

Announcements

- Suggestion Box
- Community tour update



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!



SBM Progress

Community Reported Air Quality Concerns

Air Quality Concern Prioritization Strategies and Proposed Actions for Reported Air Quality Concerns (Part 2) Draft of Air Monitoring Plan available for public input, submit to CARB staff

Board Hearing

November

December

January

February

March

April

May

June

July

August September

Community Boundary Discussion Strategies and Proposed Actions for Reported Air Quality Concerns (Part I) Draft Community Emissions Reduction Plan Begin Monitoring, Committee Consideration

Areas where CSC has provided input

Draft Air Monitoring Plan



SBM Meeting #5

Brief Recap of Air Quality Concerns
Discussion (Part 1)

Warehouse (On-site emission)

Committee input:

- Stronger language is needed in warehouse construction guidelines (e.g., mandate, require vs. encourage)
- Enforcement of CARB's 1,000 foot set back recommendation between warehouses and residents
- Warehouses should not be built on Cajon Blvd.
- Consider varying warehouse sizes
- Monitor air pollution at varying distances to support mandates
- County Readiness Plan will provide guidance on siting of electric vehicle infrastructure

Concrete Batch Plants

Committee input:

Protect children by regulating fugitive dust from concrete batch plants



SBM Meeting #5 Brief Recap of Air Quality Concerns Discussion (Part 2)

Schools, Hospitals, Parks, & Community Centers

Committee input:

- Prioritize schools near truck routes and next to major sources of air pollution
- Route trucks away from schools
- Include charter schools for air filtration systems
- Include U.S. EPA's flag program in schools to provide information about current air quality conditions

Omnitrans Bus Yard

Committee input:

- Omnitrans is seen as a source of air pollution in the community
- Omnitrans is transitioning to zero-emission buses to replace the current buses by 2040





California Air Resource Board Actions and Regulations



Who is CARB?



CARB

Regulates mobile sources of air pollution, greenhouse gases, and consumer products.







Trucks



Buses



In-Use compliance focuses on engines that are already in use by the public. Certification ensures that new engines being sold in California meet specific emissions standards.



Tools in Development

Truck Idling

Enhanced Enforcement

Zero Emission Vehicle Deployment

Emissions Reductions from Freight



What does this Community Steering Committee want to discuss?

What do you want to know more about?

What efforts do you have input on?



CARB Resource Slides

California Air Resources Board



Current Regulations and Control Measures

Ports

Commercial Harbor Craft

Cargo Handling Equipment

> Drayage Trucks

Shore Power

Ocean-Going Vessels Fuel Rule

Rail

1998
Locomotive
NOx Fleet
Average
Emissions
Agreement

Mobile On-Road

Truck and Bus Regulation

Solid Waste Collection Vehicle Regulation

Fleet Rule for Transit
Agencies

Fleet Regulation for Public Agencies and Utilities

Mobile On-Road

Tractor Trailer GHG

HD Vehicle Inspection Program

Periodic Smoke Inspection Program

Idling Limits

Emission Control Label

Mobile Off-Road

Off-Road In-Use Diesel Regulation

Transport Refrigeration Unit

Fuel

Low Carbon Fuel Standard

Diesel Regulation



Ports – Existing Regulations



Commercial Harbor Craft



Cargo Handling Equipment



Drayage Trucks



Shore Power



Ocean Going Vessels Fuel Rule



Rail – Existing MOU

The 1998 Locomotive NOx Fleet Average Emissions Agreement in the South Coast Air Basin (1998 MOU)

- signed by CARB, Union Pacific Railroad (UP) and BNSF Railway (BNSF)
- accelerates the introduction of cleaner locomotives into the South Coast Air Basin.
- under the Agreement, UP and BNSF agreed to operate locomotive fleets that "on average" meet a Tier 2 NOx emission standard, or 5.5 g/bhp-hr by 2010 (and through 2030).
- the Agreement provides State Implementation Plan (SIP) creditable emission reductions.

