CERP AND CAMP TIMELINE

Kickoff Meeting

January 2020
- Truck Traffic and Freeways
- Rail Yards and Locomotives
- Technical Advisory Group (TAG) Meeting

February 2020
- Green Spaces
- Metal Processing Facilities

June 2020
- General Industrial Facilities
- Rendering Facilities

July 2020

August 2020
- Discussion Draft CERP and CAMP

September 2020

October 2020

- CSC Membership
- Finalize Community Boundary
- Finalize Emissions Study Area
- Identify Air Quality Priorities
- Overview of CERP and CAMP Development Process (e.g., CARB Blueprint Training)
AIR QUALITY PRIORITY – TRUCK TRAFFIC AND FREEWAYS
• CSC identified truck traffic and freeways as a top air quality priority

• Community members concerned about emissions from:
  – The I-710 Freeway
  – Heavy-duty trucks idling near storage yards and fueling stations
  – General neighborhood traffic congestion
  – Future large warehouses and fulfillment centers
TRUCK TRAFFIC AND FREEWAYS – EMISSIONS

Medium-Heavy Duty Trucks

- Classes 4 – 6
- Gross vehicle weight rating (GVWR) of 14,000 - 33,000 lbs.
- Examples: Box and delivery trucks, school buses

Heavy-Heavy Duty Trucks

- Classes 7 - 8
- GVWR over 33,000 lbs.
- Examples: city transit buses, garbage trucks, big rigs
Heavy-duty trucks contribute to over 90% of diesel particulate matter (DPM) emissions in SELA

<table>
<thead>
<tr>
<th>Medium-Heavy Duty Trucks</th>
<th>Pollutant</th>
<th>Tons per Year</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Diesel Particulate Matter (DPM)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Fine Particulate Matter (PM2.5)</td>
<td>8</td>
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<tr>
<td></td>
<td>Volatile Organic Compounds (VOCs)</td>
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<td>Nitrogen Oxides (NOx)</td>
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<table>
<thead>
<tr>
<th>Heavy-Heavy Duty Trucks</th>
<th>Pollutant</th>
<th>Tons per Year</th>
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<td>Diesel Particulate Matter (DPM)</td>
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<tr>
<td></td>
<td>Fine Particulate Matter (PM2.5)</td>
<td>8</td>
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<tr>
<td></td>
<td>Volatile Organic Compounds (VOCs)</td>
<td>26</td>
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<tr>
<td></td>
<td>Nitrogen Oxides (NOx)</td>
<td>493</td>
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* Data from 2018 base year for SELA community boundary and emission study area
### TRUCK TRAFFIC AND FREEWAYS – AGENCY OVERVIEW (WHO DOES WHAT?)

<table>
<thead>
<tr>
<th>Federal and State</th>
<th>Regional</th>
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<tbody>
<tr>
<td><strong>U.S. EPA and CARB</strong></td>
<td><strong>South Coast AQMD</strong></td>
</tr>
<tr>
<td><strong>Regulatory</strong></td>
<td><strong>Regulatory</strong></td>
</tr>
<tr>
<td>• Primary authority over mobile sources including motor vehicles emissions standards (e.g., tailpipe emissions)</td>
<td>• Primary authority over stationary sources with some mobile source authority (e.g., indirect source rules)</td>
</tr>
<tr>
<td><strong>Incentives</strong></td>
<td><strong>Incentives</strong></td>
</tr>
<tr>
<td>• Provide incentives to reduce mobile source emissions (e.g., CARB’s Hybrid and Zero-Emission Truck and Bus VIP program)</td>
<td>• Provide incentives to reduce mobile source emissions (e.g., Prop 1B, Carl Moyer, VIP)</td>
</tr>
</tbody>
</table>

**Air Monitoring**

• Provides information about sources of air pollution, types of pollutants, and air quality impacts
Define Goals and Objectives of Air Monitoring and Recommend Appropriate Monitoring Technologies

Develop Community Air Monitoring Plan

Begin Air Monitoring in Priority Areas

Identify Air Quality Priorities and Pollutants of Interest

TRUCK TRAFFIC AND FREEWAYS – WORKING WITH THE CSC TO DEVELOP AIR MONITORING PLAN

- Today!
- Fall 2020
- December 2020
How Air Monitoring Can Help

- Identify areas with high air pollution levels
- Support emission reduction strategies
- Help assess community impact

