Proposition 1B: Goods Movement Emission Reduction Program

Proposed Update to Program Guidelines

March 25, 2010

Air Resources Board
California Environmental Protection Agency
Overview

• Current program
• Progress
• Proposed changes
• Comments
• Staff recommendations
Freight-Related Diesel Pollution - Impacts at Multiple Levels
Prop 1B: Goods Movement Emission Reduction Program

- $1B to reduce emissions from freight transport in the four priority trade corridors
- Upgrade diesel trucks, locomotives, ship berths, cargo equipment, and harbor craft
- Goal: reduce emissions/health risk as quickly as possible in heavily impacted communities
Trade Corridors

Bay Area

Central Valley
SJV Air Basin
+ Sac Region

LA/Inland Empire
South Coast Air Basin
+ Port Hueneme

San Diego/Border
San Diego + Imperial Counties
Core Elements

Required by statute:
• Program Guidelines
• Local agency role
• Early or extra reductions (PM/NOx)
• Match funding
• Competitive process
# Prior Actions

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2008</td>
<td>Program Guidelines adopted</td>
</tr>
<tr>
<td>May 2008</td>
<td>1\textsuperscript{st} year funds awarded ($250M)</td>
</tr>
<tr>
<td>Dec 2008</td>
<td>“Stop work” order for bond programs</td>
</tr>
<tr>
<td>Jun 2009-</td>
<td>1\textsuperscript{st} year grants restarted with cash</td>
</tr>
<tr>
<td>Feb 2010</td>
<td>from bond sales</td>
</tr>
</tbody>
</table>
# Existing Corridor Funding

<table>
<thead>
<tr>
<th>Funding</th>
<th>Percent</th>
<th>Trade Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td>$550M</td>
<td>55%</td>
<td>Los Angeles/Inland Empire</td>
</tr>
<tr>
<td>$250M</td>
<td>25%</td>
<td>Central Valley</td>
</tr>
<tr>
<td>$140M</td>
<td>14%</td>
<td>Bay Area</td>
</tr>
<tr>
<td>$ 60M</td>
<td>6%</td>
<td>San Diego/Border</td>
</tr>
</tbody>
</table>

*Based on population, freight emissions & SIP needs*
Basis for Category Funding

2005 Health Risk

- Trucks
- Locomotives
- Ships & Cargo Equipment
- Harbor Craft

Category Funding

- Trucks
### Existing Category Funding

<table>
<thead>
<tr>
<th>Funding</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>$400M</td>
<td>Drayage trucks</td>
</tr>
<tr>
<td>$360M</td>
<td>Other trucks</td>
</tr>
<tr>
<td>$100M</td>
<td>Locomotives</td>
</tr>
<tr>
<td>$100M</td>
<td>Ships &amp; cargo equipment</td>
</tr>
<tr>
<td>$ 40M</td>
<td>Harbor craft</td>
</tr>
</tbody>
</table>
Progress
Funding Status

$750M appropriated to date:

• $250M awarded for 1st year projects
  – Cash from 2009 bond sales

• $200M+ to be awarded in June
  – Cash from March 2010 bond sales
1st Year Project Funding

- Locomotives: $16M
- Shore power: $3M
- Drayage trucks: $125M
- Other trucks: $103M
1st Year Project Results

Equipment upgrades:
• 5,100 trucks (over 600 natural gas)
• 3 ship berths
• 14 locomotives

Estimated emission reductions:
• 2.3 million lbs PM
• 40 million lbs NOx
Drayage Trucks

• Rule: reduce PM by 2010, NOx by 2014
• Over 18,000 CA-based complying trucks
• Public incentives (to date)
  – $127M from Prop. 1B for over 3,200 trucks
  – $100M from ports/districts to co-fund natural gas trucks or upgrade additional trucks
Proposed Changes
Outreach

• Extensive input from local agencies, affected industries, environmental and community advocates

• 2 concept papers, 10 public workshops
Proposed Updates

- Reflect current State bond policy
- Expand technology choices
- Increase access to truck grants and supplemental financing
- Require local agencies to offer all project options within funding category
- Reallocate some drayage truck funds
Proposed Drayage Reallocation

- $400M Original drayage truck target
- $125M Drayage – spent on phase 1
- $100M Drayage - reserve for phase 2
- $60M Reallocate to ships/cargo eqp’t
- $115M Reallocate to other trucks
## Proposed Category Funding

<table>
<thead>
<tr>
<th>Funding</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>$700M</td>
<td>All trucks</td>
</tr>
<tr>
<td></td>
<td>Manage as:</td>
</tr>
<tr>
<td></td>
<td>$225M for drayage</td>
</tr>
<tr>
<td></td>
<td>$475M for non-drayage</td>
</tr>
<tr>
<td>$160M</td>
<td>Ships &amp; cargo equipment</td>
</tr>
<tr>
<td>$100M</td>
<td>Locomotives</td>
</tr>
<tr>
<td>$ 40M</td>
<td>Harbor craft</td>
</tr>
</tbody>
</table>
Trucks
Truck Funding and Access

- Add lower cost truck options
- Add subsidized loans/loan guarantees
  - State agencies, incl. ARB, can administer
- Expand eligibility to include more trucks
- Reduce paperwork for truckers and local agencies
**Truck Reuse**

- Middle-aged means MY1998-2003 engines
- Instead of scrappage, allow reuse if:
  - Equivalent or greater air quality benefit
  - Consistent with Program principles and goals
- Retrofit with PM filter for reuse in CA (agricultural/low use fleets, NOx exempt areas)
- Temporary use outside California
- Vocational training
California Operation for New Truck

- Current: 100% CA operation
  - Greatest travel in the trade corridors and in highly-impacted communities

- New: option to allow 90% CA operation with lower funding
  - Owner pays for GPS with “geofence” capability
Locomotives and Rail Yards

- Increase funds for early Tier 4 technology
- Add option to repower helpers/haulers
- Add hood/bonnet technology for rail yards
Ships at Berth and Cargo Handling Equipment

- Increase per-berth funds for shore power
- Reduce project life
- Set lower requirements for small ports
- Add electric equipment options
Commercial Harbor Craft

• Add hybrid power systems
• Reduce project life
Reducing Greenhouse Gases

- Funding for electrification, alternative fuels, and more fuel efficient engines
- Proposal to exclude other State funds from cost-effectiveness calculation for projects with significant greenhouse gas reductions
  - Example: combine State AB118 & Prop. 1B
  - Projects compete based on Prop. 1B $ only (emission reductions/State $ invested)
Recommended Priorities for Next Rounds of Funding

- Trucks
- Locomotives
- Ships at berth
Comments

• Fund 100% of landside compliance costs for ports to install shore power
• Provide advantage for alternative fuels
• Oversee truck lease-to-own programs
• Allow option for 90% CA operation for locomotives and harbor craft
• Increase “up front” funding for truck grants
Additional Changes

• Allow 90% CA operation for harbor craft and locomotives, at local agency’s option
  – Reduce funding by 20% and require GPS
• Raise “up front” administration funding for truck grants from 75% to 90%
• Minor changes for accuracy, consistency
Staff Recommendations

• Adopt the 2010 Update to the Guidelines to replace 2008 version
  – Including today’s additional changes

• Move ahead with funding awards in June