Minimizing Community Health Impacts From Freight Facilities

Workshops

Los Angeles – August 29, 2017
Sacramento – September 6, 2017

https://www.arb.ca.gov/gmp/sfti/FreightFacility.htm
Agenda

• Purpose and background
• Freight facility types
• Potential approaches
• Key topics for discussion
• Public process and timeline
• Questions and comments
• Next steps
Purpose

• View programs through community lens
• Prioritize the most disadvantaged communities
• Reduce community health impacts from large freight facilities
• Improve air quality and help achieve climate goals
• Create a more efficient, sustainable freight system
• Transition to zero-emission and near-zero-emission operations
Why are we developing concepts to reduce emissions from freight facilities?

- Freight transport is a significant emission source
  - Higher health risks near freight facilities
  - Need reductions from freight to reach air quality and climate goals
  - As trade volumes rise, emissions could increase
Why are we developing concepts to reduce emissions from freight facilities?

- March 2017 CARB Board Hearing

  - Board Resolutions directed staff to develop concepts
    
    “…within 12 months staff shall return to the Board with concepts for an Indirect Source Rule to control pollution from large freight facilities including ports, railyards, warehouses and distribution centers, as well as any identified alternatives capable of achieving similar levels of emission reductions…”

  - CARB is not doing an indirect source review rule at this time
Freight Facility Types

- Seaports
- Railyards
- Warehouses / Distribution centers
California Seaports

• 12 deep water seaports statewide

• Several types of terminals
  ➢ Container
  ➢ Break bulk
  ➢ Liquid bulk
  ➢ Marine oil
Seaports: Data Gaps

• Updated equipment and activity data, especially at smaller seaports

• Recent seaport-specific emissions inventories, especially at smaller seaports

• CARB seaport surveys (September 2017)

• Updated health risk assessments
California Freight Railyards

• 2 major Class I railroads
  ➢ Union Pacific (UP) Railroad
  ➢ BNSF Railway

• 18 major railyards
  ➢ 8 Intermodal
  ➢ 10 Classification

• 26 Class III shortline railroads
Railyards: Data Gaps

- Updated equipment inventories, including duty and maintenance cycles
- Statewide fleet operational data
- CARB railyard surveys (September 2017)
- Updated health risk assessments
Warehouses and Distribution Centers

- May be as many as 50,000 across the State
- Refrigerated and non-refrigerated
- General purpose storage
- Cross dock warehousing
- Mega and small distribution centers
Warehouses and Distribution Centers: Data Gaps

- Number of facilities
- Location of facilities
- Equipment and throughput data
- CARB warehouse/distribution surveys (to be determined)
- Evaluate health impacts
## Freight Facilities and Equipment

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Seaport</th>
<th>Railyard</th>
<th>Warehouse/DC</th>
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</thead>
<tbody>
<tr>
<td>Trucks</td>
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<td>Transport refrigerators</td>
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<td>Cargo equipment</td>
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<td>Locomotives</td>
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<td>Ships</td>
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<td>Harbor craft</td>
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California Environmental Quality Act - CARB comment letters

• 14 letters since 2015
  - Warehouses, distribution centers, seaport terminals, on-dock rail, near-dock rail, and railyard expansion

• General comments:
  - Use zero and near-zero emission technologies
  - Provide infrastructure to support zero / near-zero emission
  - Coordinate with local communities on truck traffic impacts
  - Conduct a full health risk assessment – baseline & future
  - Use cleanest possible construction equipment / practices
  - Structure lease agreements to require cleaner technologies
Potential Approaches

- Sector-Based
- Facility-Based
Sector-Based and Facility-Based Approaches

**Sector-Based Approaches**
- CARB regulations
- Binding agreements
- National / international standards
- Voluntary

**Facility-Based Approaches**
- Project design elements & mitigation measures
- CARB / district enforceable measures
- Voluntary
## Existing Sector-Based Measures

