South Coast Air Quality Management District
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Dr. Spencer D. MacNeil, Commander
U.S. Army Corps of Engineers, Los Angeles District
P.O. Box 532711
Los Angeles, CA 90053-2325

Dr. Ralph G. Appy, Director of Environmental Management
Port of Los Angeles
425 South Palos Verdes Street
San Pedro, CA 90731

Dear Dr. MacNeil and Dr. Appy:

Draft Environmental Impact Statement/Environmental Impact Report
(Draft EIS/EIR) for the Berth 136 – 147 (TraPac) Container Terminal Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The TraPac terminal is located in the Port of Los Angeles near already impacted residential communities that are currently experiencing health risks in excess of 500 in a million[1]. The proposed TraPac project is a container terminal expansion project that will substantially increase the number of truck trips, annual ship calls, and trips by line-haul locomotives. At full implementation, the proposed TraPac project will generate over 1.8 million truck trips, 330 ship calls, and 1,400 rail trips annually.

The SCAQMD staff acknowledges the efforts of the Lead Agencies to include many of the measures in the Ports of Los Angeles' and the Long Beach's Clean Air Action Plan (CAAP). The proposed TraPac project includes a wide range of mitigation measures and commits to implementing a vessel speed reduction program, shore-side power for marine vessels, use of lower sulfur fuel for main and auxiliary engines, introduction of lower emitting trucks, and cleaner intermodal equipment. Implementation of these and other mitigation measures are expected to reduce daily VOC, NOx, SOx, CO, and PM10 operation emissions below 2003 emission levels before 2015 for the proposed TraPac project. SCAQMD-1

The Draft EIS/EIR concludes, however, that air quality impacts from the proposed project are significant prior 2015 for operational impacts and up to 2025 for construction impacts. As is described below, additional mitigation measures are feasible, and some measures included in the SCAQMD-2

[1] California Air Resources Board. April 2006. "Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach."

SCAQMD-2

Draft EIS/EIR can be feasibly be accelerated. In addition, operational mitigation measures can be used to mitigate significant construction emissions. Such measures must be included as required by CEQA Guidelines §15126.4 to reduce impacts below significance as soon as possible. Many of the measures described below seek to strengthen existing mitigation measures and/or accelerate the implementation schedule of measures already included in the proposed TraPac project. Examples include earlier introduction of 0.2 percent sulfur fuel for main and auxiliary engines, 0.1 percent sulfur fuel for main engines by 2010, and greater specificity regarding main engine control requirements. In addition, SCAQMD staff believes that the relocated Pacific Harbor Lines (PHL) Pier A Rail yard meets the definition of new or redeveloped (modified) rail yard and application of mitigation measures consistent with CAAP Measure RL-3 should be implemented.

SCAQMD-3

The SCAQMD also staff urges the Lead Agencies to ensure that the proposed TraPac project is consistent with California Environmental Quality Act (CEQA) Project Objective 2 which states one of the supporting objectives is to "provide on-dock rail capabilities to promote direct transfer of cargo between ship and rail." The proposed TraPac project can do more to meet this objective. The SCAQMD staff recommends the proposed project include sufficient on-dock rail capacity for all containers destined to be transported by rail. This will minimize highway congestion impacts caused by truck drayage to near and off-dock rail yards, and will reduce the need for additional capacity at near and off-dock rail yards which are in relative close proximity to already-impacted residences and schools. We understand that space for on-dock yards is limited, but CAAP measure RL-3 committed the ports to explore all opportunities to maximize on-dock rail and explore alternative operating procedures such as transporting containers by rail from the docks unsorted by destination as a means of freeing up space devoted to creating single destination trains.

SCAQMD-4

Approval of the proposed TraPac project would result in granting a long-term 30 year lease or permit, and mitigation measures are expected to evolve during the lease term as technological advances occur and new pollution control technologies are developed. The SCAQMD staff urges the lead agencies to develop a mechanism to update mitigation measures in the lease or permit as future technologies develop. Such mechanism should include adequate requirements or incentives to ensure implementation. In addition, if the controls relied upon to mitigate project impacts cannot be implemented, the lead agencies must identify other feasible mitigations, either on- or as near as possible off-site, and implement them. Finally, given the rate of growth in port cargo throughput and the lack of perfect knowledge regarding future cargo levels, a mechanism must be developed to ensure that if cargo throughput exceeds projections assumed in the Draft EIS/EIR, additional feasible mitigation measures will be imposed.

SCAQMD-5

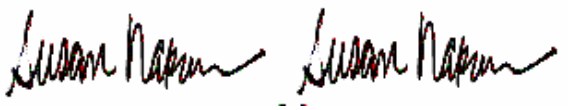
CEQA requires consideration of cumulative impacts. In addition, the CAAP includes a Project Specific Standard stating that the contribution of emissions from a project to cumulative effects will allow for timely achievement of the San Pedro Bay Standards. The ports have been working on emissions inventories and forecasting methodologies that they will use to develop projections to aid in establishing the San Pedro Bay Standards, but the Bay Standards have not yet been adopted. We urge the Ports to proceed as expeditiously as possible to adopt these standards. Although the proposed TraPac project operational emissions will be mitigated below 2003 baseline emission levels after 2015, it is uncertain if the residual emissions and health risk from

the TraPac Terminal over the course of the 30 year lease will allow for the timely achievement of the San Pedro Bay Standards. In the absence of the San Pedro Bay Standards, the SCAQMD staff urges the Port of LA to compare residual emissions from this proposed project, including cumulative emissions from all other foreseeable port actions, with the 2007 Air Quality Management Plan (AQMP) mass emissions and risk targets for the ports, and ensure project approval is consistent with achieving those targets. SCAQMD-5

The lead agency is not permitted by CEQA to approve a project with significant environmental impacts without incorporating into the project approval feasible mitigation measures within the authority of the lead agency. (Public Resources Code §21080(a)(1)(finding that changes "have been required in, or incorporated into, the project which mitigate or avoid significant effects..."). Attachment I identifies additional means to feasibly strengthen mitigation measures for the proposed project. SCAQMD-6

The SCAQMD staff appreciates the opportunity to comment on this important project. We appreciate the countless hours that the Port of LA is investing towards improving the air quality and health effects in and around the port. The SCAQMD staff looks forward to working with the Port of LA on this and future projects. If you have any questions, please call me at (909) 396-3105.

Sincerely,



Susan Nakamura
Planning Manager

Attachment

Attachment I
Additional Comments on the DEIS/EIR for Berth 136 – 147 (TraPac) Container Terminal Project

The following includes more detailed and specific comments on the Proposed TraPac Container Terminal Project.

Mitigation Measures

SCAQMD-7 Pursuant to CEQA Guidelines §15126.4 (a)(2) mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. One means of making the mitigation measures for the proposed project legally binding is for the Lead Agencies to incorporate them into the Terminal Operator's lease agreement. Furthermore, the lease agreement or permit language with the Terminal Operator must specifically contain binding requirements to monitor the air quality mitigation measures and must provide a legal mechanism to allow the Lead Agencies to enforce the mitigation measures. The lease agreement or permit language should also include an annual environmental status report wherein the terminal operator would be required to provide a status update of implementation of mitigation measures. In addition, the mitigation monitoring plan must include specific dates and milestones and measurable performance standards to ensure that mitigation measures are appropriately implemented.

SCAQMD-8 *Exceedance of Projected Throughput.* The lease agreement or permit should mandate the performance of an annual analysis of cargo throughput. The SCAQMD staff urges the lead agencies to establish requirements in the lease providing that if the analysis shows the throughput is above levels assumed in the Final EIS/EIR, additional mitigation measures will be required.

SCAQMD-9 *Harbor Craft While at Berth.* The DEIS/EIR air quality analysis assumes that the harbor craft fleet associated with this project will be repowered or retrofitted through CAAP Measure HC-1, Performance Standards for Harbor Craft. This measure is not proposed to become a condition of project approval or otherwise included in this project due to the fact that terminal operators do not have direct contractual relationships with tugboat operators and, according to the port, this control measure is better addressed through a "port-wide" measure. Since the implementation of CAAP Measure HC-1 cannot be anticipated to occur prior to construction and operational impacts, the use of repowered and retrofitted (when they become available) tugs to be used in mitigating the impacts from the tugs should be incorporated as a condition of project approval. Specifically, the Draft EIS/EIR should include a mitigation measure for harbor craft (tugboats) that are home-ported at POLA or POLB and could potentially be retrofitted with additional control devices. This measure should require all harbor craft used during the construction phase of the project to, at a minimum, have been repowered to meet the cleanest existing marine engine emission standards or the proposed U.S. EPA Tier 3 (which are proposed to be phased-in beginning 2009) or cleaner marine engine emission standards. In addition, to the extent that harbor craft powered by engines that meet the proposed U.S. EPA Tier 4 marine engine standards are available, these harbor craft should be used.

SCAQMD-10 *MM AQ-1: Expanded VSR Program*
The SCAQMD concurs with the proposed mitigation measure for expanded VSR Program.

MM AQ-2: Fleet Modernization for On-road Trucks
SCAQMD staff urges the lead agency to require that, as part of this mitigation measure, the Lead Agencies use of the cleanest available trucks. Specifically, Phase I construction (2008 – 2015) trucks should operate on engines with the lowest certified NOx emissions levels, but no greater than the 2007 NOx emission standards In addition, Phase II construction (Post 2015) trucks should meet U.S. EPA 2010 emission standards. **SCAQMD-11**

MM AQ-3: Fleet Modernization for Construction Equipment
Similarly, it is feasible as part of this mitigation measure the use of the cleanest available construction equipment. Specifically, Phase I construction (2008 – 2015) equipment should meet the cleanest off-road diesel emission level available, but no greater than Tier 3 NOx emission standards. In addition, Phase II construction (Post 2015) equipment should meet Tier 4 emission standards. **SCAQMD-12**

*MM AQ-4: Best Managemen*t Practices (BMPs)
SCAQMD staff concurs with proposed BMPs. In addition to the BMPs specified, in-use off-road equipment idling should be restricted to 5 minutes per proposed CARB regulation. **SCAQMD-13**

MM AQ-6: Alternative Maritime Power (AMP)
SCAQMD staff urges the Lead Agencies to change the 2015 target to a 2014 target to coincide with the South Coast Basin's PM2.5 attainment schedule. In addition, all ships retrofitted for AMP should be required to use AMP while hoteling at 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship. Lastly, beginning with the 2010 target of 40 percent of total ship calls, the mitigation measure should also require 100 percent AMP while hoteling for all frequent caller vessels (5 ship calls or more per year). **SCAQMD-14**