Mobile monitoring can help identify pollution hotspots and support CERP actions

Fixed air monitoring stations can provide real-time data reporting and help track the progress of emission reduction strategies
EXAMPLE OF AIR MONITORING TO ADDRESS TRUCK TRAFFIC CONCERN IN WILMINGTON, CARSON, WEST LONG BEACH COMMUNITY

- Target Air Pollutants
  - Particulate Matter (PM), Black Carbon, NOx, Ultrafine PM

- Purpose of Air Monitoring
  - Identify Pollution Hotspots
  - Support implementation of CERP
New Truck Regulations

**Estimated Board consideration/adoption – Implementation Begins**

- **2020**: Estimated Board consideration/adoption
- **2022**: Implementation Begins
- **2024**: Advanced Clean Trucks
  - Manufacturer sales requirements to sell ZE trucks at increasing % of CA sales from 2024 to 2035
  - Ensure combustion-powered vehicles are as clean as possible through proposed exhaust emission standards; in-use compliance testing, etc.
- **2024**: Heavy-Duty Omnibus
  - Would allow an on-board diagnostics system checks to identify malfunctioning emissions-related components in applicable engines
- **2026**: Heavy-Duty Inspection and Maintenance
- **2028**: Advanced Clean Fleets & ZE Drayage
  - Drive adoption of ZE vehicles everywhere feasible, starting with well-suited fleets including drayage, local delivery, and others. Strategies may include ZE purchase requirements, ZE zones, and green contracting requirements
WHAT PROGRAMS DOES CARB ENFORCE?

**Trash Trucks** (2003)


**Drayage Trucks** (2007)

**Trucks & Buses** (2008)

**DMV Registration Holds** (2020)

Diesel particulate matter classified as a toxic air contaminant (1998)

Most of these trucks & buses must have “Clean Idle” certified 2010 or newer model year engines to legally operate in California (2023)

**Off-Road Fleets** (2014)

**Cargo Handling Equipment** (2005)

**Commercial Harbor Crafts** (2007)

**Shore Power** (2007)

**Ocean-Going Vessel Fuel** (2008)

**TRUs, Consumer Products, Fuels**

CARB
**Total program inspections**: Almost 2,000 heavy-duty diesel vehicles and equipment within the emission study boundary of the SELA community

**Citations issued/brought into compliance**: Almost 230 heavy-duty vehicles for emissions violations and 90 for non-emissions violations

**T&B registration holds**: 3,325 of 4,084 heavy-duty trucks and buses registered in SELA in compliance (October 2019)

Total registration holds from 2018 – 2019: 354

**Idling**: 97% compliance rate for 1,025 trucks, buses, off-road equipment inspected
<table>
<thead>
<tr>
<th>Type</th>
<th>Dray-age</th>
<th>HDVIP (all)</th>
<th>Off-Road</th>
<th>TRU</th>
<th>T&amp;B</th>
<th>CHE</th>
<th>Total</th>
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<tbody>
<tr>
<td>Inspections</td>
<td>45</td>
<td>868</td>
<td>128</td>
<td>306</td>
<td>416</td>
<td>208</td>
<td>1971</td>
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<tr>
<td>Emissions violations</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>132</td>
<td>77</td>
<td>0</td>
<td>215</td>
</tr>
<tr>
<td>Non-emissions violations</td>
<td>1</td>
<td>30</td>
<td>37</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>89</td>
</tr>
<tr>
<td>Compliance</td>
<td>96%</td>
<td>96%</td>
<td>71%</td>
<td><strong>50%</strong></td>
<td>81%</td>
<td>100%</td>
<td><strong>85%</strong></td>
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</table>

Notes: Heavy Duty Vehicle Inspection Program (HDVIP) covers emissions control labels (ECL), smoking and tampering. See SCAQMD green paper for listing of program “Type” definitions. Compliance rates may not reflect overall compliance because of the way inspections are conducted.
Previous CARB Enforcement CERP Actions

- Truck idling sweeps coordinated with SCAQMD
- Targeted enforcement of our regulations
- MOUs with other enforcement agencies
- Outreach/educational material
- Supplemental Environmental Projects (SEP@arb.ca.gov)

What is best for your community? CERP enforcement plan?
focused enforcement for CARB’s truck regulations

