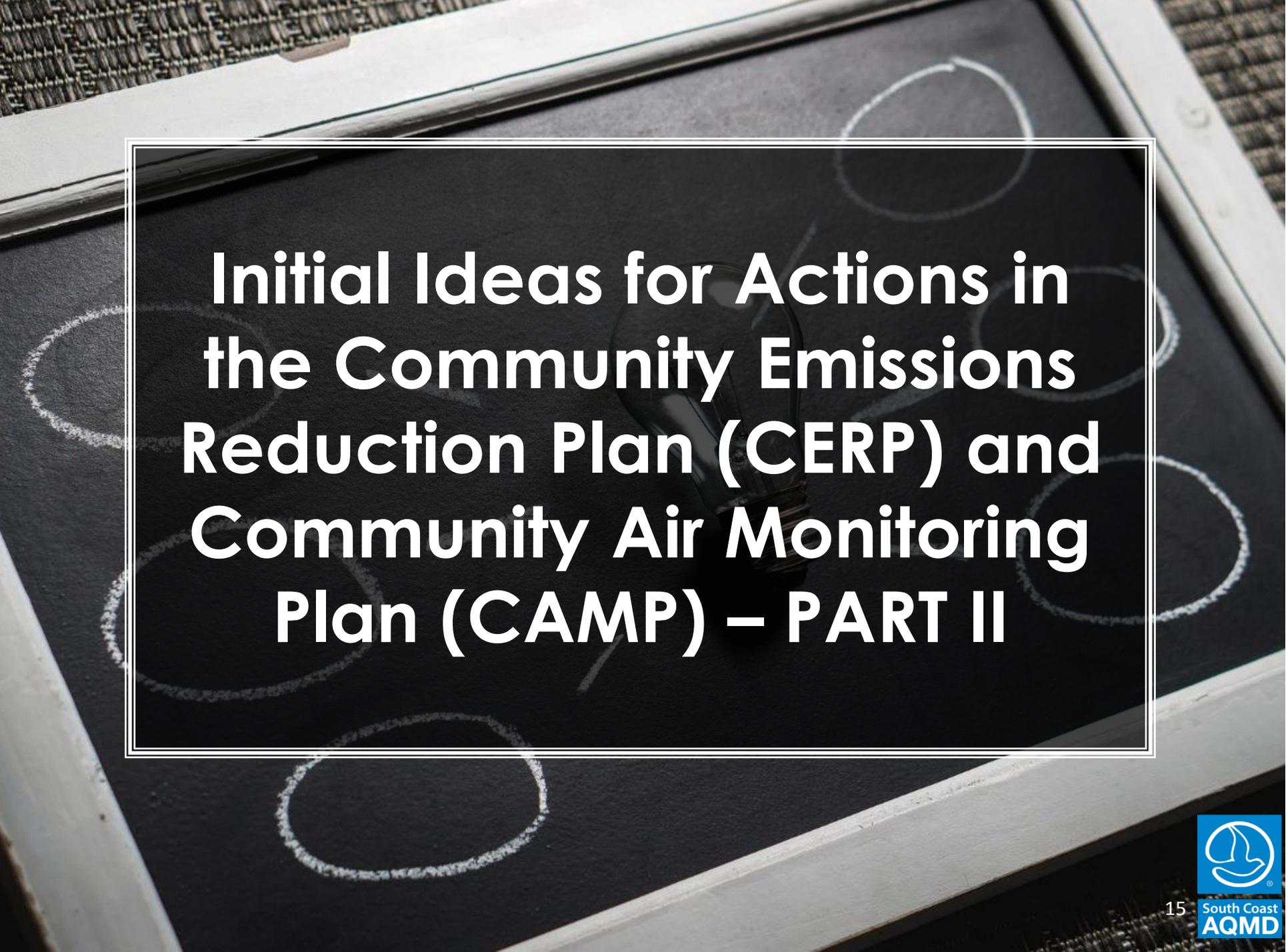
# What are the sources of Volatile Organic Compounds (VOCs) in the SBM community?

