



Maritime Comprehensive Truck Management Program
—
A MAQIP Program

Adopted
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I. EXECUTIVE SUMMARY

In developing the Maritime Comprehensive Truck Management Program (“CTMP”), the Port of Oakland (“Port”) carefully balanced its economic responsibility as a competitively positioned global gateway for the United States (“U.S.”) economy with its commitment to environmental and social responsibility, specifically as related to maritime-related trucking operations (“drayage”).

The Port is the 3rd and 5th busiest container port on the U.S. west coast and in the U.S., respectively, accounting for an approximate \$2 billion economic impact in annual trade and 28,000 jobs. Facilities located on Port-owned land that is dedicated to maritime activity (“the Seaport”) are served by an estimated 2,000 “frequent” drayage truck drivers, estimated to represent approximately 2,000 trucks. The CTMP applies exclusively to drayage activities at the Seaport.

The Port initiated development of the CTMP in early 2007 through the establishment of a steering committee, now known as the CTMP Technical Advisory Committee (“TAC”). Prior to and during development of the CTMP, a number of events occurred including the Port and City of Oakland’s (“City’s”) certification of the Final Environmental Impact Report for redevelopment of the former Oakland Army Base (“OAB”); the State of California’s adoption of regulations to address air quality issues associated with drayage trucks; new port security mandates and initiatives; the State’s completion of a health risk assessment for diesel particulate matter emissions; the Port’s adoption of the Maritime Air Quality Policy Statement and Maritime Air Quality Improvement Plan (“MAQIP”); and a major global economic downturn. The CTMP fits within the context of these actions, and in some cases relies upon them.

In developing the CTMP, the Port evaluated the suggestions of its stakeholders for consistency with Port resources, jurisdiction, and financial health; the Port’s role in ensuring that any negative impacts of Seaport operations on neighboring communities are minimized or avoided; the Port’s legal obligations and constraints; the impact of State regulations on Port customers and users; and the broader economic and regulatory context in which the Port operates.

Based on an analysis of these factors, the Port has developed a CTMP that sets forth plans and actions for comprehensively addressing air quality, safety and security, business and operations, and community issues associated with drayage. Through adoption and implementation of the CTMP, the Port seeks to identify drayage trucks serving the Seaport, support regulations to reduce emissions of air pollutants, increase safety and security domain awareness, improve operations, reduce traffic and congestion, and involve and educate all Seaport stakeholders.

CTMP Components

The CTMP is organized in two categories: Core Components (6) and Future Component (1), as summarized below. Core Components are items that will be implemented in the next one to two years. The Future Component is a potential item that builds upon the Core Components, requires further study, and necessitates major funding that is currently not available.

Core Components
Port Registry
Secure Truck Enrollment Program or “STEP” Agreement
Registry Database
Clean Trucks
Compliance deadlines
Truck retrofits & replacements
Traffic and Congestion
Congestion studies
Seaport roadway improvements
Truck idling
Truck parking and routes
Operations
Marine terminal gate operations
Trucker facilities
Communication with tenants and registered LMCs
Treatment of workers
Stakeholder Involvement and Education
Outreach materials
Multi-stakeholder forum
Trucker information center
Business and Workforce Assistance
Truck purchase and financing
Business and employment resources
Future Component
Truck Positioning Technology

Core Component: Port Registry

As part of the CTMP, the Port desires to increase its maritime safety and security domain awareness, outreach capabilities, and general knowledge of the trucking entities and trucking operations conducted on Seaport property. To achieve these goals, the Port will implement a truck registry database and related Licensed Motor Carrier (“LMC”) Secure Truck Enrollment Program (“STEP Agreement”), together known as the Port Registry. Only LMCs and trucks associated with those LMCs that have submitted a STEP Agreement and have entered their truck and driver information into the Port Registry database will be able to serve the Seaport facilities. The STEP Agreement will set forth certain terms and conditions, including but not limited to

compliance with applicable laws and will provide potential enforcement mechanisms, including fines or suspension for repeated violations of the safety and security related terms of the STEP Agreement. The Port Registry does not supersede or substitute other local, state, or federal regulatory requirements such as obligations under the California Air Resources Board (“CARB”) Drayage Truck Regulation. The Port Registry will be implemented in four phases, as summarized in the table below.

Milestone	Date	Summary of Requirements
Phase 1	October 1, 2009 to January 1, 2010	<ul style="list-style-type: none"> ▪ All LMCs to register with Port by signing STEP Agreement.
Phase 2	January 1, 2010 to April 1, 2010	<ul style="list-style-type: none"> ▪ All Port-registered LMCs must enter required information in Port Registry database.
Phase 3	June 1, 2010	<ul style="list-style-type: none"> ▪ All trucks driving for STEP-registered LMCs must show proof of registration at Seaport facilities. ▪ Seaport facility operators must handle non-STEP-registered trucks in one of two ways: deny entry or grant entry by recording and reporting certain information.
Phase 4	January 1, 2011	<ul style="list-style-type: none"> ▪ Marine terminal operators must deny entry to non-STEP-registered trucks. ▪ Other Seaport facility operators may deny entry or grant entry by recording and reporting certain information.

Core Component: Clean Trucks

The Clean Trucks Component of the CTMP covers topics of principal importance to addressing the relationship between the CTMP and CARB regulations, as well as the Port’s role in helping truck owners comply with these regulations to ensure that air emissions are reduced as quickly as possible. Trucks serving the Seaport must be compliant with all laws and regulations, notably the CARB Drayage Truck and Statewide Truck and Bus Regulations. At the Seaport, all emission standards and related requirements set forth in the CARB Regulations apply on the schedules set forth in the Regulations.

Deadline	Summary of CARB Requirements
September 30, 2009	<ul style="list-style-type: none"> ▪ All drayage trucks must be registered in the CARB statewide drayage truck registry.
January 1, 2010	<ul style="list-style-type: none"> ▪ Drayage trucks of engine model years pre-1994 are prohibited. ▪ All drayage trucks of engine model years 1994-2003 must install a CARB-verified level 3 Diesel Particulate Filter to reduce particulate matter (“PM”) emissions by 85%.
January 1, 2012	<ul style="list-style-type: none"> ▪ All drayage trucks of engine model year 2004 must install a CARB-verified level 3 Diesel Particulate Filter to reduce PM emissions by 85%.
January 1, 2013	<ul style="list-style-type: none"> ▪ All drayage trucks of engine model years 2005 and 2006 install a CARB-verified level 3 Diesel Particulate Filter to reduce PM emissions by 85%.
January 1, 2014	<ul style="list-style-type: none"> ▪ All drayage trucks must meet 2007 engine emission standards.

Recognizing that the transition of the drayage fleet to comply with the new emission standards set forth in CARB Drayage Truck and Statewide Truck and Bus Regulations represent a significant departure from status quo, the Port is working with its agency, business, and community partners to provide financial assistance in the form of grants to retrofit and/or replace trucks to meet the new CARB emission standards. The Port is contributing \$5 million toward this effort to supplement \$5 million from the Bay Area Air Quality Management District (“BAAQMD”), and potential additional federal stimulus funding, San Joaquin Valley Air Pollution Control District, and CARB. By January 1, 2010, with Port and BAAQMD funds, the Port estimates that approximately 600 truck retrofits will be funded. In addition, depending on the timing and amount of additional funding, another 500 trucks may be retrofitted by that time. The Port is also working with its business partners to assess and help ensure the readiness of the drayage fleet on January 1, 2010. Based on information available today, a minimum of 500 privately funded truck upgrades are either completed or under way. Therefore, the Port currently estimates that 1,100 to 1,600, and likely more, drayage trucks currently serving the Port will be compliant with the CARB Drayage Truck Regulation and able to serve the Seaport on January 1, 2010.

Core Component: Traffic and Congestion

Traffic and congestion issues are largely within the jurisdiction of the City and enforced by the Oakland Police Department (OPD). Operational issues are largely within the jurisdiction and control of Seaport facility operators and LMCs. Nonetheless, the Port recognizes its role in making sure drayage truck impacts are minimized or avoided to the maximum extent feasible. The Port continues to work with fellow transportation agencies to participate in congestion, traffic, and parking studies to better understand and contribute to issues of traffic loads, optimal

routes, space requirements, and land use compatibility. The Port is also planning to undertake a number of roadway improvements to improve circulation at the Seaport, which will reduce idling associated with congestion. Related to this, the Port is displaying signs that inform truckers of anti-idling restrictions and associated fines under state law. The Port currently provides about 20 acres of truck parking on former OAB property; in the future, the Port and City will provide a combined 30 acres of truck service (including parking) facilities, alleviating the on-going concerns of truck parking in neighborhood areas adjacent to the Seaport. Finally, the Port continues to work closely with the City to improve signage and strengthen the enforcement of truck parking and routes in the West Oakland areas adjacent to the Seaport, in part through additional funding. In addition to advocating for increased fines, the Port will work with the City to evaluate the feasibility of re-investing citation revenues in ways that help keep trucks out of Port-adjacent neighborhoods.

Core Component: Operations

Within this component of the CTMP, the Port seeks to address operational issues related to the access and use of the Seaport facilities. The Port understands that truckers have on-going concerns about wait times outside marine terminal gates, treatment at the gates and the provision of facilities such as restrooms. In adopting the CTMP, the Port is renewing its commitment to ensure that all individuals doing business in the Seaport area are treated fairly and equally, with dignity and respect. In addition to its commitment to on-going communication with tenants about gate operation efficiencies, the Port will continue to provide several portable restroom facilities. The Port will also leverage the Port Registry and regular meetings of the existing Trucker Work Group to communicate regularly with trucking companies serving the Port.

Core Component: Stakeholder Involvement and Education

The Port is committed to on-going, effective, and comprehensive outreach to all of its stakeholders. As part of that commitment, the Port will be updating and expanding its outreach materials, and providing those materials in multiple languages and media. In particular, the Port will set up a dedicated web page for trucking topics. The Port will use the Port Registry to reach out to trucking companies. While in the past there have been multiple Seaport project-specific stakeholder groups, the establishment of a new single maritime stakeholder group will enhance the Port's ability to obtain and consider stakeholder input. Finally, the Port is supporting the current efforts of trucking entities, community organizations, and regulatory agencies to provide and staff an information center for truckers serving the Seaport. Specifically, the Port is providing outreach materials, assigning Port staff on a part-time basis in the immediate term, and is in the process of donating a recently purchased and upgraded trailer to expand and enhance the current information center.

Core Component: Business and Workforce Assistance

In addition to the grants provided under the Clean Trucks component of the CTMP, the Port is investigating options for assisting truck owners with new truck purchases. The Port is actively exploring options available to assist truck owners in retrofitting and purchasing new trucks. The Port is working with local financial institutions to provide low-cost financing directly to truck owners to assist in truck retrofits and replacements. The Port is also developing a program to put

affected truck owners into direct contact with sellers of CARB compliant new trucks throughout the U.S. Also, consistent with the Port’s general policy to encourage or require its business partners to utilize local businesses and hire local residents, the Port will follow its own local business and local hire policies for any activities that are controlled by the Port, such as hiring businesses and individuals to support implementation of the CTMP. While the Port cannot apply such policies to the drayage industry, the Port will leverage its 360 Access Program to encourage local business utilization and local workforce development for the drayage industry serving the Seaport by connecting truckers to employment, training, and educational resources.

Timeline

The estimated timeline for implementing the CTMP Core Components is shown below. The timeline is meant to indicate initial implementation only; items that are on-going are denoted as such in the notes column.

	2009	2010	2011	2012+	Notes
Planning					
CTMP Development, Analysis, Preparation	√				
Core Components					
Port Registry	√	√			On-going
Clean Trucks	√	√		√	
Traffic and Congestion	√	√			On-going
Operations	√				On-going
Stakeholder Involvement and Education	√	√			On-going
Business and Workforce Assistance	√				On-going
Future Component					
Truck Positioning Technology			√	√	

Budget and Funding

Implementation or “set-up” of the CTMP is estimated to cost approximately \$12.7 million of direct, external costs to the Port. Of that \$12.7 million, approximately \$9.2 million is associated with the Core Components, and \$3.5 million is associated with the Future Component. Operation and maintenance costs are estimated at approximately \$1 million to \$1.4 million annually. In sum, looking through 2012, the CTMP will cost an estimated \$15.2 million of external costs. Additionally, Port staff costs are estimated on the order of \$1 million annually for the first 3 years, decreasing slightly thereafter.

II. INTRODUCTION

A. Port of Oakland

The Port of Oakland (the “Port”) was created in 1927 as an autonomous department of the City of Oakland (“the City”) under the exclusive direction of the Board of Port Commissioners by an amendment to the City’s Charter. As an independent department of the City, the Port manages property stretching along 20 miles of the eastern shore of San Francisco Bay, with about 2,600 acres dedicated to aviation activities; 900 acres of commercial real estate, and approximately 1,200 acres dedicated to maritime activities.

Port-owned land dedicated to maritime activities is defined herein as the Seaport. The Maritime Comprehensive Truck Management Program (“CTMP”) applies exclusively to drayage activities at the Seaport.

B. Maritime Operations

The Seaport is the 3rd and 5th busiest container port on the United States (“U.S.”) west coast and in the U.S., respectively. The Port serves as the principal ocean gateway for container cargo in Northern California. The Seaport provides an interface for waterborne international and domestic cargo moving between inland points in the U.S. and the Pacific Basin, as well as other points in the world. The Seaport accounts for an approximate \$2 billion annual economic impact in annual trade and 28,000 jobs. In Fiscal Year 2008, the Seaport produced 43% of total Port operating revenues, or approximately \$128 million.

The Seaport is a major gateway for international containerized cargo shipments on the U.S. west coast, with a market share of approximately 10%. For comparison, the other two major gateways on the U.S. west coast - the Ports of Los Angeles/Long Beach and Seattle/Tacoma - have market shares of approximately 70% and 20%, respectively. In 2008, the Seaport handled approximately 2.2 million TEUs¹, down from 2.4 million TEUs (1.3 million containers) in 2007. Additional cargo volume declines are being experienced in 2009 due to a major economic downturn of the U.S. and global economies.

As shown in Figure 1, the Seaport comprises approximately 1,200 acres of water area and land-side facilities in the southwestern part of the City. The Seaport includes four major marine terminal areas: the Outer Harbor Terminal Area, the 7th Street Terminal Area, Middle Harbor Terminal Area and the Inner Harbor Area. The terminals are operated by marine terminal operators, with whom the Port contracts directly. The Seaport’s 20 deep water berths and 37 container cranes are backed by a network of local roads and interstate freeways, ancillary services, warehouses and intermodal rail yards. One intermodal rail yard, the Oakland International Gateway (“OIG”), is currently operated by Burlington Northern Santa Fe Railroad (“BNSF”) and is situated on Port-owned land. A second intermodal rail yard, Railport, is located

¹ TEU = Twenty-foot equivalent unit.

on private property adjacent to the Seaport, and is currently owned and operated by Union Pacific Railroad (“UP”).²

The Seaport is a landlord port. The Port leases terminal facilities to shipping lines, stevedoring companies, and other maritime support service companies. Use of the Seaport facilities is governed by Port Tariff 2A, which sets forth rules and regulations for doing business in the Seaport area and covers such things as rates and charges, procedures, permits, and permitted operations. The Port does not operate, or employ the people who operate the terminals, ships, cargo handling yard equipment, trucks or trains that move the cargo that passes through the Seaport. With the exception of space assignment agreements and leases, the Port currently does not have contracts or agreements with the majority of trucking companies or individual drivers that serve the Seaport. The Port’s Tariff currently does not apply to trucks serving the Seaport (“drayage trucks”).

