June 7, 2007

Commissioner Kenneth **Katzoff** (Chair)
Commissioner Mark **McClure**
Commissioner David **Kramer**

**RE:** Comprehensive Truck Management Program – Maritime Division

**Background**

The Port of Oakland’s maritime operations and competitive position are directly and indirectly impacted by port drayage services offered by trucking companies and independent owner operators. The Port of Oakland’s interest is in the safe and secure movement of cargo, and in mitigating the impact of port operations on the surrounding local community.

Similarly, importers and exporters who use the seaport as a gateway for their products require timely and cost effective trucking services to support the movement of cargo through marine and railroad facilities.

The logistics chain of global importers and exporters relies on a complex network of brokers, third party logistics providers (3PLs), trucking companies and independent owner operators to provide and arrange for port truck drayage services. Concerns related to driver working conditions, air quality and security, have focused increasing attention on the provision of port truck drayage services. Community, environmental and business organizations have all expressed an interest in how port drayage services are conducted.

In 2004 the port completed the Maritime Alternative Development Plan (MADP), which examined the impact of various growth scenarios on port infrastructure requirements. One element of the study reviewed truck activity in the port area and identified multiple patterns of truck movements, as follows:

**Marine Terminal Related Moves**

- Truck with full container or “load”, referred to as Import Full In or Export Full Out
- Truck with empty container, referred to as Empty In or Empty Out
- Truck with bare chassis (without a container)
- Bobtail or tractor without chassis
Other Moves

- Truck container moves to railroads
- Non-Port shipping from rail yards, primarily the Union Pacific Rail Road (UPRR) yard
- Domestic containers (not referred to in MADP)

The study estimates trucks handled over 75% of total TEU volume in 2002, with the remainder moving by rail; and, projected regional truck activity growth at 5% annually. At Oakland, unlike ports with on-dock rail, trucks also dray IPI (Inland Point Intermodal) containers to rail yards.

The Maritime Division has determined that a Comprehensive Truck Management Program that addresses the movement of trucks to and from the port area is the best mechanism for addressing the complex issues related to port truck drayage activities. The plan will also fulfill the Oakland Army Base mitigation requirements.

Analysis

The following objectives of the Comprehensive Truck Management Plan are based on feedback from maritime customers and tenants, truckers, community and environmental organizations and the shipping industry. As the plan develops, the objectives may need to be modified.

1) Improving the quality of trucking service to shippers utilizing port facilities
2) Enhancing port security and safety
3) Improving Traffic flow in the Port and surrounding areas
4) Improving coordination between truckers, terminal operators, shippers and shipping lines.
5) Contributing to improved trucker productivity, quality of life and working conditions
6) Reducing emissions from drayage trucks and supporting the port’s environmental initiatives
7) Mitigating impact of port related trucking on neighborhoods immediately adjacent to the port and the surrounding Local Impact Area (LIA)

Development of an initial draft truck management plan is anticipated to take one year. The initial plan components include the following:

- Appointment systems
- Baseline data to establish an ‘emission footprint’
- Clean Truck Program
- Community and stakeholder participation process
- Congestion mitigation
• Coordination with local, state and federal agencies

• Customer and Tenant outreach
• Infrastructure and roadway development
• Interface between marine terminals and truckers
• Local business and worker utilization
• Parking regulation and enforcement
• Security and safety
• Service quality and port competitiveness
• Technology utilization
• Traffic flow and truck routes
• Truck parking
• Trucker data base
• Trucker outreach/training
• Trucker productivity and working conditions
• Other

Each component is briefly discussed below.

**Appointment Systems**

All the marine terminals at the port operate appointment systems providing truckers the opportunity to make appointments on-line for the pick-up and delivery of containers. Approximately 25 percent of terminal in-gate activity is made by appointment, depending on the particular terminal.

The objective is to increase the utilization of appointments and to apply technology solutions to improve coordination between truck dispatchers and terminal gate operations.

**Baseline Data to Establish an Emissions Footprint**

Gather accurate data about the age and type of trucks providing drayage services in the port area, the number and duration of truck trips will assist with establishing a truck emissions footprint.

**Clean Truck Program**

Our goal is to reduce emissions from drayage trucks to the maximum extent feasible using a combination of air quality standards and incentives for the purchase of cleaner trucks, by developing a clean truck program. The details of this program are currently being developed by staff.

The port currently provides over $2 million in total funding to replace trucks, model year 1990 and older. As stated the port is developing a plan to phase-in trucks that meet 2007...
emission standards. This plan will replace older trucks providing drayage services and set standards for safe, secure and efficient operations.

Similar programs are under consideration at other California ports and nationally. The Ports of Los Angeles and Long Beach (LA/LB) have announced a clean truck program to take effect January 2008 with the objective of replacing pre-2007 trucks over a 5-year period. The Los Angeles and Long Beach ports (LA/LB) propose to fund their clean truck program through a combination of grant money, truck and gate fees.

Oakland has yet to determine the exact nature of its clean truck program, but anticipates the program will include a local business component and provision for trucker training and assistance to facilitate the transition to clean trucks. A truck fee schedule is under consideration.

