Mobile Cargo Handling Equipment Workshop

Proposed Regulatory Amendment Concepts

February 23, 2011
Sacramento, California

California Environmental Protection Agency
Air Resources Board

Overview

- Background
- CHE Emissions Inventory
- Comments from November Workshop
- Proposed Amendments
- Next Steps
- Questions/Comments
Background

Need for Emissions Reductions

- Ports and intermodal rail yards pose a public health concern for nearby residents
- Diesel Risk Reduction Plan, Governor's Action Plan, and State Implementation Plan goals
Regulation Status

- Adopted by the ARB December 2005
- Became effective December 31, 2006
- Implementation began in January 2007
- Applying for a U.S. EPA authorization
- Workshop held November 30, 2010

Applicability

- Regulation applies to
  - mobile equipment with compression-ignition engines used at ports and intermodal rail yards
- Regulation does not apply to
  - portable compression-ignition engines or equipment
  - equipment used for fuel delivery or to transport personnel
  - equipment brought in temporarily for construction projects or special jobs/repairs not planned or due to predictable maintenance activities
Implementation Status

- In-Use equipment brought into compliance
  - 55 percent of yard trucks
  - 30 percent of non-yard truck equipment
- All equipment on track to be compliant by 2017
  - Yard trucks w/off-road engines: 2015 or 2016 (w/VDECS)
  - Yard trucks w/on-road engines: 2016 or 2017 (w/VDECS)
  - Non-yard truck equipment: 2013
Comments from November Workshop

♦ VDECS
♦ Transition to Tier 4i/Tier 4
♦ Requested compliance schedule modifications
VDECS

- Operational problems with 2007+ yard trucks with OEM diesel particulate filters
- Other VDECS safety concerns
- Need for engine maintenance to maximize VDECS effectiveness

VDECS Installation and Maintenance for Fleet Administrators

- ARB web site for instructional information:
  - http://www.arb.ca.gov/msprog/decsinstall/videos.htm
- Module 1-4: Essential Engine and Retrofit Maintenance Programs
Concerns About Transition to Tier 4i and Tier 4

- Availability of rental equipment
- Will flex engines be allowed in new equipment?
- Repower complexity

Requested Compliance Schedule Modifications

- Harmonize with off-road regulation?
- Relief for specialized equipment?
- Emissions credits for early compliance?
- Use rated horsepower instead of model year as the regulatory compliance metric?
- Set de minimis horsepower compliance limit?
Proposed Amendments

Purpose of Proposed Amendments

- Provide additional compliance flexibility
- Clarify language
Provide Additional Flexibility

- More time for certain equipment
- Allow demonstration of emissions equivalency
- Non-yard truck equipment transfers within California
- Rental flexibility for new equipment
- Warranty engine replacement
- Small port compliance plan for Humboldt Bay

More Time for Certain Equipment

- Additional 2 years for “No VDECS Available”
- Low-use extension
- Safety extension
No VDECS Available

- Current extension allows two 1-year compliance extensions for in-use equipment with no VDECS available
- Would allow two additional 1-year extensions
- Provides relief for:
  - Specialized equipment
  - RTG cranes

Low-use Compliance Extension

- Would allow low-use equipment to operate additional 2 to 3 years
- Considering a tiered system: duration tied to annual hours
- Limit pieces of equipment per facility
- Listserv notice regarding low-use equipment - 1/14/11
- Questionnaire on low-use equipment provided on website
Safety Extension

- Add compliance extension for VDECS safety issues
  - Line-of-sight issue with VDECS for some equipment
  - Base on CalOSHA and ARB joint criteria
- 3 year extension
- Non-yard truck equipment only
- Estimate 15 percent of non-yard truck CHE may be eligible for line-of-sight safety extensions

Allow Demonstration of Emissions Equivalency

- Allow use of equipment based on emissions equivalency demonstration
  - Demonstrate equipment’s emissions meet applicable emissions standards
- Provides flexibility for new technologies
Non-Yard Truck Equipment Transfers

- Allow non-yard truck equipment transfers from port-to-port or rail yard-to-rail yard
  - Allow owners/operators to move their non-yard truck equipment between in-state locations (same owner of both locations)
  - Equipment transfers not to be used to comply with or delay compliance
  - ARB will review and approve equipment transfer plans
- Yard truck transfers not allowed

Equipment Transfer Plans

- Equipment transfer plans must include:
  - Same owner/operator at both facilities
  - Both facilities are in California
  - Transferred equipment must meet the in-use performance standards within one year
  - Transfer plan must be submitted to Executive Officer for approval
Rental Flexibility for New Equipment

♦ Allow rental of equipment not meeting current standards for maximum of six months if:
  – equipment meeting current standards are not available, and
  – owner/operator rents equipment meeting the immediately preceding standard
    • i.e., if Tier 4i engines are required, only Tier 3 equipment would be allowed

Warranty Replacement

♦ Allow warranty replacement with the same engine type in cases of premature engine failure
  – Replace failed engines, still under warranty, with like engines, even when new engine emissions standards are place
Small Port Compliance Plan for Humboldt Bay

♣ Considering compliance flexibility for Humboldt Bay

♣ Evaluating two pathways:
  – alternative compliance schedule within the regulation, or
  – provisions to allow Port of Humboldt Bay to submit interim compliance plan:
    • Public workshop at the port
    • Receive public comment
    • Review and approval by Executive Officer

Clarifying Amendments

♣ New and clarified definitions
  – New definitions
    • Water-borne commerce
    • Construction activities
    • Warranty replacement
    • Cargo
    • Class I Railroad
Clarifying Amendments (cont.)

– Clarified definitions
  • Port
  • Newly purchased, leased, or rented
  • Rubber-tired gantry crane
  • Compression ignition engines
– Clarifying amendment
  • Equipment brought onto port or intermodal rail yard solely for construction/unexpected repair are exempt

Next Steps

♦ Stakeholder Input
♦ Revise Draft Regulatory Language
♦ Finalize CHE Emissions Inventory Revisions
♦ Emissions and Economic Impacts Analyses
♦ Third Public Workshop In Spring 2011
♦ Tentative Board Hearing June/July 2011
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Questions/Comments