VOC Source Category	% of Total Emissions**
ON-ROAD MOBILE	59
CONSUMER PRODUCTS	13
OFF-ROAD EQUIPMENT	7
ELECTRIC UTILITIES	3
PETROLEUM MARKETING	3
COATINGS AND RELATED PROCESS SOLVENTS	2

ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	PESTICIDES/FERTILIZERS
RECREATIONAL BOATS	FARM EQUIPMENT
FUEL STORAGE AND HANDLING	LAUNDERING
SERVICE AND COMMERCIAL FARMING OPERATIONS	FIRES
TRAINS	FOOD AND AGRICULTURE PRINTING
ADHESIVES AND SEALANTS	MANAGED BURNING AND DISPOSAL
LANDFILLS	OTHER (CLEANING AND SURFACE COATINGS)
DEGREASING	OTHER (WASTE DISPOSAL)
MANUFACTURING AND INDUSTRIAL PROCESSING	FOOD AND AGRICULTURAL PROCESSING
OFF-ROAD RECREATIONAL VEHICLE	OTHER (FUEL COMBUSTION)
CHEMICAL	MINERAL PROCESSES
ASPHALT PAVING / ROOFING	COGENERATION
OTHER (INDUSTRIAL PROCESSES)	OIL AND GAS PRODUCTION
RESIDENTIAL FUEL COMBUSTION	OTHER (PETROLEUM PRODUCTION AND MARKETING)
COOKING	OIL AND GAS PRODUCTION (COMBUSTION)



\*\*2012 Baseline Emissions

A chalkboard with a lightbulb in the center and several circles drawn around it. The text is overlaid on the board.

# **Initial Ideas for Actions in the Community Emissions Reduction Plan (CERP) and Community Air Monitoring Plan (CAMP) – PART II**

# Prioritized Air Quality Concerns in San Bernardino and Muscoy

This committee has prioritized these air quality concerns in the San Bernardino and Muscoy community:

1. Neighborhood Truck Traffic (including from/to warehouses)
2. Railyard
3. **Warehouses (On-site Emissions)**
4. **Cement Batch Plants**
5. **Omnitrans Bus Yard**
6. **Schools, Hospitals, etc.**

Discussed in Meeting #4

Today, we will focus on discussing actions to address these priorities

# Community Emissions Reduction Plan and Community Air Monitoring Plan



Deadline for CERP to be approved: September 2019

Deadlines for Air Monitoring Plan  
Submit Plan: May 2019  
Implementation: July 2019

# SBM Meeting #4

## Brief Recap of Air Quality Concerns Discussion

### Nighborhood Truck Traffic

- Focused enforcement of designated truck routes and idling truck regulations
- Time specific anti-idling regulations (to address off-hour idling)
- On-site accountability to ensure trucks comply with idling
- Education, outreach, and/or training on truck idling and warehouses
- Incentivize or encourage Zero-Emission technology, where available

### BNSF Railyard Onsite

- Focused Particulate Matter (PM) and black carbon (BC) monitoring
- Rulemaking for railyards - Facility Based Mobile Sources Measures (Indirect Source Rule (ISR)) and CARB regulations
- Incentives: Locomotive (switcher, line-haul), cargo handling equipment replacements

\* See meeting summary for more details

# Warehouse (On-site Emissions)

## Initial CERP and CAMP Ideas



### **Monitoring:**

- Fenceline monitoring to characterize air pollution activities
- Identify impacted community areas nearby
- Data could support future enforcement action if necessary

### **Incentives:**

- Electrify forklifts, transportation refrigeration units (TRUs) and other on site diesel-powered equipment, where applicable
- Charging and/or fueling infrastructure for on-site equipment