https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california



Mobile On-Road – Existing Regulations

Idling Limits

Heavy-Duty Vehicle Inspection Program

Emission Control Label

Periodic Smoke Inspection Program

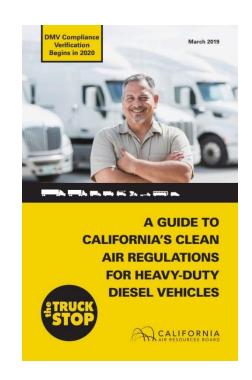
Truck and Bus Regulation

Tractor Trailer Greenhouse Gas

Solid Waste Collection Vehicle Regulation

Fleet Rule for Transit Agencies

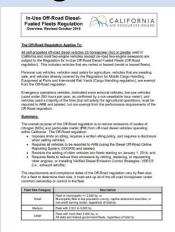
Fleet Regulation for Public Agencies and Utilities





Mobile Off-Road – Existing Regulations

Off-Road In-Use Diesel Regulation



Transport Refrigeration Units



TRU Brochure #2
What TRU & TRU Generator
Set Owners & Operators
Need to Know to Comply
with the TRU Airborne Toxic
Control Measure (ATCM)



Cal/EPA
California Air Resources Board
1001 I Street
Sacramento, CA 95814
1-888-878-2826
1-888-TRU-ATCM
http://www.arb.ca.gov/diesel/tru/tru.htr

Disponible en Español en la página: http://www.arb.ca.gov/diesel/tru/docum ents/tru/soanish.ndf

Who is affected

Owners and operators of in-use dieselfueled TRUs and TRU generator (gen) sets that operate in California, irrespective of whether they are registered in or outside of the State of California are affected. This includes all carriers that transport perishable goods using diesel-powered refrigeration systems on trucks, trallers, shipping containers, and railcars that operate in California.

Operators of terminals located in Califio his where TRUs or TRU gen sets are regularly garaged, maintained, operated, or dispatched from, including a dispatch office, cross-dock facility, maintenance shop, business or private residence (excluding independent repair shors).



What is the purpose of the regulation?

In February 2004, the California Air Resources Board (ARB) approved the Anthorn Toxic Centrol Measure for In-like Dearth Faviet Control Measure for In-like Dearth Faviet (ARB) and California Measure for In-like Dearth (ARB) (ARB

What are the basic requirements?

For TRU Owners and Operators

- Begistration: Owners must submit applications for ARB Identification Numbers (DIN) to ARB by July 31, 2009, for all TRUS that are based in California. DNs are voluntary for TRUs and TRUS enaises that are based outside of California. Inspections for TRUs with IDNs are disaster because compliance has been pre-screened. Updates are required within 30 days if registration information changes.
- Operator Reports must be submitted to ARB by all California terminal operators listing all TRU IDNs that are regularly assigned to California terminals. The initial Operator Report was due at ARB by July 31, 2009. Operator Report updates are required within 30 days if the information in the report changes.
- In-lase Standards: TRU and TRU gen set engines that operate in California must meet in use performance familiations due in plaude.
 December 31, 2009). See the phased complance schedule on the nest page. This in-use standard requirement applies to owners and operations of TRUs and TRU gen sets that operate on STRUS and TRU gen sets that operate in California, regardless of whether they are registered or based inside or obtaids of set.

HOW Do I Comply with the In-Use Performance Standards of the TRU ATCM?



