Exhibit 1

Pearson Declaration

11/14/08

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

FEDERAL MARITIME COMMISSION Plaintiff vs. CITY OF LOS ANGELES, CALIFORNIA HARBOR DEPARTMENT OF THE CITY OF LOS ANGELES BOARD OF HARBOR COMMISSIONERS OF THE CITY OF LOS ANGELES CITY OF LONG BEACH, CALIFORNIA HARBOR DEPARTMENT OF THE CITY OF LONG BEACH BOARD OF HARBOR COMMISSIONERS OF THE CITY OF LONG BEACH Defendants	**DECLARATION OF DR. ROY J. PEARSON IN SUPPORT OF PLAINTIFF'S MOTION FOR PRELIMINARY INJUNCTION** **Civil Action No. 1:08-cv-1895-RJL**

Dr. Roy J. Pearson deposes and says:

Qualifications

1) My name is Roy J. Pearson. I am the Chief Economist of the Federal Maritime Commission ("Commission" or "FMC") and the Director of the FMC's Office of Economics and Competition Analysis ("OECA") in the Bureau of Trade Analysis ("BTA"). I have held these positions for the past three years.

2) In my capacity as Director of the OECA, I am responsible for directing the review of initial agreements filed with the Commission for substantially anti-competitive impacts

and any subsequent amendments to those agreements. I am also responsible for overseeing the monitoring of agreements once they become effective. I have been one of the main contacts between the Commission's BTA and the Port of Los Angeles ("POLA") and the Port of Long Beach ("POLB") with respect to activities conducted under their co-operative working agreement on infrastructure and environmental programs (FMC Agreement No. 201170), filed more than two years ago.

3) My professional association with the Commission first began in 1984 as a visiting expert on sabbatical leave for one year from the University of Liverpool. I helped to design and implement an economic assessment of the impact of the Shipping Act of 1984, required under Section 18 of that statute. The study lasted five years. I returned to the Commission in 1987 to work on the study for a further period of 18 months. I contributed two chapters to the final report which was submitted in 1989 to the President and a Congressionally-appointed Advisory Commission on Ocean Conferences.

4) I graduated with a Bachelor of Science degree in economics from the London School of Economics and Political Science in 1973 and earned a Doctor of Philosophy degree in transportation economics from the Polytechnic of Central London in 1977. I also received two years of post-doctoral training as a research fellow working full-time on a study of airport economics sponsored by the Social Science Research Council.

5) As a tenured university professor of maritime economics for 12 years, I taught a wide range of transportation-related courses, including a graduate course in the economic assessment of transportation projects in the Department of Civic Design at the University of Liverpool and various courses in shipping and port economics. For three years, I

served as an external examiner for a master's degree program in maritime studies at the University of Wales and I have supervised or examined numerous doctoral theses on maritime subjects.

6) Between 1989 and 1994, I taught a week-long course each year at the Singapore Port Institute, the training arm of the Port of Singapore Authority, on the economic impact of technological change in the shipping industry. This course was one of six modules in a postgraduate diploma program in shipping and port management conducted in Singapore under the degree conferring auspices of the University of Delaware.

7) I have consulted on port projects. On behalf of Posford, Pavry & Partners, a London firm of consulting engineers, I conducted two economic assessments of proposed container transshipment projects; one in Malaysia and the other in the U.K. I have produced (with others) two reports for the World Bank. One dealt with container logistics and terminal design; the other examined technological and operational developments in the liner trades of West Africa.

8) The facts and opinions set forth in this affidavit are based on my review of documents submitted by the parties to Agreement No. 201170 under the Commission's reporting requirements, as well as materials provided in response to formal and informal requests by the Commission for additional information. I also obtained information at meetings conducted in the Los Angeles region with various industry stakeholders.

9) In the past two years, I have met with the parties to the agreement once in Washington, D.C. and have visited them in the Los Angeles area on three separate occasions. During these trips, I also visited with licensed motor carriers ("LMCs"), representatives of their

trade associations both regionally and nationally, independent owner operators ("IOOs") involved in drayage, marine terminal operators ("MTOs"), ocean carriers, large retailers, cargo intermediaries, warehouse owners/operators, environmental groups, a local community organization, as well as interested academics at the California State University, Long Beach and the University of Southern California.

Executive Summary

10) In November 2006, pursuant to Agreement No. 201170, the Port of Long Beach and the Port of Los Angeles unveiled a Clean Air Action Plan ("CAAP") that described various measures the Ports intended to implement in order to reduce health-impairing air pollutants from port-related sources by 45 percent by 2012. Operations by heavy duty diesel trucks are one such source, the others being ocean-going vessels, railroad locomotives, harbor craft (e.g., tugs) and cargo handling equipment in the Ports' marine terminals. The truck-related measures identified in the CAAP were expected to reduce air pollutants from truck operations by 80 percent by 2012.

11) The Parties to Agreement No. 201170 filed an amended and restated Agreement ("revised Agreement") with the FMC on August 1, 2008. The revised Agreement included information concerning the Clean Truck Program ("CTP") that the Parties have been developing and revising since November 2006. Among other things, the revised Agreement would allow the Parties to coordinate and cooperate on the implementation of their CTP and its respective concession programs. With regard to this filing, the Commission issued a formal Request for Additional Information ("RFAI") on September 12, 2008, to obtain information and documentary materials necessary for assessing the revised Agreement's competitive impact.

12) Using the Parties' response to the RFAI, other material confidentially filed with the FMC, and available public sources, my analysis of the revised Agreement's competitive impact leads to the conclusion that the Ports' CTP is likely, by a reduction in competition,[1] to unreasonably increase transportation costs and unreasonably decrease service.

13) My analysis raises several serious issues about the clean truck program at POLA and POLB. The employee mandate will almost certainly (and unnecessarily) increase transportation costs and reduce service, while doing nothing to ensure compliance with the CTP's rolling ban on older trucks. Further, the key aspects of the harmonized concessions plan, including the requirement that LMCs operate their own truck fleet and hire the drivers of their trucks as full-time employees ("employee mandate"), CTP fee and exemptions, truck subsidies, and economic pressures on LMCs, will likely transform the drayage market from a perfectly competitive market to a severely constrained market. I believe the cost of this transition will be severe; the drayage sector will lose its surge capacity, drayage efficiency will be reduced, and the few remaining LMCs will gain the ability to increase prices and profit margins. Ultimately, shippers, people employed in

[1] The Port of Los Angeles and the Port of Long Beach are contiguous facilities and long-standing competitors in the port services market. This competitive situation exists with respect to cargo movements originating and ending in Southern California, as well as for cargo moving to and from U.S. inland points. Under the revised Agreement the Parties would regulate truck access to their leased terminals through a concession system. The Parties also have agreed on a "Clean Truck Fee" on loaded containers to be paid by cargo interests to fund the clean truck program. The revenues generated by the fee are to be used to subsidize the purchase of trucks with 2007 EPA-compliant engines to replace older trucks serving the two ports. In the case of POLA, revenues also may be used to fund incentives to attract new entrants to the port drayage market. In addition, marine terminal operator lessee- tenants at the two ports are being required to administer the collection of the clean truck fee and exclude certain trucks that are banned according to a clean truck compliance schedule agreed upon by the Ports. Thus the revised Agreement involves a reduction in competition resulting from Agreement-related activities that will impact: (a) the port drayage labor market, (b) cargo owners' drayage costs and services, and (c) marine terminal operators' administrative responsibilities and expenses.

port-related industries in the Los Angeles region, and American consumers will suffer from higher prices and a loss of commerce.

14) My analysis demonstrates that certain aspects of the Parties' CTP, as currently structured, could result in $4.2 billion in *reduced* net benefits by 2025 as compared with net benefits achievable under a readily available alternative compliance path, namely, a CTP using the concession requirements adopted by the POLB. The mid-point of the range of estimated total net benefits of the CTP under the POLB concessions plan is $2.9 billion, while the mid-point of the total net benefits of the actual CTP is minus $1.3 billion (i.e., a net cost); the difference between these two mid-point estimates is $4.2 billion.

15) My analysis attributes most of the $4.2 billion reduction in net benefits to the unnecessary inefficiencies and lost opportunities that will arise from the two ports' harmonized concessions plan. After a short transition period, only licensed motor carriers that use employee drivers in their drayage service will be allowed access to container terminals at POLA. This POLA requirement, which will force all independent owner operators to become LMC employees during a short four-year transition period,[2] is expected to account for over 60 percent of the actual CTP's total cost.

16) Although one of the Parties, POLA, asserts that inclusion of an employee mandate is necessary to ensure that the CTP's environmental and public health benefits are sustainable, the other Party, POLB, has taken an opposite position. My analysis indicates that the worker status of the trucks' drivers is not in any way critical to sustaining the

[2] The transition schedule and the contractual requirements being imposed on licensed motor carriers that wish to qualify for CTP concessionaire status at POLA can be found on pages 2 and 3, under "(d) Driver Hiring," of Attachment A, "Drayage Services Concession Agreement for Access to the Port of Los Angeles."

CTP's environmental and public health benefits; a CTP without an employee mandate (such as POLB is currently establishing) not only provides all the relevant public health benefits, but does so at substantially lower cost and with greater overall net benefits.[3]

17) Other troubling aspects of the Ports' CTP include application of the CTP fee and exemptions and the $20,000 per truck incentive payment being made available by POLA to some but not all licensed motor carriers. My analysis of these aspects of the Ports' CTP leads to the conclusion that the present perfectly competitive and unified drayage market at the Ports most likely will split into two separately served markets, with one LMC subgroup serving only POLB and another serving both POLA and POLB but employing separate truck fleets for each port. These changes will result in operational inefficiencies in the local drayage market.