Seaport revenue is generated by leases and other agreements with private sector entities, which in turn are dependent on other maritime supply chain customers. Unlike some ports on the U.S. west coast, the Port does not receive any tax revenue. For these reasons, any actions taken by the Port must especially consider the impacts on Seaport tenants, customers, and users, in order to ensure that the Port can continue to deliver its direct and indirect benefits to the local and regional economies and communities.

C. Drayage at the Port of Oakland

“Drayage” is a term typically used to describe trucking associated with seaport facilities and the transport of cargo associated with waterborne commerce, for example trucking cargo to or from a marine terminal or an intermodal rail yard. The Seaport is served by an estimated 2,000 “frequent” drayage truck drivers, estimated to represent approximately 2,000 trucks.³ The total number of drayage trucks serving the Port is not known exactly, and could be higher than 2,000 when out-of-state and “infrequent callers” are counted.⁴ The drayage fleet serving the Seaport today consists of employee drivers and independent owner-operators (“IOOs”), with about two-thirds of the drivers being IOOs. Truck drivers, whether IOOs or employees of a trucking company, are hired or contracted and dispatched by Licensed Motor Carriers (“LMCs”).

Drayage truck operations are managed by the LMCs who hire, contract with, and dispatch truck drivers to Seaport facilities to pick up or deliver cargo. The demand for and flow of the trucks into and out of these facilities are controlled by facility operators, including marine terminal and rail yard operators, and vary with cargo activity on any given day, week, or month. The drayage industry contracts directly with Seaport customers and/or tenants, and the delivery of cargo

² Railport is on private property and is therefore not subject to the CTMP. However, Railport remains subject to all applicable, local, state and federal regulations. Additionally, drayage trucks serving Railport are subject to the CTMP to the extent those trucks also serve Seaport facilities.

³ See Beacon Economics, Comprehensive Truck Management Program: Economic Impact Analysis (Beacon, 2009b).

⁴ Data available from some of the Port’s marine terminal tenants suggests that up to 4,500 drayage trucks may serve the Seaport. See also Beacon, 2009b.

to/from the appropriate destinations is governed entirely by a network of agreements between trucking entities and their customers. The Port does not own, contract for, or otherwise manage the trucks that serve the Seaport. For this reason, to date, the Port has limited knowledge of which trucking entities do business in the Seaport.

For the reader's reference, a list of acronyms and abbreviations used throughout this document is presented as Appendix A.



Container ship with San Francisco-Oakland Bay Bridge and Port of Oakland in the distance.

III. PURPOSE AND GOALS OF THE CTMP

The purpose of the CTMP is to comprehensively address the following four major areas of study related to drayage:

- Air quality
- Safety and security
- Community
- Business and operations

Each of the CTMP components described in Sections VI and VII relates back to one or more of these four areas of study.

The Port seeks to balance its economic responsibility as a competitively positioned global gateway for the U.S. economy with its commitment to environmental and social responsibility, specifically as related to drayage. The Port is committed to balancing the needs of its customers with those of its neighboring community in an effort to improve commerce and quality of life for those living and working in and around the Seaport.

In developing and implementing the CTMP, the Port strives to:

- Respond to economic, social and environmental implications of Seaport operations on neighboring communities;
- Take necessary and reasonable steps to develop a CTMP that does not disproportionately burden or favor any one person or group;
- Provide a working group forum in which to share information, consider and discuss stakeholder advice and recommendations, and create dialogue about diverse and complex issues;
- Incorporate stakeholder input to the maximum extent possible; and
- Facilitate economic and social justice through inclusion of the issues, people, and businesses in the Port's larger community.

IV. CONTEXT OF THE CTMP

This section will outline the context in which the Port developed the CTMP, including applicable local, state and federal regulations covering the movement of goods, related Port programs and projects, and the applicable legal setting.

A. Air Pollution and Health Risk

In March 2008, the California Air Resources Board (“CARB”), working in cooperation with the Port, UP Railroad, and the Bay Area Air Quality Management District (“BAAQMD”), completed a health risk assessment study designed to help understand the potential health impacts of diesel particulate matter (DPM) emissions on residents of West Oakland. The purpose of CARB’s study was to investigate the potential health risks from Seaport operations, UP rail yard operations, and freeway, industrial, construction and other non-Seaport/non-UP diesel sources in and around West Oakland. Key findings from CARB’s study, as they relate specifically to the CTMP, are as follows:

- DPM ambient concentrations in West Oakland are estimated to be nearly three times the background DPM concentrations averaged over the entire San Francisco Bay Area.
- The estimated lifetime potential cancer risk for residents of West Oakland from exposure to all DPM emissions included in the study is estimated to be about 1,200 excess cancers per million.
- Seaport operations accounted for about 190 excess cancers per million, or 16% of the health risk in the study.
- Seaport-related drayage truck emissions accounted for about 40 excess cancers per million, or approximately 4% of the health risk in the study.

B. Key Regulations, Requirements and Initiatives

This section discusses regulations and requirements set forth by state and local agencies, as well as programs and initiatives implemented by the Port. The CTMP does not alter or replace these regulations, requirements, and initiatives in any way. Rather, the CTMP fits within the context of these activities, and in some cases relies upon them.

1. California Air Resources Board

a) Drayage Truck Regulation

In 2007, CARB promulgated a new rule for drayage trucks entitled Regulation to Control Emissions from In-Use On-road Diesel-Fueled Heavy-Duty Drayage Trucks (the “Drayage Truck Regulation”). This regulation requires drayage truck owners to ensure that their trucks meet certain emission standards in order to reduce air pollutant emissions, and in particular, to reduce DPM emissions by 85%. Required actions and deadlines under the Drayage Truck Regulation generally vary by truck age, and are summarized below⁵ as well as in Section VI(A)(2), Table 5.

⁵ This section provides an overview of the CARB Drayage Truck Regulation. For a complete description of requirements and deadlines, see CARB’s website at <http://www.arb.ca.gov/diesel/mobile.htm>.

September 30, 2009

Owners of drayage trucks that operate at ports and intermodal rail yards who intend to continue such operation after September 30, 2009, are required to register their trucks in the CARB state-wide Drayage Truck Registry (“DTR”). After September 30, 2009, a drayage truck that has previously not operated at a port or intermodal rail yard would be required to register in the DTR. Portions of CARB’s DTR will be available to third parties, including the Port, to download or otherwise view data. Using information provided by drayage truck owners, the DTR will record and house pertinent information for each truck, such as:

- Basic contact and identification information for the owner of a drayage truck, including name, mailing address, tax identification number, and related contact information;
- Truck identification information, including manufacturer, model year, vehicle identification number, and truck license number;
- Truck engine information, including engine manufacturer and engine model and year; and
- Compliance status information regarding the CARB regulations for drayage.

January 1, 2010 (the “2010 CARB deadline”)

Effective this date, all drayage trucks must be equipped with:

- 1994-2003 model year engine certified to California or federal emission standards and a CARB-verified level 3 Diesel Particulate Filter (“DPF”) to reduce PM emissions by 85%; or
- 2004 or newer model year engine certified to California or federal emission standards; or
- 1994 or newer model year engine that meets or exceeds 2007 model year California or federal emission standards.

January 1, 2014 (the “2014 CARB deadline”)

Effective this date, all drayage trucks must be equipped with:

- 1994 or newer model year engine that meets or exceeds 2007 model year California or federal emission standards.⁶

Most (about 94%)⁷ trucks currently serving the Seaport are of engine model years older than 2004, and are subject to the 2010 and 2014 CARB deadlines outlined above.

⁶ The 2007 emission standards include both particulate matter and nitrogen oxide limits.

⁷ See Beacon, 2009b. While Beacon estimates that 94% of the trucks currently serving the Port are pre-1994, they also estimate that this number will decline to 77% by 2010 through reduced container volume associated with the current economic downturn, and through attrition at the older end of the fleet.

b) Statewide Truck and Bus Regulation

After adopting the Drayage Truck Regulation, CARB approved in 2008 an additional regulation for existing on-road diesel-fueled vehicles operating in California. The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, and Greenhouse Gases from In-Use Heavy Duty Diesel-Fueled Vehicles (“Statewide Truck and Bus Regulation”) establishes phase-out deadlines for all heavy-duty diesel trucks, comparable to the deadlines in the Drayage Truck Regulation. While the Statewide Truck and Bus Regulation targets primarily non-drayage trucks, it does establish two deadlines for drayage trucks of engine model years 2004-2006, an age group not addressed in the Drayage Truck Regulation. The Statewide Truck and Bus Regulation requires the following for drayage trucks:⁸

January 1, 2012 (“2012 CARB deadline”)

Effective this date, drayage trucks with 2004 model year engines must be equipped with:

- A CARB-verified level 3 Diesel Particulate Filter (“DPF”) to reduce PM emissions by 85%.

January 1, 2013 (“2013 CARB deadline”)

Effective this date, drayage trucks with 2005 or 2006 model year engines must be equipped with:

- A CARB-verified level 3 Diesel Particulate Filter (“DPF”) to reduce PM emissions by 85%.

c) Obligations on Non-Port Entities

CARB’s Drayage Truck Regulation requires a number of entities to take actions to achieve compliance. Actions to be taken by truck drivers, truck owners, licensed motor carriers, port terminal operators (including but not limited to marine terminal operators), rail yard operators, and port and rail authorities are summarized in Table 6 in Section VI(A)(2) below. CARB does not mandate turn-away of non-compliant trucks; rather it requires that any terminal and rail yard operator granting access to a non-compliant truck record certain information about that truck, and report that information to the port or rail authority on a quarterly basis.

Upon registration in the DTR, a truck owner has the option of requesting a compliance label (also referred to as a sticker), which identifies the truck as being compliant. However, CARB does not require that a truck owner obtain or affix the label due to pre-emption by the federal government. Further, CARB does not mandate a specific method for determining compliance; rather CARB leaves it to the terminal and rail yard operators to implement their method of choice.

⁸ This section provides an overview of the CARB Statewide Truck and Bus Rule requirements specific to drayage trucks. The January 1, 2012 and January 1, 2013 standards were adopted by CARB in December 2008, and will become effective upon Office of Administrative Law approval of the CARB regulation. For a complete description of requirements and deadlines, see CARB’s website at <http://www.arb.ca.gov/diesel/mobile.htm>.

Under CARB's Statewide Truck and Bus Regulation, equipment owners are required to upgrade their equipment based on the established compliance deadlines. There are no specific quarterly reporting requirements comparable to those in the Drayage Truck Regulation.

d) Port Obligations

The Port's obligations under the CARB Drayage Truck Regulation are limited to (a) collecting non-compliant truck information from its terminal and rail yard tenants, and (b) reporting that information to CARB according to a set quarterly schedule specified in the Regulation. The Port has no reporting obligations under the CARB Statewide Truck and Bus Regulation.

2. Drayage Truck Idling

Two regulations, both enforced by CARB and the BAAQMD, control truck idling.

a) Idling Regulation for Commercial Motor Vehicles

California regulations prohibit operators of diesel-fueled commercial motor vehicles (with gross vehicular weight rating of 10,000 pounds or more), including drayage trucks, from idling their vehicles for more than 5.0 minutes (see 22 C.C.R. §2485). The commercial vehicle idling rule provides several exceptions, including an exception that allows an operator to idle his/her vehicle while queuing in a non-residential area (locations beyond 100 feet from a residential area).

b) Regulation of Marine Terminal Operators

Since 2002, California Health and Safety Code § 40720 has required each marine terminal operator in the State of California to operate in a manner that does not cause the engines on trucks to idle, or the trucks to queue, for more than 30 minutes while waiting to enter a terminal gate ("Truck Idling Rule"). Marine terminal operators are subject to significant fines if they cause delays that exceed the 30-minute limitation, or if the marine terminal operators allow trucks to queue inside the terminal yard in order to circumvent the time limitation set forth by regulation. However, if a marine terminal operator implements a scheduling or appointment system, the terminal shall only be subject to a fine for a truck that makes use of the appointment system and that idles or queues for more than 30 minutes outside the terminal gate.

3. Port Security

a) Overview

The Maritime Transportation Security Act ("MTSA") of 2002 requires individual marine terminals and vessels that call on those terminals to have security plans. Those plans are approved by the U.S. Coast Guard. The Coast Guard inspects the marine terminals for compliance on a yearly basis. Truck access control, perimeter security, and domain awareness are vital features of the plans and establish the backbone of infrastructure protection in the Seaport.

The SAFE Port Act expands the initial, single point security focus of the MTSA and requires the establishment of Interagency Operations Centers that have the capability to facilitate routine operational planning between agencies, the ability to monitor current port activities in comparison to planned and normal events, and the authority to initiate a coordinated initial

response to an incident. Development of these capabilities and awareness requires that agencies share information and intelligence to create common risk profiles, common operating profiles, and that day to day maritime security business practices and operational activities be integrated across layers of government and industry.

Drayage is a significant component of the overall maritime supply chain, moving import and export containers to and from marine terminals within a very complex transportation system. Recognizing the vulnerabilities inherent in a system that requires the relatively free-flow of vehicles in and out of ports, some ports in the U.S. have instituted mandatory driver and/or truck registration and tracking systems. For general context, systems such as these are akin to the Automated Identification System that is currently used to identify and verify all ships over 300 gross tons in the maritime environment, providing an additional layer of domain awareness.

b) Transportation Worker Identification Credential

The Transportation Worker Identification Credential (“TWIC”) is a vital federal security measure intended to ensure that individuals who pose a potential security threat do not gain unescorted access to secure areas of the nation's maritime transportation system, including marine terminals and on-dock intermodal rail yards. The TWIC was established by Congress through the MTSA and is administered by the Transportation Security Administration (“TSA”) and the U.S. Coast Guard. The TWIC cards are tamper-resistant biometric credentials issued to workers who require unescorted access to secure areas of ports, vessels, outer continental shelf facilities and all credentialed merchant mariners. TWIC greatly improves security at the Seaport.

TWIC went into effect at the Seaport on February 28, 2009. Anecdotal evidence suggests that some “street turns”⁹ occurred early during the implementation of the TWIC. However, it appears this practice has largely ceased, likely because of the increased costs of double-handling any container and the legal responsibility assigned to the LMC contracted to haul that container to/from its destination. To date, no major disruptions to the movement of containers into and out of the Seaport have been reported as a result of TWIC implementation.

C. Oakland Army Base Redevelopment

In 2002, the City of Oakland, acting as the Lead Agency under the California Environmental Quality Act (“CEQA”), certified the Oakland Army Base (“OAB”) Area Redevelopment Plan Final Environmental Impact Report (“EIR”). On September 17, 2002 (Resolution No. 02317), the Board of Port Commissioners, acting as a Responsible Agency under CEQA, approved the Port’s reuse of the OAB as described in the EIR. Both agencies adopted a detailed Mitigation Monitoring and Reporting Program (“MMRP”) to respond to those impacts of the development that were identified by stakeholders at various stages of the project’s development (pre-construction, construction, pre-operations, operations, etc.) Several of the MMRP mitigation items respond to identified impacts from truck activity, including the creation of a truck

⁹ A street-turn refers to a container transfer from one truck to another outside the regulated facility (e.g. marine terminal). The decline in street turns may be due to the decline in container volumes experienced in 2008 (see Section IV(E)). Alternatively, the decline could be attributed to a high percentage of drivers in possession of the TWIC.

management plan and the availability of parking to accommodate increased activity during the construction and operation of anticipated new intermodal facilities at the former OAB. The mitigation items related to trucking are presented in Appendix B. The CTMP is intended to fulfill the Port's share of mitigations, in whole or in part, as outlined in Appendix B. Information about the City's OAB mitigation plans is provided as Appendix C.