Fuel – Existing Regulations

Low Carbon Fuel Standard

- The Low Carbon Fuel Standard is a key part of a comprehensive set of programs in California to cut greenhouse gas emissions and other smog-forming and toxic air pollutants by improving vehicle technology, reducing fuel consumption, and increasing transportation mobility options.
- https://www.arb.ca.gov/fuels/lcfs/lcfs.htm

Diesel Regulation

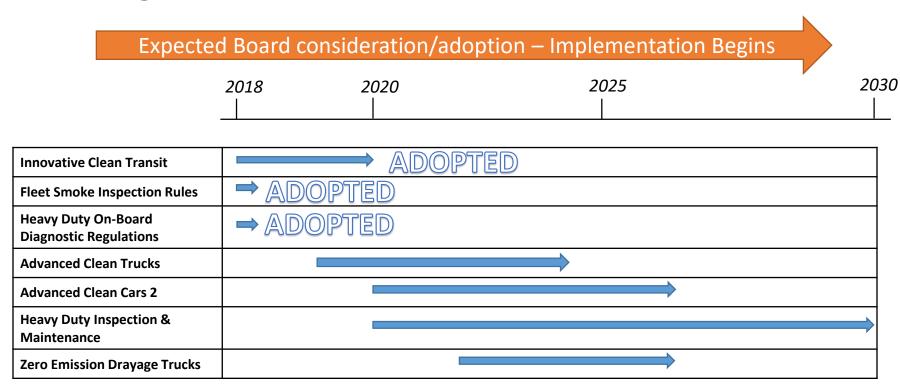
- Sets stringent standards for California diesel fuel content.
- https://www.arb.ca.gov/fuels/diesel/diesel.htm

Alternative Diesel Fuel Regulation

- The Alternative Diesel Fuels regulation is intended to create a framework for low carbon, and often times lower polluting, diesel fuel substitutes to enter the commercial market in California, while mitigating any potential environmental or public health impacts.
- https://ww2.arb.ca.gov/index.php/our-work/programs/alternative-diesel-fuels

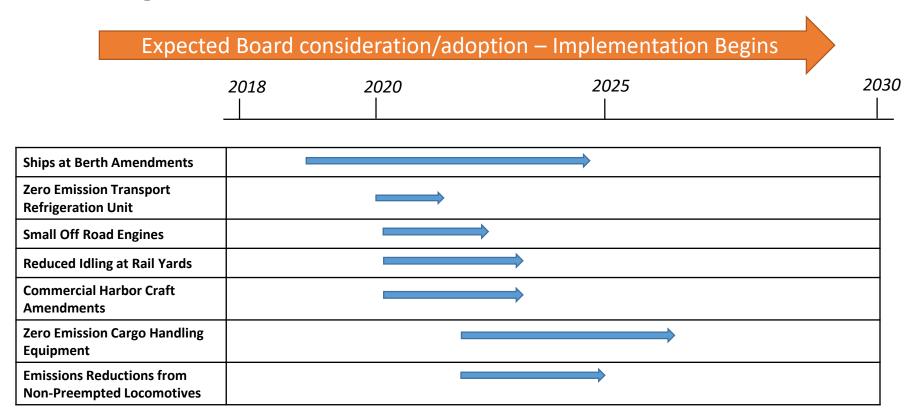


Moving Forward: On-Road



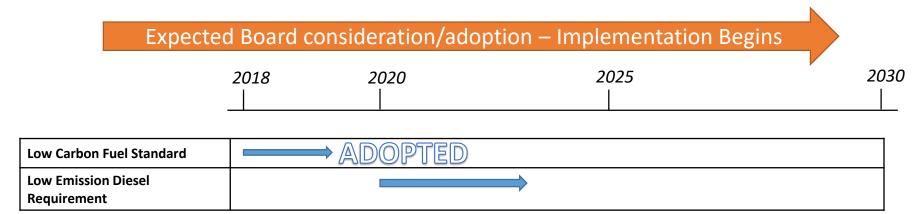


Moving Forward: Off-Road





Moving Forward: Fuel





Port Focused NEW Measures



Ships At-Berth Amendment (Shorepower)

- This strategy encompasses changing the current shorepower regulation to gain additional emissions reductions from even more vessel fleets, types, and operations
- https://www.arb.ca.gov/ports/shorepower/shorepower.htm



Commercial Harbor Craft Amendment

- This strategy would create more stringent engine requirements for freight and passenger vessels. (Blueprint page F-3)
- https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft



Port Focused NEW Measures (cont.)