18) My analysis also shows that small licensed motor carriers operating at POLA will be at a competitive disadvantage. Although POLB and POLA have set their CTP fee exemptions in different ways and only POLA provides incentive payments, a close examination of those decisions indicates what seems to be a *deliberate* choice by *both Ports* to support the POLA employee mandate and LMC preferences through these indirect means.[4]

[3] POLA has also indicated a preference for drastically reducing the number of motor carriers serving the Port, which will have the effect of empowering motor carriers to raise drayage prices above those that would prevail in a competitive environment.

[4] An outdated view of the concerted behavior of maritime agreement members is that they collectively decide upon an identical set of actions. This view stems from applying static models of competition to explain collective behaviors. As far as maritime agreements are concerned, uniform actions by agreement members have been replaced in many instances by non-identical coordinated actions as a result of agreement parties having lost their ability, under the Shipping Act of 1984 and the Ocean Shipping Reform Act, to police and effectively enforce decisions arrived at jointly. Absent an Agreement, a divergent set of actions between two competitors of the kind described in this affidavit would only occur if neither Party could do any better by unilaterally changing their strategy. But given POLA's continued pursuit of the employee mandate, POLB could easily regain a competitive advantage by adjusting its CTP fee or exemptions (as POLA did when POLB decided not to adopt the employee mandate). The fact that POLB has decided not to change its strategy following POLA's divergence on the fee exemptions and

19) The disruptions to the market described above will be costly; the efficiency of drayage operations will be reduced, the drayage sector will lose its ability to readily provide surge capacity, and the few licensed motor carriers that end up serving POLA will gain the ability to raise prices above competitive levels.

A. Background to the CTP

20) The CTP was first released by the Ports for public comment on April 12, 2007, and arose as part of the San Pedro Bay ("SPB") Ports' Clean Air Action Plan which was adopted at a joint meeting between the Ports on November 20, 2006. The CAAP sought to reduce port-related air emissions in compliance with directives of the U.S. Environmental Protection Agency ("EPA") and the California Air Resources Board ("CARB"). In addition to heavy-duty trucks, the CAAP identified ocean-going vessels, cargo handling equipment, harbor craft, and railroad locomotives as sources of Port related air pollution where emissions reduction measures are necessary.

21) As discussed in the Ports' 2006 final CAAP report, the South Coast Air Basin ("Basin"), where the Ports are located, has some of the worst air quality in the nation, which is considered to be a major health concern. The EPA cited the Basin for not attaining the National Ambient Air Quality Standards ("NAAQS") for its unhealthy levels of ozone, which the EPA rated as severe, and its levels of particulate matter. Further, the South Coast Air Quality Management District ("SCAQMD") cited ship, truck, and train emissions at the Ports as a major source of air pollution affecting the Basin in its *Multiple Air Toxics Exposure Study II*.

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incentive payments suggests that the Ports have agreed to (i.e., harmonized) these differences.

22) For base year 2002, SCAQMD calculated that emissions from the Ports contributed 12 percent of the diesel particulate matter ("DPM"), 9 percent of the oxides of nitrogen ("NOx"), and 45 percent of the oxides of sulfur ("SOx") affecting air quality in the entire Basin.[5] If not corrected, SCAQMD estimated that by 2020, emissions from the Ports could increase to 32 percent of DPM, 24 percent of NOx, and 73 percent of SOx for the Basin. These findings, the Ports noted, have affected their ability to proceed with plans to expand port capacity and infrastructure.

23) Air quality improvement efforts are now being focused on regulating mobile sources of air pollution, such as heavy-duty trucks. For example, the California Air Resources Board ("CARB") designated the exhaust from diesel-fueled engines as a toxic air contaminant, with DPM as a surrogate for all toxic emissions. In 2000, the EPA adopted stricter emissions standards for the manufacture of model year 2007 heavy-duty diesel engines used in vehicles such as trucks and buses. Compared to the 2000 standards, the 2007 standards sought to reduce the emissions of NOx and DPM by 90 to 95 percent.

24) In 2001, CARB adopted similar emissions standards on the manufacture of 2007 diesel engines, and has since approved a statewide plan to implement the 2007 emissions standards. Specifically, CARB has approved drayage truck regulations to reduce toxic air emissions from the use of heavy-duty diesel trucks at all ports in California and intermodal rail yards.[6] CARB's plan calls for an 85 percent reduction of DPM emissions starting with a partial truck ban in 2010 and full compliance with the 2007 emissions

[5] Vessels are the primary source of SOx emissions at the Ports.

[6] California Environmental Protection Agency, Air Resources Board (CARB) Proposition 1B: Goods Movement Emissions Reduction Program, Guidelines for Implementation (adopted February 8, 2008).

standards by the start of 2014. In other words, if the Ports were to do nothing to address truck emissions, the CARB regulations would soon require such action.[7]

25) The Ports have stressed that the CAAP was crafted in collaboration with SCAQMD, CARB, and the EPA with the intention of meeting these agencies' air quality standards and regulations. Originally, the CAAP sought an overall reduction in toxic air emissions of 45 to 52 percent by 2012 from all sources of air pollution at the Ports. As one of the sources of pollution, the Ports calculated that heavy-duty trucks used for drayage accounted for 10 percent of DPM, 26 percent of NOx, and one percent of SOx of the air pollutants produced by operations at the Ports. In 2006, the Ports estimated that 16,800 trucks in drayage service moved 80 percent of the total container volume at the Ports with an even larger number of trucks that serve the Ports infrequently accounting for the other 20 percent.[8]

26) As initially presented in April 2007, the proposed CTP generated public interest; numerous groups and organizations representing parties that could be affected by the program expressed strong views in favor of, or against, the proposed CTP. Their views

[7] For all California ports and intermodal rail yards, the CARB regulation will: (1) ban all pre-1993 model year trucks on January 1, 2010; (2) starting January 1, 2010, require the reduction of diesel particle matter (DPM) emissions by 85%; (3) starting January 1, 2014 require drayage trucks to meet 2007 emissions standards; and (5) by September 30, 2009, they must register with CARB's Drayage Truck Registry. In addition, the CARB regulations will require: truck drivers to provide motor carrier contact information; truck owners to register the truck in a drayage truck registry, to ensure trucks meet emissions standards, to ensure truck drivers provide contact information and to ensure emission control technologies are correctly installed and working; terminals and rail yards to collect information from non-compliant trucks entering their facilities and relay that information to the port or rail authorities on a quarterly schedule; port and rail authorities to collect non-compliant truck information from terminals and rail yards and report to CARB on a quarterly schedule. The additional requirements of the Ports of Los Angeles and Long Beach CTP timetable is to ban pre-1989 trucks after October 1, 2008 (as opposed to CARB which bans all pre-1993 trucks on January 1, 2010); starting January 1, 2010 to require the reduction of NOx (CARB only reduces DPM) emissions by 25%, and to meet 2007 emissions standards starting January 1, 2012 (as opposed to CARB's 2014 date). The Ports recently (October 27, 2008) decided to postpone the pre-1989 ban until January 1, 2009 for trucks when it can be shown that a 2007 compliant diesel truck has been ordered to replace it or until April 1, 2009 when an alternative fuel truck has been ordered to replace it. The CARB regulations apply only to diesel trucks.

[8] POLA and POLB, "Final 2006 San Pedro Bay Clean Air Action Plan Technical Report," p. 57.

primarily centered on the concessions requirements that would have been imposed on LMCs. To provide drayage service at the Ports, LMCs would have had to enter into concession agreements with the Ports that would have required the LMCs to own and maintain their own fleet of trucks and hire the drivers of their trucks as full-time employees. This concession system would have phased out the use of independent owner operators as drivers in drayage service at the Ports, which at the time was estimated at 85 percent or more of all drivers.[9] Subsequently, the Ports took additional time to re-evaluate the impact of the CTP and commissioned a number of economic studies either jointly or individually.[10]

27) Ultimately, the Ports agreed on a CTP that established: (1) deadlines for banning the use of older trucks in drayage based on the 2007 emissions standards starting on October 1, 2008, with full compliance by the start of 2012 (referred to as the "rolling ban"); (2) a drayage truck replacement (or retrofit) program for qualified older trucks; (3) a clean truck fee assessed against the containerized merchandise entering or leaving the Ports by drayage truck (with certain exceptions); (4) a Clean Truck Fund with financing options to subsidize the replacement (or retrofitting) of qualified older trucks; and (5) a concession agreement with requirements that LMCs must meet and abide by to provide drayage service at the Ports.

[9] Monaco, K., and Grobar, L., "A Study of Drayage a the Ports of Los Angeles and Long Beach," California State University Long Beach, December 2004, p. 7.

[10] The economic studies commission by the Ports include: Husing, John E., Brightbill, Thomas E. and Cooper, Peter A., "Economic Analysis: Proposed Clean Truck Program," September 7, 2007 (Attachment B); Moffatt & Nichols, and BST Associates, "Container Diversion and Economic Impact Study, Effects of Higher Drayage Costs at San Pedro Bay Ports," September 27, 2007; Husing, John E., and Brightbill, Thomas E., "Clean Truck Program Option Assessment: Proposed Clean Truck Program," Draft, December 16, 2007 (Attachment C); and the Boston Consulting Group ("BCG"), "San Pedro Bay Ports Clean Truck Program, CTP Option Analysis," March 2008.