D. Maritime Air Quality Improvement Plan

a) Overview

On April 7, 2009, the Board of Port Commissioners approved the Maritime Air Quality Improvement Plan ("MAQIP"). The MAQIP is a master plan that represents the Port's comprehensive policy framework to improve air quality and public health, as related to emissions from Seaport operations. The MAQIP implements the Port's Maritime Air Quality Policy Statement, which sets forth the Port's adopted goal of an 85% reduction from 2005 to 2020 in neighboring community cancer health risks related to exposure to DPM emissions from the Port's maritime operations through all practicable and feasible means.¹⁰

The MAQIP establishes a three-fold emissions reduction approach for the Port and its business, community, public agency and other stakeholders to follow in order to achieve the MAQIP health risk reduction goal: (1) target emissions reductions earlier than required by regulations ("early actions"); (2) support enforcement of regulations; and (3) target emissions reductions above and beyond those required by law.

b) CTMP Relationship to MAQIP

Under the MAQIP, the Port will consider a variety of emissions reductions initiatives and programs over time. The CTMP is one such program. The CTMP addresses two measures identified in the MAQIP: (a) early action retrofit and/or replacement of port drayage trucks and (b) support of CARB's Drayage Truck Regulation. The CTMP, however, reaches beyond air quality by addressing issues such as operations, safety and security.

E. Global Economy and West Coast Ports

The rapid growth in the global economy over the past 10 years has subsided. Growth of U.S. imports and exports slowed significantly in 2007 before reversing direction in 2008, with a 3% decline in volume of ocean containers to and from the U.S. At the Seaport, this decline was initially tempered with strong export activity, but exports fell sharply in early 2009. The Port forecasts a more substantial decline of container volume in 2009 compared to 2008. Exacerbating the impact of these predicted back-to-back annual declines is an excess capacity of containerships. Ocean freight rates have been driven downwards sharply, and with less cargo to fill the increasing number of ships, ocean carriers are expecting significant economic hardships in 2009.

¹⁰ Maritime Air Quality Policy Statement, adopted by the Board of Port Commissioners on March 18, 2008 (Resolution No. 08057).

In addition to the current economic downturn, the U.S. west coast ports experience unique challenges compared to other U.S. ports. In 2008, the ports on the U.S. west coast (Seattle, Tacoma, Oakland, Long Beach, and Los Angeles) experienced greater declines in ocean container volume than other regions in the U.S. The average decline of container volume at U.S. west coast ports was approximately 8% compared to the national decline of 3%. This disparity is mainly attributable to increased competition from ports in Canada and the U.S. east coast for discretionary intermodal cargo destined to inland U.S. cities serviced by railroad. Another contributing factor is the gradual relocation of distribution centers to the U.S. eastern seaboard, drawn by improved logistics infrastructure (ports, rail, and highways) and a more favorable business climate. In years past, significant amounts of containerized cargo were discharged in the U.S. west coast and then transported by rail to the east coast to supply goods to the consumer market of the eastern U.S. The west coast ports may be further challenged following completion of the Panama Canal widening project in 2014.

F. Legal setting

There are two central areas of federal law that affect the Port's ability to manage drayage truck operations: the Shipping Act and the Federal Aviation Administration Authorization Act.

1. The Shipping Act and the Federal Maritime Commission

The Shipping Act of 1984 authorizes the Federal Maritime Commission ("Commission") to regulate ocean commerce ("Act") (46 U.S.C. sec. 41300 et seq.). The Act prohibits marine terminal operators, broadly defined to include the Port, from: (1) failing to establish, observe and enforce regulations relating to receiving, handling, storing or delivering property; (2) unreasonably refusing to deal or negotiate; and (3) giving or imposing undue preference with respect to covered activities.

Sections 6(g) and 6(h) of the Shipping Act authorize the Commission to investigate any agreement within the Commission's jurisdiction that the Commission determines "is likely, by a reduction in competition, to produce an unreasonable reduction in transportation service or an unreasonable increase in transportation cost". Following notice to the affected individuals, the Commission can seek to enjoin the anti-competitive elements of any program or agreement under Section 6(h) of the Shipping Act.

2. The Federal Aviation Administration Authorization Act

The Federal Aviation Administration Authorization Act ("FAAAA") prohibits or preempts any regulation related to the "price, route or service of any motor carrier", including in this case, drayage trucks. There is an exception to this preemption for regulations directly related to safety and security. In order to fall within this exception, the regulation must be "genuinely responsive to safety concerns".

In July 2008, the American Trucking Association ("ATA") filed an action in the U.S. District Court for the Central District of California seeking an preliminary injunction prohibiting the implementation of the concession agreements that are part of the Ports of Los Angeles and Long Beach's clean truck programs, arguing that the concession programs were fully preempted by the FAAAA and did not fall within any exception. The Port of Los Angeles and Long Beach argued

that the concession programs fell within the safety/security exception stating that their respective concession models would assure ongoing safety and security through accountability and control of the concessionaires and their drivers.

On April 20, 2009, the U.S. District Court for the Central District of California issued a preliminary injunction prohibiting implementation of certain elements of the Ports of Los Angeles and Long Beach's concession programs, holding that these elements were likely to be pre-empted. The court found that the following prohibited elements of both programs were likely to be preempted as these elements (1) constituted regulations of price, service or route and (2) did not fall within the safety and security exception:

- Phased implementation of an employee concession model
- Hiring requirements
- Financial disclosure requirements
- Driver health insurance requirements
- Off-port parking requirements
- Enforcement of clean truck program in concession agreement

The Port has evaluated the legal setting discussed above in determining how to serve the needs of its maritime business partners and the community while adopting a comprehensive truck management program.



Container ship at-dock at Port of Oakland container terminal.

V. DEVELOPMENT OF THE CTMP

A. Technical Advisory Committee

In early 2007, the Port of Oakland initiated outreach for the development of a truck management plan. Shortly thereafter, the Port established a steering committee, now known as the CTMP Technical Advisory Committee (“TAC”), to assist Port staff in developing a CTMP. The concept of a “comprehensive” truck plan was born out of discussions with the TAC, and the CTMP was named to reflect the stakeholders’ belief that any successful plan created to improve and address the impacts of drayage at the Seaport should consider a number of inter-related issues, ranging from air quality to security.

The TAC is comprised of diverse Port stakeholders, ranging from marine terminal operators and trucking companies to West Oakland residents. The TAC has met formally on multiple occasions, and provided substantial feedback to Port staff regarding key CTMP issues and proposed ideas and solutions. The TAC membership is presented in Table 1.

Table 1: CTMP Technical Advisory Committee Membership

Name	Organization	Representing *		Alternate
Bill Aboudi	Oakland Maritime Support Services & AB Trucking	Industry	Trucking Licensed Motor Carrier	Jeff Caldwell, Yolo Enterprises
Diane Bailey	Natural Resources Defense Council (NRDC)	Policy Intermediary	Air Quality	
Brian Beveridge	West Oakland Environmental Indicators Project (EIP) & Ad Hoc Truck Route Committee	Impacted Resident	Resident & Environmental Justice	
Doug Bloch	Change to Win and Coalition for Clean & Safe Ports	Policy Intermediary	Labor & Environmental Justice	Zach Goldman, Change to Win & Aditi Vaidya, East Bay Alliance for A Sustainable Economy
George Bolton	West Oakland Community Advisory Group (WOCAG) & Oakland resident	Impacted Resident	Resident & Oakland Army Base Community Impacts	

Name	Organization	Representing*		Alternate
John Brauer	Workforce Development Collaborative	Policy Intermediary	Workforce	
Dick Coyle	California Trucking Association (CTA)	Policy Intermediary	Trucking Industry	Karen Vellutini, Devine Intermodal
Jose Duenas	Bay Area World Trade Center	Industry	Small Business	
Delphine Prévost	Port of Oakland (Port)	Port	Port Maritime Division	
Richard Grow	U.S. Environmental Protection Agency Region 9	Government	U.S. EPA	
Ray Kidd	West Oakland Neighbors (WON)	Impacted Resident	Resident & WON	
Steve Lautze	City of Oakland	Local Government	City of Oakland	Al Auletta, City of Oakland
Steve Lowe	West Oakland Commerce Association (WOCA)	Impacted Resident	Resident & West Oakland Business	
Harry Mamizuka	Bay Area Kenworth	Industry	Truck Dealership	
Daryl Meshack	Oakland City Mayor's Task Force & Oakland Resident	Impacted Resident	Resident	
Mike Miguel	California Air Resources Board (CARB)	Government	State Air Regulations and Funding	Mike Sutherland, CARB
Joe Steinberger	Bay Area Air Quality Management District (BAAQMD)	Government	Air Quality and Funding Administrator	

Name	Organization	Representing*		Alternate
Mike O'Brien	Port of Oakland	Port of Oakland	Port Security	
Mike Porte	TraPac, Inc.	Industry	Terminal Operator	Jim Yanak, TraPac, Inc.
Swati Prakash	Pacific Institute	Policy Intermediary	Environmental Justice	
Scott Smith	American President Lines	Industry	Ocean Carrier	
Dr. Sandra Witt	Alameda County Public Health Department (ACPHD)	Government	Public Health	Matt Beyers, ACPHD
Commissioner Margaret Gordon	Port Commissioner & West Oakland EIP	Ex Officio & Community	NA	
Viveka Chen	Viveka Chen & Associates Facilitator	Facilitator	Facilitator	Anuja Mendiratta Marsha Caldwell

* The first column designates a sub-group within the TAC. There are three sub-groups: industry/business; community-based organizations and policy intermediaries; and government and regulatory. The second column designates each TAC member's occupation, industry sector, or affiliation.

B. Elements and Components

Early in the development of the CTMP, the Port and TAC identified 10 elements for the CTMP. Over time, because of overlap between the 10 elements, it became more useful to refer to four major areas of study within the CTMP: air quality, safety and security, business and operations, and community. Also because of overlap, the CTMP is not organized according to each of the 10 elements. Nevertheless, the 10 elements previously developed are reflected in the CTMP Core and Future Components, as described in Sections VI through VII of this plan. Table 2 illustrates the relationship between the 10 elements, four major areas of study, and CTMP Components.

Table 2: Relationship Between Elements, Areas of Study, and Components of the CTMP

10 Elements		Corresponding Area of Study	Corresponding CTMP Component
1.	Clean Trucks	<ul style="list-style-type: none"> ▪ Air quality ▪ Community ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Clean Trucks
2.	Truck Registry	<ul style="list-style-type: none"> ▪ Safety and security ▪ Community ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Port Registry ▪ Truck Positioning Technology (Future Component)
3.	Safety and Security	<ul style="list-style-type: none"> ▪ Safety and security ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Port Registry ▪ Traffic and Congestion Operations ▪ Truck Positioning Technology (Future Component)
4.	Community Impacts	<ul style="list-style-type: none"> ▪ Air quality ▪ Community ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Port Registry ▪ Clean Trucks ▪ Traffic and Congestion ▪ Stakeholder Involvement and Education ▪ Business and Workforce Assistance
5.	Stakeholder Participation	<ul style="list-style-type: none"> ▪ Community ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Port Registry ▪ Operations ▪ Stakeholder Involvement and Education ▪ Business and Workforce Assistance
6.	Customer Service	<ul style="list-style-type: none"> ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Port Registry ▪ Traffic and Congestion Operations ▪ Truck Positioning Technology (Future Component)
7.	Increased Productivity	<ul style="list-style-type: none"> ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Operations ▪ Truck Positioning Technology (Future Component)
8.	Sustainable Drayage Truck Workforce	<ul style="list-style-type: none"> ▪ Air quality ▪ Community ▪ Business and operations 	<ul style="list-style-type: none"> ▪ Clean Trucks ▪ Stakeholder Involvement and Education ▪ Business and Workforce Assistance
9.	Funding	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Budget section
10.	Political Support	<ul style="list-style-type: none"> ▪ Not applicable 	<ul style="list-style-type: none"> ▪ Clean Trucks ▪ Budget section

C. Economic Impact Analysis

In 2008, the Port commissioned an economic impact analysis to gain a better understanding of the drayage industry serving the Port's maritime facilities, and to inform development of the CTMP. The analysis was performed by Beacon Economics (Beacon, 2009a; Beacon, 2009b).

The methods of analysis included extensive surveys of drivers, licensed motor carriers, and other supply chain participants, discussions with industry participants and Port staff, and a reliance on fundamental economic principles. Through this study, the Port has gained additional insight into driver characteristics, compensation and costs, operational characteristics, as well as costs of external (i.e. non-Port) security and regulatory (e.g. environmental) requirements. Key data findings of the economic impact analysis that informed development of the CTMP are presented as Appendix D.

The Port retained University of California Haas School of Business to perform a peer review of the economic impact analysis. The Port accepted written public comments on the draft economic impact analysis from March 11, 2009 to April 2, 2009. The Port received twenty-one written comment submissions during this period. Both the peer review and the public comments highlighted a number of issues and concerns with the data gathered and the findings reached by Beacon Economics. Port staff considered the peer review and the public comments in developing the CTMP.¹¹

D. Other Considerations

In developing the CTMP, the Port considered and evaluated a number of ideas and options suggested by our stakeholders, ranging from shipping lines and trucking companies, to community and labor organizations. These ideas and options include but are not limited to:

- Current structure of drayage operations or “status quo”
- LMC concession model
- LMC “sponsorship” model¹²
- Employee truck driver requirement
- Implementation of a user fee as a funding mechanism
- Early implementation of State regulatory deadlines
- Incentive programs for companies and/or truck owners to upgrade trucks
- Requirements or incentives for alternative-fuel trucks
- Port truck buy-back and scrapping program
- Local hire and local business utilization requirements

¹¹ The draft and final economic impact analysis reports, peer review, and public comments are available on the Port's website at http://www.portofoakland.com/enviro/m/prog_07_info.asp.

¹² An LMC sponsorship model was evaluated by Beacon Economics as part of the CTMP Economic Impact Analysis (see Beacon, 2009b).

The Port evaluated the suggestions of its stakeholders for consistency with the Port’s resources, jurisdiction, and financial health, as well as the broader economic and regulatory context in which the Port operates. In particular, the Port evaluated:

- Port resources, needs, constraints, and jurisdiction as a landlord port;
- Requirements and impacts of CARB regulation on the drayage trucking industry and Port customers;
- Port financial health and role in the local and regional economies;
- Port role in ensuring that any negative impacts of Seaport operations on neighboring communities are minimized or avoided; and
- Port legal obligations and constraints.

Based on our analysis of these factors, the Port developed a CTMP that sets forth plans and actions for comprehensively addressing air quality, safety and security, business and operations, and community issues associated with drayage, while reflecting the 10 elements originally developed with the TAC. The CTMP is described in detail in Sections VI through VII.



Drayage trucks operating at the Seaport.

VI. CTMP COMPONENTS

The CTMP is organized in two categories: Core Components and Future Component.

Core Components are items that Port staff believes are necessary in the next one to two years to address fundamental issues within each of the four key study areas (air quality, safety and security, business and operations, and community). The Future Component is a potential item that builds upon the Core Components, requires further study, and/or necessitates major funding that is currently not available. The Port will amend its Tariff to reflect CTMP Core and Future Components, as appropriate. Table 3 presents the Core and Future Components and their relationship to the Tariff. The Tariff sets forth the Port's rules and regulations for doing business in the Seaport area and covers such things as rates and charges, procedures, permits, and permitted operations. Therefore, only certain elements of the CTMP will be incorporated into the Tariff, as outlined in Table 3.

