

Clean Air Program Update

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Briefing Overview

- Last Commission Briefing: 6/23/2009
 - 2008 Strategy Implementation Report
- Briefing:
 - Summary of drayage truck issues
 - Port of Seattle Clean Truck Program
 - San Pedro Bay Ports Clean Truck Program
 - ABC Fuels

What is a Drayage Truck?

- Heavy-duty diesel truck that move containers to and from marine terminals, intermodal yards, and distribution centers
 - Short distances (1 to 25 miles)
- Operated by both independent owner/operators and employee drivers
- Hired by cargo owners, steamship lines, or 3rd party logistics (3PLs)
 - No direct business relationship with ports



Particulate Matter Emissions from Drayage Trucks

- Drayage operations to/from terminals and intermodal yards contribute to port emission profiles:
 - Port of Tacoma: 1%
 - Port of Seattle: 3%
 - Port of Oakland: 7%
 - Port of Los Angeles: 40%
 - Port of Long Beach: 36%
 - Port of San Diego: 8%
 - Port of Houston: 5.6%
 - Port of New York/New Jersey: 12%
- Why do the percentages differ?
 - Distance from terminals to intermodal yards
 - Percent of containers moved by truck vs. on-dock rail
 - Terminal turn times
 - Regional traffic congestion

Regional Port Emission Contributions

- Port contributions to regional PM emissions from all sources:
 - Tacoma: 7%
 - Seattle: 9%
 - Oakland: 6%
 - Los Angeles: 9%
 - Long Beach: 9%
 - San Diego: <1%
 - Houston: 3.4%
 - New York/New Jersey: 1%

What is the Average Age of a Drayage Truck?

- Port Metro Vancouver: 2000
- Port of Seattle: 1996
- Port of Tacoma: 1998
- San Pedro Bay Ports: 1995
- Port of Houston: 1999
- Port of New York/New Jersey: 1998

How do these compare to state averages?

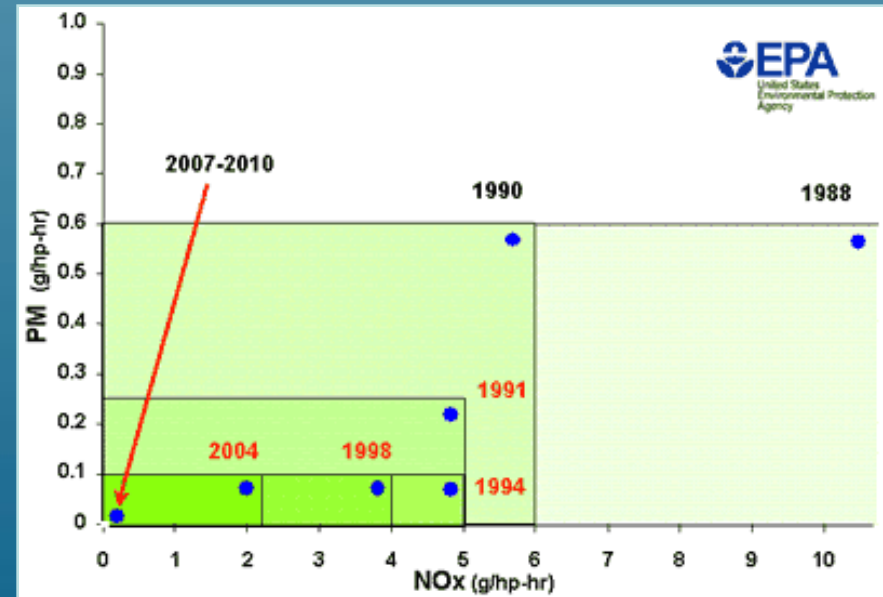
- *Washington: 1996*
- *South Coast California: 1995*

Why is Reducing Drayage Truck Emissions Important to Ports?

- Impacts on Public Health
 - Combustion of diesel fuel emits pollutants such as particulate matter (PM) and oxides of nitrogen (NO_x)
 - PM and NO_x are linked to increases in respiratory and cardiovascular disease
 - Proximity of drayage truck emissions to population centers
- Impact on Environment
 - Climate impacts from contribution to greenhouse gas emissions

Federal Efforts to Reduce Truck Emissions

- Ultra-Low Sulfur Diesel Fuel Rule
 - Implemented in 2006
- Heavy-Duty Diesel Engine Standards
 - Final PM: MY 2007
 - Final NO_x : MY 2010
- U.S. EPA SmartWay Transport Partnership
 - Focused on shippers, carriers, trucks and rail
 - Promotes fuel saving and efficiency technologies



Port of Seattle

Clean Air Program

- Northwest Ports Clean Air Strategy Truck Performance Measures:
 - 12/31/2010: All trucks must meet Federal 1994 PM emission standard
 - 12/31/2015: 80% of trucks must meet Federal 2007 PM emission standard (100% by 2017)
- Standards will be enforced by MTOs at gates
- Fee Free
- Partnered with PSCAA on a buy-back and scrap program for pre-1994 trucks
- OSR Small Business Assistance program

