

Regulation for Drayage Trucks



Faster Freight – Cleaner Air February 2008



California Environmental Protection Agency
Air Resources Board

Overview

- ❖ Background/Inventory
- ❖ Regulation requirements
- ❖ Benefits
- ❖ Costs/Funding
- ❖ Summary
- ❖ Questions/Comments



Ports

- ❖ Serviced by ocean going vessels
- ❖ Typically have terminals used for loading or unloading of water borne commerce
- ❖ Serviced by drayage trucks



Intermodal Rail Yards

- ❖ Intermodal - serviced by drayage trucks
- ❖ Largest Rail Freight Operators (Class 1 - Revenues of \$250 million or more)
- ❖ Within 80 miles of an affected port
or
- ❖ Rail facility has 100 or more drayage trucks visits per day and is outside the 80 miles radius of an affected port



Drayage Truck / Population

- ❖ Class 8 - heavy-duty:
 - GVWR > 33,000 lbs
- ❖ Pre-regulation:
 - 20,000 trucks frequently visit the ports and rail yards
 - 90,000 trucks non-frequent visitors
- ❖ Post-regulation:
 - Frequent fleet could grow to ~30,000 trucks
 - Non-frequent fleet expected to switch to other trucking sectors

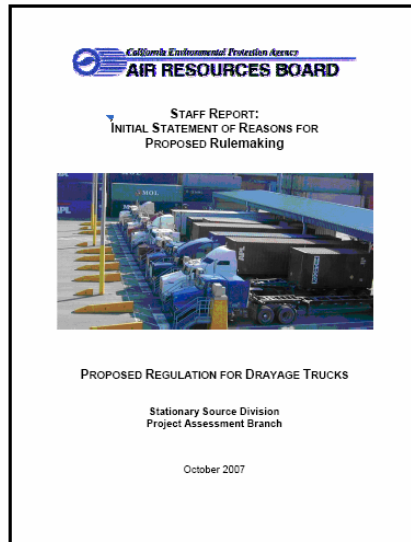
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Emissions from Drayage Trucks

Location	2007 Pollutant Emissions, Tons/Year	
	PM	NOx
South Coast	630	12,000
Bay Area	50	1,800
San Joaquin Valley	90	2,000
San Diego	15	400
Other Air Basins	65	1,300
Statewide	850	17,600

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Regulation Requirements



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Compliance Schedule

Phase 1: By December 31, 2009 and through 2013, all drayage trucks must be equipped with:

- (A) 1994 - 2003 model year engine certified to California and federal emission standards and a level 3 VDECS;
or,
- (B) 2004 - 2006 model year engine certified to California and federal emission standards;
or,
- (C) 1994 or newer model year engine that meets or exceeds 2007 California and federal emission standards.

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Compliance Schedule - Cont.

Phase 2: After December 31, 2013, all drayage trucks must be equipped with an engine that meets or exceeds 2007 model year California and federal emission standards.

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Exemptions

- ❖ Emergency vehicles
- ❖ Military tactical support vehicles
- ❖ Regulation would not affect dedicated use trucks of uni-body design



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Drayage Truck Registry (DTR)

- ❖ Drayage Truck Registry (DTR)
- ❖ Types of information collected:
 - Truck owner name, address, and contact info
 - Engine make, model, and year and VIN
 - Vehicle license number and state of issuance
 - Compliance information (e.g. diesel particulate filter)
- ❖ Starting January 1, 2010, drayage trucks cannot legally operate on port or intermodal rail yard property without a DTR label.



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Motor Carrier

- ❖ Motor carrier responsibilities:
 - Provide copy of regulation to truck owner
 - Ensure trucks are in compliance with regulation before dispatching to the port or rail yard
 - Ensure truck operator has motor carrier contact information
 - Keep drayage truck dispatch records and be subject to audits



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Truck Owner/Operator

- ❖ Truck owner responsibilities:
 - Meet Phase 1 and 2 requirements
 - Register with the DTR
 - Affix compliance label on truck
 - Maintain emission control device and keep maintenance log
 - Ensure truck operator has motor carrier contact information
- ❖ Truck operator responsibilities:
 - Provide motor carrier contact information and maintenance log upon request by enforcement personnel

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Marine Terminals, Rail Yards and Authorities

- ❖ Marine terminals and rail yards:
 - Collect and report data on all trucks entering facility without valid DTR label
- ❖ Port and rail authorities:
 - Collect non-compliant truck data from terminals and rail yards and report to ARB enforcement



