

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



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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

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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

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Cargo Handling Equipment Emissions Inventory



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Comments from November Workshop



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Comments from November Workshop

Comments from November Workshop

- ◆ VDECS
- ◆ Transition to Tier 4i/Tier 4
- ◆ Requested compliance schedule modifications

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VDECS

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

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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

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Concerns About Transition to Tier 4i and Tier 4

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

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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?

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Proposed Amendments



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Proposed Amendments

Purpose of Proposed Amendments

- ◆ Provide additional compliance flexibility
- ◆ Clarify language

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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

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More Time for Certain Equipment

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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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Clarifying Amendments

- ◆ New and clarified definitions
 - New definitions
 - Water-borne commerce
 - Construction activities
 - Warranty replacement
 - Cargo
 - Class I Railroad

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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

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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