28) The Ports' CTP aims to enforce the drayage truck emissions regulations adopted by CARB earlier than CARB requires by advancing application of those requirements by between 14 and 24 months. By doing so, this early adoption qualified the Ports to receive up to $400 million in state funding.[11]

29) The terms of the CTP implemented by POLB and POLA are compared in Table 1 below. With regard to the section 6(g) standard, those areas that are causing the greatest concern are highlighted in red under the POLA column. The concession agreement of POLA requires LMCs to lease or own (and operate) their trucks and employ the drivers (the employee mandate), whereas the concession agreement of POLB allows LMCs to operate with employee drivers, IOOs, or a combination thereof, and without a vehicle ownership requirement. POLA's concession application fee is $2,500, and POLB's fee is $250. Only qualified LMCs are eligible for clean truck funds from POLA, while POLB provides

[11] Proposition 1B authorized the Legislature to appropriate $1 billion in bond funding to CARB to quickly reduce air pollution emissions and health risk from freight movement along California's priority trade corridors. The State Fiscal Year (FY) 2007-08 budget included the first installment of $250 million. The implementing statutes direct CARB to maximize the emission reduction benefits and achieve the earliest possible health risk reduction in communities heavily impacted by goods movement. The Goods Movement Emissions Reduction Program ("Program") supplements regulatory actions and other incentives to cut diesel emissions. By statute, the Program can only fund emission reductions "not otherwise required by law or regulation." Key pollutants targeted by the Program include DPM and NOx that contribute to formation of both PM 2.5 and ozone. CARB will award grants to fund projects proposed by local agencies that are involved in freight movement or air quality improvements associated with goods movement activities. The local agencies will then be responsible for providing financial incentives to owners of equipment used in freight movement to upgrade to cleaner technologies, consistent with Program Guidelines adopted by CARB. Bond funds will flow via grants from CARB to local agencies, then to equipment owners via contracts or other binding agreements with those local agencies. At both steps, there is competition based on the projected emission reductions and reductions per State dollar invested to ensure the most beneficial projects are funded. It should be noted that the statewide funding plan for early compliance is fuel neutral; it focuses on standards, but does not prescribe how the standards must be met. The funding guidelines also are neutral with respect to employee status. Indeed, they require the local agency funding recipient to demonstrate how it will conduct targeted outreach and assistance to independent truck owner-operators.

clean truck funds to both LMCs and IOOs that qualify.[12] POLA exempts trucks powered by liquefied natural gas ("LNG") or alternative fuels from paying the clean truck fee regardless of whether they were funded under the Clean Truck Fund or not. POLB exempts from the fee only LNG or alternative fuel trucks that were privately funded. Similarly, POLA provides a 100 percent exemption from the fee for privately funded 2007 compliant diesel trucks, whereas POLB only provides a 50 percent reduction in the fee for such trucks.[13]

30) Prior to the concession requirements, most of the LMCs serving the Ports were non-asset owning businesses that employed the IOO trucks and drivers as independent contractors. They arranged drayage service for their customers who need containers moved, usually cargo owners, ocean transportation intermediaries, or ocean carriers. The POLA employee mandate and the related requirement that LMCs own or control the trucks will force surviving LMCs to become asset-owning businesses with drivers who are direct employees and bear the associated capital and labor costs.

[12] The CTP fund is making grants available for up to $67,000 for the purchase of a new clean diesel truck (typically priced at about $93,000) or for up to $105,000 for the purchase of a new LNG truck (priced at between $161,000 and $197,000, depending on specification). Subsidized lease financing options also are available. For a $95,000 clean diesel truck or a $161,000 LNG truck, over a seven-year term, the monthly payments by the LMC/IOO would be about $300 per month for the first two years and about $500 per month for the next five years.

[13] POLB provides a full exemption of 2007 compliant diesel trucks that were privately funded and purchased before October 1, 2008, if recorded in the Drayage Truck Registry.

Table 1: A Comparison of Key Elements in the Ports' CTP	POLB	POLA
All drayage drivers must possess TWIC certification to enter the Ports	☑	☑
Rolling ban on non-EPA 2007 compliant trucks	☑	☑
10/2008: All trucks with engines MY 1988 and older are banned	☑	☑
01/2010: All trucks with engines MY 1993 and older are banned; all trucks with unretrofitted MY 1994 to MY 2003 engines are banned	☑	☑
01/2012: All trucks that do not meet EPA 2007 truck emissions standards are banned	☑	☑
Trucks entering the Ports must be registered with Ports' drayage truck registry ("DTR")	☑	☑
Trucks entering the Ports must be equipped with Radio Frequency Identification Device ("RFID") or other such device	☑	☑
Adopt tariff amendment instituting a "Clean Truck Fee"	☑	☑
Collect fee from trucks with non-EPA 2007 compliant engines (engine year 2006 and older)	☑	☑
Collect fee from diesel trucks purchased/leased **with** Clean Truck Fee Program funds	☑	☑
Collect fee from diesel trucks purchased/leased **without** Clean Truck Fee Program funds	☑[14]	☐[15]
Collect fee from alternative fuel (LNG) trucks purchased/leased **with** Clean Truck Fee Program funds	☑	☐
Collect fee from alternative fuel (LNG) trucks purchased/leased **without** Clean Truck Fee Program funds	☐[16]	☐
Licensed motor carrier must sign a concessions agreement and agree to the following components:	☑	☑
LMC must pay concessions application fee and administrative fee per truck	☑	☑
LMC must transition to providing all drayage services using employee labor	☐	☑
LMC may provide drayage services using both independent owner operator and employee labor	☑	☐
LMC must lease or own and operate the drayage trucks	☐	☑
LMC must submit maintenance plan for trucks under their control	☐	☑
LMC must submit an off-street parking plan for their trucks	☐	☑
LMC must require and/or maintain automotive and liability insurance for all trucks under their control	☑	☑
LMC must offer health insurance to all drivers under their control	☑	☐
LMC must permit safety and security searches for all trucks under their control	☑	☑

[14] POLB will collect 50 percent of the fee if the privately funded truck was purchased after October 1, 2008 and an old truck was scrapped. If the privately funded truck was purchased or ordered prior to October 1, 2008, then it is exempt from the clean truck fee.

[15] Outside of the port's tariff provisions, POLA is providing incentive payments of up to $30,000 per clean truck to selected motor carriers that were able to sign letters of intent by September 19, 2008, to provide 2007 EPA-compliant trucks.

[16] POLB exempts this type of truck from the clean truck fee if it is replacing a scrapped older truck.

B. Comparative Benefit and Cost Analysis

31) I used a two-step process to review the likely impact of the revised Agreement's CTP (including the rolling ban, fee exemptions and concessions' requirements) on transportation costs and service.

32) The first step involved comparing the benefits and costs of two viable alternative paths to achieving the Parties' clean air/public health goals by replacing the current drayage fleet, namely, (1) the CTP as reflected in the revised Agreement (labeled "CTP-Actual"), and (2) the CTP assuming both Ports had adopted the POLB concessions' requirements (labeled "CTP-POLB"). Using various measures, the relative economic efficiency of the two paths, CTP-POLB versus CTP-Actual, was compared (see the summary data in Tables 2 and 3 below). One of the paths (CTP-Actual), the one adopted by the Parties, resulted in much lower efficiency (i.e., it produced substantially higher costs relative to benefits).

33) The second step involved identifying which specific elements within the CTP-Actual were causing this much poorer outcome.

Summary of the Outcomes

34) Attachment D to this declaration, entitled "Evaluation of Different Paths to Cleaner Air Using a Benefit-Cost Framework" (hereafter referred to as the "benefit-cost comparison table"), identifies a range of estimates of the likely benefits and costs that would be generated by the CTP-Actual which has been agreed upon between the Parties. These estimates are compared to the estimated benefits and costs that likely would be generated if the two Parties had agreed to jointly implement the CTP-POLB plan which does not contain an employee mandate or a requirement that LMCs must own their trucks.

35) To the extent possible, the benefit-cost comparison table (Attachment D) has been populated with estimates that derive originally from information furnished by the Parties to the agreement, their consultants, or other third parties.[17]

36) The summary page of the benefit-cost comparison table, reproduced below, shows the total benefit, total cost and total net benefit of four outcomes, and their related benefit-cost ratios:

- The CTP assuming both Ports adopt the POLB concessions model
  - The worst case outcome[18]
  - The best case outcome[19]

- The actual CTP as agreed between the two Parties
  - The worst case outcome
  - The best case outcome

37) The CTP-POLB, which excludes an employee mandate, provides substantially superior outcomes on the basis of both total net benefits (B minus C) and benefit-to-cost ratio (B divided by C) compared to the CTP-Actual (which includes the POLA employment mandate and other requirements such as LMC ownership of trucks).

[17] The Ports' consultants included Dr. John Husing, the Boston Consulting Group ("BCG"), and Starcrest Consulting Group, LLC ("Starcrest"). The collected data was not necessarily taken at face-value, rather I exercised my professional judgment, where appropriate, based on industry knowledge and experience.

[18] The worst case outcome compares the lower total benefit estimate against the higher total cost estimate.

[19] The best case outcome compares the higher total benefit estimate against the lower total cost estimate.