Table 3: Core and Future Components of the CTMP

Core Components	Tariff Amendment
Port Registry	
Secure Truck Enrollment Program ("STEP") Agreement	√
Registry database	√
Clean Trucks	
Compliance deadlines	√
Truck retrofits & replacements	
Traffic and Congestion	
Congestion studies	
Seaport roadway improvements	
Truck idling	
Truck parking and routes	
Operations	
Marine terminal gate operations	
Trucker facilities	
Communication with tenants and registered LMCs	
Treatment of workers	
Stakeholder Involvement and Education	
Outreach materials	
Multi-stakeholder meetings	
Trucker information center	
Business and Workforce Assistance	
Truck purchase and financing	
Business and employment resources	
Future Component	
Truck Positioning Technology	√

A. Core Components

The Core Components are (1) Port Registry, (2) Clean Trucks, (3) Traffic and Congestion, (4) Operations, (5) Stakeholder Involvement and Education, and (6) Business and Workforce Assistance.

1. Port Registry

- √ Business and Operations
- √ Air Quality
- √ Safety and Security
- √ Community

As part of the CTMP, the Port will increase its maritime safety and security domain awareness, outreach capabilities, and general knowledge of the trucking entities and trucking operations conducted on Seaport property. To achieve these goals, the Port will implement a truck registry database and Secure Truck Enrollment Program Agreement (“STEP Agreement”), together known as the “Port Registry”.

The Port Registry would be distinct from and in addition to the registry that CARB has established to administer and enforce its Drayage Truck Regulation. This is because while CARB is only concerned with truck characteristics, Port security initiatives and business purposes require additional information, for example motor carrier and TWIC identification. This additional information is largely un-related to air quality regulations and therefore is not and will not be part of CARB’s registry.

The Port Registry in no way supersedes or substitutes other local, state, or federal regulatory requirements (for example, obligations under the CARB Drayage Truck Regulation). Requirements set forth by CARB in its regulations apply independently of the Port Registry.

A summary of key deadlines and requirements for the CTMP Port Registry and Clean Trucks Components is provided as Appendix E.

a) The Secure Truck Enrollment Program Agreement (“STEP”) and the Registry Database

Each LMC¹³ that dispatches drayage trucks¹⁴ to conduct business at Seaport facilities must submit a Secure Truck Enrollment Program Agreement (“STEP Agreement”) with the Port annually. Seaport facilities are defined as marine terminals, rail yard,¹⁵ and other facilities where drayage trucks operate (“non-marine terminals”¹⁶) in the Seaport, not including truck parking and maintenance facilities. Only LMCs and trucks associated with those LMCs that have submitted a STEP Agreement will be able to serve the Seaport facilities. Doing business at the Seaport will require two principal actions by the LMCs:

- Signing a STEP Agreement; and
- Entering information into a database pertaining to the LMC, to each truck, and to each truck driver that is employed or contracted by the LMC.

The terms and conditions of the STEP Agreement will apply to the LMC itself, as well as the trucks and the truck drivers who are employed or contracted by the LMC, as identified by the LMC. The terms and conditions of the STEP Agreement will generally be as follows:

- The Port Tariff will apply, as applicable, except where superseded or modified by the terms and conditions of the agreement.
- Compliance with Homeland Security TWIC requirements.
- Compliance with all Port safety and security requirements.
- Compliance with all applicable local, state and federal laws and regulations.
- Only trucks compliant with all applicable laws and regulations may be dispatched.
- Possession of all legally required insurance by LMCs and drivers.
- Agreement to install positioning technology on each truck owned or contracted by the LMC, and to pay for the truck positioning unit (including but not limited to technologies such as radio frequency identification – “RFID”), if so directed by the Port or any other local, state, or federal agency.

¹³ For the purpose of the Port Registry, an LMC is defined here as a trucking company that hires or contracts with drivers and that dispatches those drivers to transport waterborne cargo to or from Seaport facilities. Such companies are typically distinguished by possession of a Uniform Intermodal Interchange Agreement (UIIA) with the owner of container/chassis equipment.

¹⁴ For purposes of the CTMP, a drayage truck is defined as any heavy-duty truck (manufacturer gross vehicle weight rating of 33,000 pounds or more) used to transport waterborne cargo, empty containers, empty chassis, or other equipment used to transport waterborne cargo, to or from Seaport facilities. This definition excludes yard trucks/hostlers and military vehicles.

¹⁵ This does not include Railport, which is located on private property.

¹⁶ The reference is to facilities where cargo is handled for transport by drayage trucks. Facilities such as truck parking and maintenance facilities would not fall in this category. Facilities where activities such as cargo transloading take place would fall in this category.

- If implemented by the Port, payment of annual fee(s)¹⁷ to cover all or a portion of the administrative costs incurred by the Port to administer the Port Registry.
- Compliance with Port proof of STEP agreement registration requirements for all trucks driving for a Port-registered LMC.
- Enter LMC, truck, and truck driver information in the Port Registry database, and update information in the Registry no less than every 6 months, or as changes occur.
- Indemnity and “hold harmless” provisions for accidents which occur on Port property.
- Acknowledgment that the Port may levy fines or suspend the registration for repeated violations of the safety and security requirements¹⁸ of the agreement. Suspended registrations may be reinstated upon implementation of actions to correct the repeated violations.

b) Implementation Process

The Port Registry will be implemented in phases, as discussed below and summarized in Table 4. A phased approach will facilitate transition to the Port Registry system by providing sufficient time for informational outreach, addressing registry problems or questions, ensuring smooth operation during a time of transition, and accommodating out-of-state or infrequent drivers who may not be aware of the Port Registry requirement.

Requirements set forth by CARB in its regulations apply independent of the Port Registry as further discussed in Section IV(B)(1). More specifically, the CARB requirements to register drayage trucks in CARB’s statewide DTR and to meet certain emission standards on the timelines set forth by CARB are fully applicable. LMCs, drayage truck owners, drayage truck drivers, and other entities must meet both the Port Registry and CARB requirements, as applicable.

Phase 1: October 1, 2009 to January 1, 2010

During this time period, all LMCs serving the Seaport facilities must sign a STEP Agreement with the Port. The Port will issue a STEP identification number to each LMC that has filed a STEP Agreement with the Port; this number will give the LMC access to the Port Registry database. Any LMC new to the drayage industry after January 1, 2010 must also sign a STEP Agreement before gaining access to the Port Registry.

¹⁷ STEP Registration fees will not be charged in the first year of the Port Registry. Fees may be charged in subsequent years, once the Port further evaluates fee implementation and after detailed program administration costs are available. Any consideration of fees will also take into account market conditions.

¹⁸ The safety and security related elements of the STEP Agreement are as follows: (1) compliance with Homeland Security TWIC requirements, (2) compliance with all Port safety and security requirements, (3) agreement to install positioning technology if so directed by the Port, (4) compliance with proof of STEP registration requirements, and (5) entry and update of information in the Port Registry database.

Phase 2: January 1, 2010 to April 1, 2010

By this date, all LMCs serving the Seaport facilities must have entered all the required information into the Port Registry database. In addition to providing a web-based portal for database entry, the Port will also establish a service center in January 2010 in the Seaport area to provide in-person database/registration services and to help address registration questions or concerns. The service center will be located within the Seaport, likely on former OAB property. Based on information entered into the database by the LMCs, the Port will issue a STEP registration certificate and STEP registration stickers for each STEP-registered truck. The sticker should be displayed on each STEP-registered truck in order to demonstrate compliance with Port Registry requirements while operating in the Seaport.

Truck drivers who may choose to not display the Port-provided registration sticker may demonstrate compliance with the Port Registry in the following alternative manners:

1. Providing a legible copy of the STEP registration certificate for the particular truck seeking entry; or
2. Providing other evidence acceptable to the Seaport facility demonstrating registration.

The STEP registration sticker does not replace or supersede proof of compliance for other matters, such as the CARB Drayage Truck Regulation.

Phase 3: June 1, 2010

All LMCs (and trucks serving those LMCs) must show proof of STEP registration in order to access Seaport facilities. A truck without proof of compliance with the Port Registry must be handled in the following ways:

1. Deny entry to the truck; or
2. Grant entry to the truck, record pertinent information about the truck and truck driver, and report that information to the Port on a quarterly basis.¹⁹

If turned away, the truck driver should be directed to the Port's service center, where Port or Port-contracted staff will assist the driver as appropriate and feasible. Depending on the evaluation and the details of each case, the Port may issue a "day pass" (date and time stamped) to enable a truck driver to finish his/her transaction. This process will be handled at the service center. Because day passes are intended for infrequent callers, the number of day passes issued for any one driver and truck will be limited to 10 per year.

Seaport facility operators²⁰ who are able to determine that a truck is Port Registry-compliant, but who cannot independently verify that the truck is compliant with CARB regulations must

¹⁹ The operators will be required to collect the following information: business name of dispatching motor carrier; contact person's name; bill of lading or tracking number; truck entry date and time; operator's name; operator's license number; truck's license plate number and state of issuance; truck's vehicle identification number (VIN). All information collected shall be kept for a period of not less than three years.

follow the procedures set forth in the CARB regulations. If the marine terminal operator chooses to turn away the truck, as allowed by CARB, the driver may be directed to the Port service center; however, it is unlikely the Port will be able to resolve CARB compliance issues as the Port has no jurisdiction over implementation of the CARB regulation.

Phase 4: January 1, 2011

A truck without proof of compliance with the Port Registry must be denied entry to the marine terminals. At rail yard and non-marine terminals, the truck may be denied entry, or the truck may be granted entry if certain information is recorded and reported to the Port, as outlined above. If and when turned away, the truck driver should be directed to the Port's service center.

Post-January 2011

The Port intends to maintain a Registry service center for at least three years. The day pass system will be in effect, as discussed above. After these three years, operation of the service center will be re-evaluated based on information and experience gained during the first three years of the Port Registry system.

The Port will evaluate the procedures set forth here over the next two to three years, and may modify procedures as necessary.

c) Handling of Non-STEP-Registered Trucks

As outlined above, non-STEP registered trucks must be handled as follows:

- Effective June 1, 2010, Seaport facility operators may handle a non-STEP-registered truck by denying entry to the truck or by granting entry while recording pertinent information. This information must be reported to the Port on a quarterly basis. If turned away, the truck driver should be directed to the Port's service center, where Port or Port-contracted staff will assist the driver as appropriate and feasible. Depending on the evaluation and the details of each case, the Port may issue a "day pass" (date and time stamped) to enable a truck driver to finish his/her transaction.
- Effective January 1, 2011, the marine terminal operators must deny entry to a non-STEP registered truck. The truck driver should be directed to the Port's service center, where Port staff will assist the driver as appropriate and feasible. At rail yard and non-marine terminals, the truck may be denied entry, or the truck may be granted entry if certain information is recorded and reported to the Port, as outlined above.

²⁰ Seaport facility operators are entities who operate Seaport facilities, as defined previously in Section VI(A)(1)(a).

Table 4: Overview of Port Registry Implementation and Requirements

Milestone	Date	Requirement
Phase 1	October 1, 2009 to January 1, 2010	<ul style="list-style-type: none"> ▪ During this time period, all LMCs serving the Port are required to register with Port by signing a STEP Agreement. ▪ On January 1, 2010, all LMCs serving the Seaport must have STEP Agreements in place.
Phase 2	January 1, 2010 to April 1, 2010	<ul style="list-style-type: none"> ▪ All Port-registered LMCs must enter the required LMC, truck, and truck driver information in the Port Registry database. ▪ The Port will issue stickers to STEP-registered LMCs for the trucks identified in the Port Registry database.
Phase 3	June 1, 2010	<ul style="list-style-type: none"> ▪ All trucks driving for STEP registered LMCs must show proof of STEP registration at Seaport facilities. ▪ Seaport facility operators must handle non-registered trucks in one of two ways: <ul style="list-style-type: none"> ○ Deny entry ○ Grant entry by recording certain required information. ▪ Effective this date, Seaport facility operators must report the information collected for a non-STEP-registered truck that was granted entry to the Port quarterly. ▪ If a Seaport facility operator grants entry to a non-STEP-registered truck, the truck driver should be directed to the Port's service center.
Phase 4	January 1, 2011	<ul style="list-style-type: none"> ▪ Marine terminal operators must deny entry to non-STEP-registered trucks. ▪ Marine terminal operators should direct truck drivers to the Port's service center. ▪ Other Seaport facility operators (rail yard and non-marine terminals) may deny or grant entry. If entry is granted, certain information must be recorded and reported to the Port quarterly.

d) Exemptions

Exemptions from the Port Registry requirement may be granted by marine terminal operators only in cases of documented emergencies. Such exemptions would in no way override non-Port requirements and regulations, such as CARB requirements. Exemptions must be documented

and reported to the Port on a quarterly basis, along with information about non-Port registered trucks as described above.²¹

e) Reporting

As included in the terms and conditions of the STEP Agreement, LMCs are required to update their information in the Port Registry database no less than every six months, or as changes occur, by accessing the Port Registry database directly via the Registry web portal. As outlined above, Seaport facility operators are required to report quarterly to the Port any non-STEP-registered trucks granted entry, as well as any emergency exemptions granted.

2. Clean Trucks

- √ Business and Operations
- √ Air Quality
- √ Safety and Security
- √ Community

The Clean Trucks Component of the CTMP covers topics of principal importance to addressing the relationship between the CTMP and CARB regulations, as well as the Port's direct role in helping truck owners comply with these regulations to ensure that air emissions are reduced as quickly as possible. A summary of key deadlines and requirements for the CTMP Port Registry and Clean Trucks Components is provided as Appendix E.

a) Compliance Deadlines for Emission Standards

As discussed in Section IV(B)(1), the CARB Drayage Truck Regulation and Statewide Truck and Bus Rule impose five key deadlines in the near future. Of these deadlines, 2010 is expected to be the most challenging, as it represents a significant departure from status quo and affects up to approximately 94% of drayage trucks serving the Seaport today.²²

²¹ Documentation for emergency cases must include all the information required for truck turn-away, as discussed previously. In addition, the marine terminal operators must submit a statement signed by the gate agent and terminal manager on duty describing in detail the basis for allowing the truck entry, including the nature of the emergency, individuals or companies involved in the decision-making and any exigent circumstances. Determination of an emergency case lies with the terminal operator. The Port will evaluate the number and type of emergency cases reported by the terminal operators and may adjust the "emergency" standards as appropriate.

²² This could be reduced to 77%, as discussed in Note 7.

The Port will remain consistent with the deadlines set forth in the CARB Drayage Truck and Statewide Truck and Bus Regulations, as summarized in Table 5. Therefore, the following deadlines apply at the Seaport:²³

- 2009: Regulated entities are to follow the CARB regulation for registering trucks in the CARB DTR.
- 2010: Regulated entities are to follow the CARB regulation to meet specified emission standards. While the Port will not mandate an earlier compliance deadline, we note that some trucks will be retrofitted in advance of the CARB deadline through grants provided by the Port and BAAQMD (see Section VI(2)(c)).
- 2012: Regulated entities are to follow the CARB regulation to meet specified emission standards.
- 2013: Regulated entities are to follow the CARB regulation to meet specified emission standards.
- 2014: Regulated entities are to follow the CARB regulation to meet specified emission standards.



Drayage trucks on Port of Oakland container terminal.