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Enforcement

- ❖ Enforcement entities:
 - Air Resources Board (primary)
 - Law enforcement and local Air Districts
- ❖ Field inspections:
 - Compliance with regulation
 - Proper installation and operation of emission control devices
 - Emission control device maintenance records
- ❖ Terminal and motor carrier audits



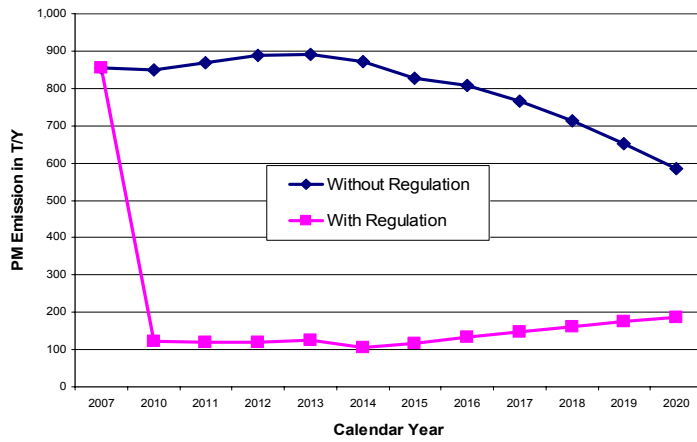
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Emission Reductions and Health Benefits



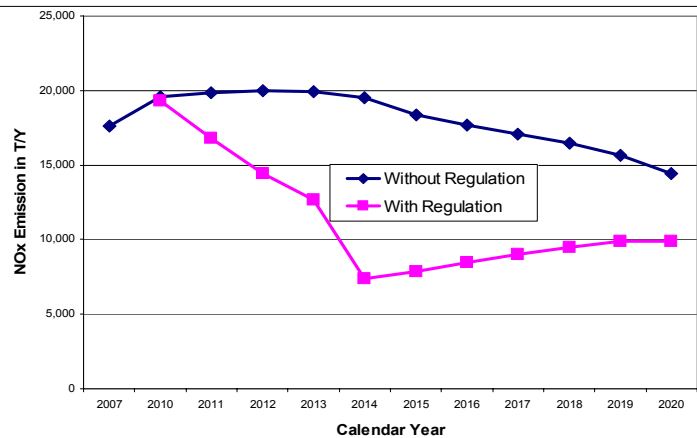
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Projected Statewide PM Reductions



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Projected Statewide NOx Reductions



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Health Benefits

(2010-2020)

- ❖ Near-source cancer risk reduction:
 - Approximately 85 percent
- ❖ Non-cancer cumulative impacts:
 - 1,200 Premature deaths
 - 37,000 Cases of asthma-related and lower respiratory symptoms
 - 3,100 Cases of acute bronchitis
 - 220,000 Work loss days
 - 1,300,000 Minor restricted activity days
- ❖ \$8.7 billion estimated non-cancer health benefits from proposed regulation

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Projected Statewide Effect on CO₂ Emissions

- ❖ Phase 1: Estimated CO₂ reductions of 50,000 - 90,000 t/y (3-5%) due to replacement of pre-1994 trucks

- ❖ Phase 2: No change

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Regulation Costs and Incentive Funding



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Estimated Costs

- ❖ Phase 1: \$360-\$480 million
 - ~\$21,000 used truck
(~28% of the fleet will have to be replaced)
 - ~\$10,000 DPF
- ❖ Phase 2: \$780-\$1,050 million
 - ~\$33,000 used truck
- ❖ Total cost: \$1.1-\$1.5 billion

*All costs in 2006 dollars

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Potential Funding Source - 1B Bond

- ❖ ARB awards competitive grants to local agencies to fund cleaner equipment along CA trade corridors:
 - Total of one billion dollars over several years
 - Local agencies run competitive programs
 - Largest percentage proposed for drayage trucks
- ❖ \$250 million budget appropriation for 07-08:
 - Priority for projects with quick implementation, such as upgrades and retrofits

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POLA/POLB CAAP

- ❖ November and December 2007 - Clean Air Action Plan (CAAP) Clean Trucks Tariff approved
- ❖ Drayage truck rule and CAAP compliment each other

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Questions/Comments



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<http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>
or
<http://www.arb.ca.gov/drayagetruck>

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