MM AQ-7: Yard Tractors
SCAQMD staff concurs with proposed mitigation for yard tractors. The Lead Agencies, however, should modify any references to "Tier 4 on-road emission standards" to "Tier 4 non-road emission standards", as it is assumed to be a typographical error. In addition, Page 3.2-62, lines 27 – 32 of the DEIS/EIR appears to be a typographical error, as it is a duplicate of lines 21-26. **SCAQMD-15**

MM AQ-8: Low-NOx and Low-PM Emission Standards for Top Picks. Forklifts, Reach Stackers, Rubber-Tiered Gantries (RTGs), and Straddle Carrier
The lead agencies should use electric rail-mounted container gantry cranes whenever possible. The Port of Los Angeles is the Lead Agency for the proposed Burlington Northern Santa Fe Southern California International Gateway rail yard which is proposing use of electric rail-mounted container gantry cranes whenever possible. In addition, the Lead Agencies should modify any references to "U.S. EPA Tier 4 on-road or Tier 4 non-road engine standards" to "U.S. EPA Tier 4 non-road engine standards", as it is assumed to be a typographical error. **SCAQMD-16**

MM AQ-9: Fleet Modernization for On-road Trucks

SCAQMD-17 The Ports of Los Angeles and Long Beach are developing the Port Clean Truck Program to implement the CAAP HDV-1 Truck Measure. As a condition of project approval, any trucks providing drayage service for the facility must comply with the Clean Truck Program. However, prior to 2014, those drayage trucks that meet 2007 or 2010 NOx standards should be used over trucks that have only been retrofitted. After 2014, all trucks entering the Port should meet 2010 NOx emission standards. In addition, the Lead Agencies should delete references to Tier 4 emission standards for on-road heavy-duty diesel engines, as it is assumed to be a typographical error.

MM AQ-10: Vessel Speed Reduction Program (VSRP)

SCAQMD-18 SCAQMD staff concurs with the commitment to implement MM AQ-10. The SCAQMD requests that the Lead Agencies, however, identify in the mitigation monitoring plan the specific mechanisms expected to be used to ensure that this measure is adequately monitored and enforced.

MM AQ-11: Ship Auxiliary Engine, Main Engine, and Boiler Fuel Improvement

Mitigation measure AQ-11 calls for a phasing-in of low sulfur (<0.2 percent sulfur) marine fuel in the main and auxiliary engines of ships calling at the TraPac terminal in San Pedro. Specifically, MM AQ-11 includes the following phase-in schedule for usage of 0.2 percent sulfur fuel:

2009 – 10% of total ship calls
2010 – 20% of total ship calls
2012 – 50% of total ship calls
2015 – 100% of total ship calls

According to the Draft EIS/EIR, MM AQ-11 assumes that 0.2 percent sulfur fuel will be "readily available by the required dates" of the phase-in schedule. It also states that TraPac's proposed implementation schedule "allows time for technical equipment upgrades on the vessels, including installing new tanks and piping."

SCAQMD-19

Reducing fuel sulfur is one of the most significant and feasible means of expeditiously reducing particulate and sulfur oxides emissions from the TraPac terminal. SCAQMD staff believes that, given the experience implementing low sulfur fuel to date by MAERSK as well as other information summarized below, the phase-in schedule proposed in the DEIR can feasibly be accelerated. In addition, all vessels should utilize 0.1 percent sulfur fuel by 2010.

We thus urge the lead agencies to accelerate use of low sulfur fuel in main and auxiliary engines of vessels calling at the Berth 136 - 147 Terminal, as follows:

- Within 6 months after approval of the TraPac project, all vessels calling at the terminal shall use fuel with sulfur content no higher than 0.2 percent when they are within 40 nm of Point Fermin.
- Staff understand that the port staff has concerns about the schedule to limit fuel sulfur of ships not operated by the parent company of TraPac, Mitsui O.S.K. (MOL). Staff believes Maersk has demonstrated that switching to low sulfur fuel is currently feasible,

and recommends that TraPac mitigation measures require all vessels to utilize low sulfur fuel. If, however, the port determines that it must provide additional time for vessels not operated by MOL, we urge that such provision be limited to vessels that require equipment modifications. The following condition would accomplish this:

- Within 6 months after approval of the TraPac project, all vessels operated by entities other than MOL calling on the terminal shall use fuel with a sulfur content no higher than 0.2 percent within 40 nm of Point Fermin, *unless* the operator demonstrates to the satisfaction of the port that the vessel is not capable of switching fuel due to unavailability of necessary tankage or separate piping. Tankage or piping shall be considered "available" if (1) the vessel is equipped with tankage and piping that can supply stored low-sulfur fuel to main engine from independent tank(s), and (2) such tankage and piping is capable of providing 0.2 percent sulfur fuel within 40 nm of Point Fermin (i.e. no exceptions due to a failure of the vessel to carry 0.2 percent fuel).
- If such exemption is allowed, any vessels that need modification should have them made as soon as possible. We urge that the following provision be adopted to accomplish this:
  - Upon approval of the project, no vessel may make more than one call at the TraPac terminal unless the vessel operator demonstrates to the satisfaction of the port that any modifications to the vessel needed to utilize 0.2 percent sulfur fuel will be made at the earliest possible date.

- Finally, on or before January 1, 2010, *all vessels* shall use fuel in main and auxiliary engines with sulfur content no higher than 0.1 percent within 40 nm of Point Fermin. **SCAQMD-19**

Such strengthening of the mitigation measure will ensure that all feasible mitigation measures are employed as specified in CEQA. This amendment would also help implement the South Coast AQMP which calls for 0.1 percent sulfur fuel by 2010.

The balance of this comment addresses technical feasibility and fuel availability issues. We also highlight the extraordinary capabilities and resources of TraPac's parent company, because they are germane to the issue of feasibility.

1. Low Sulfur Fuel for TraPac Ships Are Feasible

Maersk's Successful Experience. In March of 2006, Maersk began using low sulfur marine diesel fuel in ships within 24 NM of the California coast. At that distance from shore, Maersk ships switch from high sulfur RFO fuels to distillate fuels with 0.2 percent or lower sulfur content. Maersk has to date implemented hundreds of ship calls involving switches to 0.2 percent sulfur fuel. While Maersk still is evaluating this program, its experience strongly supports the feasibility of switching to low sulfur fuels when approaching port.

Engine Manufacturers Guidance. Despite past and recurring statements of concern raised about the operation of ship main and auxiliary engines on fuels with low sulfur content, information provided by vessel engine manufacturers continues to show that switching fuels when required is a normal and routine operation. In addition, over the last year of operation, Maersk has reported no technical problems (e.g., no lubricity problems, no increased fuel pump or engine wear, no fuel storage problems) associated with implementation of fuel switching. Maersk considers fuel

switching to be "normal engineering practice" and states there is "no special training provided" to the crew.[2] Indeed, as described in a recent CARB Maritime Air Quality Technical Working Group Meeting (27 July 2007), vessel engine manufacturers have provided advice regarding means to accomplish fuel switching, stating, for example, that if the engines are to operate for longer periods of time on low sulfur fuel, the strict lubricating oil specifications for residual fuel operation could be relaxed to allow a lower base number.

Tankage Availability. The large majority of ships in service are equipped with multiple tanks (although many operators currently choose to use residual fuel to run auxiliary engines due to cost considerations). Maersk uses separate tanks for the storage of the distillate fuel to avoid compatibility issues.[3]

No Barriers to Timing. Over a period of roughly 13 months, Maersk initiated use of 0.2 percent low sulfur fuels in 78 of its vessels. Records of vessel calls at the TraPac terminal over the last year indicate that 46 percent of all calls were by ships owned by TraPac's parent company, MOL. These calls were conducted by just 18 unique ships. Based on Maersk's performance of initiating low sulfur fuel in 78 vessels within 13 months, it appears feasible that a major international shipping company like MOL (see below) could switch to low sulfur fuels for just 18 vessels in a much shorter timeframe.

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Non-MOL Ships. Half the calls to the TraPac terminal are made by ships not owned by MOL. Based on the past year of TraPac records, this non-MOL fleet has been composed of approximately 43 unique ships and only eight shipping lines. Notably, the majority of these ship calls have been handled by only three shipping lines and just 26 unique ships. The limited number of lines and ships should facilitate TraPac in working with its customers to require use of low sulfur fuel. In addition, the port has the legal authority as landlord to specify conditions of entry for all ships utilizing the TraPac terminal. We thus are not aware of any information indicating a need for non-MOL ships to be granted more time to begin using low sulfur fuel.

Feasibility of 0.1% Sulfur Fuel. There is no indication that the implementation process or technical feasibility of using low sulfur fuels is significantly different between fuels with 0.1 percent or 0.2 percent sulfur content. We thus assume that *only* the availability and price of the fuel are the main issues with regard to lowering the fuel sulfur content limit from 0.2 percent to 0.1 percent. We note in this connection that a number of bodies have stated support for 0.1 percent sulfur limits. The California Air Resources Board is considering adopting, and the United States has proposed that the International Maritime Administration adopt, a 0.1 percent sulfur limit for main engines by 2010 or 2011. The World Shipping Council, whose members transport 90 percent of containerized marine cargo, has stated its support for the U.S. proposal as follows:

> "…The proposal by the U.S government is 0.1 percent, a standard that has already been set for future use in European ports and in Southern California. WSC has no objection to a 0.1% or a 0.2% standard, so long as fuel meeting the standard is reasonably available. 0.2% or

[2] "Maersk Pilot Fuel Switch Initiative," presentation by Jai Alimchandani, Manager, Regulatory Compliance, Technical Organization, and James Flanagan, General Manager, Regulatory Affairs, Maersk; CARB Maritime Air Quality Technical Working Group Meeting , 27 July 2007, accessed at: http://www.arb.ca.gov/ports/marinevess/presentations/072407/072407maepres.pdf

[3] Id.

> lower sulfur fuel is used by a number of WSC lines in certain areas today on a voluntary basis… The only obvious condition WSC sees as necessary is that fuel meeting this standard is reasonably available from refiners on a global basis by the proposed implementation date of 2011, and we are not aware of a reason to believe that it would not be available if the IMO can act promptly and provide refiners with a clear and uniform standard and date." (emphasis added)[4]

2. Availability of Low Sulfur Marine Fuels For Use at TraPac Terminal

Based on data reported by the Department of Energy,[5] about 3.1 percent of distillate fuel sold/delivered in California (2,600 MT/day) goes to vessel bunkering. The U.S. EPA released a report[6] that estimated marine distillates are as much as 90 percent (by sales) rebranded on-road diesel. A survey by DNV Petroleum Services supports these estimates, finding that the average DMA fuel in the San Francisco and Los Angeles regions has significantly less than 0.1 percent sulfur content.[7] This is consistent with Maersk's experience, and it suggests that the TraPac operation can obtain fuel that achieves a faster compliance rate than required by MM AQ-11. Given that the majority (~96 percent) of distillate that was imported to PADD 5 had sulfur contents between 500 ppm and 2,000 ppm, the California supply of marine distillate likely enables full compliance without significant phase-in time.