Zero Emission Cargo Handling Equipment

- This strategy will transition cargo handling equipment to zero emission technology. In addition to emissions reductions at seaports, this strategy would also provide reductions at intermodal rail yards. (Blueprint page F-3)
- https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment



Zero Emission Drayage Trucks

- This strategy will transition drayage trucks to zero emission technology. In addition to emissions reductions at ports, this strategy would also provide reductions at intermodal rail yards. (Blueprint page F-4)
- https://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm



Rail Focused NEW Measures



Reduced Idling at Railyards

- This strategy would reduce emissions from idling freight and passenger locomotives with implementation targeting communities with high cumulative exposure burdens. (Blueprint page F-5)
- https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california



Emissions Reductions from Non-preempted Locomotives

- This strategy would reduce emissions from older locomotives operating in California. (Blueprint page F-5)
- https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california



Mobile On-Road Focused NEW Measures



Innovative Clean Transit

- •This regulation requires all public transit agencies to gradually transition to a 100 percent zero-emission bus (ZEB) fleet and encourages them to provide innovative first- and last-mile connectivity and improve mobility for transit riders. This regulation also provides various exemptions and compliance options to provide safeguards and flexibility for transit agencies through this transition.
- https://www.arb.ca.gov/msprog/ict/ict.htm
- •https://ww2.arb.ca.gov/rulemaking/2018/innovative-clean-transit-2018



Fleet Smoke Inspection Rules

- •Amendments to the Heavy Duty Vehicle Inspection Program (HDVIP) and Periodic Smoke Inspection Program (PSIP) reflect lower smoke opacity limits from diesel exhaust.
- https://www.arb.ca.gov/msprog/hdim/hdim.htm
- •https://ww2.arb.ca.gov/rulemaking/2018/heavy-duty-vehicle-inspection-program-and-periodic-smoke-inspection-program



Mobile On-Road Focused NEW Measures (cont.)



Heavy Duty OBD Regulations

- Proposed updates to these regulations include updating monitoring requirements, changing testing requirements, gathering more robust data, and enhancing enforcement of noncompliance.
- https://www.arb.ca.gov/msprog/obdprog/hdobdreg.htm
- https://ww2.arb.ca.gov/rulemaking/2018/heavy-duty-board-diagnostic-system-requirements-2018



Advanced Clean Trucks

- This proposed strategy will accelerate first-wave zero-emission truck deployments by requiring manufacturers to sell a portion of Class 2B and above sales as zero-emission starting 2024.
- Fleets to report data to inform on what vehicles are good targets for electrification and inform future fleet rules.
- https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks



Mobile On-Road Focused NEW Measures (cont.)



Advanced Clean Cars 2

- This proposed strategy would help increase the number of zero emission vehicles on the road and may also include lowering overall fleet emissions
- https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program



Heavy-Duty Inspection & Maintenance

- This future program could help ensure that broken emissions control components on heavy-duty vehicles are repaired in a timely manner and are operating as designed to meet California's public health protection goals.
- https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program



Mobile Off-Road Focused NEW Measures



Zero Emission Transport Refrigeration Unit

- This proposed measure would focus on transitioning transport refrigeration units (TRUs) to zero emission or near-zero emission to achieve emissions reductions while in transit and at freight hubs.
- https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation



Small Off-Road Engines

- This proposed measure will seek to reduce emissions from small off-road engines by tightening emissions standards and developing strategies to transition to zero emission.
- https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore



Fuel Focused NEW Measures



Low Carbon Fuel Standard

- Approved amendments to the Low Carbon Fuel Standard (LCFS) strengthen targets to 2030 and encourage zero emission vehicle infrastructure, among other improvements.
- https://www.arb.ca.gov/fuels/lcfs/lcfs.htm

