



## Implementation of the Cargo Handling Equipment Regulation

**Faster Freight - Cleaner Air  
Conference**

February 26, 2007

California Environmental Protection Agency



Air Resources Board

## Overview

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- ◆ Background
- ◆ Requirements of the Regulation
- ◆ Future Activities
- ◆ Contacts



## Background

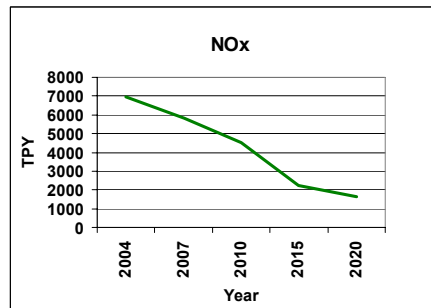
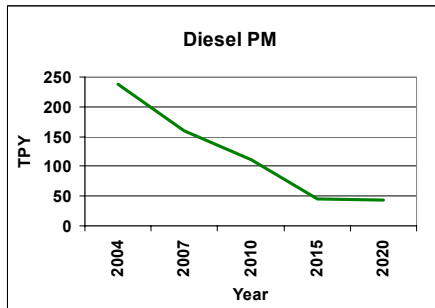


## Need for Reductions

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- ◆ Dramatic increases in trade
- ◆ No other regulations currently addressing in-use off-road diesel engines
- ◆ Ports and intermodal rail yards pose specific public health concern for nearby residents
- ◆ Diesel Risk Reduction Plan, Governor's Action Plan, and State Implementation Plan goals

## Expected Cargo Handling Equipment Diesel PM and NOx Emission Reductions



Estimated Reductions by 2020: Diesel PM = 81%  
NOx = 77%

## Regulation Status

- ◆ Adopted by the Air Resources Board on December 8, 2005
- ◆ Approved by the Office of Administrative Law on December 1, 2006
- ◆ Became effective on December 31, 2006
- ◆ Applies to:
  - in-use equipment
  - newly purchased, leased, or rented equipment
- ◆ Implementation began January 2007

## Requirements of the Regulation



## Newly Purchased, Leased, or Rented Equipment:

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### **Performance Standards**

- ◆ Yard trucks
  - 2007 or later on-road or, when available, 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 highest level verified controls

## In-Use Yard Trucks

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### Performance Standards

- ◆ 2007 or later on-road engine standards, final Tier 4 off-road engine standards, or equivalent

### Compliance Schedule

- ◆ Phased in beginning December 31, 2007 (oldest vehicles comply first)



## In-Use Non-Yard Trucks

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### Performance Standards

- ◆ 2007 or later certified on-road engines; or
- ◆ certified on-road engines (pre-2007) or off-road engines
  - requires highest level verified controls (may require 2<sup>nd</sup> step to replace to Tier 4 off-road or apply Level 3 controls)

### Compliance schedule

- ◆ Phased in beginning December 31, 2007



## Compliance Extensions for Non-Yard Truck Equipment

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- ◆ No verified controls available
- ◆ Use of experimental diesel PM emission control strategies
- ◆ Alternative Compliance Plan
  - Implementation Guidance available online at <http://www.arb.ca.gov/msprog/offroad/marinevess/documents/guidance1206.pdf>

## Recordkeeping and Reporting

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- ◆ Recordkeeping began December 31, 2006
  - records must be kept onsite
  - equipment labeling or approved alternative method
- ◆ Compliance Plans and first Annual Report were due January 31, 2007
- ◆ Reporting forms available online at <http://www.arb.ca.gov/cargo>



## Future Activities



## Future Activities

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- ◆ Continue implementation
- ◆ Demonstration program for RTG cranes, top picks, and side picks
- ◆ Technology Working Group



## Contacts

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