²³ Certain drayage trucks may be exempt from CARB requirements. To determine applicability and for more information on related requirements, the reader should consult the CARB regulations. Additionally, should CARB put into effect new or modified deadlines or requirements under the Drayage Truck Regulation or Statewide Truck and Bus Rule, those new or modified deadlines and requirements would supersede those set forth here as applicable at the Seaport.

Table 5: Clean Trucks Compliance Deadlines Applicable at the Port of Oakland²⁴

Truck Engine Model Year	CARB Emission Requirement Schedule	Port of Oakland Emission Requirement Schedule
1993 and older	Prohibited starting January 1, 2010	Prohibited ²⁵ starting January 1, 2010
1994	Starting January 1, 2010, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards	Starting January 1, 2010, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards
1995		
1996		
1997		
1998		
1999		
2000		
2001		
2002		
2003		
2004	Starting January 1, 2012, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards	Starting January 1, 2012, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards
2005	Starting January 1, 2013, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards	Starting January 1, 2013, Reduce PM emissions by 85% (e.g. install a CARB-verified level 3 Diesel Particulate Filter) <u>And</u> Starting January 1, 2014, meet 2007 engine emission standards
2006		
2007 and newer²⁶	Fully Compliant	Fully Compliant

²⁴ Certain drayage trucks may be exempt from CARB requirements. To determine applicability and for more information on related requirements, the reader should consult the CARB regulations. Additionally, should CARB put into effect new or modified deadlines or requirements under the Drayage Truck Regulation or Statewide Truck and Bus Rule, those new or modified deadlines and requirements would supersede those set forth here as applicable at the Seaport.

²⁵ Per CARB Regulation, “prohibited” means not allowed to operate, unless terminal or rail yard operator records information as required by CARB. See Section IV(B)(1) of the CTMP, as well as CARB Drayage Truck Regulation.

²⁶ Additional requirements may apply in the 2020 time-frame for all drayage trucks pursuant to both the CARB Drayage Truck Regulation and the Statewide Truck and Bus Rule.

b) Handling of Non-Compliant Trucks

In keeping with the Port's approach of consistency with CARB regulatory deadlines, as detailed above, the Port requires that regulated entities fulfill all their obligations pursuant to the CARB Drayage Truck Regulation and Statewide Truck and Bus Regulation. The Port will work with its tenants to help ensure that all necessary reporting occurs, and to fulfill its reporting obligations to CARB. Table 6 presents a summary of reporting obligations under the CARB Drayage Truck Regulation.

Table 6: CARB Drayage Truck Regulation Stakeholder Responsibilities

Source: CARB Workshop, April 2009

Drayage Truck Regulation	
Basic Stakeholder Responsibilities	
Note: The following are state minimums. It is possible that local entities (such as air districts or ports) have more restrictive local requirements for drayage trucks. In those cases, the more restrictive requirements take precedence as long as the state standards are met. Please check with your local air districts, ports, and rail yards to see if more stringent requirements apply.	
<u>Truck Drivers:</u>	
✓ Provide the motor carrier contact information to enforcement officer or port and rail yard authority when requested	
<u>Truck Owners:</u>	
✓ Ensure truck meets emission standards by deadline dates	
✓ Register truck in the Drayage Truck Registry (DTR)	
✓ Ensure the truck driver provides the motor carrier contact information to enforcement personnel when requested	
✓ Ensure all emission control technologies on the truck are installed correctly and working properly	
<u>Motor Carriers:</u>	
✓ Provide a copy of the regulation or ARB summarized version to each truck owner	
✓ Ensure trucks they dispatch are compliant with emission standards and DTR requirements	
✓ Ensure truck drivers relay motor carrier contact information to enforcement personnel if requested	
✓ Keep truck dispatch records for 5 years	
<u>Terminals and Rail Yards:</u>	
✓ Collect information as specified in the regulation from all non-compliant trucks entering their facilities	
✓ Relay the non-compliant truck information to their respective port or rail authorities according to a set quarterly schedule as specified in the regulation	
<u>Port and Rail Authorities:</u>	
✓ Collect non-compliant truck information from terminals and rail yards and report it to the ARB according to a set quarterly schedule as specified in the regulation	

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c) Truck Retrofits and Replacements

The economic impact analysis performed by Beacon Economics²⁷ indicates that up to approximately 94%²⁸ of the trucks currently serving the Port may need to be retrofitted or replaced to comply with the 2010 CARB deadline. However, Beacon Economics also estimates that the Port may be over-served by as much as 25% (about 500 trucks), suggesting that some shrinkage in the drayage truck supply may be endured without disruption to Seaport operations, thereby reducing the number of potential retrofits and replacements by up to 500 trucks.

The costs of retrofits and replacements required to achieve the CARB emission standards are expected to present a challenge to the drayage industry. Based on the latest available information, retrofit devices cost about \$18,000, while a new truck in California can cost in the range of \$130,000. New Liquefied Natural Gas (“LNG”) drayage trucks are even more expensive, estimated between \$170,000 and \$220,000. The total cost to industry for the 2010 and 2014 CARB deadlines is estimated to be approximately \$200 million. For the 2010 CARB deadline alone, costs are estimated to be approximately \$70 million.²⁹

The Port acknowledges this challenge, but also recognizes and understands from its business partners that market forces will play a significant role in transitioning the drayage market through the 2010 CARB deadline. Nonetheless, the Port is doing its part to assist with the industry’s transition and to help ensure a supply of drayage trucks on January 1, 2010. The Port is partnering with the BAAQMD, the San Joaquin Valley Air Pollution Control District (“SJVAPCD”), and CARB to provide and leverage grant funding to retrofit and/or replace trucks in support the CARB Drayage Truck Regulation compliance deadlines. The Port is also working with its business partners throughout the maritime supply chain to assess the readiness of the drayage industry for the 2010 CARB deadline. Depending on the exact timing and demand, we currently estimate that grant funding will facilitate 600 to 1,100 truck retrofits by January 1, 2010, as shown in Table 7. Combined with privately-funded industry actions, we currently estimate that 1,100 to 1,600 trucks (about 80% of the core drayage fleet), and likely more, will be retrofitted or replaced by January 1, 2010. Table 8 provides an overview of compliance for the drayage truck fleet.

²⁷ Beacon, 2009b.

²⁸ This number may be reduced to 77%, as discussed in Note 7.

²⁹ The \$200 million estimate is derived from analyses performed by CARB, as well as work performed by Beacon Economics (see Beacon, 2009b). The estimate of \$70 million is derived from work performed by Beacon Economics, under the assumption that the 2010 CARB deadline is met primarily through truck retrofits and that truck replacements are largely deferred to the 2014 CARB deadline. If this is not the case, and many more replacements take place prior to 2010 than required, the \$70 million estimate may increase to \$170 million. Information available from regulatory agencies, trucking companies, and truckers suggests that retrofits will be a key method of achieving compliance with the 2010 CARB deadline and that, therefore, the \$70 million estimate may be most realistic.

(1) Port-BAAQMD Projects

In partnership with the BAAQMD, the Port is providing funding and supporting applications for grant funding to retrofit and/or replace trucks in support the CARB compliance deadlines, as outlined below.

2010 CARB Deadline

- The Port is providing \$2 million in grants, via the BAAQMD, to help fund retrofit devices for trucks of engine model years 1994-2003 category. This funding was authorized by the Board of Port Commissioners on April 7, 2009 (Resolution 09039), and is combined with \$5 million of Transportation Fund for Clean Air (“TFCA”) funds from the BAAQMD, for a total of \$7 million. Many these retrofits are expected to take place in advance of the CARB 2010 deadline, consistent with the Port’s “early action” strategy identified in the MAQIP.
- Also on April 7, 2009 (Resolution 09039), the Port authorized an additional \$3 million for truck and/or other air quality projects. This funding may be used to supplement federal stimulus grant funds, which the Port and BAAQMD are currently pursuing. By January 1, 2010, any unspent funds within the \$3 million Port authorization would be re-directed to other air quality projects with an emphasis on trucks, as feasible.
- Related to stimulus funding, the BAAQMD has submitted an application requesting funding from the Diesel Emission Reduction Act (“DERA”), which is administered by the Environmental Protection Agency (“EPA”). We estimate that between \$4 million and \$10 million of funding may be used for truck retrofits and replacements, not limited to but focused on drayage trucks. The Port, City of Oakland, local elected officials, and community groups have all provided support letters encouraging the EPA to fund the proposed project. If the project proposal is accepted, the funds would provide assistance for additional drayage truck retrofits and replacements.
- CARB previously committed an additional \$5 million of Proposition 1B funds to supplement the Port and BAAQMD grants; however, this funding is on-hold until further notice due to the State’s budget challenges. However, if this funding were to become available in Summer 2009, additional trucks could be retrofitted.

2014 CARB Deadline

- If the \$3 million committed by the Port identified above cannot be spent on retrofits in support of the CARB 2010 compliance deadline, it may be re-directed to other projects including but not limited to truck retrofits and/or replacements necessary for compliance with the 2014 CARB deadline. Additional funding may become available between 2010 and 2014, enabling the Port to also assist its business partners with truck replacements or retrofits for trucks with engine model years 2004-2006, subject to the Statewide Truck and Bus Regulation. However, the amount and timing of any such funding is unknown at this time.
- The Port will continue to research and evaluate future sources of funding such as grants.

(2) Port-SJVAPCD Projects

The Port is also in discussions with the SJVAPCD to address compliance of drayage trucks that serve the Seaport and California Central Valley region. The SJVAPCD is the regulatory agency that manages regional efforts to meet federal and state air quality standards in California's Central Valley. Agricultural equipment and heavy-duty diesel vehicles comprise the largest emission sources within its jurisdictional boundaries. A significant number of heavy-duty diesel trucks currently serve the Port's export market for agricultural goods and, as such, travel between the Port and Central Valley.

In concept, SJVAPCD TFCA funds would be used to fund retrofits on trucks that serve the Port's export market. A partnership with the SJVAPCD would supplement and strengthen the existing truck retrofit efforts of the Port-BAAQMD partnership, and improve the health and quality of life of impacted communities through effective and cooperative inter-agency air quality programs. In the immediate future, the Port will seek a letter of intent from the SJVAPCD to support the current Port-BAAQMD retrofit project.



CARB-verified level 3 diesel particulate filter.

Table 7 presents a summary of truck retrofit and replacement efforts, given the funding discussed above.

Table 7: Summary of Drayage Truck Retrofit Efforts Using Agency Grants

Funding Partners	Number of Retrofits (Cumulative)³⁰
BAAQMD and Port	600
BAAQMD, Port, and DERA	750
BAAQMD, Port, DERA, SJVAPCD	900
BAAQMD, Port, DERA, SJVAPCD, and CARB	1,100

(3) Other Efforts

The Port is working with its business partners throughout the maritime supply chain to assess the readiness of the drayage industry for the 2010 CARB deadline. Port staff is reaching out to tenants and customers to identify the actions that these entities are taking and will take to upgrade their fleets consistent with regulatory requirements. To date, approximately 500 privately-funded truck retrofits and/or replacements have been identified. Table 8 illustrates how agency grants and private investment are contributing to the readiness of the core fleet of trucks serving the Port.

Table 8: Drayage Truck Fleet Compliance for 2010 CARB Regulatory Deadline

	Number of Trucks
Core fleet of trucks serving Seaport	2,000
Potential excess trucks currently serving Seaport ³¹	(500)
Number of trucks in core fleet requiring retrofit or replacement	1,500
Retrofits and replacements funded with agency grants	600 – 1,100
Retrofits and replacements funded by industry ³²	400 - 900
Identified truck retrofits and replacements ³³	500
As-of-yet unidentified truck retrofits and replacements ³⁴	0 - 400

³⁰ Cumulative truck retrofit calculations assume that the identified funds are made available at or about the same time. Currently, the only confirmed sources of funding are BAAQMD and Port. The DERA, SJVAPCD, and CARB funding is not confirmed and subject to change. If funding is not available assumed, the number of retrofits may decrease. Additionally, the ultimate number of retrofits depends on market demand, the amount of time remaining prior to the 2010 CARB deadline, and any restrictions of use of the funding that may not yet be known. Some of the funds may be used toward replacements; however, this cannot be quantified at this time.

³¹ See Beacon, 2009b.

³² Range defined by (a) 1,500 trucks minus 600 grant-funded retrofits and (b) 1,500 minus 1,100 grant-funded retrofits.

³³ As of May 21, 2009, the Port has obtained information about truck upgrades from 22 trucking companies that serve the Seaport. The Port's outreach is on-going; the 500 trucks identified here are considered a minimum.

³⁴ The range is defined by (1) 1,500 required trucks minus 600 grant-funded retrofits minus 500 privately-funded retrofits/replacements, which equals 400; and (2) 1,500 required trucks minus 1,100 grant-funded retrofits minus 500 privately-funded retrofits/replacements, which is equal to less than zero.

3. Traffic and Congestion

- √ Business and Operations
- √ Air Quality
- √ Safety and Security
- √ Community

Traffic and congestion issues are largely within the jurisdiction of the City of Oakland and enforced by the Oakland Police Department (OPD). Operational issues are largely within the jurisdiction and control of the marine terminal operators and LMCs. Nonetheless, the Port recognizes its role in making sure drayage truck impacts are minimized or avoided to the maximum extent feasible.

Large vehicles, such as drayage trucks, pose significant safety concerns because of their size and weight. To address these size and weight safety considerations, the City of Oakland has adopted several traffic control ordinances that address the safety concerns caused by these vehicles. Similarly, the Port is evaluating traffic flow patterns at the Port to determine if additional safety measures for large and heavy vehicles are necessary.

a) Congestion Studies

The Port routinely works with the Alameda Congestion Management Agency (ACCMA) on studies related to truck parking and traffic flow. Recently, the Port participated in a study to investigate the feasibility of truck parking facilities along major highway corridors I-80, I-580 and I-880 in Alameda County, as a means of reducing congestion. Currently, the Port is assisting ACCMA with a truck demand model study.

The Port is also working with Caltrans, City of Oakland, Bay Area Toll Authority and other agencies, as part of the Gateway Park Working Group for the proposed new Gateway Park near the new Bay Bridge toll plaza, and the City's proposed development of the former Oakland Army Base. Through this Group, the Port will help ensure that issues of land use compatibility, as well as pedestrian, bicycle, and vehicular traffic compatibility, adjacent to the Seaport are appropriately addressed.

b) Seaport Roadway Improvements

The Port recognizes that certain physical improvements to roadways within the Seaport are necessary to improve traffic flow to and from Seaport facilities and to provide additional queuing space to marine terminals. While queues should be minimized, they cannot be avoided. By providing additional queuing space, idling associated with bottlenecked through-traffic will be reduced. In general, the Port envisions the following types of improvements:

- Re-striping
- Removal of raised curb medians
- Conversion of painted medians into traffic lanes
- Relocation of light poles
- Improving the use of roadway shoulders for queuing lanes by taking steps to prevent illegal container drops
- Removal of signs and stop lights as appropriate

In the short to medium term, the Port is focusing its planning and design efforts on improvements that would take place on a segment of roadway that runs from the intersection of 7th Street and Maritime Street to the Ben E. Nutter Terminal entrance. The Port will continue to evaluate other improvements over time, as needed.

c) Truck Idling

In support of the existing State regulations regarding idling, the Port installed and maintains several solar-powered digital sign boards throughout the roadways in the Seaport, notifying drivers of idling restrictions and penalties. Permanent signs or placards are currently being installed. Such highly-visible notices are an on-going part of the Port's outreach to Seaport users and of our general support of State regulations.