Table 2: Comparing the Relative Costs and Benefits of the CTP Paths to Cleaner Air[20]

BENEFIT - COST SUMMARY	CTP-POLB		CTP-Actual	
	Worst-Case Outcome	Best-Case Outcome	Worst-Case Outcome	Best-Case Outcome
TOTAL BENEFITS	$ 4,707,000,000	$ 6,223,000,000	$ 6,053,000,000	$ 9,583,000,000
TOTAL COSTS	$ 2,864,000,000	$ 2,193,000,000	$ 10,264,000,000	$ 8,130,000,000
NET BENEFITS (B-C)	$ 1,844,000,000	$ 4,030,000,000	$ (4,211,000,000)	$ 1,452,000,000
BENEFIT/COST RATIO (B/C)	1.6	2.8	0.6	1.2

38) Regardless of the type of comparison conducted, the CTP-POLB plan always outperforms the CTP-Actual, and almost always by a substantial margin. With respect to the CTP-Actual, the worst-case outcome indicates that it likely will produce costs that are $4.2 billion in excess of potential benefits (i.e., a total net cost), while that plan's best-case outcome likely will produce net benefits that are about $2.5 billion less than would be the case if the Parties adopted the CTP-POLB concession requirements (the best-case outcome in Table 2 above).

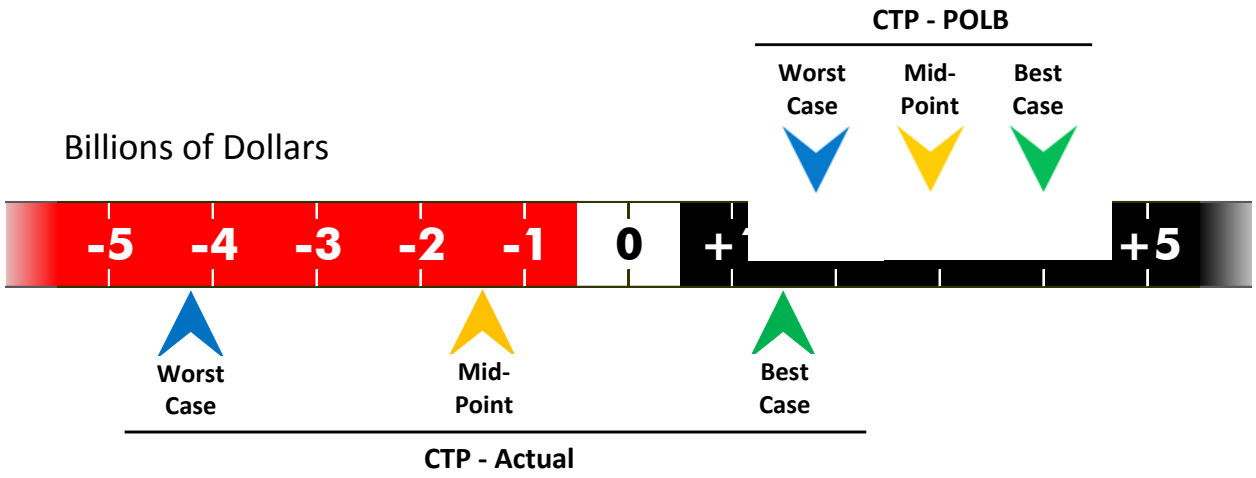
39) On the basis of best-case to best-case and worst-case to worst-case comparisons (see Table 3 below), the CTP-POLB concessions model produces far superior outcomes. In fact, the worst-case outcome for the CTP-POLB model outperforms even the best-case outcome for the CTP-Actual by well over $300 million.

Table 3: Comparing Differences in Best-Case and Worst-Case Outcomes

	CTP-POLB	CTP-ACTUAL	Difference
Best-Case Outcome Total Net Benefit (highest benefits with lowest costs)	$4.0 billion	$1.5 billion	$2.5 billion (favoring CTP-POLB)
Worst-Case Outcome Total Net Benefit (lowest benefits with highest costs)	$1.8 billion	-$4.2 billion	$6.0 billion (favoring CTP-POLB)
Best-Case Outcome Benefit/Cost Ratio	2.8	1.2	CTP-POLB Superior
Worst-Case Outcome Benefit/Cost Ratio	1.6	0.6	CTP-POLB Superior

[20] The program's total costs and benefits are aggregated through 2025 and rounded to the nearest million.

40) As seen in the illustrative summary below, the net benefit outcomes range for the CTP-POLB is $1.8 to $4 billion, the mid-point of which is $2.9 billion. The net benefit outcomes range for the CTP-Actual is minus $4.2 to plus $1.5 billion, the mid-point of which is minus $1.3 billion (i.e., a net cost). Taking the difference between these two mid-points, the CTP-Actual results in a *loss* of net benefits of $4.2 billion compared to the less restrictive POLB concessions' requirements (CTP-POLB).



41) A comparison of both plans on a worst-case to worst-case basis produces the bleakest outcome of all. On this latter basis, implementing the CTP-Actual model could result in a substantial net loss of $6 billion compared to the readily available alternative model (CTP-POLB).

C. Further Analysis of Estimated Benefits

42) The first page of the benefit-cost comparison table (Attachment D) identifies potential benefits that could be produced by the CTP. The biggest single benefit is derived from an expected reduction in the number of premature deaths if the CAAP's reduced emissions target for drayage trucks is reached. This benefit amounts to $4.4 to $5.6 billion

regardless of the exact plan because both plans are expected to reduce truck emissions by the same amount.[21]

43) After public health benefits, the "avoidance of anti-poverty payments" is the second largest single benefit of the actual CTP. This benefit stems directly from the POLA employee mandate. The estimated benefit of almost $1.25 billion for anti-poverty payments avoided originates from a study produced for the Coalition for Clean and Safe Ports ("CCSP") by the Los Angeles Alliance for a New Economy ("LAANE").[22] Arguing that many drayage drivers rely on a variety of public welfare or other social safety net programs to make ends meet, this group estimated that independent contractor drivers qualify for over $18,000 in annual taxpayer-supported subsidies, such as the earned income tax credit, Section 8 housing allowances, WIC payments, and reduced-price school meals.

44) The estimated benefit for anti-poverty payments avoided shown in the benefit-cost comparison table is lower than the LAANE estimate of these subsidies by about $1 billion to reflect the following factors:

- About 13 percent of drayage drivers are employee drivers rather than independent contractor drivers (something not accounted for by the LAANE study).[23]
- The LAANE estimate of anti-poverty subsidies was based on a married couple with children, but over 20 percent of drayage drivers are not married[24] and, therefore, may not qualify for welfare payments of this magnitude.

[21] Although the largest health benefit is avoidance of premature deaths, additional quantified health impacts include hospital admissions, lost workdays, minor restricted activity days, etc. Some other health effects, however, cannot be quantified at this time (e.g., worsened asthmatic conditions). As a result, overall public health benefits may be underestimated (but to the same extent in both models).

[22] *"The Road to Shared Prosperity,"* Los Angeles Alliance for a New Economy, Los Angeles, August 2007.

[23] Monaco, K. & Grobar, L. "A Study of Drayage at the Ports of Los Angeles and Long Beach." California State University Long Beach, December 2004, p. 7.

- About 25 percent of all drayage drivers earn $38,000 or more annually;[25] these drivers may not qualify for social welfare payments and benefits.
- LAANE construed the $29,000 average income of these drivers as household income thus ignoring the possibility of working spouses, which would raise average household income and thereby reduce welfare payments.
- The LAANE estimate was based on four children in the household, while the available evidence from a recent survey of San Pedro Bay drayage drivers shows that the mean number of children per driver is 2.4.[26]

45) The third largest benefit of the actual CTP is derived from reduced traffic congestion in the Los Angeles area plus a consequent reduction in traffic accidents. Under the actual CTP, these two items together account for over $1.6 billion in benefits. The value of these benefits hinges on an anticipated reduction in drayage trips of between 8 and 31 percent. The reduced number of trips depends completely on substantial increases in the proportion of drayage trips for which import loads are matched with return export loads or empty containers (and vice versa). These reductions are contradicted by the POLA consultant BCG. According to BCG, just 15.9 percent of trips are matched with return loads. To achieve the level of benefits claimed, the percentage of trips that are matched must rise from the current level to 25.8 percent (on which their low estimates of congestion and accident costs are based), and to a rather implausible 65.9 percent (for the high estimate).[27]

46) Given the nature of the drayage business (which lacks automation) and just-in-time import supply chains (which demand a high degree of responsiveness from service

[24] Ibid, p. 16.

[25] Ibid, p. 14.

[26] Ibid, pp. 16-17.

[27] See Attachment E, "Response to Question 29 of the RFAI."

providers), the very high rate of matching, on which the BCG high-end estimate depends, is an unwarranted assumption. Moreover, absent considerable consolidation of the drayage industry, even the low estimate of 25.8 percent matching is not achievable. In mid-October, the Port's website showed that over 700 licensed motor carriers had applied for concessions at POLA. With a large number of operators active in the market, the rate of matching is unlikely to change much from the current 15.9 percent, thereby calling into question whether the substantial benefits for reductions in congestion and accidents shown in the table are really achievable. Moreover, if the drayage market fractures, as predicted later in this affidavit, then the rate of matching would probably go down.

47) The concessions component of the CTP attempts to make concessionaires accountable for the safety of trucks and the safety training of drivers, thereby improving public safety. Attachment D incorporates benefits for increased public safety based on estimates furnished by BCG.

48) The Ports also contend that concessions close a security gap that they say currently exists by enabling them to correlate drivers, trucks, cargo and the motor carriers,[28] although it is unclear that a security gap exists, much less that the Ports bear responsibility for it. It seems no one has yet been able, however, to put a value on the benefit (if any) of closing the gap. On a preventative basis, the most significant security benefit is likely to derive from enforcement of the Transportation Worker Identification Credential ("TWIC") issued by the U.S. Department of Homeland Security ("DHS"). The TWIC program increases security and reduces vulnerabilities on port property by limiting access to Port

[28] Letter to the Commission from Dr. Geraldine Knatz, Executive Director of POLA, dated October 28, 2008.

facilities to individuals deemed safe by the Federal government.[29] However, TWIC will accomplish these goals regardless of the employment status of the truck driver. Moreover, as a Federal program, TWIC will be implemented with or without the Ports' CTP. Although the Ports have decided to implement certain TWIC measures marginally sooner than required by DHS,[30] the monetary value of this slight acceleration in TWIC has not been assessed.