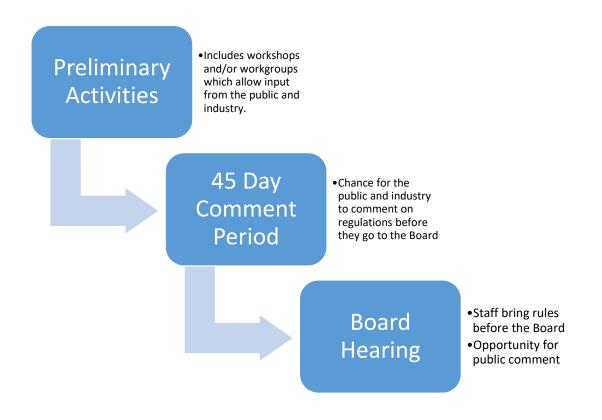


Low-Emission Diesel Requirement

• This proposed measure would establish performance requirements for low-emission diesel fuel and would require diesel fuel producers to decrease criteria pollutant emissions from their diesel products.



Regulatory Process





CARB Vehicle Idling Pilot Study

Heavy-Duty idling concerns raised by communities

CARB three step idling pilot with Community Steering Committee input/participation

- 1. Evaluate idling regulations with current emissions data
- 2. Identify idling locations and collect activity data
- 3. Assess need for additional mitigation measures



Community Air Grants

\$15 million total

\$10 million for FY2017-18 and another \$5 million for FY2018-19

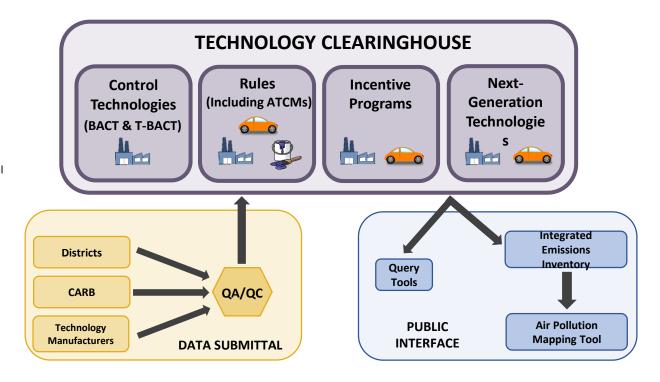
Funds go to projects that focus on the community

https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-air-grants



Technology Clearinghouse Update

- BACT = Best Available Control Technology
- T-BACT = Best Available Control Technology – Toxics
- ATCM = Air Toxic Control Measure

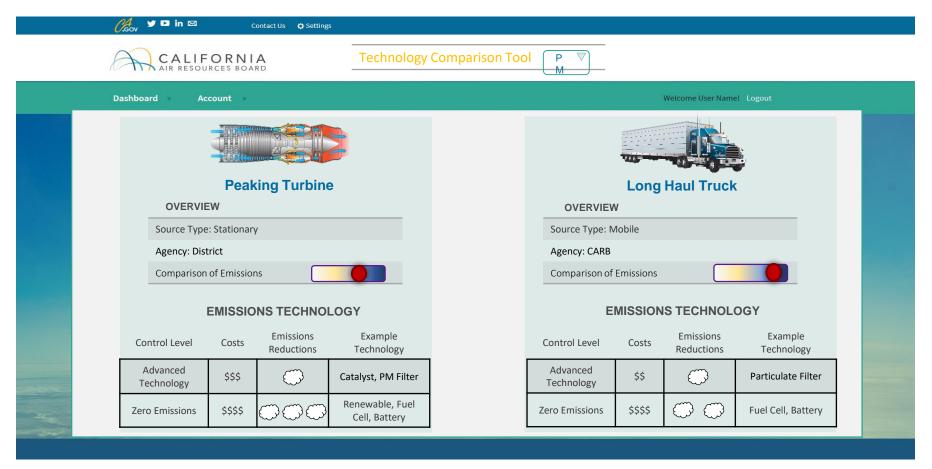




New System Available in Early 2020



Technology Clearinghouse Example





Handouts

The following pages are handouts associated with this resource slide deck. They include:

