



Implementation of the Cargo Handling Equipment Regulation

**Faster Freight - Cleaner Air
Conference**

February 26, 2007

California Environmental Protection Agency



Air Resources Board

Overview

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



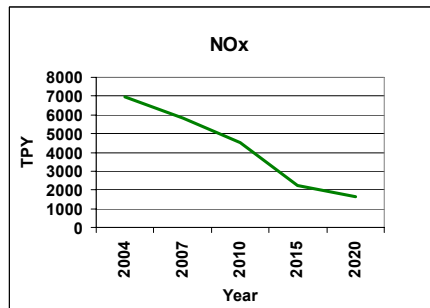
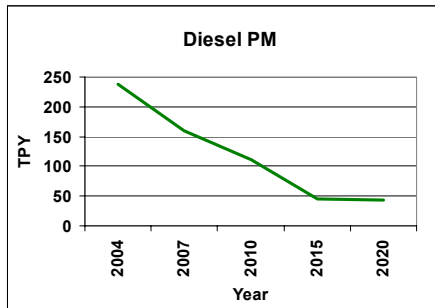
Background



Need for Reductions

- ◆ 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:

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

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

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 2nd 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

- ◆ 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

- ◆ 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

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



Contacts

◆ **Lisa Williams (Staff)**

e-mail: lwilliam@arb.ca.gov

phone: 916.327.1498

◆ **Cherie Rainforth, Manager
Control Strategies Section**

e-mail: crainfor@arb.ca.gov

phone: 916.327.7213

◆ **Dan Donohue, Chief
Emissions Assessment
Branch**

e-mail: ddonoho@arb.ca.gov

phone: 916.322.6023

Web Site: <http://www.arb.ca.gov/cargo>