- Incentive funding for cleaner heavy-duty trucks
- Incentive funds for small businesses or independent owner/operators

- Outreach to truck owners/operators about incentive programs, community ordinances, restricted truck routes, and trucking regulations

- Air monitoring to support implementation of emission reduction strategies

- Regulate indirect sources, or facilities that attract mobile sources in order to reduce emissions (e.g., Warehouse ISR)
DISCUSSION

COMMENTS AND QUESTIONS?
AIR QUALITY PRIORITY – RAILYARDS AND LOCOMOTIVES
• CSC identified Railyards and Locomotives as a top air quality priority

• Community members concerned about emissions from:
  – Older equipment
  – Idling locomotives
  – Violations of rules (i.e. compliance)
RAILYARDS AND LOCOMOTIVES—EMISSION SOURCES AND DATA

Locomotives

- **Line haul locomotives**
  - Large, high horsepower
  - Travel throughout the country
  - Difficult to incentivize

- **Switchers**
  - Small, lower horsepower
  - Typically older, generally stay local
  - State incentives available

Cargo Handling Equipment

- Motorized vehicles used to handle cargo or perform routine maintenance activities at the rail yards
- Examples: yard trucks, container handlers, forklifts
RAILYARDS AND LOCOMOTIVES–EMISSION SOURCES AND DATA (LOCOMOTIVES)

**Locomotive emissions include:**
- Hauling locomotives
- Switching locomotives
- Metrolink
- Passenger trains

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<td>367</td>
</tr>
</tbody>
</table>

Data from 2018 base year for SELA community boundary and emissions study area
RAILYARDS AND LOCOMOTIVES – EMISSION SOURCES AND DATA (CARGO HANDLING EQUIPMENT)

RAILROAD SELF-REPORTED ONSITE* RAIL YARD EMISSIONS INVENTORIES

*Analysis prepared by railroads undergoing review by CARB & South Coast AQMD. Total NOx emissions in 2017 & 2018 from these railyards and regional locomotive travel is 13% of air basin's carrying capacity to meet federal standards in 2031.
RAILWAYS AND LOCOMOTIVES—WORKING WITH THE CSC TO DEVELOP AIR MONITORING PLAN

Identify Air Quality Priorities and Pollutants of Interest
- Today!

Define Goals and Objectives of Air Monitoring and Recommend Appropriate Monitoring Technologies
- Fall 2020

Develop Community Air Monitoring Plan
- December 2020

Begin Air Monitoring in Priority Areas
How Air Monitoring Can Help

- Look for specific emission sources
- Support emission reduction strategies
- Determine locations for potential fixed monitoring, if appropriate

Mobile monitoring can help identify activities that may lead to increase in emissions
EXAMPLE OF AIR MONITORING TO ADDRESS RAILYARDS AND TRUCK TRAFFIC CONCERN IN EAST LOS ANGELES, BOYLE HEIGHTS, WEST COMMERCE COMMUNITY
**RAILYARDS AND LOCOMOTIVES—AGENCY OVERVIEW (WHO DOES WHAT?)**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>U.S. EPA</td>
<td>CARB</td>
<td>South Coast AQMD</td>
</tr>
<tr>
<td>• Stationary and Mobile Source Authority</td>
<td>• Primary mobile source authority</td>
<td>• Primary stationary and indirect source authority*</td>
</tr>
<tr>
<td>• Regulate locomotive emissions standards</td>
<td>• Regulate locomotive activity</td>
<td>• Regulate rail yard emissions</td>
</tr>
<tr>
<td></td>
<td>• Incentives (e.g., CORE Project)</td>
<td>• Incentives (e.g., Carl Moyer, Prop 1B)</td>
</tr>
</tbody>
</table>

*Federal preemption limits may apply*
Regulatory and Enforcement Efforts for Rail Related Concerns

July 23, 2020
South East Los Angeles
AB 617 Community Steering Committee Meeting
Shannon Downey and Mae Colcord
CARB Background on Rail

1998 South Coast Agreement (sunset 2030)
- Average Tier 2 NOx emissions standard
- Railroads report activity
- Credits provided for early technology adoption

2005 Statewide Railyard Agreement (sunset 2015)
- Idle reduction, repair and reporting effort
- Use of cleaner diesel fuel
- 17 railyard health risk assessments
1. Establish a Locomotive Emissions Reduction Spending Account

2. Charges held in the individual Railroads’ trust, with annual public reporting of locomotive usage and funds deposited.