Additionally, the Port and its marine terminal and rail yard operators meet routinely to discuss a number of operational issues. Reduction of idling inside the terminals will continue to be a topic of discussion; however, state regulations do allow idling under certain operational circumstances, making in-terminal idling more challenging to address.



Drayage trucks outside Port of Oakland container terminal.

d) Truck Parking and Routes

Illegal truck parking in the neighborhoods adjacent to the Seaport is an on-going concern. Since 2000, the Port has funded two OPD officers of the Commercial Vehicle Unit for general maritime and truck enforcement. These officers address truck safety violations, route regulations and illegal parking. While enforcement by OPD has been generally effective, improvement is needed.

In advance of any requirements to do so under the OAB EIR mitigations, the Port has offered truck parking on the former OAB property, as a means of mitigating the adverse impact of maritime related truck activity on the communities adjacent to the Seaport. Currently, the Port provides approximately 20 acres of truck parking on a site operated by Ampco System Parking at the former OAB. As indicated in the economic impact analysis prepared by Beacon Economics, additional parking facilities are provided on nearby City-owned property.

As part of environmental mitigation for redevelopment of the former OAB, the Port and City are each required to provide 15 acres of truck support facilities, including but not limited to truck parking. The provision of 30 acres of facilities³⁵ is expected to partially mitigate the problem, but additional action is needed, as further discussed below.

In 2006, the City Public Works Agency completed a study on truck volumes and movement in West Oakland. The City, working with the Port and the community, established truck routes to control the flow of commercial traffic into residential areas. Maps depicting the proposed truck routes are made available to the public on the City Public Works Agency website, www.oaklandnet.com.

The Port fully supports the strict enforcement of parking and route restrictions, especially in neighborhood streets. While the Port cannot currently directly enforce parking violations or routes, the Port will take the following actions to address illegal truck parking, as summarized in Table 9.

³⁵ The Port's current provision of about 20 acres of parking is part of the joint (Port-City) 30 acres required under the OAB mitigations. The final location of the Port's share of the 30 acres may be adjusted from its current location.

Table 9: Truck Parking and Route Improvement and Enforcement Efforts

Action	Target Completion Date
<ul style="list-style-type: none"> ▪ Support and work with City officials to investigate penalty increases for parking violations to no less than \$250 per violation on both Port maritime and City properties, with specific focus on West Oakland neighborhoods. 	January 2011
<ul style="list-style-type: none"> ▪ Work with the City to investigate opportunities for citation payments collected by the City to be invested in maritime truck-related facilities in ways that assist in keeping trucks out of Port-adjacent neighborhoods to the maximum extent feasible. 	January 2011
<ul style="list-style-type: none"> ▪ Provide additional funding to support and work with City officials and neighborhood residents to map and implement necessary signage updates, and to determine “hot spots” where enforcement could be focused cost-effectively. 	January 2011
<ul style="list-style-type: none"> ▪ Advocate to City officials for City Parking Enforcement officers to prioritize heavy duty trucks, and work with City officials to explore alternative parking enforcement mechanisms. 	On-going
<ul style="list-style-type: none"> ▪ Install Tow-Away signs to all existing “No Parking” signs in the Port area. 	January 2010
<ul style="list-style-type: none"> ▪ Provide additional funding and coordinate with City and assigned police officers and gain greater insight into enforcement activities through quarterly meetings with OPD. We understand the OPD has established a new group of Problem Solving Officers (“PSOs”) who work closely with patrol and traffic units. The Port and City will work closely with this special group within OPD. 	On-going
<ul style="list-style-type: none"> ▪ Utilize the Port Registry, as feasible, to support enforcement. 	April 2010 & on-going
<ul style="list-style-type: none"> ▪ Provide truck route and parking information in a clearly defined and dedicated location on the Port’s website. 	On-going
<ul style="list-style-type: none"> ▪ Provide education and outreach. 	On-going

Information about the City’s efforts in the area of truck management, including truck parking, routes, and enforcement is provided as Appendix C. Additionally, as discussed in Section VII, a potential future truck positioning system could further assist with enforcement.

4. Operations

- √ Business and Operations
- √ Air Quality
- Safety and Security
- Community

Within this Component of the CTMP, the Port seeks to address operational issues related to the access and use of the Seaport facilities.

a) Marine Terminal Gate Operations

The Port understands that some truckers have expressed concern about the long wait times to enter marine terminals. The marine terminal operators staff their gates to handle anticipated cargo receipts and deliveries for any given day. Wait times at the terminal gates vary with terminal, cargo volume, gate hours, labor staffing, and terminal operations on any given day. There are often queues in the early morning and immediately after the lunch hour, but those are typically resolved quickly once the gates open. With the recent downturn in the economy, terminal gates have become more efficient as a result of lower cargo throughput. Irrespective of cargo volume, all terminals have an appointment system for the truckers, but those appointment systems are generally underutilized. Cargo volume at the Seaport, even prior to the economic downturn of 2008-2009, does not support off-hour or night operations (i.e. “night gates”).

Because the Port does not hire, contract for, or manage the personnel on the marine terminals, and does not manage the day-to-day operations of the marine terminals, the Port cannot alter operations to reduce wait times at the terminal gate. However, the Port will continue to discuss efficiency issues with its marine terminal operator tenants, as noted above in Section VI(A)(4)(c). The Port also anticipates that gate efficiencies will improve over time with the terminals’ implementation of technologies such as optical character recognition (“OCR”) and RFID that will facilitate terminal access and shorten turn-times. The benefits of these technologies will carry over into the future, when cargo throughput rebounds. The Port is also looking at the implementation of such technologies, as a future component of the CTMP and as further discussed in Section VII.

b) Trucker Facilities

The Port provides and will continue to provide 12 portable restroom facilities throughout the Seaport. These facilities are cleaned twice per week by the Port. The restroom at the Middle Harbor Shoreline Park, at the intersection of 7th Street and Middle Harbor Road is also available. Additionally, the eight marine terminals at the Seaport provide restroom facilities for the truckers. Some of these are portable restrooms, but most of the terminals have a combination of portable and permanent bathrooms within the terminal boundaries. Most of the terminals also have pay phones available at the trouble booth, but the usage on these has declined since most truckers use cell phones.

As discussed above, as part of environmental mitigation for redevelopment of the former OAB, the Port and City of Oakland are each required to provide 15 acres of truck support facilities, including but not limited to truck parking. These facilities are likely to include additional restrooms and services for drayage truckers.



Drayage trucks on Port of Oakland container terminal.

c) Communication with Tenants and STEP-Registered LMCs

Staff of the Port’s Maritime Division meets routinely with Seaport tenants to discuss a number of operational issues. As part of these meetings, Port staff will provide an orientation to the CTMP, and continue to address topics such as idling, regulatory compliance, marine terminal gate transaction/efficiency, and related matters as they arise. The Port will also regularly contact Port STEP-registered LMCs via the monthly Trucker Work Group (“TWG” – see below) meetings and additional means as necessary.

d) Treatment of Workers

The issue of worker treatment is one the Port takes very seriously. The Port believes and expects that all workers doing business at the Seaport, including truckers, trucking companies, terminal and gate personnel, should be treated equally and fairly with dignity and respect. The Port does not hire or manage the personnel who operate and use Seaport facilities; nonetheless, we believe it is critical for the Port to encourage and support fair and equitable treatment of workers doing business in the Seaport. As part of the CTMP, the Port will:

- Continue to co-chair the monthly “TWG” meetings³⁶;
- Contact STEP-registered LMCs routinely to discuss operational and administrative issues. Under the Port Registry system, the Port expects that trucker complaints be reported to the LMC for whom the driver(s) is working at the time of the complaint; and
- Discuss similar issues with all its tenants, including marine terminal operators.

5. Stakeholder Involvement and Education

- √ Business and Operations
- √ Air Quality
- √ Safety and Security
- √ Community

The Port is committed to on-going, effective, and comprehensive outreach to all its stakeholders. Within this component of the CTMP, the Port outlines ways in which stakeholder involvement, outreach, and education will be enhanced.

a) Outreach Materials

In the past, the Port has routinely prepared education and outreach materials for a number of maritime projects and issues, for example truck route maps. Working with its business stakeholders, particularly the drayage industry, the Port will develop the following new and additional education and outreach materials. These materials will be in the identified principal

³⁶ In the past, representatives of marine terminals and ILWU labor have attended these meetings. Port staff will help encourage diverse participation in these meetings.

languages of Port truckers (English, Spanish, Punjabi, Vietnamese, and Chinese), and available in multiple forms of media (for example, print and on-line):

- A clearly defined and dedicated section of the Port’s website for trucking companies and truck-related matters;
- Truck route maps; and
- A summary of key applicable laws and regulations, as well as Port-specific requirements, and associated fines or penalties.

Outreach to stakeholders, particularly truckers, will be dramatically enhanced by development of the Port Registry, as previously described in Section VI(A)(1). The Port Registry will enable the Port to communicate directly and comprehensively with all LMCs and drivers serving the Seaport. Additionally, the Port will participate in fairs, outreach events, and public meetings to provide information and resources to the Port’s drayage trucking community.

b) Multi-Stakeholder Forum

Over the past 10 years, the Port has changed its business philosophy to embrace a triple bottom line that considers economic, social and environmental responsibility. The Port has expanded its practices and operations to include stakeholder outreach, as well as stakeholder consultation and involvement. There have been multiple stakeholder groups, focused on specific maritime programs or projects; for example, the MAQIP Task Force and the CTMP TAC. Feedback received from both the MAQIP and CTMP forums indicates that having representatives from all sides of an issue is key to meaningful dialogue. However, the Port has also learned that having multiple stakeholder groups is time-demanding for Port staff and stakeholders alike, and can lead to duplicative information and/or uncoordinated dialogues on interrelated issues.

In order to improve stakeholder involvement, the Port is establishing a new maritime stakeholder group comprised of Port customers (maritime tenants and other maritime related businesses), government (regulatory, policymakers and interagency) and community (residential, environmental advocacy, local business and other special interest groups) representatives. This structure is intended to provide a comprehensive stakeholder forum where the Port can effectively inform and engage with its multiple stakeholders on Seaport issues and projects, including CTMP implementation. Because only one group is envisioned, it is likely the group will be able to meet on a consistent, regular basis. Smaller “working” or “focus” groups may be created over time, as needed. Currently, meetings are planned to be quarterly, transitioning to semi-annually. The maritime stakeholder group is expected to start meeting in Fall 2009.

c) Trucker Information Center

As outlined in Section VI(A)(1), the Port Registry will dramatically enhance outreach to truckers by enabling the Port to communicate directly and broadly with all LMCs and drivers serving the Seaport. Additionally, the Port will support the current and on-going efforts of trucking entities, community organizations, and regulatory agencies to provide and staff an information center (called “OT411”) for truckers serving the Seaport. To this end, the Port is (a) providing outreach materials, (b) assigning Port staff to assist with providing outreach on a part-time basis in the

short term, and (c) donating a recently purchased and upgraded trailer to expand and enhance the current trucker information center.

The trailer will be donated to a local non-profit entity with experience working with Port users (truckers) and government agencies (notably CARB and BAAQMD) on education and outreach, and is expected to be operational by early fall 2009. As a condition of donation, the new owner of the trailer will use the trailer, in part or in whole, as a trucker outreach center to provide information and services as summarized below:

- “One-stop” support and information for existing and prospective truckers.
- Port-related material and information, if and when requested by the Port. For example, Port facility maps, truck heavy haul route maps, Port-specific requirements and future truck registry requirements.
- Information and referrals to the Port’s 360 Access Program to help increase access to job information, resources and transition support programs.
- Collaborate with regulatory agencies (CARB and BAAQMD) on outreach and education for key applicable laws and regulations, and for funding opportunities.

The trailer will be used in accordance with these conditions at least through June 2014, which is six months after the 2014 CARB deadline. It is anticipated that the trailer will be permanently situated on the City property within the Oakland Maritime Support Services current leasehold at the former OAB, where other support services already exist such as truck scales, a convenience store, a doctor's office, a TWIC center, and a truck repair facility.

6. Business and Workforce Assistance

- √ Business and Operations
- √ Air Quality
- √ Safety and Security
- √ Community

Within this Component of the CTMP, the Port outlines programs and approaches for assisting local business and the drayage industry adapt to new regulatory requirements and programs.

a) Truck Purchase and Financing

In addition to the grants discussed in Section VI(A)(2), the Port is actively exploring options available to assist truck owners in retrofitting and purchasing new trucks.

The Port is working with local financial institutions to provide low-cost financing directly to truck owners to assist in truck retrofits and replacements. Such financing would take advantage of federal loan programs and community banking initiatives. The Port is working to create financing opportunities that would allow low-rate repayment plans over a four to ten year period, generate working capital for truck owners, and provide free financial literacy programs for the

benefit of the trucking community. The Port is currently in discussions with a local bank, and anticipates that financing assistance of this type will be available by September 2009.

The Port is also developing a program to put affected truck owners into direct contact with sellers of CARB-compliant new trucks throughout the U.S. To implement this program, the Port is currently evaluating development of an online clearinghouse and working with a consulting/contracting service to locate suitable trucks for sale nationally that fit the needs and constraints of the individual buyers.

b) Local Business and Workforce Development

The Port's general policy is to encourage or require its business partners to utilize local businesses and hire local residents. Several stakeholders have suggested that the Port apply its policies on Non-Discrimination Small Local Business Utilization Policy ("NDSLUBUP") and the Maritime Aviation Project Labor Agreement ("MAPLA") for public works construction projects to the drayage industry. However, the Port cannot adopt a Port-specific business policy, such as NDSLUBUP or MAPLA, because the federal government, not the Port, has exclusive jurisdiction over the drayage industry for activities that affect the "price, service or route" of drayage truck owners and operators. Similarly, under federal law, the Port does not have authority to require drayage truck owners and operators to hire local residents. However, the Port will follow its own local business and local hire policies for any activities that are controlled by the Port, such as hiring businesses and individuals to support implementation of the CTMP.

Through the Port's 360 Access Program, the Port will encourage local business utilization and local workforce development for the drayage industry serving the Seaport, as detailed below:

- Encourage the drayage industry servicing the Port of Oakland to hire with special attention to Oakland "fence-line" communities.
- Assist in facilitating equity in opportunities for drayage entities including trucking companies and independent owner operators.
- Liaise with port trucking community to identify resources and connect with businesses to bridge opportunities for local trucking jobs.
- Work with trucking community in developing tools and methods to help increase access to job information and resources.
- Expand outreach to fence-line communities and local impact area (cities of Oakland, Alameda, San Leandro, and Emeryville) to include information on trucking issues, employment, training, environmental compliance, and educational opportunities.
- Connect trucking community with agencies and organizations who can partner and assist in addressing job training, readiness, language proficiency and education, referrals, environmental compliance, and information sharing.
- Work with existing trucking and shipper networks to establish appropriate communication tools and resources.

- Expand outreach to individuals and businesses impacted by federal and state environmental and security requirements in the drayage industry, and help connect them to resources for finding other employment pathways.
- Work with agencies and organizations that can partner and assist with career transition services for individuals and businesses impacted by federal and state environmental and security requirements in the drayage industry. Partnerships include local and regional resources, but are not limited to:
 - The Oakland Workforce Investment Board (“WIB”) programs and services provide training, education, job placement at no cost. Through the Oakland WIB truckers may access federally funded training and transition support services designed to connect individuals to the resources needed to identify and secure employment.
 - Alameda Transportation and Logistics Academic Support Initiative (“ATLAS”) under Peralta Community College District is a career training project that provides basic warehousing and logistics training program in multiple career paths.
 - Small Business Development Centers (“SBDC”) – California’s Regional SBDC Programs are part of the United States Small Business Administration’s national network of SBDCs. As such, the programs leverage local, state and federal dollars to strengthen small businesses, and thus, positively impact the state’s economy. The SBDCs facilitate the success of small business through business management counseling and training, linkage to other service providers and business planning services.