In addition, based on records of TraPac vessel calls, an average of one ship every 1.4 days calls at the terminal. Maersk cites roughly 24 metric tons of distillate fuel used per switching operation based on a 24 NM boundary. If the boundary is extended to 40 NM, usage of distillate fuel will increase. Provided the increase is roughly proportional to the increase in the boundary distance, then it is anticipated that a ship calling to TraPac would consume 40 metric tons of distillate fuel. This amounts to an average demand of 28.5 metric tons of distillate per day. On an annual basis, full compliance for all ships at TraPac would require some 600-650 thousand tons of distillate fuel. This transfer from high-sulfur distillate to low sulfur distillate represents a reduction in no more than 15 percent of the West Coast (PADD 5) distillate greater than 500 ppm sulfur supplied currently, and an increase of less than 3 percent in the 15-500 ppm sulfur distillate sold/delivered currently in California. This data provides further support for concluding that a fuel switch would not require a significant phase in period. Moreover, the experience to date of Maersk Lines suggests that there is little difficulty sourcing these quantities of 0.2 percent or lower sulfur fuel on the U.S. West Coast.[8]

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We also note that other nations are likely capable of providing low-sulfur fuel for ships calling on TraPac terminals. The most common trade routes for ships calling at TraPac include visits to Chinese and Japanese ports and the Port of Oakland. Roughly 87 percent of all ships visiting TraPac included a Chinese port in their rotation, and about 45 percent of ships included a

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[4] http://www.worldshipping.org/Vessel_air_emissions_WSC_position_paper_on_USG_proposal.pdf. It is also noteworthy that the 2005 Starcrest study for POLA found that France and the Netherlands will make such fuel available beginning in 2008. Notably, TraPac's parent company MOL has just signed a "lease contract" with the Port of Rotterdam, which includes "building the superstructure, equipping and operating" a new terminal at this large bunkering port in the Netherlands. This connection with the EU's largest port located within a SECA should help further MOL's experience with 0.1% sulfur marine fuels by 2010.

[5] http://tonto.eia.doe.gov/dnav/pet/pet_cons_821dst_dcu_SCA_a.htm

[6] http://www.epa.gov/otaq/regs/nonroad/420d07001chp1.pdf

[7] "Current Marine Distillate Fuel – Low Sulfur Fuel Availability," presentation by Dr. Rudolph Kassinger, Technical Consultant, DNV Petroleum Services, Inc., CARB Maritime Air Quality Technical Working Group Meeting , 27 July 2007, http://www.arb.ca.gov/ports/marinevess/presentations/072407/072407dnvpres.pdf

[8] "Maersk Pilot Fuel Switch Initiative," presentation at CARB workshop, 07/27/07. http://www.arb.ca.gov/ports/marinevess/presentations/072407/072407maepres.pdf

Japanese port. This is important because Maersk reported that sourcing low sulfur marine distillate, while "difficult" in Singapore and Hong Kong, is "available" in Japan. The ships bound for the TraPac terminal that called in Japan were owned by MOL. Therefore, it is reasonable to assume that all MOL ships make calls in at least two regions (Japan and Los Angeles), where 0.2 percent or lower sulfur fuel is currently available.

We believe that the non-MOL ships will also be able to acquire low sulfur fuels. Marine carriers have expertise in strategic planning of fuel acquisitions, generally deciding when and where to purchase fuel based on price (Starcrest, 2005). And history has demonstrated that fuel providers are responsive to demand, including when new environmental standards require lower emitting fuels. Coordinating the purchase of relatively small amounts of low sulfur fuel for operation within the relatively limited regions defined by the draft EIR would not appear to stretch the abilities of the lines. For example, for those vessels in repeat service to the U.S west coast, low sulfur fuel could be acquired here in sufficient quantities for both the outbound and return trips.

3. Extraordinary Capabilities and Resources of TraPac's Parent Company

As noted, TraPac is the wholly owned terminal-operating subsidiary of Mitsui O.S.K. Lines Ltd. (MOL). In recommending that the TraPac EIR include a more aggressive phase in of low-sulfur marine fuel, it is recognized that there will be cost and logistical challenges. However, MOL is a multi-national corporation of extraordinary size and resources. According to its own website,

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> Mitsui O.S.K Lines (MOL) is one of the worlds largest, most versatile and most potent shipping companies. The MOL of today harnesses a work force of over 16,500 people and a fleet exceeding 500 vessels of about 34 million dead weight tons. Every year, nearly 2600 MOL voyages criss-cross the globe to link over 200 ports in more than 100 countries. MOL offices all over the world are linked by a state-of-the-art network that gives customers instant access to a range of information -- vessel and cargo tracking, scheduling, bills of lading, booking. And we continue to improve our information technology (IT) systems to offer more convenient services such as online schedule information, cargo tracking, and booking.

Further, the website states that "MOL plays a key role in the global energy trade, operating the world's largest tanker fleet." It describes MOL's impressive capability to transport an extraordinary variety of transportation fuels and energy sources, including those that are environmentally friendly.

Finally, as shown in Figure 1 in MOL's website, MOL's "corporate principles" include a commitment to "advance global economic growth" while also promoting and protecting the environment. Expediting the use of 0.2 percent sulfur marine fuel at its TraPac facility in the Port of Los Angeles will make a very important, direct contribution to both of those key goals.

In closing, we believe that there is substantial evidence that acceleration of use of low sulfur fuels is feasible and that sufficient fuel can be made available. TraPac, and, we believe, other companies that operate marine vessels, have substantial technical, logistical and economic resources to do this. Fuel availability issues and cost impacts are limited because the region in which low sulfur fuel would be required encompasses but a small portion of total trip distances.

To the extent there is any uncertainty about fuel availability in all locations, establishing requirements in the EIR to utilize low sulfur fuel will provide impetus for fuel providers to make needed fuels available in a wider range of ports. SCAQMD-19

MM AQ-12: Slide Valves in Ship Main Engines
The SCAQMD staff supports use of slide valves in ship main engines. Slide valves are available technology that can be readily retrofitted into existing engines without need to enter dry-dock. Many such applications have occurred. The phase-in schedule in the draft EIR (culminating in 95 percent of ship calls by 2015) can be feasibly be expedited. We urge that 95 percent of ship calls be equipped with slide valves no later than two years after project approval.

Slide valves and other control technologies could be used in combination to obtain higher control rates, and can be retrofitted to existing vessels. These additional control technologies can feasibly be applied to ship main engines and should be required by the project approval. Below is a table listing feasible measures with the associated emission reduction estimates compiled SCAQMD staff.

List of Feasible Controls

Control	Control Details	Estimated Emission Reductions		
		PM	NO_x	Other
SCR and DOC	Selective Catalytic Reduction with Urea Injection and Diesel Oxidation Catalyst	25-50%	90%	90% CO
Slide Valves	Replace existing engine valves with slide valves designed to improve fuel efficiency and achieve emission reductions	-	30%	
Exhaust Gas Water Treatment	Exhaust Gas Mixes with Sea Water	80%	20%	90% SO_2
Water Injection	Humidification of Fuel-Air Mixture	10-20%	20-40%	N/A
Injection Timing Delay	Reduces Pressure at Auto Ignition Reducing Peak Flame Temperature	10-30%	N/A	N/A

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Slide valves that provide around a 30 percent reduction in NOx emissions are available from Mann, one of the leading marine engine manufacturers. These slide valves have been installed on several ocean-going vessels and are being demonstrated as part of a joint effort with the California Air Resources Board (CARB). Water injection, emulsified fuels, or humid air are established technologies in use in Europe. In addition, SCR is a mature technology in use on a wide variety of sources including marine vessels. It has not to the SCAQMD staff's knowledge been applied to a large container ship. However, based on SCAQMD staff visits to European marine vessel operators, such an application is feasible and merely a matter of appropriate engineering. Utilization of the control device could be limited to areas adjacent to the coast.

Space constraints would be an issue, thus making installation most feasible in new builds, but SCR may be retrofitted if space issues are addressed.

Many of the above retrofit technologies are summarized in the attached report by Lovblad and Fridell (2006). The report can be found at www.profu.se or please be obtained from the SCAQMD staff.

Based on the above, SCAQMD staff urges the lead agencies to modify this mitigation measure to require that:

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> Main engines on vessels calling at TraPac that are first placed into service after 2011 shall: 1) be equipped with SCR, if feasible; or 2) if SCR is not feasible (as determined by the port), shall be equipped with a combination with slide valves, water injection, or other technology capable of achieving a NOx reduction of at least 60 percent and PM reduction of at least 30 percent. This requirement shall be met by vessels making at least 20 percent of calls to TraPac in 2010 and 50 percent of calls in 2015.

Marine vessels first placed into service 2011 and later would be subject to MM AQ-13 for Main Engines in New Vessel Builds.

MM AQ-13: Main Engines in New Vessel Builds

This mitigation measure lacks commitments that are specific or enforceable. Based on the information and plans summarized in the preceding section, SCAQMD staff urges inclusion of language in the mitigation measure requiring vessels put into service after January 1, 2011 that call at TraPac to be equipped with technologies achieving at least an 80 - 90 percent reduction in NOx and a 60 percent reduction in PM.

SCAQMD-21

The relative feasibility of installing advanced control in new builds as discussed in MM AQ-12 underscores the importance of acting immediately to establish control requirements for new vessels in the proposed terminal operator's lease. There are currently an extraordinary number of vessels on order to be constructed. Once those vessels are built and in the water, the technical and economic challenges to control them will be much greater.

MM AQ-14: Clean Rail Yard Standards

The SCAQMD staff concurs that the on-dock rail facility shall incorporate the cleanest locomotive technologies consistent with CAAP measure RL-3. The SCAQMD staff recommends that the Final EIS/EIR include specific language clarifying the types of technologies and timeframe that this measure will be implemented. Highly effective control technologies are feasible. U.S. EPA in its proposed rulemaking for locomotives and marine

SCAQMD-22

engine standards, provided a detailed discussion of state of control technologies (U.S. EPA Draft Regulatory Impact Analysis: Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression-Ignition Engines Less than 30 Liters per Cylinder – EPA420-D-07-001, March 2007). We strongly agree with U.S. EPA's assessment that there exist control technologies that could be utilized to further reduce emissions from existing Tier 2 locomotives. Such control technologies could be equipped on a smaller volume of locomotives in an earlier timeframe than what U.S. EPA envisions since EPA's rulemaking is on a national basis.