### **Collaboration**

- Encourage buffer zones between warehouses and residents
- Encourage solar power generation
- Encourage warehouses to build loading docks away from residents' homes
- Infrastructure needs, collaboration with public utilities/Public Utilities Commission (PUC)/California Energy Commission (CEC) and local ordinances

### **Rules, Regulations, and Agreements**

- Rulemaking for warehouses- Facility Based Mobile Sources Measures (Indirect Source Rule (ISR))
- CEQA Mitigation Fund

*These measures are either new or could have new components based on committee feedback and priorities*

# Cement Batch Plants

## Initial CERP and CAMP Ideas



### **Monitoring:**

- Place hexavalent chrome monitors near cement manufacturers
- Add in PM10 monitoring
- Provide information for enforcement actions
- Support the CERP (e.g. track progress)
- Provide information for enforcement actions, when appropriate

### **Enforcement:**

- Focused enforcement of Rule 403 (Fugitive Dust)

### **Outreach:**

- Fugitive dust outreach materials for community members
- Outreach to operators

*These measures are either new or could have new components based on committee feedback and priorities*

# Omnitrans Bus Yard

## Initial CERP and CAMP Ideas



### **Monitoring:**

- Fenceline monitoring to characterize emissions
- Identify impacted community nearby

### **Enforcement:**

- Utilize the FLIR camera to identify sources of leaks; conduct targeted follow-up investigation

### **Outreach:**

- Odor identification outreach materials for community members

### **Collaboration:**

- Seek opportunities for minimizing emissions

*These measures are either new or could have new components based on committee feedback and priorities*

# Schools, Hospitals, Parks, & Community Centers

## Initial CERP and CAMP Ideas



### **Monitoring:**

- Look at air pollution levels at and near these places
- Track progress of the emission and exposure reduction programs
- Provide community education and engagement

### **Incentives:**

- Installation of air filtration systems at schools
- Upgrade or replace school buses