- A Guide to California's Clean Air Regulations for Heavy-Duty Vehicles
- Cargo Handling Equipment Regulation Overview
- Commercial Harbor Craft Regulation Overview
- Drayage Truck Regulation Overview
- At-Berth (Shorepower) Advisory
- Ocean Going Vessels Fuel Rule Advisory
- Off-Road Regulation Overview
- Transportation Refrigeration Unit Brochure



California Air Resource Board

Automated License Plate Reader





AB 617 Community Steering Committee Meeting

San Bernardino, Muscoy May 16, 2019

Improving On-road Vehicle Data: Automated License Plate Readers (ALPR) Portable Emission AcQuisition System (PEAQS)

Sara Forestieri, Victoria Villa, Jeremy Smith California Air Resources Board

What is ALPR?



- Collect footage of on-road traffic
- Use ALPR software to read license plates
- Use DMV Registration data and other databases to link license plate to vehicle information





Potential Applications of ALPR Data



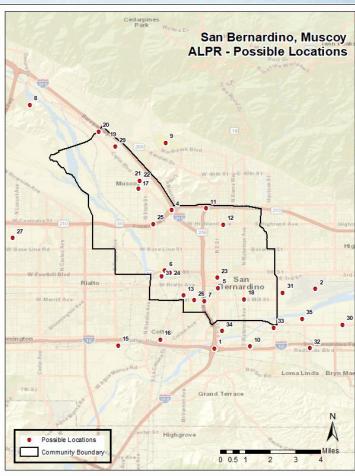
- Understand what vehicles operate in the community
- Determine split of local vs non-local trucks
- Understand how often commercial trucks operate certain roads (e.g., truck-prohibited routes)
- Validate/refine on-road vehicle emission estimates
 - The fraction of light- vs heavy-duty vehicles
 - Model year distribution and therefore age
 - Traffic counts
- Identify older trucks for targeted incentives

On-road Mobile Source Concerns



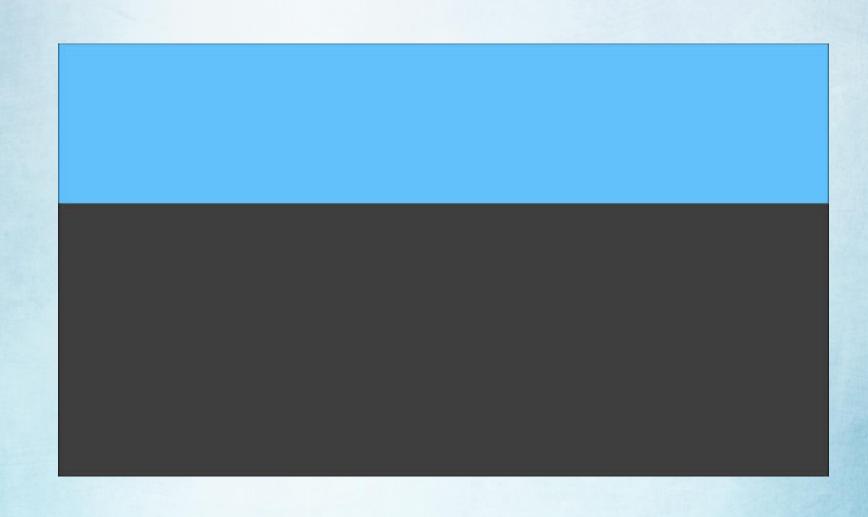
Community Identified Initial Locations for Discussion