D. Further Analysis of Estimated Costs

49) An assessment of the POLA employee mandate indicates that it will add between $6 billion (low estimate) and $6.5 billion (high estimate)[31] to the cost of the actual CTP, ignoring for the moment any offsetting benefits.[32] About half of this figure (approximately $3 billion) derives from the higher wage and fringe benefits employees

[29] The Ports' argument that their harmonized concessions plan adds a layer of security above that offered by the TWIC seems inconsistent with the vision for maritime security described in the United States government's "National Strategy for Maritime Security," (http://www.whitehouse.gov/homeland/maritime-security.html). This Plan demarcates the responsibilities of the Federal government and of private industry (which in this case includes the Ports as facility owners). In this document, the Federal government is charged with producing and distributing information on threats, providing guidance to reduce vulnerabilities, and providing a security presence to protect from and deter attacks (p. 10). Private industry is "responsible for increasing physical security and reducing the vulnerabilities of their property by conducting routine risk management planning, as well as investing in protective measures – e.g. staff authentication and credentialing, access control, and physical security of their fixed sites and cargoes – as a necessary business function" (p. 10). The Plan cautions private industry from taking steps over and above controlling access to their facilities, stating that: "Overly restrictive, unnecessarily costly, or reactionary security measures to reduce vulnerabilities can result in long-term harm both to the United States and global economies, undermine positive countermeasures, and unintentionally foster an environment conductive to terrorism" (p.19). The Coast Guard made similar points in 2003 when promulgating rules implementing the Maritime Transportation Security Act ("MTSA"). Among other things, the MTSA gave the Coast Guard the authority to require facilities to implement security measures. In explaining how that authority would be exercised, the Coast Guard stated: "We do not intend to delegate this authority to State or local agencies because we believe the system, as mandated by the MTSA, provides the necessary nationwide consistency to strengthen security without putting any particular State or region at a competitive economic disadvantage." (Federal Register, Vol. 68, No. 204)

[30] While drayage truckers are required to have this credential in their possession under the terms of the Ports' concession agreements, or evidence that they have applied for it, as yet there is no checking of this credential at the marine terminal gates. DHS is scheduled to begin TWIC enforcement in April 2009.

[31] These costs consist of $2.8 to $3.1 billion as a result of higher wages and benefits, $2 billion in lost productivity because more drivers are required, and $1.2 to $1.4 billion in higher wages if the driver workforce is subsequently unionized; see page two of the benefit-cost comparison table (Attachment D).

[32] The employee mandate's cost (i.e., additional wages and benefits, etc.) will also create lost commerce due to increased transportation costs. The opportunity cost of lost commerce is called a dead weight loss by economists.

earn relative to IOO drivers. A third (about $2 billion) is explained by lost productivity because more drivers are required under the employee mandate. According to the Port's consultant, Dr. John Husing, 28 percent more drivers will be required under the employee mandate versus the current status quo.[33] The remaining added cost of over $1 billion would occur if, ultimately, the employee drivers serving POLA became union members.[34]

50) According to those who support the employee mandate, converting IOO drivers to employees will bring with it certain benefits. They argue that various social payments to IOO drivers earning less than the poverty guidelines, e.g., earned income tax credits and Section 8 housing allowances, might be avoided if drayage drivers were paid more. Also, cost burdens placed on local health care providers might be reduced if more drayage drivers have health care coverage. Some also believe that employee drivers would be less likely to take unsafe rigs and loads onto the highways. Based on data provided by the Ports and others who put forth these arguments, I estimate that these offsetting benefits amount to between $1.4 billion (low estimate) and $3.5 billion (high estimate).[35]

51) On a net basis (added cost minus offsetting benefits), therefore, the net cost impact of the POLA employee mandate likely will range between $3.0 billion and $4.6 billion over the period through 2025.

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[33] Under the employee mandate, for any given number of trips, more drivers are required for two main reasons. First, employees work fewer hours than IOO drivers in an average week. Second, certain employee work rules and practices cut into the time available for driving.

[34] According to a relatively recent study of the de-regulated trucking industry, "Union membership remains an important determinant of wages, with members earning 18 to 21 percent more than non-union counterparts." See, Belman, D. L. & Monaco, K. A., "The Effects of Deregulation, De-Unionization, Technology, and Human Capital on the Work and Lives of Truck Drivers." *Industrial and Labor Relations Review*, Vol. 54, No. 2A, March 2001, pp.502-524.

[35] These offsetting benefits are the aggregated "other community benefits" plus the "wait-time reduction" benefit that appear on the first page of the benefit-cost comparison table (Attachment D).

52) Data made available to the Commission by the Parties as late as October 9, 2008, indicated that the above mentioned figures may underestimate the cost of the employment mandate. The estimates above are premised on an estimated 16,800 trucks and drivers regularly engaged in port drayage. Generated in 2005, this estimate was developed by the Ports' consultant, Starcrest, based on a rather restricted sampling of truck license plates recorded over a 37-day period as trucks passed through the gates at five out of the then fourteen container terminals at the two ports.[36] This initial estimate of 16,800 trucks regularly calling at the two ports is used extensively by the Ports as a basis for planning the CTP.

53) More recently, however, Starcrest generated a revised estimate of the number of trucks serving the Ports based on a complete annual census of all truck license plates passing through the gates at seven container terminals in 2006. This revised estimate indicated that the number of trucks regularly calling at the Ports is 19,475 rather than 16,800;[37] an added difference of about 16 percent in trucks and drivers.[38] Replacing the original estimate with this more up-to-date estimate of the number of trucks that need to be replaced under the CTP would make the net cost of the employee mandate even larger than the $3 to $4.6 billion estimate just provided.

[36] Starcrest Consulting Group, "Draft Methodology for Estimating Heavy-Duty Diesel Truck Activity at the Ports of Los Angeles and Long Beach – Based on 2006 License Plate Data," July 2008 (Attachment F).

[37] Although the report concludes there are 19,475 frequent and semi-frequent calling trucks at the Ports, there appears to be a small error in the computation of frequent calling trucks (at page 5) which, if corrected, would push the number to 20,297 (rather than 19,475). The corrected number (20,297) is about 21 percent higher than the 2005 estimate of 16,800 trucks.

[38] In addition, the same study substantially revised its estimate of the number of trucks serving the Ports on an infrequent basis. The original estimate, based on the restricted sample, suggested that infrequently calling trucks accounted for less than 20 percent of all truck trips generated at the Ports. The revised estimate suggests that they account for over 30 percent of all trips (Tables 1 and 2 in the Starcrest report dated July 2008).

E. Employee drivers and sustainability

54) POLA's justification for its employee mandate rests mainly on the port's contention that given the current drayage market structure, IOO drivers would not be able to afford to appropriately maintain the new "greener" trucks.[39] This contention is inconsistent with mainstream economic theory and experiences with perfectly competitive markets such as the current drayage market. Based on its argument, POLA has structured its concessions agreement in ways that will transform the current drayage market into a rigid, constrained market with a limited pool of LMC-employed drayage drivers.

55) In contrast, the current structure of the port drayage market fits the perfect competition model.[40] Drayage services are homogeneous, individual motor carriers lack the power to raise prices, barriers to entry and exit are extremely low, switching costs are low for customers,[41] and many customers (e.g., retailers, steamship lines and major exporters) have strong negotiating power. Additionally, few costs are incurred when incumbents choose to leave.[42] As a result of this market structure, whether the market relies on a

[39] POLA claims that any failure to regularly and reliably maintain these vehicles may drastically reduce the vehicle's emission control capabilities, which may prevent the Ports from achieving the PM and NOx emission reduction targets established in the CAAP. The Port used a 2003 survey indicating IOO drivers' low incomes and the prospect of potentially large maintenance expenditures to support its claim. Monaco, Kristin and Lisa Grobar, *A Study of Drayage at the Ports of Los Angeles and Long Beach*, Department of Economics, California State University Long Beach (2004).

[40] This is an economic term describing a market where the suppliers of the service cannot determine price, sell identical products, have low trading costs, and information regarding the price and quality of services is fully available. An inherent characteristic of perfectly competitive markets is that profit margins are persistently low, which forces inefficient operators out of the market.

[41] Switching costs are monetary and non-monetary costs that consumers incur as a result of changing supplier. A rational consumer will not switch to a supplier offering a lower price if the switching cost outweighs the price differential between the two suppliers.

[42] Barriers to entry are low because a serviceable used truck can be acquired for under $30,000, with various licensing and concession fees accounting for another few thousand dollars. Barriers are also low because scale economies seem absent or weak; for instance, small LMCs operating just a handful of trucks appear to compete effectively with very large LMCs that control several hundred. Moreover, leaving the market incurs few costs because drayage trucks readily can be deployed in other sectors of goods movement transportation or the construction industry, if conditions warrant such a transfer.

business model dependent on thousands of IOO drivers or one dependent on hundreds of LMCs using employees, the profit margins for LMCs will be persistently low. The current market structure encourages LMCs and IOOs to provide reliable and high-quality drayage services, because if they do not, they will quickly lose their customers.

