Regulation for Cargo Handling Equipment at Ports and Intermodal Rail Yards

Maritime Air Quality Technical Working Group Meeting
September 12, 2006

Status of Regulation

- Approved by the Board in December 2005 with modifications
- Proposed modified text released for 15-day public comment period in May 2006
  - Alternative Compliance Plan (ACP) revised to include public review process
  - definitions revised to ensure military facilities would be included if located at a port or on contiguous properties
  - exemption added for military tactical support cargo handling equipment
- Regulation and Final Statement of Reasons to the Office of Administrative Law in October
- Implementation begins January 1, 2007
Applicability

♦ Regulation applies to
  – mobile compression-ignition cargo handling equipment at ports and intermodal rail yards

♦ Regulation does not apply to
  – portable compression-ignition engines or equipment
  – equipment used for transporting personnel or fuel delivery
  – military tactical support equipment

Newly Purchased, Leased, or Rented Equipment:

Performance Standards
♦ Yard trucks
  – 2007 or later on-road or final Tier 4 off-road engine

♦ Non-yard truck equipment
  – 2007 or later on-road, Tier 4 off-road, or highest level off-road engine with VDECS

Compliance Schedule
♦ Effective January 1, 2007
In-Use Yard Trucks

**Performance Standards**
- 2007 or later on-road engine standard or final Tier 4 off-road engine standard (or equivalent)

**Compliance Schedule**
- Phased in beginning December 31, 2007

In-Use Non-Yard Trucks

**Performance Standards**
- Certified on-road engines
- Off-road engines with VDECS (may require 2nd step to replace to Tier 4 off-road later)

**Compliance schedule**
- Phased in beginning December 31, 2007
Compliance Extensions for Non-Yard Truck Equipment

- No verified emission controls available
- Use of experimental diesel PM emission control strategies
- Engines near retirement
- Alternative Compliance Plan

Alternative Compliance Plan

- Only non-yard truck equipment under the owner/operator’s direct control at one port or intermodal rail yard is eligible
- Operators may comply using alternative emission control strategies
- Must achieve equivalent or greater reductions
- Applications include a public review process
- Implementation guidance under development
  - workshop in Fall 2006
Expected Environmental Impacts of the Regulation

- Diesel PM
- NOx

<table>
<thead>
<tr>
<th>Year</th>
<th>Diesel PM % Reduced</th>
<th>NOx % Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>40%</td>
<td>24%</td>
</tr>
<tr>
<td>2015</td>
<td>66%</td>
<td>47%</td>
</tr>
<tr>
<td>2020</td>
<td>39%</td>
<td>31%</td>
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</tbody>
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