Name	Location	Name
10/215 Fwy Interchange	19	Truck Parking - Neighborhoods
Airport	20	Truck Route
BNSF Railyard/JB Hunt Trucking C.	21	Palm Ave/Hallmark Pkwy
Freeway/Railway Interchange	22	W 1st Ave/Route 66
Metrolink	23	Truck Traffic
Omnitrans Bus Yard	24	Truck Traffic Route 66
Road Congestion	25	Truck Idling - 210 Fwy/N. CA St
San Manual Amphitheater Traffic	26	Truck Idling - School
Traffic at CSUSB	27	Medline Warehouse
Traffic - Hospitality Ln and 10 Fwy	28	Warehouses - Fontana
Traffic - H Street Exit	29	DCS Logistics
Traffic	30	Warehouses
Mt Vernon Corridor	31	Warehouses
Traffic - Waterman	32	Warehouses
Train Station	33	Warehouses
Trains	34	Warehouses - ICEMA
Lavon Dr/N Macy St	35	Warehouses
Truck Traffic - Waterman/Tippecanoe		
	Airport BNSF Railyard/JB Hunt Trucking C. Freeway/Railway Interchange Metrolink Omnitrans Bus Yard Road Congestion San Manual Amphitheater Traffic Traffic at CSUSB Traffic - Hospitality Ln and 10 Fwy Traffic - H Street Exit Traffic Mt Vernon Corridor Traffic - Waterman Train Station Trains Lavon Dr/N Macy St	Airport 20 BNSF Railyard/JB Hunt Trucking C. 21 Freeway/Railway Interchange 22 Metrolink 23 Omnitrans Bus Yard 24 Road Congestion 25 San Manual Amphitheater Traffic 26 Traffic at CSUSB 27 Traffic - Hospitality Ln and 10 Fwy 28 Traffic - H Street Exit 29 Traffic - Waterman 32 Train Station 33 Trains 34 Lavon Dr/N Macy St 35



What is PEAQS?





PEAQS Field Measurements



PEAQS platforms and deployments

- Prototype trailer and suitcase sized platforms
- 12 weeks of pilot measurements across California
- Assessing ability to serve as a screening tool for enforcement programs
- CARB will test first unattended system for long-term operation summer 2019
- Building additional PEAQS units –
 Expected availability 2020







DRAFT Focused List of Actions to Address Air Quality Priorities



Air Quality Priority	Strategy	Action			
Truck Idling and Truck Traffic	Enforcement/Collaboration/ Public Info & Outreach	Conduct enforcement sweeps with CARB; Partner with the City and Bernardino on land use planning issues, restrictive truck routes; Col appropriate agency on restrictive truck routes and improvements of complaint/response systems	laborate with		
related to Warehouses	Incentives/Public Info & Outreach/Collaboration	Expand outreach efforts (e.g. fairs, workshops) to distribute incenti to equipment owners; Partner with CARB to identify older trucks in targets for incentives			
BNSF Railyard	Regulation/Collaboration	Continue development of Facility-Based Mobile Source Measure (In Rule); Support CARB on petitioning the U.S. EPA for new national logemission standards			
	Incentives	Incentivize older diesel equipment changeout (i.e. locomotive)			
Warehousing	Collaboration/Public Info & Outreach	Collaborate with the City and/or County of San Bernardino on enhance requirements to address warehouse development (e.g., requiring loaway from residents, 1,000 foot buffer zones for new development, electric utility infrastructure with appropriate parties).	oading docks		
	Regulation	Continue the development of Facility-Based Mobile Source Measure Source Rule)	e (Indirect		
Omnitrans Bus Yard	Regulation/Incentives Collaboration	Support Omnitrans on the acceleration of zero emission buses and chargers			
Concrete Batch Plants	Monitoring/Enforcement/ Public Info & Outreach	Monitor hexavalent chrome and particulate matter (PM10) to identify hot spots for follow-up enforcement if needed; Expand outreach efforts to operators and community on Rule 403 – Fugitive Dust best practices			
Schools/Hospitals/Parks and	Collaboration/Public Info & Outreach	Partner with the San Bernardino County Department of Public Healt materials for air quality advisories and/or asthma related programs	th on outreach		
Community Centers	Exposure Reduction	Distribute air filtration systems by prioritizing schools along major to	ruck routes		
Emission	on reduction	Exposure reduction	43		