56) Any well-functioning competitive market, including the current drayage market, has the ability to sustain itself and cover the costs of doing business. A perfectly competitive market is by definition unfettered and competitive, endowing the market with a natural ability to adjust flexibly to external factors that cause the participants' business costs to change. If a regulatory requirement which substantially raises the cost of doing business, such as TWIC or enhanced emissions standards, is imposed on that market, the market will ensure that the regulations are met in the most efficient way possible.

57) Some existing participants (i.e., the least efficient) will not have the ability to afford to pay those higher costs, and they will find ways to increase their efficiency or they will leave the market. Other market participants (i.e., the most efficient), with the ability to pay those higher costs, will remain. Also, potential entrants may be enticed to enter the market, which they could do with ease because there are no barriers. The regulation might cause prices to go up, but prices will rise only as much as is necessary to pay for the costs of the new regulation.[43] If a group of LMCs tries to raise costs above what is necessary to pay for the regulations, then that group of LMCs will lose their customers to their competitors.

[43] In a market that is not perfectly competitive, market participants can respond to regulations by raising prices by an amount larger than what is necessary to pay for the costs of the regulation.

58) POLA seem skeptical that a perfectly competitive drayage market is capable of meeting the financial challenges that may lie ahead if this market has to grapple with increasingly stringent emissions, safety and security standards. The Port seems to believe that the only sure way to achieve this is to re-structure the market such that far fewer and much larger LMCs operate in the sector.[44] The Port can accomplish this re-structuring only by creating considerable entry barriers, through imposition of a concessions scheme for example.

59) In the POLA Harbor Board's view, presumably the enhanced market power of the LMCs favored by such a scheme would give them the financial strength to keep the "greener" trucks well maintained and to meet the financial challenges of even more stringent standards in the future. The down-side of giving LMCs more market power is that they will face far less competition, allowing them to substantially raise prices and increase profit margins above competitive levels.

60) The theoretical notion that a perfectly competitive market is capable of dealing effectively with capital replenishment is supported by the facts on the ground. For example, the results of a recent and comprehensive survey of drayage drivers prepared for the Gateway Cities Council of Governments in 2007 appear to refute the POLA contention that IOO drivers lack the resources to maintain and purchase clean trucks. The *Survey of Drayage Drivers Serving the San Pedro Bay Ports* indicates that IOO drivers substantially increase their earning capacity once loans are paid down, and that most work diligently to pay loans down as soon as possible. While newer trucks may be more expensive to maintain than older types of trucks *for the same type of repair*, new trucks

[44] It should be noted, that the concentrated market seemingly favored by POLA does not need to be predicated on the LMCs' use of employee drivers; it could function just as well with IOO drivers.

should experience fewer operating problems for several years after being leased or purchased, during which period the annual cost of maintaining these vehicles should be substantially lower than having to maintain a much older truck. Indeed, IOO drivers now bear a mean annual maintenance expenditure of over $7,000 for their old trucks and the most recent survey results seem to demonstrate that IOO drivers would be capable of dealing with the high expenditures on new truck maintenance.[45]

61) I also find POLA's argument that IOO drivers will lack the resources to maintain and purchase the new "greener" trucks to be unpersuasive because:

- TWIC on its own is likely to shrink the existing pool of drayage drivers, resulting in higher drayage rates and annual net earnings for IOO drivers who remain. Any increase in net earnings, if it materializes, could provide them with the financial heft required to maintain "greener" trucks in peak operating condition.
- Between 20 to 30 percent of capacity in the existing drayage market is provided by trucks that call at the Ports infrequently.[46] These trucks will not qualify for replacement subsidies and may be permanently lost to the sector. Inevitably, a loss in capacity of this magnitude will cause drayage prices to rise in the short to medium term, providing yet another source of increased earnings.[47]
- The truck leasing packages being made available by the Ports incorporate pre-paid maintenance expenses. Monthly lease payments are about $500 during the seven-year term of the standard lease, plus the IOO driver can assume ownership of the vehicle for a modest lump sum at the end of the lease. Once the monthly lease payments cease, an IOO driver's annual net earnings would increase by $6,000 (i.e., the annual sum of the monthly lease payment). These savings will also provide additional resources that could be used to maintain the "greener" truck.

[45] Monaco, K. "The Economies of Port Drayage and the Implications for Clean Air." California State University Long Beach, 2007.

[46] Starcrest Consulting Group, "Draft Methodology for Estimating Heavy-Duty Diesel Truck Activity at the Ports of Los Angeles and Long Beach – Based on 2006 License Data," July 2008 (Attachment F).

[47] 2007 EPA-compliant trucks that serve the Ports infrequently may continue to call outside the concession arrangements so long as they make 12 or fewer trips per year and pay a "day pass" fee of $100 on top of any additional CTP fee.

F. Impacts on the Drayage Market at POLB and POLA

62) This section analyses the economic impact on the drayage market, and the potential for service disruption, of three specific elements in the Ports' CTP, namely, the POLA employee mandate, the Ports' CTP fee exemptions, and the POLA $20,000 per truck incentive payment to selected motor carriers in return for an early commitment to deploy 2007 EPA-compliant trucks. I begin by briefly characterizing the economic structure of the current drayage market, and then assesses how and when that structure might change as a result of implementing those elements of the CTP.

63) In the perfectly competitive drayage market that existed in the Ports prior to implementing the CTP, every drayage truck was a perfect substitute. This meant that beneficial cargo owners ("BCOs") and LMCs were largely indifferent as to which (specific) truck carried the container – their main concern was that cargo was delivered in a timely manner and at the specified price. Due to this indifference, BCOs could shop around and change their LMC based on price.[48] The ability of BCOs to move between LMCs with no or very few switching costs kept the price of drayage services highly competitive and forced LMCs to deliver a high quality of service. The employee mandate, as well as the likely reduction in the number of LMCs and the differences in the CTP fee exemptions at both Ports, will change the nature of the drayage market so that trucks are no longer perfect substitutes. The cost of operating a specific truck will vary based on the type of truck, how that truck is financed, and which Port it is serving.

[48] During my discussions with LMCs, there was general agreement that shippers will switch their drayage provider for a difference as small as $10 per trip.

64) The CTP fee exemptions at POLA differentiate between diesel trucks based on how they are financed (private versus public) and between all drayage trucks based on their engines (LNG/alternative fuel versus diesel). The operational cost advantage for CTP-financed LNG trucks and privately funded clean diesel trucks at POLA makes those trucks much more competitive at POLA than similar trucks with different financing. Profit-maximizing LMCs will strongly prefer to deploy those two truck types at POLA, causing the San Pedro Bay drayage market to divide into two separately served markets – one serving POLA and the other serving POLB. LMCs, therefore, will have to obtain equipment to take advantage of the benefits at each Port.

65) The CTP fee exemption for port-financed LNG trucks at POLA makes those trucks substantially more cost-effective when they serve POLA. The fee exemption effectively subsidizes port-financed LNG trucks twice: first through the direct subsidy reducing the purchase or lease price of the truck, and second through the exemption from the CTP fee per loaded container. This double subsidy is a boon to any LMC that is granted a port-financed LNG truck, effectively cutting the capital and CTP fee costs by 50% for LNG trucks purchased through the program and by over 75% for LNG trucks leased through the program.

66) These subsidies exist because the Ports, as authorized by the revised Agreement, can discuss and jointly set the subsidy rate for port-financed clean trucks. These subsidies and exemptions do not reflect differences in program operating costs between the two Ports, but instead indicate an intentional decision to make some trucks (and the companies that deploy them) more economically advantaged. By setting the levels of the CTP fees

jointly and then having different fee exemptions, the Ports will consciously alter the cost competitiveness of the drayage market.

67) Tables 4 and 5 below identify how certain elements of truck costs will vary by truck type, financing method, and the port being accessed.[49] Because each LMC's ultimate goal is to maximize profits, LMCs will no longer be indifferent as to which port individual trucks serve. This situation likely will lead to fracturing of the current drayage market at the Ports into two separate and more rigidly served markets, thereby introducing operating inefficiencies and reducing surge capacities.[50] The ultimate effect of these changes,[51] none of which stem from the phase-out of the current older trucks, is likely to be an unreasonable increase in costs to BCOs and an unreasonable decrease in service.

[49] This footnote is meant to assist further in interpreting the data in tables 4 and 5 in the context of the present discussion. As an added cost, the estimated cost per container carried shown in the tables would be subtracted from the amount paid to a drayage driver/LMC for hauling a container to derive what the driver/LMC would earn for hauling a container after the CTP fees and loan or lease payments are taken into account. So, for example, a leased LNG truck would pay approximately $22 per container at the Port of Los Angeles in lease payments and applicable CTP fees (table 4). If the cargo owner pays $200 to the trucking company to move the container, then the LMC would get to keep $178 after lease payments and CTP costs. This margin is much greater than that earned by a leased clean diesel truck at POLB (table 5), which would generate $126 ($200 minus the $74 in lease payments and CTP fees). The return is also greater than the $115 ($200 minus $85) return that a port-funded LNG truck would earn at POLB. This example assumes that other drayage costs are held constant across both Ports.

[50] For the purpose of this affidavit, I define surge capacity as the drayage market's ability to increase the amount of drayage services available to accommodate upswings in demand. It is important to differentiate between anticipated swings in demand caused by seasonal shipping increases and unanticipated swings in demand (such as the one that occurred in 2004 at the Ports). The perfectly competitive drayage market that exists now is versatile enough to handle anticipated and unanticipated swings in demand. A command-and-control type market, such as the POLA preferred market with few LMCs and employee drivers, probably could maintain the ability to meet anticipated increases in demand, but maintaining that capacity during lull periods would be very costly. Even so, a command-and-control type market will not be able to meet unanticipated increases in demand.