VII. FUTURE COMPONENT

A. Truck Positioning Technology

- √ Business and Operations
Air Quality
- √ Safety and Security
Community

This component will be considered by the Port for potential implementation in the next two to three years.

The Port may expand the CTMP and the Port Registry to require that all drayage trucks serving the Seaport be equipped with positioning technology (sometimes referred to as “truck tracking” technology). Such technology would be integral to the landside domain awareness picture for the Port of Oakland and the San Francisco East Bay region. The captured information can be used to correlate potentially suspicious activity with alerts and to provide early warning and response capability, an integral component of maritime domain awareness being driven by MTSA and the SAFE Port Acts. Therefore, safety and security within the Seaport domain is the primary driver for truck positioning technology.

The proposal to require that drayage trucks be equipped with positioning technology is reliant upon a centralized truck database (created through the Port Registry) that would collect, store and filter incoming data to provide “real-time” reporting capabilities. The filtered data could be accessible by the Port, marine terminal operators, trucking companies, regulatory agencies, and pertinent law enforcement agencies.

Combined, the Port Registry and positioning technology have the potential to yield a number of benefits, including but not limited to operational efficiencies, improved security, and improved coordination with law enforcement agencies. If and when implemented, positioning technology would likely supersede the need for the STEP Agreement sticker (described in Section VI(A)(1)), because verification of STEP registration would be automated. Preliminarily, we envision the positioning technology to enable the following:

- Identify a drayage truck upon entry and exit of each of the Port’s marine terminals.
- Track and report "tagged" vehicles within the Seaport, and possibly locations outside the Seaport (Port domain area).
- Integrate into standard terminal operating systems to allow quick and timely access control and logistics decisions.

- Send tracking information to various customers based on pre-defined needs identified in the design process. These may include, but are not limited to, notification of stolen vehicle license plate, notification of truck arriving with an appointment, and other defined reports going to customers who need them for environmental, logistics and security purposes.

Selection and implementation of a positioning technology is costly and affects a number of entities doing business at the Seaport, for example, truck drivers and marine terminal operators. Implementation and maintenance costs must be weighed against logistical, security, and other benefits. The Port must also consider the technologies that current marine terminal operators utilize in order to minimize duplication and burden on Port users, while ensuring the technology meets the Port's needs. The Port applied for a California Proposition 1B security grant to fund the technology described here; however, all Proposition 1B funding is on-hold until further notice due to State budgetary constraints.



Drayage trucks on Port of Oakland container terminal.

VIII. TIMELINE

Below is the estimated timeline for initial implementing the CTMP Core Components and general guidance for implementation of the Future Component, subject to further study.

Table 10: Estimated Timeline for CTMP Implementation

	2009	2010	2011	2012+	Notes
Planning					
CTMP Development, Analysis, Preparation	√	√			
Core Components					
Port Registry					
STEP Agreement	√	√			On-going
Registry database	√	√			On-going
Clean Trucks					
Compliance deadlines	√	√		√	
Truck retrofits & replacements	√			√ ³⁷	
Traffic and Congestion					
Congestion studies	√				On-going ³⁸
Seaport roadway improvements	√	√			On-going ³⁹
Truck idling	√				On-going
Truck parking and routes	√	√			On-going
Operations					
Marine terminal gate operations	√				On-going
Trucker facilities	√				On-going
Communication with tenants & registered LMCs	√	√			On-going
Treatment of workers	√				On-going
Stakeholder Involvement and Education					
Outreach materials	√	√			
Multi-stakeholder forum	√	√			On-going
Trucker information center	√				On-going ⁴⁰
Business and Workforce Assistance	√				On-going
Truck purchase and financing	√				
Business and employment resources	√				On-going
Future Component					
Truck Positioning Technology			√	√	

³⁷ Denotes a potential activity, subject to funding and need as described in the CTMP.

³⁸ This activity will be performed on an as-needed basis.

³⁹ This activity will be performed on an as-needed basis.

⁴⁰ The Port purchased and upgraded a trailer, which it is donating to a community-based organization in 2009. As a condition of the donation, the trailer is to be used for trucker information through at least June 2014. The on-going responsibilities are those of the organization to whom the trailer is donated.

IX. BUDGET AND FUNDING

Implementation or “set-up” of the CTMP is estimated to cost approximately \$12.7 million of direct, external costs to the Port. Of that \$12.7 million, approximately \$9.2 million is associated with the Core Components, and \$3.5 million is associated with the Future Component. Annual operation and maintenance costs are estimated to range from approximately \$1 million to \$1.4 million annually. Additionally, Port staff costs are estimated on the order of \$1 million annually for the first 3 years, decreasing slightly thereafter. In sum, looking through 2012, the CTMP will cost an estimated \$15.2 million of external costs.

Table 11 provides an overview of set-up and recurring annual costs for the CTMP.

Table 11: Estimated Port of Oakland Costs for CTMP Implementation

CTMP Component	Estimated Set-Up Cost ⁴¹	Estimated Annual Cost ⁴²	Funding Source
EXTERNAL COSTS			
CTMP Development, Analysis, Preparation	\$765,000	-	Port
CORE COMPONENTS			
Port Registry STEP Agreement and Registry database	\$1,750,000	\$500,000	Port & State security grant
Clean Trucks Compliance deadlines	-	-	-
Truck retrofits & replacements	\$5,000,000	-	Port ⁴³
Traffic and Congestion Congestion studies	-	-	-
Seaport roadway improvements	\$250,000	\$50,000	Port
Truck idling	-	\$5,000	Port
Truck parking and routes	\$1,100,000 ⁴⁴	\$525,000 ⁴⁵	Port

⁴¹ Set-up costs are incurred in 2009 and 2010, with the exception of Future Component costs, which are also incurred in 2011.

⁴² Not all annual costs are incurred each year. In some years, certain annual costs may be less than shown here.

⁴³ The Port’s \$5 million contribution is supplemented by agency grants from BAAQMD, and potential funding from DERA, SJVAPCD, and CARB, for an estimated total of up to \$22 million. Additionally, the trucking industry will be using private funds (up to an estimated \$185 million) to retrofit or replace trucks. The estimate of \$185 million is derived from analysis performed by CARB during its rulemaking process; final costs may deviate from this estimate.

⁴⁴ Includes \$300,000 of funds paid to the City in 2009 for OPD officers, and \$500,000 for 2010 (an additional \$200,000 have been budgeted beyond current Port payments for OPD enforcement). This also includes

CTMP Component	Estimated Set-Up Cost⁴¹	Estimated Annual Cost⁴²	Funding Source
Operations			
Marine terminal gate operations	-	-	-
Trucker facilities	20,000	20,000	Port
Communication with tenants & registered LMCs	-	-	-
Treatment of workers	-	-	-
Stakeholder Involvement and Education			
Outreach materials	\$100,000	\$25,000	Port
Multi-stakeholder forum	\$25,000	\$25,000	Port
Trucker information center	\$30,000	-	Port ⁴⁶
Business and Workforce Assistance			
Truck purchase and financing	\$150,000	-	Port ⁴⁷
Business and employment resources	\$50,000	\$5,000	Port ⁴⁸
FUTURE COMPONENT			
Truck Positioning Technology	\$3,450,000	\$250,000	Port & State security grant
TOTAL	\$12,690,000	\$1,405,000⁴⁹	
INTERNAL COSTS⁵⁰			
Port Staff	1,000,000	\$1,000,000⁵¹	Port

\$300,000 for new truck route signage support to the City. Provision of this new/additional funding is subject to discussions with and request of the City.

⁴⁵ This reflects the increased annual payment to the City for OPD officers (see note above), as well as annual maintenance for truck route signage. Also see note above.

⁴⁶ Port costs are limited to purchase, upgrade, and donation of a trailer to a community-based organization. Costs incurred after donation are the responsibility of the organization to whom the trailer was donated.

⁴⁷ The cost identified here (\$150,000) represents only funds the Port would provide as necessary to support the initial implementation of a financing or purchase assistance program (for example, developing a clearinghouse as discussed in Section VI(A)(6)). Private capital used or leveraged for truck purchases is not reflected here.

⁴⁸ The cost identified here (\$50,000 and \$5,000 annually) represent only funds the Port would provide as necessary to support the Port's outreach pursuant to its 360 Access Program.

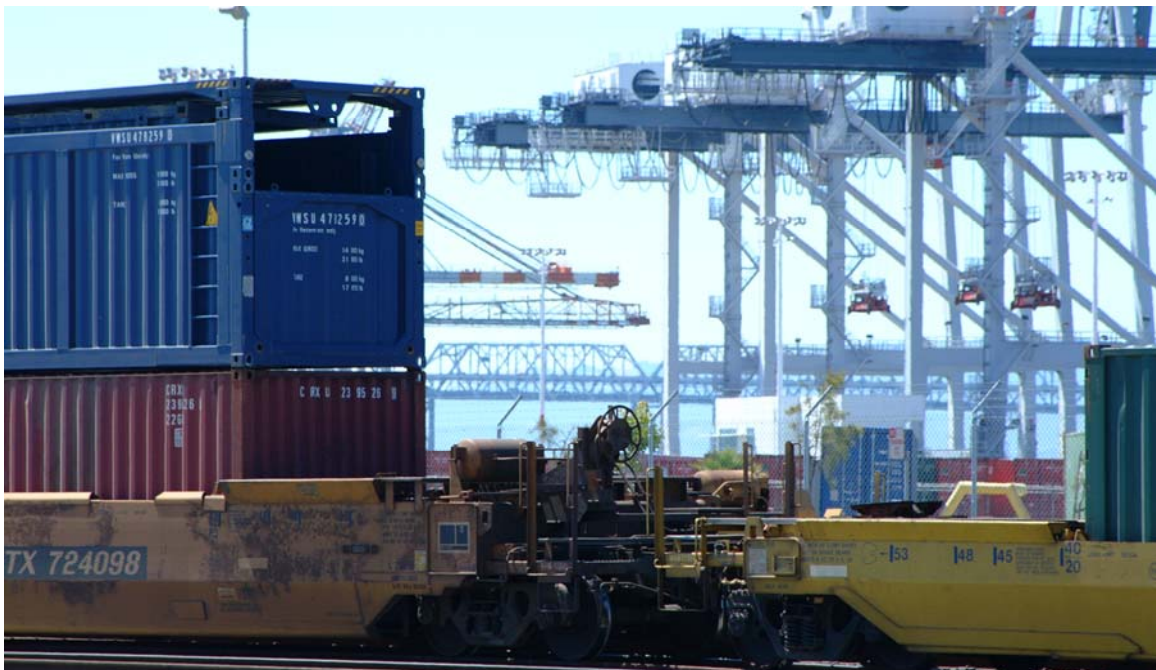
⁴⁹ See Note 39 above. Annual costs are likely to vary between \$1 million and \$1.4 million.

⁵⁰ Port staff may evaluate and/or recommend that select functions of CTMP implementation and management be contracted to external parties, including but not limited to consultants or organizations with expertise in the applicable areas of work.

⁵¹ Staff costs are estimated to decrease to approximately \$750,000 starting in about 2012.

The security grant funding identified under Future Component is currently on-hold due to the state's budgetary challenges. The Port will continue to build and leverage political support to address some of these funding gaps and to obtain more government funding in order reduce, where possible, costs currently allocated entirely to the Port's budget.

The costs presented here are estimates. At the time of publication of this document, the Port has not solicited or entered into contracts with external entities for the provision of these services, and therefore, the Port does not have final costs for implementing the CTMP. Port staff will keep the Board of Port Commissioners informed as final costs become available through further study and/or issuance of requests for proposals, particularly where actual costs may exceed the estimated costs identified here.



Rail yard with Port of Oakland container terminal in the background.

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XII. APPENDICES

A. Appendix A. Acronyms and Abbreviations

ACCMA	Alameda County Congestion Management Agency
ACPHD	Alameda County Public Health Department
ATA	American Trucking Association
ATLAS	Alameda Transportation and Logistics Academic Support Initiative
BAAQMD	Bay Area Air Quality Management District
BNSF	Burlington Northern Santa Fe Railroad
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
City	City of Oakland
CPI	Consumer Price Index
CTA	California Trucking Association
CTMP	Port of Oakland Maritime Comprehensive Truck Management Program
DERA	Diesel Emission Reduction Act
DPF	Diesel Particulate Filter
DTR	Drayage Truck Registry (CARB)
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
FAAAA	Federal Aviation Administration Authorization Act
FMC	Federal Maritime Commission
IOO	Independent Owner Operator
LMC	Licensed Motor Carrier
LNG	Liquefied Natural Gas
MAQIP	Maritime Air Quality Improvement Plan
MAPLA	Maritime and Aviation Project Labor Agreement (Port of Oakland)
MMRP	Mitigation Monitoring and Reporting Program
MTSA	Maritime Transportation Security Act
NDSLBU	Non-Discrimination and Small Local Business Utilization Policy
NRDC	Natural Resources Defense Council
OAB	Oakland Army Base
OCR	Optical Character Recognition
OIG	Oakland International Gateway (operated by BNSF)

OPD	City of Oakland Police Department
PM	Particulate Matter
Port	Port of Oakland
SBDC	Small Business Development Center
Seaport	Port of Oakland maritime area and facilities
RFID	Radio Frequency Identification Device
SAFE Port	Security and Accountability For Every Port Act of 2006
SJVAPCD	San Joaquin Valley Air Pollution Control District
STEP	Port of Oakland Secure Truck Enrollment Program
TAC	Technical Advisory Committee to the Maritime CTMP
TCM	Transportation Control Measure
TEU	Twenty-Foot Equivalent Unit (1 TEU equals 1, 20-foot cargo container)
TFCA	Transportation Fund for Clean Air
TSA	Transportation Security Administration
TWIC	Transportation Identification Worker Credential
UIIA	Uniform Intermodal Interchange Agreement
UP	Union Pacific Railroad
VDEC	Verified Diesel Emission Control
WIB	Oakland Workforce Investment Board
WOCA	West Oakland Commerce Association
WOCAG	West Oakland Community Advisory Group (City OAB redevelopment)
WOEIP/EIP	West Oakland Environmental Indicators Project
WON	West Oakland Neighbors
WOPAC	West Oakland Project Area Committee (City redevelopment)

B. Appendix B. Truck-Related Oakland Army Base EIR Mitigation Requirements

In 2002, the City of Oakland certified the OAB Area Redevelopment Plan Final EIR as the Lead Agency under CEQA. On September 17, 2002 (Resolution No. 02317), the Board of Port Commissioners, acting as a Responsible Agency under CEQA, approved the Port's reuse of the OAB as described in the EIR. Both agencies adopted a detailed MMRP to respond to those impacts of the development that were identified by stakeholders at various stages of the project's development (pre-construction, construction, pre-operations, operations, etc.). Several of the MMRP items respond to identified impacts from truck activity, including the creation of a truck management plan and the availability of parking to accommodate increased activity during the construction and operation of new intermodal facilities at the former OAB. OAB mitigation measures that are relevant to trucks, either directly or indirectly, include:

Mitigation 4.3-6: The Port shall fund signage designating through transport truck prohibitions through the interior of the Gateway development area.