In addition, the Class 1 railroads operating in the South Coast Air Basin are deploying switcher locomotives that achieve lower emissions levels than current EPA Tier 2 standards. Union Pacific and BNSF are deploying 66 locomotives recently developed by National Railway Equipment Corporation that employ several non-road engines on a locomotive chassis. The non-road engines are relatively well controlled. Notably, these "multi-engine switcher" locomotives were developed in a relatively short time period without involvement of the two major national locomotive manufacturers. Moreover, these engines could feasibly be retrofitted with DPF and SCR after treatment technologies to further reduce PM and NOx emissions.

While use of these switchers is important, it should be noted that switcher locomotives create a relatively small portion of regional locomotive emissions. Approximately 90 percent of such emissions are created by line haul locomotives. The SCAQMD technical staff is not aware of any technical or economic reason that would preclude deployment of such multi-engine technologies for the purpose of moving container trains across the South Coast Air Basin. Such technology could be deployed within a few years, and could substantially expedite the schedules in EPA's proposed locomotive rule. Several hundred of such locomotives could be in service by 2014, potentially sufficient to pull all trains in the South Coast Air Basin if the locomotives are dedicated to this region. SCAQMD-22

MM AQ-16: Truck Idling Reduction Measures
This mitigation measure should be consistent with California State requirements and the idling should be limited to 5 minutes per idling event. SCAQMD-23

Green-Container Transport System. The Final EIS/EIR should commit to a process of implementing zero- or near-zero emission transport technologies such as rail electrification. Through implementation of the CAAP the Ports of Los Angeles and Long Beach are evaluating advanced cargo transportation technologies. The Lead Agencies should include a mitigation measure that would incorporate this commitment. SCAQMD-24

Peak Daily Emissions Estimate Assumptions
Vessels. Page 3.2-58 line 25 and 38 of the DEIS/EIR states that in 2007, one 3,000 to 5,000 TEU and one 5,000 to 6,000 TEU capacity vessel would be assumed to be at berth and one 3,000 to 5,000 TEU capacity vessel would perform a round trip transit in and out of the Port in calculating the peak daily emissions. However, in Section 2.4.2.6 (Terminal Operations) describes, a total of four vessels could be berthed at the terminal and any one time and according to Figure 1.2 (Existing Container Terminal) aerial photograph on page 1-5 or 1-6 in the Introduction clearly show three ships at berth. Based on the Figure and the possibility of having 4 ships at berth, calculating emissions with only two ships at berth may not capture the most representative peak daily emissions. Furthermore, the 3,000 to 5,000 TEU capacity vessel performing a round trip transit in an out of the port would not be consistent with the vessel selection assumption used in 2015 to create the peak daily emissions. SCAQMD staff requests that the lead agencies clarify if peak daily emissions associated with operation of Berth 136-147 reflects the peak daily potential emissions. Specifically, the Final EIS/EIR should incorporate careful selection of vessel types, the number of vessels, and a discussion that would be more representative of a peak daily scenario. SCAQMD-25

SCAQMD-26 *Train Trips and Associated Cargo Throughput*. Page 3.2-61 line 1 of the DEIS/EIR discusses an assumption of train trips and associated cargo throughput at off-site/on-site rail yards during each project year. SCAQMD staff seeks clarification of this assumption and how this assumption was derived.

SCAQMD-27 *Idling Assumptions for Line-Haul Locomotives.* Page 3.2-46, line 2 of the DEIS/EIR states that the idling times for line-haul locomotives at the rail yards were adjusted from 1.9 to 1.0 hours starting in 2006 in response to the 2005 CARB/Railroad Statewide Agreement. Although the statewide agreement includes a provision for idling, there are many exceptions to this provision. In addition, there is no assurance that even the agreed upon idling scenarios would be limited to 1 hour, since the Statewide Agreement contains exemptions for self-determined "essential" idling and ARB enforcement staff cannot feasibly enforce more than a small portion of idling events. If the analysis assumes a 1 hour idling limitation for line-haul locomotives, the Lead Agencies should include an enforceable mitigation measure that would reflect this idling assumption. Alternatively, the Lead Agencies should adjust the idling time taking into account the many exceptions to the Statewide Agreement.

SCAQMD-28 *Container Hauling.* Page 2-31, line 30 of the DEIS/EIR states that a loaded double-stack train is typically pulled by three or four line-haul locomotives or two or three smaller locomotives. SCAQMD staff recommends that PHL operate all trains by utilizing the two or three smaller locomotives causing less emissions as compared to utilizing three or four line-haul locomotives. The Final EIS/EIR must explain how the Lead Agencies are minimizing the emissions through use of smaller locomotives.

SCAQMD-29 *Average Sulfur Content for Line-haul Locomotives.* Page 3.2-46, line 9 of the DEIS/EIR assumed line-haul locomotives use diesel fuel with an average sulfur content of 2,200 ppm before June 2007. However, in the HRA portion of the DEIS/EIR, Page D3-6, in the continuing paragraph for locomotives, states that the HRA analysis assumed that line-haul locomotives use diesel fuel with an average sulfur content of 1,927 ppm before 2008. SCAQMD staff seeks clarification of this discrepancy.

SCAQMD-30 *Annual Ship Calls.* Page 3.2-42, line 7 and the Table D1.2-PP-1 of the DEIS/EIR states that in 2015 and 2038 the air quality analysis evaluated 279 and 311 annual ship calls, respectively. However, Page 2-3 and Page 2-43 states that in years 2015 and 2038, the annual ship calls projected are 309 and 334, respectively. SCAQMD staff seeks clarification for the difference. Also clarify the impact the difference has on the projected annual TEUs and emissions, if any.

SCAQMD-31 *Hoteling Time/Visit.* Page 3.2 – 43, line 10 and Table D1.2-PP-1 of the DEIS/EIR states vessel hoteling durations. However, when reviewing the data, SCAQMD staff noticed inconsistencies between the various types of ships. It is understandable that additional cranes would be utilized to reduce ship hoteling time for the larger ships, however the amount of TEU moves/crane hour should not change. It is expected that the crane operator would not be able to pick up more TEUs in one hour, just because the ship is larger. SCAQMD staff seeks clarification on how the hoteling time/visit were calculated for each ship type and proposed project scenario.

Cargo Throughputs. Page 3.2-43, line 1 of the DIER/EIS states that throughputs for 5,000 – 6,000 TEU vessels were based upon the average throughput of vessels >5000 TEUs at Berths 121-131 in year 2001. In addition, throughputs for 8,000-9,000 TEU vessels were based upon a capacity of 8,800 TEUs times 1.43 (the ratio of TEU throughput per ship visit to the TEU capacity for vessels >5,000 TEUs that called at Berths 121-131 in 2001). SCAQMD staff recommends using site specific data whenever possible. If the Lead Agencies determine that the use of West Basin Container Terminal (Yang Ming) data from 2001 in this analysis is most appropriate for the proposed terminal, this should be clearly explained in the Final EIS/EIR. SCAQMD-32

Truck Idling Assumption. Page 3.2-45, line 22 of the DEIS/EIR states that on-terminal idling occurred for 33 minutes in 2003 and would occur for 15 minutes in subsequent years, based upon current and expected operational characteristics of Berth 136 – 147. SCAQMD staff requests clarification on the "current and expected operational characteristics of the Berth 136-147 terminal that would reduce truck idling to 15 minutes." SCAQMD-33

New and Relocated Rail Facilities

On-Dock Rail Yard. Page 2-19, line 24 of the DEIS/EIR states that the Project includes an on-dock rail yard to be constructed where the Pier A rail yard is presently located. In comparing Figures 2-1 and 2-4 to 2-3 (Proposed Project Layout), it appears that the existing PHL Pier A Rail Yard acreage will be decreased with less track limiting the new on-dock rail yard capacity. The Final EIS/EIR should include additional information with regards to new on-dock rail development as compared to the current PHL Pier A Rail Yard setup to confirm that the on-dock rail is maximized. According to Table 2.1 (Project Throughput Comparison) on Page 2-3, percent TEUs by on-dock rail decreases from year 2015 to 2038, at 31.6 percent to 29.3 percent respectively. The DEIS/EIR does not provide details in the percent TEU by on-dock rail decrease, but the limiting factor appears to be the new on-dock rail TEU capacity. If the reason for the percent decrease by on-dock rail is due to the limited TEU capacity, the Project should then include a larger on-dock rail with possible alternatives of having an inland port to increase efficiency at the terminal if space and capacity is limited. SCAQMD-34

Relocated Pier A Rail Yard.

Page 2-19, line 30 and Page 3.2-12, line 11 of the DEIS/EIR provides limited details about PHL's Pier A Rail Yard relocation. The proposed PHL Pier A Rail Yard relocation to the 70-acre area northeast of the existing terminal, between the Consolidated Slip and Alameda Street appears to be an expansion with an increase in capacity compared to the proposed On-dock Rail Yard area of 10 acres. The DEIS/EIR does not provide activity data for this proposed rail yard. SCAQMD staff seeks additional information with regards to the relocation in the DEIS/EIR as part of the Project emissions, if any. SCAQMD-35

Page 3.2-45, line 38 of the DEIS/EIR states that emission factors for the yard locomotives at the proposed Berths 136-147 Terminal rail yard were adjusted to account for the commitment by PHL to replace their existing yard locomotives with engines that meet the Tier 2 standard per CAAP measure RL-1. If CAAP measure RL-3 is not applied to the relocated Pier A Rail Yard, the Final EIS/EIR should clarify the status of the of the PHL operating agreement, including all amendments with respect to the implementation schedule. Lastly, SCAQMD staff firmly believes that the proposed PHL Pier A Rail relocation is a new rail yard and should comply with SCAQMD-36

SCAQMD-36 CAAP measure number RL-3 for New and Redeveloped Rail Yards and SCAQMD's 2007 Air Quality Management Plan (AQMP) rail measures.

Alternatives

SCAQMD-37 *Alternative 1 – No Project.* SCAQMD staff reviewed Table 3.2-38 on page 3.2-118, an overview of the cancer risk under the No Project Alternative. SCAQMD staff recommends that the lead agencies adjust the emissions to assume a No Project Alternative that accounts for implementation of CAAP measures. This will provide a more realistic comparison of Project and No Project emissions since many CAAP measures can and should be adopted whether or not the proposed project is approved.

Construction

SCAQMD-38 *Dredging.* Section 2.4.4.2, starting on Page 2-38 of the Draft EIS/EIR states that filling/dredging is assumed to be accomplished by 1) hydraulic dredge pumping and 2) barge-mounted clamshell dredge maneuvered by a tugboat and supported by one or two workboats. SCAQMD staff seeks use of construction equipment that would produce the least amount of emissions.