Air Quality Priority Concern Action Template

- CSC members and staff can have one-on-one discussions
- Focus on actions that are priorities for the CSC

Oraft CERP – San Be	rnardino, Muscoy	Air C	Quality Priority:
CSC Member:			
	ality Priority: ion # :		
Description	of Action:		Strategies Included: Mark all strategies that apply Regulation Incentives Air Monitoring Enforcement Public Info & Outreach Collaboration Exposure reduction
Goals, Met	rics, and Timefr	ame:	
Implement	ing Agency, Org	anization, Busine	ess or Other Entity:
Name	Action		
References			
			S

Ver. 5/7/19

DRAFT Example 1 Des

Air Quality Priority: Neighborhood Truck Traffic Action XX: Idling Truck Enforcement

Description of Action:

 Conduct enforcement sweeps with CARB;

Strategies Included:

- Enforcement
- Collaboration
- Partner with the City and County of San Bernardino on land use planning issues, restrictive truck routes;
- Collaborate with appropriate agency on restrictive truck routes and improvements of complaint/response systems.

Goals, Metrics, and Timeframe:

• Inspections/targeted sweeps will be conducted [insert frequency to be discussed by CSC] within a [insert proposed timeframe].

Implementing Agency, Organization, Business or Other Entity:

Name	Action
South Coast AQMD	Targeted idling sweeps may require coordination with local law enforcement.
CARB	Idling truck inspections with support from local law enforcement

References

- 13 CCR § 2485
- https://www.arb.ca.gov/enf/diesel.htm



DRAFT Example 2

Air Quality Priority: Neighborhood Truck Traffic Action XX: Conduct Outreach for Incentives

Description of Action:

 Expand outreach efforts (e.g. fairs, workshops) to distribute incentive information to equipment owners

Strategies Included:

- Public Info & Outreach
- Collaboration
- Incentives
- Partner with CARB to identify older trucks in community as targets for incentives

Goals, Metrics, and Timeframe:

Date of incentive fair [insert date discussed by CSC]

Implementing Agency, Organization, Business or Other Entity:

Name	Action
South Coast AQMD	Collaborate with local business owners to conduct an incentive fair and provide outreach materials
CARB	Identify location(s) to place the Automated License Plate Reader (ALPR) and train South Coast AQMD staff on the technology

References

- Carl Moyer Program (Heavy-Duty Engines): https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB34
- Carl Moyer Program (Heavy-Duty Engines): <a href="http://www.aqmd.gov/home/programs/busines



Air Quality Priority Concern Action Templates

- Would you like to contribute additional input towards a specific CERP action?
- What specific CERP actions would you like to work on? Contact staff and let us know!
- 3. What measureable air quality goals should be set for each action item?

Send comments to:
Pedro Piqueras — ppiqueras@aqmd.gov

Community Air Monitoring Plan (CAMP)

Committee Discussion

Send comments to: AB617@aqmd.gov

Next steps and important reminders

Future meeting dates and locations:

 CSC Meeting #7: June 20th (6:00 p.m. - 8:30 p.m.) at San Bernardino Valley College

Likely agenda items for CSC Meeting #7:

- Committee presentations
- CARB & South Coast AQMD Enforcement Actions
- Measuring Success: Goals

Is the CSC okay with these topics?

Any additional topics?

Next Technical Advisory Group (TAG) Meeting:

May 29, 2019
 10 am at South Coast AQMD headquarters (GB room)