Timing: Construction; at time the Loop Road is built

Port/CTMP Reference: Section VI(A)(3)

Additional information: The Port has also participated in truck parking and related studies and worked with the City to revise and map West Oakland truck routes, distributed flyers showing the revised truck route, worked with the City to revise signage/pavement marking at 3rd and Market street, and funded two OPD officers for enforcement.

Mitigation 4.3-7: The City and the Port shall continue and shall work together to create a truck management plan designed to reduce the effects of transport trucks on local streets. The City and Port shall fund on a fair share basis the implementation of this plan.

Timing: Pre-operations

Port/CTMP Reference: Sections V and VI(A)(3)

Mitigation 4.3-11: During both construction and operation, the Port shall provide truck parking within the Port development area or Maritime sub-district, at a reasonable cost to truck operators and provide advance information to operators where the parking is located.

Timing: Construction; Operations

Port/CTMP Reference: Section VII(A)(3)

Additional information: The Port also hired a consultant to conduct a Port "baseline" truck parking study in 2007.

Mitigation 4.4-3: The Port shall develop and implement a criteria pollutant reduction program aimed at reducing or off-setting Port-related emissions in West Oakland from its maritime and rail operations to less than significant levels, consistent with federal, state and local air quality standards. The program shall be sufficiently funded to strive to reduce emissions from redevelopment related contributors to local West Oakland air quality, and shall continually re-examine potential reductions toward achieving less than significant impacts as new technologies emerge. The adopted program shall define measurable reductions within specific time periods.

Timing: Pre-operations; at time of Port development area redevelopment

Port/CTMP Reference: Section IV(D) and VI(A)(1),(2),(3),(4)

Additional information: The Port approved the MAQIP to dramatically reduce DPM emissions and health risk by the year 2020. Between 2003 and 2006, the Port funded approximately 80 drayage truck replacements and upgrades. The Port and its tenants have taken other actions to upgrade non-truck equipment, for example cargo-handling equipment on marine terminals. However, the focus of this appendix of the CTMP is on drayage trucks.

Mitigation 4.4-4: The City and the Port shall jointly create, maintain, and fund on a fair share basis, a truck diesel emission reduction program. The program shall be sufficiently funded to strive to reduce and/or off-set redevelopment related contributions to local West Oakland diesel emissions to less than significant levels, consistent with applicable federal, state and local air quality standards and shall continually re-examine potential reductions toward achieving less than significant impacts as new technologies emerge. The adopted program shall define measurable reductions within specific time periods.

Timing: Pre-operations; at time of Port and Gateway development area redevelopment

Port/CTMP Reference: Sections V and VI(A)(2)

Additional information: See information above regarding MAQIP.

Mitigation 4.4-5: Major developers shall fund on a fair share basis BAAQMD-recommended feasible Transportation Control Measures (TCMs) for reducing vehicle emissions from commercial, institutional, and industrial operations, as well as all CAP TCMs the BAAQMD has identified as appropriate for local implementation.

Timing: Pre-operations; Operations

Port/CTMP Reference: Section VI(A)(2),(3),(4)

Additional information: This will be further evaluated through the bid and selection process for future developments.

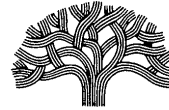
Mitigation 5.3-7: The City and Port shall cooperatively develop a program that combines multiple strategic objectives and implementation tools designed to reduce cumulative truck parking and other ancillary maritime service impacts.

Timing: Operations

Port/CTMP Reference: Section VI(A)(1),(3),(4)

C. Appendix C. Letter from City of Oakland Regarding OAB Mitigation Measures and Outstanding Truck Parking Issues

CITY OF OAKLAND



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Community and Economic Development Agency
Redevelopment Division

(510) 238-3015
FAX (510) 238-3691
TDD (510) 839-6451

May 14, 2009

Omar Benjamin, Executive Director
c/o Delphine Prevost, Maritime CTMP Manager
Port of Oakland
530 Water Street
Oakland, CA 94607

**Re: Port of Oakland Maritime Comprehensive Truck Management Program –
City of Oakland’s perspective on truck related Oakland Army Base (OAB)
EIR mitigation measures and outstanding truck parking issues.**

Dear Mr. Benjamin:

As one of the parties participating in the development of the Comprehensive Truck Management Plan (CTMP) since it began back in February, 2007, the City of Oakland acknowledges the effort required to create this planning document, but also recognizes that much of the hardest work lies ahead. While the bulk of the responsibility will be on the Port of Oakland, its customers, and other stakeholders, the City of Oakland realizes that its departments and staff will need to take a lead role on specific initiatives related to the CTMP. Among these initiatives are certain remaining truck-related items in the Mitigation Monitoring and Reporting Program for the 2002 Army Base EIR, which require a lead role for the City, including a particular focus on truck parking and related zoning issues.

Truck-related mitigations as it relates to Oakland Army Base Environmental Impact Report (EIR):

Even though action and/or full achievement of many of the truck-related mitigation measures is not technically required until actual construction or operations begin at the Army Base, many measures have actually been partially or fully accomplished. For instance, an ad hoc committee of representatives from the community, the Port, and various City departments discussed and created a new heavyweight truck route for West Oakland, and 30 acres of truck parking were established on an interim basis at the old Army Base.

On the other hand, more work needs to be done to discourage truck parking in West Oakland, and on other mitigation measures. Port and City staff have initiated a formal accounting of which mitigation measures have been partially or fully met, which remain

outstanding, and whether responsibility to fully accomplish these mitigation measures is primarily that of the Port, the City, or both parties. The truck related mitigations are all consistent with the goals of the CTMP. However, the CTMP is indeed a more “comprehensive” document, since it seeks to address issues not included in the truck related mitigations such as safety and security, a truck registry, outreach and funding for retrofitting and replacing trucks, workforce and business model issues, etc.

Truck parking and route enforcement:

The ad hoc committee that was formed to develop a new truck route in West Oakland between 2005 and 2007 may offer a model for a fruitful approach to addressing truck parking issues in West Oakland. That committee had representatives from the West Oakland community, Port staff, City Council staff, and representatives of various City departments, including the Police Department, Public Works Agency, Parking Enforcement, and Economic Development. Among the actions such a committee could consider are the items raised at the Port/City Liaison Committee on April 2, 2009, which include additional signage prohibiting overnight truck parking and increased fines for truck parking violations. This committee could also address the need for fine tuning of the truck route, and could also at least frame the discussion for zoning issues related to the CTMP, such as strategies that might be used to prevent “backfilling” of truck parking or other truck related uses once full scale parking and truck services are established at the Army Base.

City of Oakland staff look forward to working with Port of Oakland staff, members of the West Oakland Community, Port truckers, and other stakeholders to develop and implement key aspects of the CTMP that require specific leadership by the City, and to generally support other aspects of the plan which seek to improve the health of the community as well as the economic growth and performance of the Port of Oakland.

Sincerely,



Al Auletta
Redevelopment Area Manager
City of Oakland Redevelopment Agency

D. Appendix D. Key Data Findings of the CTMP Economic Impact Analysis that Informed Development of the CTMP

In 2008, the Port commissioned an economic impact analysis to gain a better understanding of the drayage industry serving the Port's maritime facilities, and to inform development of the CTMP. The analysis was performed by Beacon Economics. The principal findings of the analysis that informed the Port's development of the CTMP are as follows:

➤ **Overview**

- Approximately 2,000 drivers (or about 2,000 trucks, assuming one driver per truck) and 120 LMCs serve the Port.
- Approximately two-thirds of the trucks serving the Port are driven by IOOs; one-third by employee drivers.
- Inefficiencies in the drayage market include time between dispatches, and time spent waiting to get into the marine terminals and to get loaded once inside the marine terminals.
- Due to inefficiencies, the Seaport may be currently "over-trucked" by as much as 25%, or about 500 trucks.
- Almost 80% of all hauls for Oakland are short hauls (less than 100 miles), with about 30% of those hauls being shuttle hauls between marine terminals and rail yards.
- Approximately 50% of LMCs are Class III carriers, earning less than \$3 million per year.

➤ **Driver Characteristics**

- Hourly employee and IOO driver earnings are comparable. Weekly earnings are altered by the number of hours worked, but remain similar (\$1,050 IOO vs. \$1,265 employee). Annual earnings are also comparable (\$57,000 IOO vs. \$59,000 employee). These figures reflect gross income, but are net of expenses for IOOs.
- On average, both IOOs and employee drayage truck drivers earn significantly more than other truck drivers in the region.
- 18% of surveyed IOOs report being of "white" race, while 44% of surveyed employees report being of "white" race.
- 60% of current IOOs do not want to become employee drivers. This represents approximately about 800 trucks, assuming one driver per truck.
- Most LMCs report providing health insurance; however, only 50% of drivers report having health insurance through the LMCs. Most IOOs do not have any health insurance.

➤ **Economic and Related Impacts**

- State air quality regulatory requirements alone are expected to raise per-dray costs by 4% to 30%, depending on the length of haul. A concession model would add an extra 1% to 2% to the drayage rates, and an employee driver requirement would add an additional 21% to drayage rates.
- Even with a potential employee driver requirement (one of the parameters studied by Beacon Economics), a continued role for IOOs is appropriate.

➤ **Air Quality**

- Between 77% (1,530) and 94% (1,876) of the trucks serving the Port will have to be replaced or retrofitted pursuant to the 2010 and 2014 CARB deadlines, at an estimated cost of \$200 to \$275 million, depending on fleet attrition and the mix and timing of retrofits and replacements. For the 2010 CARB deadline alone, the cost could range from \$70 million to \$170 million, again depending on fleet attrition and the mix and timing of retrofits and replacements.
- Air quality regulations present a significant challenge to the drayage sector.
- Container fee should be avoided to the extent possible, with industry being held responsible for costs directly.

E. Appendix E. Summary of Key Deadlines and Requirements for CTMP Port Registry and Clean Trucks Components

Date	Requirement	Responsible Party ⁵²	Enforcement Party ⁵³
September 30, 2009	<ul style="list-style-type: none"> ▪ All drayage trucks must be registered in the CARB statewide truck registry (DTR). ▪ All other provisions of the CARB Drayage Truck Regulation apply. 	<ul style="list-style-type: none"> ▪ Drayage truck owners 	<ul style="list-style-type: none"> ▪ CARB
October 1, 2009 to January 1, 2010	<ul style="list-style-type: none"> ▪ During this time, all LMCs serving the Seaport must sign Port STEP Agreement. 	<ul style="list-style-type: none"> ▪ LMCs 	<ul style="list-style-type: none"> ▪ Port
January 1, 2010	<ul style="list-style-type: none"> ▪ All drayage trucks must be equipped with 1994-2003 model year engine with CARB-verified level 3 Diesel Particulate Filter (DPF); or 2004 or newer model year engine; or 1994 or newer model year engine that meets or exceeds 2007 model year emission standards.⁵⁴ ▪ All other provisions of the CARB Drayage Truck Regulation apply. ▪ All LMCs must have registered with the Port by signing STEP Agreement. 	<ul style="list-style-type: none"> ▪ Drayage truck owners ▪ LMCs ▪ Truck drivers ▪ Terminal operators ▪ Rail yard operators ▪ Port ▪ Rail authorities 	<ul style="list-style-type: none"> ▪ CARB ▪ Port (for Port Registry only)
January 1, 2010 to April 1, 2010	<ul style="list-style-type: none"> ▪ During this time, all STEP-registered LMCs must enter required information in Port Registry database. ▪ Port to establish Port Registry service center in January 2010. ▪ Port to issue STEP registration certificates and stickers to STEP-registered trucks, as identified by the LMCs. 	<ul style="list-style-type: none"> ▪ LMCs ▪ Port 	<ul style="list-style-type: none"> ▪ Port

⁵² If multiple parties are identified, this means that there are multiple requirements, each with a different responsible party. It does not mean that all parties are responsible for all obligations.

⁵³ While CARB and/or the Port are ultimately the enforcement parties, all responsible parties directly support enforcement by controlling and/or reporting truck activity.

⁵⁴ All drayage truck emission-related requirements identified throughout this table are based on the CARB Drayage Truck and Statewide Truck and Bus Regulations. For complete information see CARB's website at <http://www.arb.ca.gov/diesel/mobile.htm>.

Date	Requirement	Responsible Party	Enforcement Party
June 1, 2010	<ul style="list-style-type: none"> ▪ All trucks driving for STEP-registered LMCs must show proof of Port registration at Seaport facilities. ▪ Seaport facility operators must handle non-STEP-registered truck in one of two ways (deny entry or grant entry by recording certain information). If turned away, trucks directed to the Port's service center. ▪ Information collected for a truck that was granted entry must be reported to the Port quarterly. 	<ul style="list-style-type: none"> ▪ LMCs ▪ Seaport facility operators <ul style="list-style-type: none"> ○ Marine terminal operators ○ Rail yard operators ○ Non-marine terminal operators 	<ul style="list-style-type: none"> ▪ Port
January 1, 2011	<ul style="list-style-type: none"> ▪ Marine terminal operators must deny entry to non-STEP-registered trucks, and trucks should be directed to the Port's service center. ▪ Rail yard and non-marine terminal operators may grant entry to non-STEP-registered trucks by recording and reporting required information (see above). 	<ul style="list-style-type: none"> ▪ Seaport facility operators <ul style="list-style-type: none"> ○ Marine terminal operators ○ Rail yard operator ○ Non-marine terminal operators 	<ul style="list-style-type: none"> ▪ Port
January 1, 2012 ⁵⁵	<ul style="list-style-type: none"> ▪ All drayage trucks of engine model year 2004 must install a CARB-verified level 3 Diesel Particulate Filter (DPF) to reduce PM emissions by 85%. ▪ All other provisions of the CARB Drayage Truck Regulation and Statewide Truck and Bus Regulation apply. 	<ul style="list-style-type: none"> ▪ Drayage truck owners ▪ LMCs ▪ Truck drivers ▪ Terminal operators ▪ Rail yard operators ▪ Port ▪ Rail authorities 	<ul style="list-style-type: none"> ▪ CARB

⁵⁵ The January 1, 2012 and January 1, 2013 standards were adopted by CARB in December 2008, and will become effective upon Office of Administrative Law approval of the CARB regulation.

Date	Requirement	Responsible Party	Enforcement Party
January 1, 2013 ⁵⁶	<ul style="list-style-type: none"> ▪ All drayage trucks of engine model year 2005 and 2006 must install a CARB-verified level 3 Diesel Particulate Filter (DPF) reduce PM emissions by 85%. ▪ All other provisions of the CARB Drayage Truck Regulation and Statewide Truck and Bus Regulation apply. 	<ul style="list-style-type: none"> ▪ Drayage truck owners ▪ LMCs ▪ Truck drivers ▪ Terminal operators ▪ Rail yard operators ▪ Port ▪ Rail authorities 	<ul style="list-style-type: none"> ▪ CARB
January 1, 2014	<ul style="list-style-type: none"> ▪ All drayage trucks must meet 2007 engine emission standards⁵⁷. ▪ All other provisions of the CARB Drayage Truck Regulation and Statewide Truck and Bus Regulation apply. 	<ul style="list-style-type: none"> ▪ Drayage truck owners ▪ LMCs ▪ Truck drivers ▪ Terminal operators ▪ Rail yard operators ▪ Port ▪ Rail authorities 	<ul style="list-style-type: none"> ▪ CARB

⁵⁶ The January 1, 2012 and January 1, 2013 standards were adopted by CARB in December 2008, and will become effective upon Office of Administrative Law approval of the CARB regulation.

⁵⁷ The 2007 emission standards include both particulate matter and nitrogen oxide limits.