Peak Daily Emission

SCAQMD-39 *Operation.* Page 3.2-59, Table 3.2-23 of the Draft EIS/EIR provides peak daily emissions generated for each Project scenario/activity and then quantified at certain critical Project years. However, SCAQMD staff noted when you subtract the CEQA Baseline 2003 from the Project Year Total, the Net Change from the CEQA Baseline for the Project Year is incorrect. SCAQMD staff seeks clarification of the Net Change from the CEQA Baseline in the Final EIS/EIR.

SCAQMD-40 *Operational Emission in 2010*. Page 3.2-79 and 83 of the Draft EIS/EIR states that operational emissions in year 2010 would produce the highest Project annual air quality impacts. The SCAQMD staff recommends that the Final EIS/EIR present 2010 daily operation emissions.

Health Risk Assessment

SCAQMD-41 *Use of China Shipping Project Data.* Page D3-2 and D3-3 of the Draft EIS/EIR references China Shipping Project data to delineate boundaries of emission sources for use in the HRA. SCAQMD staff is concerned in using data from another terminal due to differences in activity levels, distance to receptors, and others factors that may cause the data to be inappropriate for use at the proposed terminal. If the Lead Agencies feel that the use of China Shipping Project data is most appropriate for the proposed terminal, please clarify in detail. The SCAQMD staff believes that use of site specific data in the HRA is most appropriate and should be used when available.

SCAQMD-42 *Terminal Equipment.* Page D3-5 of the DEIS/EIR states that the useful life (replaced) of terminal equipment has been assumed to be 15 years based on discussions with the proposed terminal operator. SCAQMD staff recommends that since 15 years is assumed in the analysis, the Lead Agencies require as part of the proposed Project that all terminal equipment be replaced at least every 15 years.

CEQA Baseline. Page D3-22 (Table D3-6) and D3-25 (Table D3-8) of the DEIS/EIR provides two tables of maximum health impacts due to the proposed Project without mitigation and with mitigation. The CEQA baseline appears to be different between the two tables. SCAQMD staff seeks detailed information on how the CEQA baseline was determined for both tables and the reason for the differences in the baseline. SCAQMD-43

Maximum Individual Cancer Risk (MICR). Page D3-22 (Table D3-6) and D3-25 (Table D3-8) of the DEIS/EIR provides two tables of maximum health impacts due to the proposed Project without mitigation and with mitigation. A comparison of Maximum Individual Cancer Risk (MICR) per Receptor Type is quantified in these two tables. However, the Final EIS/EIR should provide a comparison of the MICR baseline to the MICR proposed Project. SCAQMD-44

Fairway Transit. Page D3-2 of the DEIS/EIR states that only the closest 14-nm of Fairway transit was considered in the HRA and the more distant emissions in the transit were not included based on a sensitivity analysis for China Shipping. The more distant emissions contributed less than 1 percent of the total risks at the maximum and residential receptors according to the DEIS/EIR. It is unlikely that the ignored impacts would change the risk levels associated with the project, however SCAQMD staff requests the lead agencies provide a more complete citation and explanation of the sensitivity analysis used in the Final EIS/EIR. SCAQMD-45

Locomotive Hauling. Page D3-2 to D3-3 of the DEIS/EIR states that project trains traveling north along the San Pedro Subdivision rail line were considered in the HRA and project train emissions north of Anaheim Street were not included, based on a sensitivity analysis for China Shipping. The project emissions north of Anaheim Street emission contributed no greater than 0.2 percent to the total risks from all project sources at the maximum residential and occupational receptors according to the DEIS/EIR. Based on the results of the sensitivity analysis, it may be acceptable to exclude these risks since the vast majority of the emissions (and thus the impacts) are concentrated in the Port area; however SCAQMD staff requests the lead agencies provide a more complete citation and explanation of the sensitivity analysis used in the Final EIS/EIR. SCAQMD-46

Truck Hauling. Page D3-3 of the DEIS/EIR states that project trucks traveling north along I-110 and Alameda Street were considered in the HRA and project truck emissions north of Anaheim Street were not included, based on a sensitivity analysis for China Shipping. The emissions north of Anaheim Street contributed no greater than 0.2 percent to the total risks from all project sources at the maximum residential and occupational receptors according to the DEIS/EIR. Based on the results of the sensitivity analysis, it may be acceptable to exclude these risks since the vast majority of the emissions (and thus the impacts) are concentrated in the Port area; however SCAQMD staff requests the lead agencies provide a more complete citation and explanation of the sensitivity analysis used in the Final EIS/EIR. SCAQMD-47

Truck Emissions. Page D3-3 of the DEIS/EIR (third complete paragraph) states that the HRA evenly distributed truck on-terminal driving and idling emission throughout Berths 136-147 terminal for all project scenarios. SCAQMD staff requests additional rationale for evenly distributing truck on-terminal driving and idling emissions throughout Berths 136-147 terminal in the Final EIS/EIR. It is the understanding of SCAQMD staff that trucks are restricted to SCAQMD-48

SCAQMD-48 specific areas or routes according the DEIS/EIR and therefore it may not be appropriate to evenly distribute the emissions throughout the Berths 136-147 terminal.

SCAQMD-49 *Volume Source Heights.* Page D3-13 to D3-15 of the DEIS/EIR provides release heights for project ships, trains, and trucks that are similar but not exactly equal to those assumed by CARB in their DPM Exposure Assessment Study for the Ports. SCAQMD staff would like to see justification for those instances where the release heights are greater than CARB's assumptions in the Final EIS/EIR.

SCAQMD-50 *Meteorological Data.* Page D3-16 of the DEIS/EIR states that due to the varying wind conditions within the Port region, the most accurate way to perform the project HRA was to split the modeling domain into distinct Inner/Outer Harbor Port meteorological areas. SCAQMD staff concurs with the approach of using different meteorological data for inner and outer harbor sources. However, it would be helpful to SCAQMD staff, that the lead agencies provide a map showing the locations of the monitoring sites as support for the decision in the Final EIS/EIR.

South Coast Air Quality Management District, September 26, 2007

SCAQMD-1. Thank you for your comment. The Port however, has increased the VSRP measure as follows:

> **Mitigation Measure AQ-10**: **VSRP.** All ships calling at Berth 136-147 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area in the following implementation schedule: 70% in 2007 and 95% in 2008.

SCAQMD-2. The Final EIS/EIR has accelerated implementation of some mitigation measures proposed in the Draft EIS/EIR, as discussed in more detail in response to comments SCAQMD-7 through SCAQMD-24. Earlier introduction of 0.2 % sulfur is discussed in response to comment SCAQMD-19.

Relocating the PHL rail yard does not trigger CAAP measure RL-3. RL-3 does apply to new and redeveloped rail facilities, but, in this instance, cannot be applied to PHL given the language of RL3, which states that a list of cleanest available locomotive technologies "will be provided for project proponents to consider…and the measures will be formalized in lease requirements." (CAAP, p. 50, emphasis added.) Because the PHL rail yard is being relocated at the discretion of the Port, PHL is not a project proponent. Furthermore, TraPac is not responsible for PHL's relocation or operation. Furthermore, TraPac does not have the ability, directly or indirectly, to control PHL's operations. Accordingly, RL-3 cannot be applied to PHL at this time.

PHL entered into an agreement with the Ports of Los Angeles and Long Beach in January 2006 to replace their switch locomotive engines with cleaner engines that meet the Tier 2 locomotive standards. The replacement is scheduled to occur between the 3rd quarter of 2006 and the 3rd quarter of 2007, per CAAP measure RL-1. This agreement is discussed in the Draft EIS/EIR Section 3.2.3.3, Local Regulations and Agreements, and in the context of Impact AQ-3 (see Draft EIS/EIR Section 3.2.4.4).

Please note that the Final EIS/EIR proposes to implement diesel particulate traps (DPTs) on PHL locomotives beginning in 2015. This control measure is a strategy of RL-3 and it would reduce diesel particulate matter (DPM) emissions from these locomotives by about 90 percent from uncontrolled levels.

SCAQMD-3. The design and capacity of the Project rail yard optimizes a balance between the need to support intermodal rail projections and the need for terminal backland area to support cargo destined for the local market. While the railyard has been sized to handle the majority of rail-destined cargos, it is neither efficient nor environmentally beneficial to require that all rail-destined cargoes be required to be transported only via on-dock rail facilities. Because all the containers on a unit train built in on-dock rail yards are bound for the same destination, the on-dock rail yard cannot accommodate intermodal cargo destined for locations other than that of the unit train. For example, over the course of a week, the container terminal may have enough containers to build a number of unit trains to Chicago. However, the terminal may have 20 additional containers bound for Texas and 30 containers bound for New York. In such a scenario, containers bound for these other locations are hauled to near dock facilities to be grouped with containers from other terminals bound for the same destinations.

The ability to send unsorted containers by rail to an inland sorting facility is being considered as part of a larger goods movement strategy. In this scenario, new rail and terminal infrastructure connecting the Port to the yet to be identified or developed inland site would need to be built. This scenario would require commitment from the mainline rail carriers, manufactures and warehouses, plus cooperation and approval by federal, state, and local governments. It is not possible to impose such a mitigation on a single marine terminal operator at the Port because marine terminals are not in the rail or inland terminal businesses. The Port also does not have jurisdictional power to develop such a system. Rail is largely controlled by the federal government. While the Port is working with the railroad companies, federal, state and regional entities, and the shipping community to explore such an option, a number of operational, financial, and jurisdictional issues remain outstanding. An inland Port facility would affect operations at all Port terminals and throughout the goods movement network, and would need to be analyzed at a larger level than the project-specific analysis presented in this EIS/EIR

SCAQMD-4. Mitigation Measures AQ-17 and AQ-18B provide a process to consider new or alternative emission control technologies in the future. Additionally, the Port will add the following measure to the lease to ensure compliance with Mitigation Measure AQ-17:

> As partial consideration for the Port's agreement to issue the permit to the tenant, tenant shall implement not less frequently than once every 7 years following the effective date of the permit, new air quality technological advancements, subject to the parties mutual agreement on operational feasibility and cost sharing which shall not be unreasonably withheld.

Approval of the Project is dependent upon an acceptable Mitigation Monitoring and Reporting Program (MMRP) that identifies all feasible mitigation measures to reduce Project air quality impacts. The Port and Project terminal operator would comply with the MMRP for the life of the lease, or 30 years.

As discussed in the Draft EIS/EIR Section 1.1.3, the EIS/EIR used a number of Port studies to determine the maximum capacity for the terminal. As discussed in Section 1.1.3, changes to operation that require any physical change at the facility or new technology that could increase throughput beyond what was analyzed in the document would require a separate environmental analysis

SCAQMD-5. The Draft EIS/EIR includes a qualitative analysis of Project cumulative impacts.