3. Railroad uses accumulated charges for cleaner locomotives, with reporting.

Assess charge to Railroads for locomotives based on emissions level and amount of work performed in CA.
Railroads currently have no limit how many times they can remanufacture
  • Remanufacture only needs to be as-built or “plus” standard
  • When implemented, any locomotive already remanufactured more than once would be banned from California
  • Alternative: remanufacture to Tier 4 and continue California operation
3. Adopt U.S. EPA 30 Minute Idling Limit

- Incorporates Federal requirements in California SIP
- Makes the rule CARB enforceable
- Enforcement by Air Districts possible through enforcement MOU
Next Steps

• Next CARB locomotive outreach in fall 2020
• CARB locomotive Board Meeting late 2021
Railyard Emissions Sources

- Locomotives
- Cargo Handling Equipment
- Forklifts
- Drayage Trucks
- Truck Fleets
- TRUs

Maintenance Facilities
Railyard Enforcement

- Cargo Handling Equipment (CHE)
  - 100% in-use compliance at intermodal railyards statewide
  - Prioritizing AB 617 Communities for enforcement activities
- Transportation Refrigeration Units (TRUs)
  - 100% compliance of TRU gen sets and refrigerated railcars at intermodal railyards statewide
- Locomotive Idling
  - Working with U.S. EPA to resolve idling complaints
- Drayage Trucks
  - Case settlement with UP and BNSF
RAILYARDS AND LOCOMOTIVES–CERP POLICY EXAMPLES

• Local utilities and state agencies to encourage the installation of infrastructure for zero-emission vehicles and equipment, and onsite equipment
• Work with the railyards to replace diesel-fueled equipment with cleaner technologies

• Conduct air monitoring around railyards to identify activities that may cause increased levels of air pollution
• Air monitoring to support implementation of emission reduction strategies

• Regulate indirect sources, or facilities that attract mobile sources in order to reduce emissions (e.g., Railyard ISR)
QUESTIONS AND COMMENTS?
# CARB AND SOUTH COAST AQMD CONTACTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Name</th>
<th>Number/Email</th>
<th>Agency</th>
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</thead>
<tbody>
<tr>
<td>SELA Community Liaison</td>
<td>Gina Triviso</td>
<td><a href="mailto:gtriviso@aqmd.gov">gtriviso@aqmd.gov</a></td>
<td>South Coast AQMD</td>
</tr>
<tr>
<td>SELA CERP Lead</td>
<td>Dr. Dianne Sanchez</td>
<td><a href="mailto:dsanchez@aqmd.gov">dsanchez@aqmd.gov</a></td>
<td>South Coast AQMD</td>
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<td>Air Monitoring</td>
<td>Dr. Payam Pakbin</td>
<td><a href="mailto:ppakbin@aqmd.gov">ppakbin@aqmd.gov</a></td>
<td>South Coast AQMD</td>
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<tr>
<td>CARB Community Liaison</td>
<td>Liliana Nuñez</td>
<td><a href="mailto:liliana.nunez@arb.ca.gov">liliana.nunez@arb.ca.gov</a></td>
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<td>CARB Enforcement Liaison</td>
<td>Dr. Crystal Reul-Chen</td>
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<td>Event Description</td>
<td>Time</td>
<td>Date</td>
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<tr>
<td>January 9, 2020</td>
<td>Community Kick-off Meeting</td>
<td>6:00 – 8:30 pm</td>
<td>July 23, 2020</td>
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<tr>
<td></td>
<td>Salt Lake Park (Huntington Park)</td>
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<tr>
<td>February 6, 2020</td>
<td>Community Steering Committee Meeting</td>
<td>6:00 – 8:30 pm</td>
<td>August 27, 2020</td>
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<td>Ross Hall at Veterans Park (Bell Gardens)</td>
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<td>March 12, 2020 and</td>
<td>Community Steering Committee Meetings –</td>
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<td>September 17, 2020</td>
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<td>April 9, 2020</td>
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<td>4:00 – 6:00 pm</td>
<td>October 8, 2020</td>
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<td>Community Steering Committee Meeting</td>
<td>4:00 – 6:00 pm</td>
<td>November 5, 2020</td>
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Note: July 23, 2020 meeting is a Virtual Meeting.