Community and Stakeholder Participation

The West Oakland community and other community-based organizations have expressed an interest in truckers, trucking operations and the relationship to the Port activities. The External Affairs Branch has developed and participates in several mechanisms to address community participation, including:

Ad Hoc Truck Route Committee
Mayor’s Port Task Force
Maritime Air Quality Improvement Plan Stakeholders Task Force
Truck Management Plan Forum
Trucker Working Group
Vision 2000 Air Quality Mitigation Program
WOTRC (West Oakland Toxic Reduction Collaborative) - Truck Incentive Work Group

Input from the dialog between stakeholders and the port will help shape the Truck Management program.

Congestion Mitigation

Congestion mitigation is complex and has many aspects and is addressed by several component of the truck management plan, including: clean truck program; technology utilization; truck parking; terminal appointment systems; and, infrastructure development.

Reducing congestion on port area roadways and the resultant spillover into the neighborhoods immediately adjacent to the port is an important objective of the truck management plan. Staff intends to examine mechanisms for metering the flow of trucks into and out of the port area.

The port is cooperating with the Alameda Congestion Management Board on 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.
The port is discussing with Partners for Advanced Transit and Highways (PATH) their assistance with developing a truck-flow metering program. Partners for Advanced Transit and Highways is recognized as a leader in the development of systems and technologies to address traffic congestion and related transportation issues.

**Coordination with Local, State and Federal Agencies**

Numerous agencies work with the port to implement public policy related to safety, quality of life, security and economic growth. The External Affairs Branch of the Port coordinates with outside agencies to ensure effective two-way dialog. Several aspects of the truck management program involve outside agencies such as the City of Oakland, the Counties of Alameda and Contra Costa, California Air Resources Board (CARB), Bay Area Air Quality Management Board (BAAQMD), United States Environmental Protection Agency (EPA), United States Coast Guard, United States Department of Homeland Security - Customs and Border Protection; California Highway Patrol and numerous State of California agencies.

**Customer and Tenant Outreach**

The truck management will need to address the business and operational requirements of Port of Oakland customers and tenants. A formal process to solicit customer input and participation will be instituted.

**Infrastructure and Roadway Development**

As identified in the Maritime Development Alternative Study, the course of growth at the port will directly affect truck activity and congestion in the port area. A strategy of high rail IPI growth will likely reduce the growth of truck activity. Similarly, the planned improvements to 7th street will improve traffic flows and offer the opportunity to examine the feasibility of Intelligent Transportation Systems (ITS) or computer-supported systems to manage the flow of traffic.

**Interface between Marine Terminals and Truckers**

Trucking operations by necessity must coordinate their drayage activities with the marine terminals that set rules for conducting business at their facilities. The rules are in place to safeguard the premises by complying with government security mandates and to optimize terminal operations.

In addition to on-line appointment systems, truckers interface with terminal personnel at the gates and in the yard. Terminals are increasingly automating their gate and yard operations through the use of RFID and GPS enabled equipment. The truck management
plan will examine ways that the port can expedite the adoption of technology by trucking companies as a means of improving productivity, security and customer service.

The area maritime safety committee chartered a truck driver facility access control work group to establish standard vehicle screening procedures for all trucks entering maritime terminals at the Port of Oakland.

**Local Business and Worker Utilization**

In developing the truck management program staff will examine the impact on local business and worker utilization. Promoting local business and worker utilization is an essential outcome.

**Parking Regulation and Enforcement**

The City of Oakland has established ordinances governing overnight street parking in residential neighborhoods. The port has undertaken surveys in order to quantify the nature and extent of overnight truck parking in West Oakland, and contracts with the City for the services of two police officers to enforce parking. As an incentive, the port has offered subsidized truck parking to mitigate the impact of maritime related overnight parking. Some trucks continue to park illegally overnight.

Staff intends to explore other means and mechanisms with the City for preventing illegal street parking by trucks engaged in the movement of marine containers.

**Security and Safety**

The events of 9/11 highlighted security concerns related to port operations. Trucks and drivers are subject to considerable oversight by federal and state law enforcement agencies. The port security plan identifies the following trucker-related priorities:

- Ability to track trucking activity in the Port of Oakland to establish landside domain awareness;
- Ability to associate drivers with trucking company to help establish business purpose and streamline terminal access and exit control process; and,
- Potential for integration with software program/algorithms to identify “exceptional” activity for focused investigations/law enforcement

**Service Quality and Port Competitiveness**

Increasingly, sophisticated corporate logistics chains rely on real-time information from service providers to ascertain the status of cargo. The port’s pilot GPS program, administered by the Bay Area World Trade Center, has demonstrated the value shippers place on systems that accurately trace container truck movement to warehouse and distribution facilities. Electronic verification of delivery and notification of container
availability are important information for truckers, shippers and shipping lines to enable the efficient utilization of equipment.

Improving the quality of drayage services enhances the overall competitiveness of the Port.

**Technology Utilization**

Global positioning technology (GPS) and radio frequency technology (RFID) provide the means to use information technology to monitor truck activity inside and outside of the Port. Unauthorized incursions into neighborhoods adjacent to port operations may be identified through the GPS application known as geo-fencing. Understanding where a particular driver is can facilitate updated highway and terminal gate status, as well as automated gate transactions.