The Ports are in the process of finalizing the Clean Air Action Plan (CAAP) San Pedro Bay Standards in coordination with the South Coast Air Quality Management District and the California Air Resources Board. In support of the CAAP, the Ports will prepare a Ports-wide HRA and the results of this analysis can be used to more quantitatively estimate cumulative impacts from Ports operations and individual projects.

Draft EIS/EIR Appendix D4 presents annual DPM of Project sources for the 2003 existing conditions and 70 years of Project mitigated operations starting in 2007. These data show that emissions of most source categories peak in year 2010 and then beyond 2012, they are less than 2003 conditions. In other words, the proposed mitigation measures also satisfy the intent to timely achieve the CAAP San Pedro Bay Standards.

The Draft EIS/EIR emissions are consistent with the emissions projections in the CAAP. In addition, the cumulative analysis of air quality impacts included foreseeable Port actions and used projections from the 2007 AQMP and the Multiple Air Toxics Exposure Study (MATES-II) (see Draft EIS/EIR Section 4.1.1). The 2007 AQMP includes the Port's projected emissions for trains, ships, construction equipment, and rail cargo handling equipment (refer to AQMP 3-3, 6-27). The Port's approval of projects will be consistent with these targets.

SCAQMD-6. Mitigation Measures AQ-1 through AQ-18B in the Draft EIS/EIR represent feasible means to reduce air pollution impacts from proposed construction and operational emission sources. The Final EIS/EIR has accelerated implementation of some mitigation measures proposed in the Draft EIS/EIR and added additional mitigation measures, as discussed in more detail in response to comments SCAQMD-7 through SCAQMD-24.

SCAQMD-7. The MMRP in the Final EIS/EIR would be certified by the Board of Harbor Commissioners and adopted as a Project lease condition. It would include monitoring and enforcement mechanisms to ensure appropriate implementation of all mitigation measures. The Port and Project terminal operator would comply with the MMRP for the life of the lease, or 30 years. See response to comment SCAQMD-4 for discussion of earlier implementation of measures through leases.

SCAQMD-8. The throughput numbers presented in the analysis represent the maximum physical and operational capacity of the marine terminal based on all known present and future technology and operational strategies. As discussed in Draft EIS/EIR Section 1.1.3, the EIS/EIR used a number of Port studies to determine the maximum capacity for the terminal. Changes to operation or new technology that could increase throughput beyond what was analyzed in the document would require a separate environmental analysis, but currently, such changes are unknown and therefore speculative. However, the following mitigation measures has been added to the Final EIS/EIR:

> **Mitigation Measure AQ-26**: **Throughput Tracking**. If the project exceeds project throughput assumptions/projections anticipated through the years 2015, 2025, and 2030, then staff would evaluate the effects of this on the emission sources (ship calls, locomotive activity, backland equipment, and truck calls) relative to the EIS/EIR. If it is determined that these emission sources exceed EIS/EIR assumptions, staff would evaluate actual air emissions, for comparison with the EIS/EIR and if the criteria pollutant emissions exceed those in the EIS/EIR <u>including any subsequent mitigation/emission reductions added to the terminal</u>, then new/additional mitigations would be applied through Mitigation Measure AQ-17.

SCAQMD-9. Thank you for your comment. Mitigation Measure AQ-1 has been amended as follows:

> **Mitigation Measure AQ-1: ~~Expanded VSR Program~~ <u>Harbor Craft</u> used for <u>Crane and Sheet-pile Deliveries and Construction.</u>** All cargo ships used for terminal crane and sheet-pile deliveries shall comply with the expanded VSRP of 12 knots from 40 nm from Point Fermin to the Precautionary Area. In addition, ships used for sheet-pile deliveries in Phase II construction (post 2015) shall use low-sulfur fuel (maximum sulfur content of 0.2 %) in auxiliary engines, main engines, and boilers within 40 nm of Point Fermin. This measure shall also require all harbor craft used during the construction phase of the Project to, at a minimum, be repowered to meet the cleanest existing marine engine emission standards or USEPA Tier 2.

Additionally, where available, harbor craft shall meet the proposed USEPA Tier 3 (which are proposed to be phased-in beginning 2009) or cleaner marine engine emission standards.

The above harbor craft measures shall be met, unless one of the following circumstances exist and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;

2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; and

3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease

The Project construction procurement process will include a selection system that requires bidders to use clean construction equipment, such as tug boats with Tier 3 and cleaner engine standards. Through funding by the CARB Carl Moyer Program, several tug boat operators at the Ports have re-powered their engines to Tier 2-compliant standards. For Project operational impacts, the analysis included a pre-CAAP assumption that the future baseline vessel assist tug boat fleet would be 38/100 percent Tier 2-compliant in years 2015/2030. The above mitigation measure will result in further emission reductions than assumed in the Draft EIS/EIR. However, due to availability issues, these reductions have not been quantified.

SCAQMD-10. Thank you for your comment.

SCAQMD-11. Thank you for your comment. Mitigation Measure AQ-2 has been amended as follows:

Mitigation Measure AQ-2: Fleet Modernization for On-Road Trucks. All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 33,000 pounds or greater used on-site or to transport materials to and from the site shall comply with the USEPA 2007 Heavy-Duty Highway Rule PM emission standards and shall have the cleanest available NOx emissions for Phase I. In addition, for Phase II construction (post January 2015), all on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 33,000 pounds or greater used on-site or to transport materials to and from the site shall comply with the USEPA 2007 Heavy-Duty Highway Rule emission standards where available. Trucks hauling materials such as debris or fill shall be fully covered while operatiing off Port property.

The above on-road truck measures shall be met, unless one of the following circumstances exist, and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;

2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; and

3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.

The Project construction procurement process will include a selection system that requires bidders to use clean construction equipment. The above mitigation measure will result in further emission reductions than assumed in the Draft EIS/EIR. However, due to availability issues, these reductions have not been quantified.

SCAQMD-12. Thank you for your comment. Mitigation Measure AQ-3 has been amended as follows:

Mitigation Measure AQ-3: Fleet Modernization for Construction Equipment. All off-road diesel-powered construction equipment greater than 50 hp, except derrick barges and marine vessels, shall meet the cleanest off-road diesel emission levels available but no greater than Tier 2 emission standards for projects starting construction prior to December 2011. Tier 3 emission standards shall be applied to projects starting construction between December 2011 and January 2015. The contractor could meet Tier 3 equivalent PM10 emission limits through the use of new or repowered engines designed to meet Tier 2 PM standards and/or the use of CARB approved diesel particulate traps. ~~achieve the Tier 2 emission standards in Phase 1 construction and Tier 4 emission standards in Phase 2 construction, as defined in the USEPA Non-road Diesel Engine Rule (USEPA 1998 and 2004). Equipment not designated Tier 2~~3 ~~by the manufacturer may achieve the emissions requirement by retrofitting the equipment with an CARB Verified Diesel Emission Control System (VDECS) and/or by the use of an CARB verified emulsified fue~~l. For Phase II construction (post 2015), equipment shall meet the Tier 4 emission standards where available. In addition, construction equipment shall incorporate, where feasible, emissions savings technology such as hybrid drives and specific fuel economy standards.

The above construction equipment measures shall be met, unless one of the following circumstances exist, and the contractor is able to provide proof that any of these circumstances exists:

1. A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;

2. A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; and

3. A contractor has ordered a control device for a piece of equipment planned for use on the project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the project has the controlled equipment available for lease.

New Tier 3 standard off-road engines became commercially available in 2006/2007 for the prevalent horsepower categories proposed for Project construction. Since most of Phase 1 construction would occur within a few years after this time, all Project construction equipment may not be able to comply with these standards. Hence, Mitigation Measure AQ-3 proposes a more achievable goal that requires non-marine construction equipment on the average to comply with Tier 2-equivalent standards. Mitigation Measure AQ-3 does require all of these equipment to comply with the Tier 4 standards. The above mitigation measure will result in further emission reductions than assumed in the Draft EIS/EIR. However, due to availability issues, these reductions have not been quantified.

SCAQMD-13. Thank you for your comment. Mitigation Measure AQ-4 has been revised to limit idling to five minutes as follows:

Mitigation Measure AQ-4: Best Management Practices (BMPs). LAHD shall implement a process by which to select additional BMPs to further reduce air emissions during construction if it is determined that the proposed construction equipment exceed any SCAQMD significance threshold. The following types of measures would be required on construction equipment: (a) use of diesel oxidation catalysts and catalyzed diesel particulate traps; (b) maintain equipment according to manufacturers' specifications; (c) restrict idling of construction equipment to a maximum of 5~~10~~ minutes when not in use; and (d) install high-pressure fuel injectors on construction equipment vehicles. The LAHD shall determine the BMPs once the contractor identifies and secures a final equipment list.

The above mitigation measure will result in further emission reductions than assumed in the Draft EIS/EIR.

SCAQMD-14. Final EIS/EIR Mitigation Measure AQ-6 has been revised to increase the AMP compliance rate of total ship calls. Additionally, the measure will state the following: By 2010, all ships retrofitted for AMP shall be required to use AMP while hoteling at 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship as follows:

> **Mitigation Measure AQ-6: Alternative Maritime Power.** Ships calling at Berth 136-147 shall use AMP while hoteling at the Port in the following at minimum percentages: (a) 2009: 25% of ship calls; (b) 2010: 50% ~~40%~~ of ship calls; (c) 2012: 60% ~~50%~~ of ship calls; (d) 2015: 80% of ship calls; and (e) 2018: 100% of ship calls. In addition, by 2010, all ships retrofitted for AMP should be required to use AMP while hoteling at 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.

Mitsui O.S.K. Lines Ltd (MOL) is TraPac's parent company and they have committed to retrofitting MOL ships dedicated to the Los Angeles service with AMP technology. The phase-in schedule assumes that 100 percent of MOL's P-Class vessels will be AMP-capable and will use AMP by 2010. These P-class vessels will be the most frequent callers at the terminal that provide weekly service between the US West Coast and Asia and they are assumed to make up approximately 50 percent of TraPac's ship calls. The phase-in schedule will allow for the AMP infrastructure to be constructed on the berth.

The longer phase-in schedule is to accommodate MOL's APX class vessels and 3rd party invitees. MOL's APX service provides monthly service to Europe, the US East Coast, and connections to the US West Coast through the Panama Canal. These ships are not dry-docked as frequently as the P-class vessels, due to their long vessel transits, and therefore they will require a longer phase-in to achieve AMP retrofits. The APX service is only expected to call at the terminal monthly.