[51] It is clear that the CTP fee by itself, if imposed uniformly across all drayage trucks serving the Ports, would not introduce operational inefficiencies into the drayage market; it is the way the CTP fee exemptions and incentive payments will be applied differentially between the Ports that create this problem.

68) Holding other factors constant, the figures in Tables 4 and 5 show the added cost per trip of operating a truck at POLA and POLB based on truck type and financing method.[52]

69) At POLA (see Table 4), port-subsidized LNG trucks and privately financed clean diesel trucks have a strong competitive advantage of at least $30 per trip compared to the port-subsidized clean diesels and privately funded LNG trucks. The economic advantage of the port-subsidized LNG truck and the privately financed truck at POLA is particularly notable because it is based, first, on financing and, second, on the CTP fee exemptions, rather than on economic efficiency, productivity, or the cleanliness of the trucks' emissions.

70) The competitive advantage derived from financing will benefit large companies that have access to outside funds to purchase clean trucks quickly. In the case of the subsidized LNG truck, it should be noted that POLA (and POLB) will choose which LMCs are able to purchase or lease the limited supply of these trucks. At a practical level, the Ports could choose to provide such trucks only to large LMCs or LMCs with employees, giving those LMCs a powerful economic advantage at POLA as they compete against small LMCs without employees.

[52] The costs estimated and shown in tables 4 and 5 do not include other costs, such as fuel, maintenance, taxes, and wages, as those costs should not change regardless of whether the truck is operating at POLA or POLB.

Table 4: Cost per Container Trip based on Truck Capital Cost & CTP Fee - POLA
(Assuming 500 truck trips per year)

Truck Technology & financing (Ranked outcomes at POLA)	Cost Per Trip, POLA	Cost Per Trip, POLB
CTP Leased LNG	**$22**	**$85**
Incentive Payment	**$33**	**NA**
Privately Funded Clean Diesel	**$44**	**$76**
CTP Funded LNG	**$44**	**$107**
CTP Leased Clean Diesel	**$74**	**$74**
CTP Funded Clean Diesel	**$75**	**$75**
Retrofit Only	**$77**	**$77**
Incentive Payment LNG	**$83**	**NA**
Privately Funded LNG	**$93**	**$93**

71) CTP-funded clean diesel trucks, the type of truck that small, poorly capitalized LMCs are most likely to acquire, will be at a considerable disadvantage at POLA as they will cost about $30 more per trip to operate at POLA compared to privately funded clean diesel trucks and $40 to $50 more per trip than clean diesel trucks brought in through the POLA incentive program or CTP leased LNG trucks.

72) In contrast to POLA, the POLB competitive landscape sculptured by the CTP financing and fee exemption arrangements is comparatively level (see Table 5). Regardless of funding source (i.e., private capital or CTP-fund) clean diesels and older trucks that have been retrofitted incur about the same added cost per trip (reflecting truck capital cost and CTP fee) of about $75 at POLB. An LNG truck leased through the CTP would have a slight cost disadvantage of about $10 per trip at POLB, while LNG trucks purchased privately or with CTP funds would be at a greater disadvantage.

Table 5: Cost per Container Trip based on Truck Capital Cost & CTP Fee - POLB
(Assuming 500 truck trips per year)

Truck technology & financing (Ranked outcomes at POLB)	Cost Per Trip, POLB	Cost Per Trip, POLA
CTP Leased Clean Diesel	**$74**	**$74**
CTP Funded Clean Diesel	**$75**	**$75**
Privately Funded Clean Diesel	**$76**	**$44**
Retrofit Only	**$77**	**$77**
CTP Leased LNG	**$85**	**$22**
Privately Funded LNG	**$93**	**$93**
CTP Funded LNG	**$107**	**$44**
Incentive Payment	NA	**$33**
Incentive Payment LNG	NA	**$83**

73) The CTP-funded clean diesel truck, which is expected to be the workhorse vehicle at POLB, will be uncompetitive at POLA. Operating into POLA, this vehicle would be at a cost disadvantage of about $30 to $50 per trip compared to other types of trucks serving POLA (e.g., those that are brought in under the incentive program). Similarly, LNG trucks leased through the CTP are highly competitive (and favored) at POLA, yet this vehicle would be at a competitive disadvantage at POLB because its cost per trip would be $8 to $11 higher than other types of trucks serving POLB. At POLA, the only other type of vehicle likely able to compete against the CTP leased LNG is privately funded clean diesel, particularly if they serve the Port under the incentive program.

74) The analysis above leads to the conclusion that the present perfectly competitive and unified San Pedro Bay drayage market most likely will split into two separately served markets, with one LMC subgroup serving only POLB and another serving both POLA and POLB.[53] However, the latter subgroup will dispatch separate truck fleets to each

[53] Information obtained from the Ports' websites in mid-October 2008 showed that while 678 licensed motor carriers had applied for concessions at both POLA and POLB, no fewer than 149 had applied only to POLB.

port. Among existing LMCs, there are some who vehemently oppose the POLA concession conditions that require them to own the trucks they operate and have employee drivers; they will either leave the drayage industry or serve only POLB. By October 2009, when the employment mandate begins to take effect, this subgroup will end up serving only POLB. Most likely, the other LMCs will split their drayage operation in two.[54] Using employee drivers, one set of trucks will serve POLA and will consist of heavily subsidized LNG and privately funded clean diesel trucks that entered port service through the incentive program. A different set of trucks will serve POLB using IOO drivers and will consist primarily of CTP funded clean diesels that are not cost competitive at POLA.

Explicit versus implicit employee mandate

75) If the Ports want to force LMCs to use employee drivers in LMC-owned vehicles, an explicit employee mandate may not be necessary. Although the analysis presented above assumed an explicit mandate, the Ports' current concessions plans, truck subsidy levels, CTP fee levels and CTP fee exemptions could all be structured in a way that leads to an employee-based system even without an explicit mandate. Indeed, the current incentive and subsidy system does not seem to be based on a calculation of the amount of subsidy needed to fund the trucks, but appears instead to be designed to provide competitive advantage to large firms using employee drivers.[55] The data in Tables 4 and 5 above

[54] Some LMCs argue it is impractical to serve just one of the two ports because that would create operational inefficiencies and increase costs, and perhaps cause them to lose customers who ship into or out of both Ports.

[55] This assertion is supported by estimates in a document produced by BCG, called "Sources and uses of funds for the CTP: Port of Los Angeles." Data in that document show that POLA will face a CTP funding shortfall (Attachment G). If the CTP fees had been created to fund the CTP, then there should not be a funding shortfall. Conversely, my own estimates of fund revenues and outlays show that POLB revenues from the CTP fee will exceed fund outlays by a substantial margin from the outset (see Attachment H).

demonstrate that an implicit employee mandate will begin to take effect at POLA just as soon as the CTP fees are assessed.[56] The Ports' may alter their concessions plans at any time, so one or all of the features of the CTP could be changed to benefit large LMCs with employees or to make small LMCs without employees uncompetitive. In other words, the CTP fee exemptions and truck subsidies can be altered to benefit those LMCs that use employee drivers, forcing LMCs that use IOO drivers out of business simply through the interplay of competitive market forces.

Impact of the employee mandate on service and surge capacity

76) As a result of seasonal variations in container volumes and labor supply inflexibility, the employee mandate likely will produce short-term driver shortages resulting in either a sudden spike in drayage prices and/or a drastic reduction in service, particularly when coupled to an unanticipated surge in demand. In contrast, the current IOO system provides a perfectly competitive market that can supply any level of drayage service at a consistently low price. The perfectly competitive IOO market provides the most efficient and robust drayage service possible, and as explained earlier in this document, a perfectly competitive market is capable of providing clean trucks as well. POLA has failed to demonstrate why this perfectly competitive market should be transformed into a rigidly constrained market that will be unable to deal efficiently with unanticipated surges in demand.

77) The employee mandate, in its current form or as an implicit mandate, will force LMCs to hire employees for POLA but will allow LMCs to retain the IOO system for POLB. In hiring employees, LMCs will attempt to guess how many drivers they need to cover their

[56] The Ports have indicated their intention to begin assessing and collecting CTP fees on November 17, 2008.

normal needs for POLA. The number of drivers actually employed by LMCs serving POLA will act as a constraint on the Port's drayage services, reducing the amount of surge capacity available to deal with unanticipated increases in demand.

78) The following example may clarify how a reduction in the market's ability to deal efficiently with surge capacity could occur. Consider an LMC that on an average week is responsible for moving 200 containers a distance between 50 and 100 miles. One employee and truck combination can move about 10 containers that distance a week, so the LMC would need about 20 employees to move those containers.[57] If this LMC hires 22 employees, then on an average week, two employees would be idle, costing the LMC money. For that reason, this LMC would hire just enough employees to meet its expected average need or at most to meet expected seasonal needs.[58] Once the LMC has reached its capacity of 200 containers a week, it will need to either turn down work or hire more drivers. Since there is a large cost to hiring additional drivers, including training, acquiring new trucks, and possibly unemployment benefits, there is a disincentive to hiring unless the additional work is going to be sustained (i.e. the number of containers this LMC moves a week goes up permanently).[59] Since employee drivers are more

[57] This example assumes no slip-seating takes place (i.e., two drivers using the same truck on different shifts).

[58] The number of containers passing through the Port varies by month and season, with the peak occurring in mid to late summer and the lulls around the New Year. Motor carriers will need to hire enough employees to cover the peaks, but those employees will not be utilized fully during lulls. This idle time will increase the cost of drayage.