The Port of Oakland TruckTracker is the name of the port’s program that includes advanced GPS transport-tracking system coupled with comprehensive dispatch management and interfaced to terminal appointment systems. This program, initially sponsored by the Port, is targeted to delivering significant commercial benefit to truckers, shipping lines, terminals and the import/export community. The theme of this GPS system is “Deploying Information to Improve Life for the Oakland Community and Improving Efficiencies of the Movement of Goods”.

The GPS data will be integrated with modeling and systems developed by PATH (Partners for Advanced Transit and Highway, a collaboration between CalTrans and the University of California at Berkeley) for managing and metering the flow of truck traffic into the port area and to coordinate this data with terminal appointment systems to reduce gate queues.

Importantly, GPS data and reports may be used to analyze and support several of the Truck Management Program initiatives. These initiatives will be greatly enhanced by establishing a baseline of truck activity from which to measure improvement. Comprehensive data and maps that portray the actual truck movement and time spent on the highways, terminals and in the communities surrounding the Port may be invaluable to establishing a benchmark with which we may measure many of the improvements and address community concerns. Accordingly, this information may be shared with and used by the Alameda County Management Congestion Agency, the Metropolitan Transportation Commission and other key stakeholders.

The RFID initiative includes distribution of truck tags and sponsorship of trucker database through eModal. The tags can be electronically read and associated with a specific trucking company and drives. Approximately 1,000 trucks have activated RFID tags with another 600 in process and over 200 trucks are currently GPS-enabled. This compares to an estimated 2,500 trucks currently providing drayage services at the Port. The objective is for all trucks providing services at the Port to have RFID tags and GPS.
RFID and GPS also support security initiatives such as domain awareness and TWIC (Transportation Worker Identification Card).

**Traffic Flow and Truck Routes**

The City of Oakland, working with the port and the community, has established truck routes to control the flow of commercial traffic into residential areas. Equipping port drayage trucks with GPS provides a mechanism to monitor compliance. Physical barriers are another means of controlling truck traffic flow. Staff will examine the broad range of traffic management alternatives to keep port-related trucks out of residential neighborhoods.

**Truck Parking**

The Port has offered subsidized truck parking as a means of mitigating the adverse impact of maritime related truck activity on the communities adjacent to the port area. The truck parking area formerly managed by the port was transferred to the City of Oakland as part of the land swap between the two organizations. The Port has issued an RFP for the management of a truck parking area that is targeted for opening in July 2007. The Port is also in discussions with the City to determine the feasibility of operating joint truck parking facilities.

**Trucker Data Base**

The port does not have accurate information about firms and truckers providing drayage services at port facilities. Such information is essential to develop a truck management program. The data base will allow the port to identify all companies engaged in the provision of trucking services, enable the port to develop a profile of trucks operating at the port and facilitate port outreach efforts in support of the clean truck program.

The data base would also help determine how many marine-related truckers are based within the local impact area (LIA).

**Trucker Outreach**

The development of the truck management program requires the participation and input of a wide spectrum of truckers and trucking companies. The port participates in several trucker outreach programs. Staff hopes to directly communicate with all truckers and companies identified by the trucker database.

Staff anticipates jointly developing a trucker information guide book to service as a single source for trucker information.
Trucker Productivity and Working Conditions

Under the current truck drayage system independent owner operators are compensated based on the trip, rather than the time. This means traffic and terminal delays directly impact compensation. Improving truck turn times and trucker information technology capabilities, allows truckers to perform more container moves and to provide enhanced customer service.

Another issue to examine is consolidation and control of truck maintenance and support operations to ensure legality and convenience.

Other

Such other components as may be identified during the course of developing the truck management program, subject to the approval of the Executive Director.

<table>
<thead>
<tr>
<th>Action Items</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Develop Clean Truck Program</td>
<td>30-45 days</td>
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<tr>
<td>Collaborate with Community</td>
<td>On-going</td>
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<tr>
<td>Contract with PATH</td>
<td>30 days</td>
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<tr>
<td>Coordinate with other Agencies</td>
<td>On-going</td>
</tr>
<tr>
<td>Open Interim Truck Parking Area</td>
<td>30 days</td>
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<tr>
<td>Authorize Continuation of GPS and RFID</td>
<td>30 days</td>
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<tr>
<td>Extend eModal and BAWTC Contracts</td>
<td>30 days</td>
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<tr>
<td>Develop Trucker Data Base</td>
<td>120 - 180 days</td>
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<tr>
<td>Trucker Outreach</td>
<td>on-going</td>
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<tr>
<td>Develop Draft Truck Management Program</td>
<td>1 year</td>
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Several of the action items noted-above are included in a separate Board Letter for consideration by the Oakland Board of Port Commissioners.

We thank you for your thoughtful consideration of the information contained in this briefing. Staff will provide additional information and be available to answer any questions you may have at the Committee meeting.

Sincerely,

Joseph Wong
Interim Maritime Director

Maritime Committee Item E