While MOL represents TraPac primary business partner, TraPac will also contract with other shipping lines, referred to as 3rd part invitees, to fill extra terminal capacity. TraPac has recently lost a majority of their third-party invitees due, in part, to terminal upgrades delays and costs associated with expected future environmental requirements. While TraPac anticipates they will be able to attract new third-party invitees with the terminal upgrades assumed as part of the proposed Project, the actual customer mix is not yet known and costs associated with environmental requirements remain an issue. Currently, AMP retrofits cost approximately $800,000 per vessel. Through future lease amendments and the CAAP, all Port container terminals and shipping lines are expected to comply with AMP in the future. However, until most or all of the other container terminals and vessels are required to use AMP, with AMP requirements at the Berth 136-147 Terminal, TraPac will have difficulty attracting third party business. The longer phase-in schedule allows TraPac to negotiate environmental upgrades with the invitees and to also to remain competitive with other Port terminals that do not yet have environmental requirements as part of their operating requirements.

SCAQMD-15. The text of Mitigation Measure AQ-7 in the Final EIS/EIR has been revised to state "Tier 4 non-road emission standards." Additionally, the second bullet of Mitigation Measure AQ-7 has been revised to state the following: By the end of 2010, all yard tractors will meet at a minimum the USEPA 2007 Tier 4 non-road emission standards."

SCAQMD-16. TraPac has stated that they intend to electrify their rail-mounted gantry cranes (RMGs) in the new intermodal yard. TraPac also indicates that they are interested in electric RTGs on their backland, but that they plan to evaluate the results of Port tests before they commit to this measure due to a number of operational issues. Currently, diesel powered RTGs can be moved around the backlands. Electric RTGs must be plugged-in, thereby

limiting mobility. Port tests will examine the best physical terminal layout and whether overhead or trenched electricity provides the most flexible backlands operation.

In regards to "on-road" vs. "non-road", thank you for your comment, there was a typographical error. The text of Mitigation Measure AQ-7 in the Final EIS/EIR has been revised to state "Tier 4 non-road emission standards."

SCAQMD-17. Trucks that call at the Berths 136-147 Terminal would be CAAP-compliant. Mitigation Measure AQ-9 incorporates the Port's Clean Truck tariff into the TraPac Terminal. On November 1, 2007 the Board of Harbor Commissioners adopted a tariff to implement the progressive banning of older trucks from operation at the Ports (the tariff is included as Attachment 1). Under the progressive ban, trucks will only be granted entry to Port terminals if they (i) are registered with the Ports, (ii) meet the model-year requirements of the schedule banning dirty trucks, and (iii) have a Radio Frequency Identification (RFID) tag that will provide information about each truck to the Ports. The truck registry information would include the truck owner, model year, and emissions level as indicated by the truck's status of compliance with the USEPA 2007 Heavy-Duty Highway Rule emissions standards and/or CARB Verified Diesel Emission Control Strategy (VDECS) retrofit status. Port marine terminal operators will be required to equip their terminals with RFID tag readers to manage access of drayage trucks and improve security at their facilities.

Mitigation Measure AQ-9 would ensure required gate modifications are completed to support the Clean Trucks tariff, and would prohibit the applicant from permitting access to the terminal any truck not compliant with the Clean Trucks Program (CTP) truck ban schedule.

Final EIS/EIR Table 3.2-24 has been revised to state that Clean Trucks Program compliant trucks are those that achieve the USEPA 2007 Heavy-Duty Highway Rule PM emission standards and have the cleanest available NOx emissions at time of purchase. Additionally, as discussed in the Final EIR, the Project start year was identified as 2007 in Chapter 3.2. Due to delays in project approval, the start year has been changed to 2008, consistent with the construction schedule and the lease term (2008-2038) presented in Chapter 2 of the Draft EIS/EIR. Changes to the start year results in changes to Mitigation Measure AQ-9:

> **Mitigation Measure AQ-9: Fleet Modernization for On-Road Trucks.** Trucks Heavy-duty diesel trucks entering the Berths 136-147 Terminal shall achieve the USEPA 2007 Heavy-Duty Highway Rule emission standards for on-road heavy-duty diesel engines (USEPA 2001a) in the following percentages:15% in 2008 ~~2007~~, ~~30% in 2008, 50% in 2009~~; 70% in 2010; and 100% in or newer 2012 and thereafter.

The new implementation schedule does not change the significance findings presented in the Draft EIS/EIR, as Project emission projections for 2008 are expected to be essentially the same or slightly lower compared to those estimated for the Project in year 2007 for the following reasons: (1) all Project vehicle fleets except vessels would have an additional year to turn over to vehicles with newer and cleaner emission standards, (2) proposed Project throughput does not increase between 2007 and 2008 due to lack of terminal upgrades, (3) operational scenarios remain the same, and (4) mitigation measures remain the same or become more aggressive.

SCAQMD-18. The MMRP will state that vessel calls shall be monitored by the Environmental Management Division and the Marine Exchange. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting to disclose VSRP compliance rates.

SCAQMD-19. Thank you for your comment. Mitigation Measure AQ-11 in the Final EIS/EIR has been revised to increase the compliance rate of total ship calls that use low-sulfur fuel (maximum sulfur content of 0.2 %) in auxiliary engines, main engines, and boilers within 40 nm of Point Fermin (including hoteling for non-AMP ships). Additionally, the measure will state the following: By 2012, all frequent caller ships (three or more calls a month) shall comply with this requirement as follows:

> **Mitigation Measure AQ-11**: **Low Sulfur Fuel.** Ships calling at Berth 136-147 shall use low-sulfur fuel (maximum sulfur content of 0.2 percent) in auxiliary engines, main engines, and boilers within 40 nm of Point Fermin (including hoteling for non-AMP ships) at the following annual participation rates: (a) 2009: 20 ~~10~~ percent of auxiliary engines, main engines, and boilers; (b) 2010: 30 ~~20~~ percent of auxiliary engines, main engines, and boilers; (c) 2012: 50 percent of auxiliary engines, main engines, and boilers; and (d) 2015: 100 percent of auxiliary engines, main engines, and boilers <u>In addition, by 2012, all frequent caller ships (three or more calls a month) shall use 0.2% in main and auxiliary engines within 40nm of the Port.</u>

MOL has committed to using low sulfur (0.2%) fuel in MOL ships dedicated to a Los Angeles service. This phase-in schedule assumes 100 percent of MOL's P-Class vessels will use low sulfur fuel in auxiliary engines, main engines, and boilers by 2012. These P-class vessels will be the most frequent callers at the terminal providing a weekly service between the US West Coast and Asia and are assumed to make up approximately 50 percent of TraPac's ship calls.

The longer phase-in schedule is to accommodate third party invitees. TraPac has recently lost a majority of their third-party invitees due, in part, to terminal upgrades, delays, and costs associated with expected future environmental requirements. While TraPac anticipates they will be able to attract new third-party invitees with the terminal upgrades assumed as part of the proposed Project, the actual customer mix is not yet known and costs associated with environmental requirements remain an issue.

Currently, ships that frequent the Port burn heavy fuel oil (HFO), that has a sulfur content ranging from 1.0 to 4.5%, with an average sulfur content of 2.7% in their main auxiliary, and boiler. At today's cost, low sulfur (0.2%) costs approximately $350 more per ton than bunker fuel (currently, bunker fuel is approximately $400 per ton, while low sulfur fuel is $750 [www.bunkerworld.com accessed 10/10/07]). Assuming a round trip voyage from 40 nm from Point Fermin to Berth 136-147 at 12 knots an hour and hotelling, a 5,000 TEU ship would use approximately 22 tons of fuel in main, auxiliary, and boiler engines. Based on this scenario, low sulfur fuel (0.2%) will cost approximately $7,700 more than the use of HFO. Additionally, there may be retrofits associated with using low sulfur fuel. Maersk ship retrofits cost approximately $300,000 per vessel. Through future lease amendments and the CAAP, all Port container terminals are expected to comply with low sulfur fuel regulations in the future. However, until most or all of the other container terminals and shipping lines are required to use low sulfur fuel, with 0.2% sulfur requirements at the Berth 136-147 Terminal, TraPac will have difficulty attracting third party business. The longer phase-in schedule allows TraPac to negotiate

environmental upgrades with the invitees and to also to remain competitive with other Port terminals that do not yet have environmental requirements as part of their operating requirements. Additionally, as part of the CAAP, the Ports are developing a low sulfur fuel tariff that would apply to all container vessels entering the San Pedro Bay. This tariff would both remove any competitive disadvantages among the different container terminals competing for third party business and accelerate emissions reductions. This tariff would supersede the proposed environmental mitigation.

While the phase-in schedule is largely to accommodate financial considerations, there are potential issues with fuel availability and potential ship retrofits. As a whole, most container ships will require minimal upgrades to use 0.2% sulfur fuel, especially newer ships designed with low sulfur fuel in mind. However each ship must be looked at on a case-by-case basis to ensure safe vessel functions. MOL is currently performing retrofits and safety testing on all ships dedicated to the Berth 136-147 Terminal. Third party customers will also require time to address their ship fleets. According to the *Evaluation of Low Sulfur Marine Fuel Availability- Pacific Rim* (2005) and further investigations by the San Pedro Bay Ports, low sulfur fuel is available in most Japanese ports (the origin of most MOL ships dedicated to the Berth 136-147 Terminal), Singapore, and Hong Kong. However, low sulfur fuel is not readily available in China (most of TraPac's former third-party business originated in China). These vessels could take on fuel in Los Angeles, but use of low sulfur fuel in their inbound leg cannot be guaranteed at this time. As part of the CAAP, the Ports are working with local port authorities and fuel suppliers in areas that low sulfur fuel is not readily available to remove this hurdle.

- <u>0.2% vs 0.1% Sulfur Fuel</u>

In order to allow for some margin of error and product contamination in the distribution system, when a shipping line orders 0.2% sulfur fuel, they are actually receiving a fuel with a lower sulfur content of between 0.13% and 0.16%. Therefore, if the mitigation measure required 0.1% fuel, the fuel supplier would have to provide fuel at a lower than 0.1% content, which may not be possible in current refineries. Additionally, 0.2% is consistent with the CAAP. In developing and approving the CAAP, the Ports of Los Angeles and Long Beach met and collaborated with agencies (including CARB, AQMD, and USEPA), environmental and community groups, and the shipping industry. As a result of this collaborative process, 0.2% sulfur fuel was found to be feasible from port-wide perspective and use of this fuel represents consensus.

<u>CAAP Compliance</u>

The phase-in schedule allowed by this mitigation measure is consistent with the CAAP. The CAAP assumes full compliance of OGV-4 and OGV-5, pending technical feasibility and fuel availability. As discussed above, the Ports are pursuing a tariff mandating 100 percent compliance in all ships entering the San Pedro Bay Ports. However, as detailed in the CAAP, a number of steps must be performed, including further fuel availability and technical studies, and legal analysis, prior to implementing this tariff. Lease implementation was another strategy identified to implement OGV-4 and OGV-5 in the CAAP. However, a phase-in schedule (port-wide) was assumed in all presentations of emission reductions.