<table>
<thead>
<tr>
<th>CARB Regulations</th>
<th>Seaport</th>
<th>Railyard</th>
<th>Warehouse/DC</th>
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<tr>
<td>Fuel rules</td>
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<td>Transport refrigeration units</td>
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<td>Truck and bus</td>
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<td>Drayage trucks</td>
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<td>Cargo handling equipment</td>
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<td>Ships at-berth</td>
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<td>Commercial harbor craft</td>
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<td>Large spark-ignition engines</td>
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## Existing Sector-Based Measures (continued)

<table>
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<tr>
<th>Other Measures</th>
<th>Seaport</th>
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<td>Incentives</td>
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<td>CARB agreements with railroads</td>
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<td>National locomotive standards</td>
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<td>International Maritime Organization standards for ships</td>
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<td>Port initiatives</td>
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State Implementation Plan Commitments

• Petition to U.S. EPA for updated locomotive emission standards submitted April 2017
• At-berth regulation amendments
• Transport refrigeration unit amendments
• Low-NOx engine standard
• Medium- and heavy-duty GHG phase 2
State Implementation Plan Commitments (contd.)

- Advanced clean local trucks (last mile delivery)
- Innovative truck technology certification flexibility
- Zero-emission airport ground support equipment
- Zero emission forklift regulation
- Low-emission diesel requirement
- Further deployment of cleaner technologies
Facility-Based Approach

**Project design elements & mitigation measures**

**Potential Concepts**
- Environmental review process (CEQA / NEPA)
- Settlements and agreements
- Best practices (e.g., Freight Handbook)
- Lease provisions
- Voluntary / Incentives

**Potential Requirements**
- Zero and near-zero technologies
- Cleaner construction equipment and practices
- Periodic reviews to implement cleanest technology
- Exposure reduction actions
Facility-Based Approach

CARB / district enforceable measures

Potential Concepts
- Indirect source review or other facility-based rules
- Enforceable agreements with industry / ports

Potential Requirements
- Zero and near-zero emission technologies
- Infrastructure for zero emission technologies
- Efficiency improvements
- Exposure reduction actions
Evaluating Approaches and Concepts

- Staff is working with stakeholders to discuss approaches and identify concepts that achieve the following outcomes:
  - Effectiveness in reducing emissions and health risk to protect communities
  - Opportunities to increase efficiency
  - Implementation feasibility for equipment operators / facilities
  - Ease of compliance and enforcement
  - Certainty of implementation
Key Topics for Discussion

• What is the most feasible way to reduce community exposure and does it vary by freight facility type?
• If you had to pick one concept to present to our Board, what would it be and why?
• Which concepts would you support the most and which would you be strongly against?
• What else should we include in our evaluation of approaches and concepts?
• What data are available to help our evaluation?
## Public Process & Timeline

### Workshops, Community Meetings, and Board Hearing

<table>
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<tr>
<th>Timeframe</th>
<th>Events</th>
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<tr>
<td>Aug - Sep 2017</td>
<td>Workshops: Los Angeles, Sacramento</td>
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<tr>
<td>Sep - Nov 2017</td>
<td>Community Meetings: South San Joaquin/Lamont, Long Beach, Inland Empire/Fontana, Oakland, San Diego</td>
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<td>Jan 2018</td>
<td>Workshops: Los Angeles, Sacramento</td>
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<td>Mar 2018</td>
<td>CARB Board Hearing: Riverside</td>
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Questions & Comments
Next Steps

• Meetings with communities, agencies, industry
• Data collection / surveys continue
• Develop concepts
Contact Information

• Visit our website: https://www.arb.ca.gov/gmp/sfti/FreightFacility.htm

• Email questions or comments to: freight@arb.ca.gov

• Sign up for our listserve to get email updates: https://www.arb.ca.gov/listserv/listserv_ind.php?listname=sfti

• Call staff: Monique Davis, (916) 322-7304, Monique.Davis@arb.ca.gov