Clean Air Program

MTO Lease Amendments

- Received FMC approval on June 23rd to discuss truck program implementation
- Final version of lease amendments have been sent to MTOs for review and execution (as of 8/13/2009)

Clean Air Program

PSCAA Buy-Back and Scrap

- PSCAA staff are developing program elements
 - Focused on pre-1994 trucks
 - Must have recently worked at Port of Seattle
 - Provide a “bounty” of \$5,000 or blue book value, whichever is greater
- Schedule:
 - July/August: Develop RFP, obtain stakeholder input
 - September: Issue RFP for 3-4 weeks
 - October: Select operators, execute contracts
 - November: Anticipated program launch date

Clean Air Program

PSCAA Buy-Back and Scrap

- Key Considerations:
 - Program gets the oldest trucks off the road first
 - Avoids relocation of the emissions problem
 - Gives owners fair compensation for their old truck
 - Port legally can't fund a truck retrofit/replacement program

- Hosted Trucker Resource Fair 6/3/2009
 - Brought together health insurance, community resources, and financial resources,
 - Provided briefing on the Clean Truck Program
- Planning second Trucker Resource Fair for November
 - Coincide with launch of buy-back and scrap program

Clean Air Program

Truck Parking

- South Harbor Truck Parking Work Group
 - Purpose: To provide input on south harbor neighborhood parking and routing issues.
 - Partners include City, SDOT, community, industry, labor, and environmental groups.
 - Recommendations presented to Commission and City Council in May 2009
- Terminal 25 South interim truck parking facility
 - 3 acres
 - Opened July 1
 - No fees
 - Used by 75 trucks, 15 cars (typical Monday 6 AM)

Program Comparison

	Port of Seattle CTP	San Pedro Bay Ports CTP
Air Quality Attainment Status	<ul style="list-style-type: none"> • In attainment for PM2.5, pending non-attainment for ozone 	<ul style="list-style-type: none"> • In severe non-attainment for U.S. EPA criteria pollutants (NO_x, SO_x, PM, VOCs, CO)
# of Drayage Trucks	<ul style="list-style-type: none"> • 1,500 known (2008) 	<ul style="list-style-type: none"> • 16,000
Truck Emission Contribution	<ul style="list-style-type: none"> • 3% of Port of Seattle inventory 	<ul style="list-style-type: none"> • 40% of Port of L.A. inventory • 36% of Port of Long Beach inventory
Dray Distances	<ul style="list-style-type: none"> • .5 to 2 miles 	<ul style="list-style-type: none"> • 5 to 25 miles

Program Comparison

	Port of Seattle CTP	San Pedro Bay Ports CTP
Fleet Age	<ul style="list-style-type: none"> • 1996 average model year (in 2008) • 25% of trucks older than 1994 	<ul style="list-style-type: none"> • 1995 average model year (in 2008)
Truck Ban Dates	<ul style="list-style-type: none"> • Dec 31, 2010: Ban all pre-1994 trucks • Dec 31, 2015: 80% of trucks must meet 2007 PM emission standards (100% by 2017) 	<ul style="list-style-type: none"> • Oct 1, 2008: Ban all pre-1989 trucks • Jan 1, 2010: Ban all pre-1994 and unretrofitted 1994-2003 trucks • Jan 1, 2012: Ban all trucks that don't meet 2007 CARB standard

Program Comparison

	Port of Seattle CTP	San Pedro Bay Ports CTP
State/ Regional Programs	<ul style="list-style-type: none"> • No state authority to implement truck standards • Voluntary efforts on anti-idling programs and exhaust retrofits 	<ul style="list-style-type: none"> • State authority under U.S. Clean Air Act • CARB Drayage Truck Rule: all trucks must meet 2007 standards by 2013
Fees	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • \$35 per TEU for containers hauled by pre-2007 trucks • Collected by MTOs via PortCheck

Program Comparison

	Port of Seattle CTP	San Pedro Bay Ports CTP
Enforcement	<ul style="list-style-type: none"> • MTOs will enforce standards at terminal gates • Lease amendments with Port 	<ul style="list-style-type: none"> • Port tariff • Concession agreements <i>**in litigation**</i>

Other Port Clean Air Programs

- Staff is monitoring development of port clean truck programs:
 - Port of Tacoma
 - Port Metro Vancouver
 - Port of Oakland
 - Port of San Diego
 - Port of New York/New Jersey
 - Port of Houston Authority
 - Virginia Port Authority

Port of Seattle

ABC Fuels

- At-Berth Clean Fuels Vessel Incentive Program
 - Pilot program with Puget Sound Clean Air Agency
 - \$1,500 incentive for use of 0.5% sulfur fuel in auxiliary engines while at a Port of Seattle berth
 - Eligible lines must call 5 or more times/year
 - 7 Participating Lines:
 - Hapag-Lloyd
 - Matson
 - APL
 - COSCO
 - Maersk
 - Norwegian Cruise Line
 - CMA-CGM
 - Current participants represent 35% of all calls made in 2008