[59] It is worth noting that some labor markets have a cyclical pattern similar to the drayage market. In cyclical labor markets such as farming, employers may lay-off their permanent (non-seasonal) employees during slow periods. If employees know they will be laid off for 8-10 weeks at a time, often they rely on unemployment benefits (paid for by the government) to supplement their income. This cyclical lay-off model of employment is costly for the government and removes workers from the labor market for relatively long periods of time. IOO drivers working for LMCs are not employees, so they cannot collect unemployment benefits during slow times. Instead, they will be forced to work fewer hours, take vacation, or temporarily find work in other transportation sectors or industries.

expensive than IOO drivers, this LMC will prefer to use its employees at POLA and continue to contract with IOO drivers at POLB.

79) Under an employee driver system, LMCs will have just enough workers to meet *expected* demand (either average or peak). They are unlikely to employ "extra workers" to hedge against *unexpected* increases in demand, and so there is a real danger for there to be occasional shortages of drayage drivers at POLA.

Impact of the CTP exemptions and incentive payments on the number of licensed motor carriers

80) The CTP fee exemptions at POLA benefit larger firms that can quickly deploy self-financed trucks.[60] If the POLA plan forces small LMCs out of business, then drayage rates at POLA almost certainly will rise. The large number of LMCs applying for concessions (about 800 as of mid-October 2008) will prevent any one LMC from being able to determine the price of drayage services (i.e., the LMCs will be price-takers with unconstrained market entry).

81) If the number of LMCs ultimately is reduced to the much smaller number of companies that POLA has indicated it prefers,[61] then those companies most likely will have the power to influence drayage rates (making them price-setters). When firms are price-setters rather than price-takers, supply will be restrained and the price of the goods or services that those firms provide will increase.

[60] It is more difficult for small LMCs to raise capital, especially in the current financial climate.

[61] While visiting staff in the Los Angeles City Mayor's Office in connection with the CTP, on February 26, 2008, I was introduced to Mayor Antonio Villaraigosa. During a brief discussion with the mayor about the purpose of my visit, he opined that the Port would not be able to get to clean air with the independent owner operators and added, "We need the big national firms in here." In a presentation in May 2008 to selected LMCs, POLA made it clear that their program was designed to be favorable to larger companies (see Attachment I).

82) POLA has offered a $20,000 per truck payment to LMCs that can commit to deploying new, 2007 EPA-compliant clean diesel trucks to serve the Ports. In addition, POLA will give these trucks a $10 per container load subsidy for the first year (up to a maximum of $10,000). These incentive payments reward companies that can commit to early deployment of privately funded, 2007 EPA-compliant trucks. As such, it gives those companies an advantage of approximately $11 per container dray (see table 4).

83) This incentive payment is a subsidy, and it is only available to companies that were prepared to commit on just 29 days advance notice to deploy 2007 EPA-compliant clean diesel trucks.[62] The subsidy, therefore, benefits two groups - either large companies that can deploy existing 2007 EPA-compliant trucks to POLA from other regions in the country, or those LMCs with ready access to financial resources to order those trucks on short notice (again likely to be large companies).

84) The incentive payment is paid from the CTP fund, into which those licensed motor carriers receiving the incentive payments for privately funded trucks never pay. As the clean truck fee is assessed on CTP-funded clean diesel trucks or retrofitted trucks, this means that licensed motor carriers reliant on the CTP as a funding source are helping to subsidize their larger competitors. POLA's actions could result in the demise of a group of relatively weaker truckers reliant on CTP funding. Such weaker LMCs would be expected to contribute the incentives payments and trip subsidies made to a separate group of larger self-reliant truckers who will use these payments to compete fiercely against them.

[62] The POLA Harbor Commission approved the incentive program on August 21, 2008. On September 11, 2008, POLA issued a press-release announcing that the deadline for receiving applications was September 19, 2008.

85) Statements by owners and operators of small LMCs currently serving the Ports raise concerns that small LMCs are being forced out of business by the Ports' harmonized concessions plan. Michael Lightman, [63] Thelma Standart,[64] and Joshua Matthew Owen[65] are all Presidents of small LMCs, and they explain the impracticality of serving just one of the Ports. For that reason, the POLA employee mandate might force them out of business, as they cannot just serve POLB. The fee exemptions are also problematic, as it makes it difficult for small LMCs to compete with larger competitors. Daniel Meylor, Customs Administration Manager of Carmichael International Service, anticipates that many small LMCs will be forced out of business and that the ensuing decrease in trucking and drayage competition will lead to higher rates.

86) The picture these statements paint is that the harmonized CTP fees are placing immediate burdens on small LMCs. Standart notes: "The Ports' programs are forcing XRT and other small drayage trucking companies to change to a business model that they are not built to handle," and that "the Ports demands are putting a financial strain on XRT by disturbing the normal course of doing business and forcing it to make capital investments not otherwise warranted."

87) If a majority of the small LMCs go out of business, competition at both POLA and POLB will be reduced, raising drayage rates at both Ports. Once these small LMCs are put out of business, it will be difficult to revive the drayage market because the CTP fee exemptions will act as an entry barrier. LMCs are being forced to make decisions now that will

[63] President of Great Freight, Inc.

[64] Principal/owner of XRT Express Reefer Transport, Inc.

[65] President of Ability/Tri-Modal Transportation Services, Inc.

impact their viability far into the future, making a temporary injunction against the employee mandate and fee exemptions all the more important.

Outcome – An inefficient market

88) The current unified drayage market may split into two separately served markets if the LMCs direct their port-funded LNG trucks and privately funded clean diesel trucks only to serve POLA. The split will be between port-funded LNG trucks and privately-funded diesel trucks serving POLA on the one hand, and port-funded clean diesel trucks serving POLB on the other. A truck that currently serves both Ports likely will only be dispatched to the one port in which it is favored in terms of the CTP financing and fee exemptions. Such a split will create rigidities in the drayage market, reduce the quality of services, and introduce several transportation cost implications. Moreover, LMCs will not deploy drayage trucks to POLA or POLB based on the need for drayage drivers or number of containers being moved, but instead will deploy trucks based on profit differentials created by CTP fund financing and the fee exemptions. This will reduce the surge capacity that is currently available to meet seasonal or operational changes in demand for drayage service, and it could increase wait times by encouraging LMCs to assign individual trucks to serve one port exclusively based on that truck's financing or engine type (thereby exacerbating the problem of matching truck loads that leave the terminals with suitable return loads).[66]

89) The revised Agreement has resulted in POLA and POLB setting a common CTP fee but with different fee exemptions. The differential application of the exemptions is creating

[66] POLA has assumed rather aggressive efficiency gains that derive from what it argues will be an increase in matching of over 50 percentage points (i.e., a 300% increase in matching from 16% to 66%). However, POLA does not seem to have anticipated a likely divergence in the drayage market between POLA and POLB, and how that divergence will make it more difficult for LMCs to realize the matching gains that POLA is attempting to create.

operational incentives that are distinct to each port and this is likely to cause the current unified drayage market to splinter. Splitting the San Pedro Bay ports' market into two separately served markets likely will cause problems such as a reduction in surge capacity and greater difficulties in matching outbound and inbound truck loads; and both effects will reduce drayage efficiency. Reductions in efficiency, coupled with a limit on the number of trucks available to serve the market, will place an upward pressure on drayage prices.

90) A second possible outcome of the discrepancy in fees arising from the exemptions is that POLA and POLB could standardize their exemptions. This scenario is unlikely if there is an explicit or implicit employee mandate, as employee-driven drayage trucks would not be competitive with the POLB IOO-driven drayage trucks without the fee exemptions. The substantially higher cost for employee-driven trucks would make it difficult for POLA to adopt POLB's exemptions.[67]

Summary

91) In light of the forgoing economic analysis, and consistent with the Commission's determination on October 29, 2008, I find that FMC Agreement No. 201170-001 is likely to: (1) result in a reduction in competition by excluding a large number of independent owner operators, otherwise authorized to provide drayage service at the Ports, from operating at the Port of Los Angeles; (2) produce an unreasonable reduction in transportation service by causing the perfectly competitive and unified drayage market to split into separately served markets, with different truck fleets conducting operations in

[67] The employee mandate's higher costs may constrain POLA from matching its exemptions with those of POLB, as without the current exemptions, drayage services at an employee-only POLA would be more expensive.

each Port; and (3) produce an unreasonable increase in transportation cost due to mandating, over a brief phase-in period, that licensed motor carriers utilize only employee drivers. The impact of these effects will be to increase transportation costs substantially beyond what is necessary to generate the public benefits sought by the Ports. As a result of these findings, it is my opinion that Agreement No. 201170 is violative of section 6(g) of the Shipping Act.

Conclusion

92) My testimony raises several serious issues about the clean truck program at POLA and POLB. The employee mandate will almost certainly (and unnecessarily) increase transportation costs and reduce service, while doing nothing to ensure compliance with the CTP's rolling ban on older trucks. Further, the key aspects of the harmonized concessions plan, including the employee mandate, CTP fee and exemptions, truck subsidies, and pressures on LMCs, will likely transform the drayage market from a perfectly competitive market to a severely constrained market. I believe the cost of this

transition will be severe; the drayage sector will lose its surge capacity, drayage efficiency will be reduced, and the few remaining LMCs will gain the ability to raise prices and profit margins. Ultimately, shippers, people employed in port-related industries in the Los Angeles region, and American consumers will suffer from higher prices and a loss of commerce.

Executed this 17th day of November, 2008

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dr. Roy J. Pearson