### **Collaboration/Outreach:**

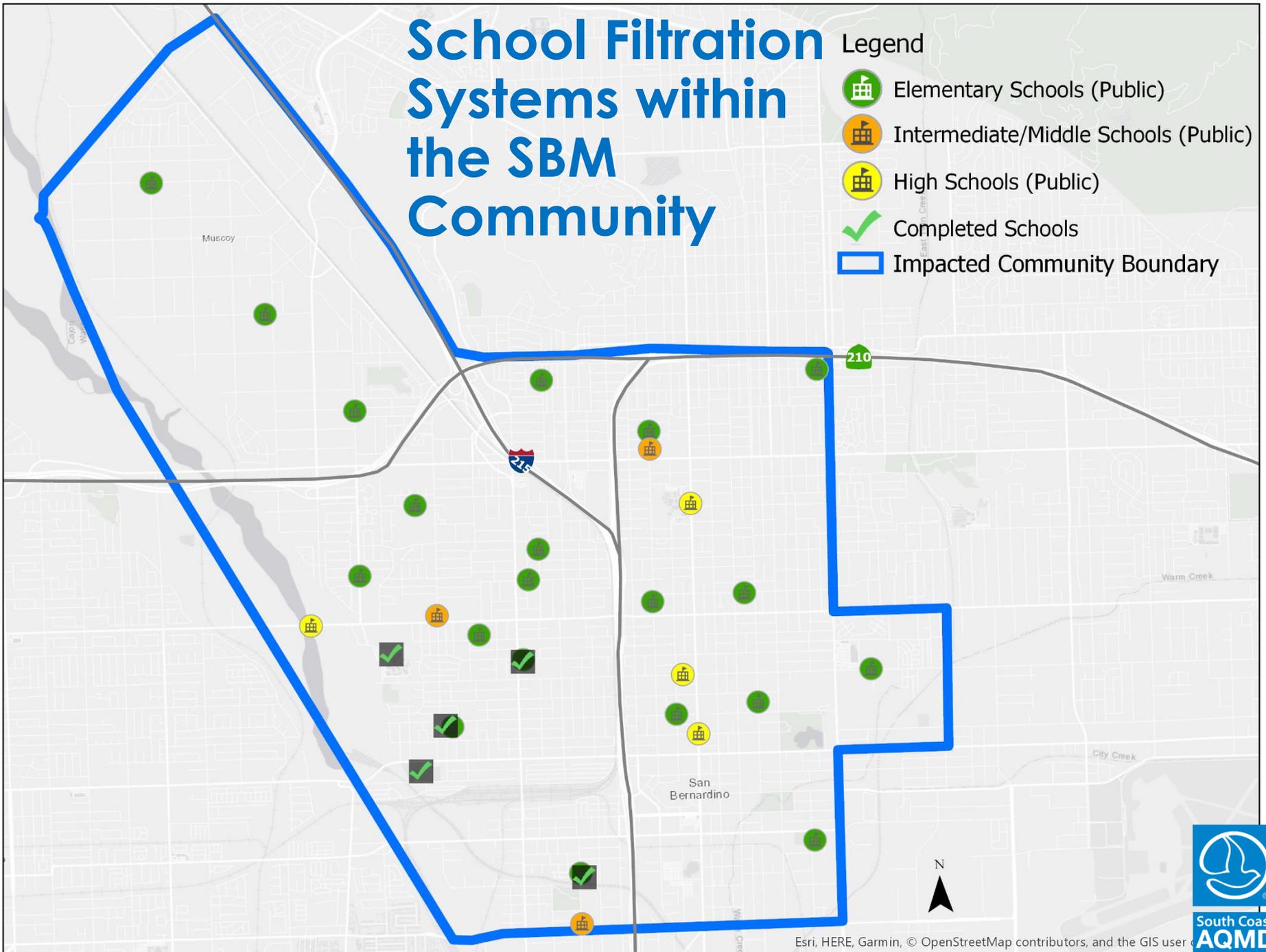
- Provide schools with information related to air quality advisories
  - Work with Department of Public Health and school districts to develop guidelines

*These measures are either new or could have new components based on committee feedback and priorities*

# School Filtration Systems within the SBM Community

## Legend

-  Elementary Schools (Public)
-  Intermediate/Middle Schools (Public)
-  High Schools (Public)
-  Completed Schools
-  Impacted Community Boundary



# Discussion Questions

1. Which of the proposed actions in this air quality concern category are the highest priorities?
2. Does the proposed monitoring approach support other actions (e.g. enforcement, emission reductions)?
  - ❖ This is your opportunity to provide input to staff for the draft air monitoring plan.
3. What additional ideas do you have to address this air quality concern?
4. How would you prioritize schools (e.g. age group sensitive receptors, proximity to known emission sources, concentrations of pollutants/toxics, etc.)?
  - ❖ To which group would you give the highest priority and why: schools, community centers, hospitals, parks, etc.?

# Next steps and important reminders

## Future meeting dates and locations:

- CSC Meeting #6: May 16, 2019 (6:00 p.m.-8:00 p.m.\*) at TBD  
*\*Depending on CSC input, the meeting may be extended*

## Likely agenda items for CSC Meeting #6:

- Committee presentations
  - San Bernardino County Department of Public Health
  - City of San Bernardino
- Developing goals for the CERP
- CARB Actions

**Is the CSC okay with these topics?**

**Any additional topics?**

## Technical Advisory Group (TAG):

### Primary Member

Ryan Sinclair (Loma Linda University)

Andreas Beyersdorf (California State University, San Bernardino)

Tammy Yamasaki (Southern California Edison)

**Next TAG Meeting:  
Late Spring  
2019**

**Thank you  
for the hard work!**

**More information on AB 617:**

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

**Email: [AB617@aqmd.gov](mailto:AB617@aqmd.gov)**

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