SCAQMD-20. Thank you for your comment. Mitigation Measure AQ-12 in the Final EIS/EIR has been revised to increase the compliance rate of total ship calls that implement slide valves or

equivalent on main engines to a minimum of 50 percent in year 2009. Additionally, the measure will state the following: By 2012, all frequent caller ships (three or more calls a month) shall comply with this requirement, as follows:

> **Mitigation Measure AQ-12: Slide Valves.** Ships calling at Berth 136-147 shall be equipped with slide valves or equivalent on main engines in the following percentages: (a) 15 percent in 2008; (b) 50 ~~25~~ percent in 2010; ~~(c) 50 percent in 2012;~~ and (c) 95 percent in 2015. By 2012, all frequent caller ships (three or more calls a year) shall comply with this requirement.

MOL has committed to retrofitting MOL ships with slide valves. This phase-in schedule assumes 100 percent of MOL's P-Class vessels will be retrofitted with slide valves by 2010. These P-class vessels will be the most frequent callers at the terminal providing a weekly service between the US West Coast and Asia and are assumed to make up approximately 50 percent of TraPac's ship calls.

The longer phase-in schedule is to accommodate third party invitees. While MOL represents TraPac primary business partner, TraPac will also contract with other shipping line, referred to as third-party invitees, to fill extra terminal capacity. TraPac has recently lost a majority of their third-party invitees due terminal upgrades, delays, and costs associated with expected future environmental requirements. While TraPac anticipates they will be able to attract new third-party invitees with the terminal upgrades assumed as part of the proposed Project, the actual customer mix is not yet known and costs associated with environmental requirements remain an issue.

Slide valves are relatively easy to install, not overly expensive, and provides good NOx and PM reductions. However, slide valves are specific to Man B&W engines. Other engine manufactures are working on equivalent technologies and preliminary tests appear promising. Because the third-party invites mix is not yet known, slide valves are being phased in over time to allow for this research and development.

Although selective catalytic reduction (SCR) technology has been demonstrated on four new OGVs carrying scrap/steel between the Bay Area and Korea, the applicability of low-emissions technologies like SCR to large ocean-going vessels such as container ships needs to be further evaluated and demonstrated. SCR is currently being tested as part of the CAAP's Technological Advancement Program (TAP). There are still a number of feasibility questions in regards to SCR, including spatial needs and available reactant (ammonia) and byproduct issues. At this time, SCR is not considered feasible. However, the Port will add the following measure to the lease to ensure implementation of future feasible technology through Mitigation Measure AQ-17:

> As partial consideration for the Port's agreement to issue the permit to the tenant, tenant shall implement not less frequently than once every 7 years following the effective date of the permit, new air quality technological advancements, subject to the parties mutual agreement on operational feasibility and cost sharing which shall not be unreasonably withheld.

SCAQMD-21. As discussed above, the main engine technology identified is not considered feasible at this time but is expected to be available in the future. Mitigation Measure AQ-17, in conjunction with the lease measures below, provides a process to consider new or

alternative emission control technologies in the future and an implementation strategy to ensure compliance.

> As partial consideration for the Port's agreement to issue the permit to the tenant, tenant shall implement not less frequently than once every 7 years following the effective date of the permit, new air quality technological advancements, subject to the parties mutual agreement on operational feasibility and cost sharing which shall not be unreasonably withheld.

Additionally, Mitigation Measure AQ-13 has been modified to include additional future technologies:

> **Mitigation Measure AQ-13: New Vessel Builds.** All new vessel builds shall incorporate NO_x, ~~and~~ PM and GHG control devices on auxiliary and main engines. These control devices include, but are not limited to the following technologies, where appropriate: (1) selective catalytic reduction (SCR) technology; (2) exhaust gas recirculation; (3) in line fuel emulsification technology; (4) diesel particulate filters (DPFs) or exhaust scrubbers; (5) common rail; ~~and~~ (6) Low NO_x burners for boilers; (7) implementation of fuel economy standards by vessel class and engines; and (8) diesel-electric pod-propulsion system.
>
> This measure focuses on reducing DPM, NO_x, and SO_x emissions from main engines and auxiliary engines. OGV engine standards have not kept pace with other engine standards such as trucks and terminal equipment. New vessels destined for California service should be built with these technologies. As new orders for ships are placed, the Port believes it is essential that the following elements be incorporated into future vessel design and construction:
>
> 1. Work with engine manufacturers to incorporate all emissions reduction technologies/options when ordering main and auxiliary engines, such as slide valves, common rail, and exhaust gas recirculation;
> 2. Design in extra fuel storage tanks and appropriate piping to run both main and auxiliary engines on a separate/cleaner fuel; and
> 3. Incorporate SCR or an equally effective combination of engine controls. If SCR systems are not commercially available at the time of engine construction, design in space and access for main and auxiliary engines to facilitate installation of SCR or other retrofit devices at a future date.
>
> In addition, this measure will also incorporate design changes and technology to reduce GHG emissions where available.

SCAQMD-22. Mitigation Measure AQ-14 has been revised in the Final EIS/EIR to state:

> **Mitigation Measure AQ-14: Clean Rail Yard Standards.** The Berth 136-147 on-dock rail yard will incorporate the cleanest locomotive NOx and PM technologies into their operations. These include diesel-electric hybrids, multiple engine generator sets, use of alternative fuels, DPFs, SCR, idling shut-off devices, and idling exhaust hoods. The on-dock rail yard will also, utilize "clean" Cargo Handling Equipment (CHE) and Heavy Duty Vehicles (HDVs) and comply with the CAAP's

Technology Advancement Program. Additionally, the Port shall require diesel particulate traps (DPTs) on all PHL switcher locomotives that operate within the Project rail yard beginning in 2015. Because some of these systems are not yet available, but are expected to be available within the next few years, and given the uncertainty of implementing Mitigation Measure AQ-14, the mitigated emission analysis took no reduction for the effects of this measure.

The Port would implement Mitigation Measure AQ-14 with respect to line haul locomotives using the new on-dock rail yard through ongoing negotiations with Class 1 railroads, consistent with the schedule set forth in CAAP measures RL2 and RL3.

Please also see response to comment SCAQMD-2.

SCAQMD-23. TraPac states that their new terminal design, plus a container optical character recognition scanning system, will eliminate the need for queuing on terminal. As a result, they do not see the need to provide queuing lines for either the new in or out gate facilities. These features would reduce the 15 minutes of on-terminal truck idling currently assumed in the air quality analysis.

Any truck that operates within the Berths 136-147 Terminal area is exempt from the CARB Heavy Duty Diesel Truck Idling Regulation, as they are at all times beyond 100 feet from a restricted area (i.e., any real property zoned for individual or multifamily housing units that has one or more of such units).

SCAQMD-24. Due to the complexity and cost of implementing new low-emission technologies, such as rail electrification, development and implementation of these technologies are best handled on a Port-wide basis. The CAAP's Technology Advancement Program (TAP) is a process to achieve this objective. As stated in response to comment SCAQMD-21, the opportunity exists to require such technologies if the tenant proposes a lease amendment or facility modification through Mitigation Measure AQ-17 and the new lease measure.

SCAQMD-25. It is expected that peak daily scenarios estimated for the Project would produce vessel emissions that would rarely exceed those presented in the Draft EIS/EIR for the following reasons:

1. The number of cranes determines the instantaneous cargo handling capacity of the berth. Approximately half of the vessel calls occur from MOL ships that run on schedules to coincide when there are enough cranes available to transfer cargo to and from the vessel as quickly as possible. In other words, these schedules are designed to avoid excessive congestion at the berth, as delays are very expensive to the shipper;

2. In 2007, the Project berths would have a total of 10 cranes with a daily capacity of 7,480 TEUs. The scenario analyzed for 2007 assumes the operation of nine cranes, leaving only one crane available for another vessel. It is possible a third vessel would be at berth during this time and Draft EIS/EIR Figure 1.2 verifies this possibility. However, a situation of three vessels at berth for an entire 24-hour period would have a low probability of occurrence in 2007. It is unknown if all three vessels in Figure 1.2 were present at berth for an entire 24-hour period, as the figure shows that only one of the vessels is being substantially worked on by cranes;

3. Each analysis year includes the occurrence of a vessel round trip transit within the Project region. This assumption essentially simulates two ship visits, as a single vessel rarely makes a round trip transit in one day. In other words, the analysis simulates the presence of four vessels in 2007 and five vessels in 2015 and thereafter in the Project region. One-way transit emissions for a vessel within the analysis domain range from 70 to 97 percent greater than their hoteling emissions over a 24-hour period, depending on vessel size. This equate to approximately 5/6 hoteling-equivalent vessels in the Project region for 2007/post-2007; and

4. For year 2015 and thereafter, the analysis assumed a round trip transit of an 8,000 to 9,000 TEU vessel, which is the largest vessel considered in the Project vessel fleet. Vessels this large do not call at Berths 136-147 prior to 2010.

SCAQMD-26. Cargo capacities of a train round trip (612 TEUs) are based upon activities associated with the Yang Ming Terminal ICTF, as identified in the Draft EIS/EIR. Project train trips for the peak day in general are slightly greater than the annual average daily trips identified in Table D1.2-PP-31 of Appendix D1. However, peak daily train trips analyzed for 2007 are slightly less than this value (2 versus 2.44).

SCAQMD-27. The one hour "idling" duration is an average assumption and not a limitation for line haul locomotives. In actuality, the air quality analysis simulated the presence of line haul locomotives in rail yards with a notch 1 engine setting (load factor of 0.05), which is blend of idling (load factor of 0.004) and notch 2 (load factor of 0.11) modes of operation. Hence, this approach produces higher emissions than the use of idling mode. The POLA 2005 emissions inventory process determined that line haul locomotives operated within on-dock rail yards at the Port for 1 hour per trip into the Port and 2.5 hours per outbound trip (Table 5.11). Hence, the use of a 1 hour duration for inbound trains is a reasonable assumption. Use of a longer dwelling time for outbound locomotive trips within the rail yard would increase the estimate of Project locomotive emissions, but not substantially when compared to Project emissions as a whole. Additionally, revisions to other Project operational assumptions essentially would offset these emission increases. These revisions include (1) use of electric rubber-tired gantry (RTGs) cranes in the Project on-dock rail yard instead of diesel-powered units, (2) acceleration of the implementation of proposed mitigation measures, and (3) a shift of Project year 1 from 2007 to 2008, which would allow all Project vehicle fleets except vessels an additional year to turn over to vehicles with newer and cleaner emission standards.

SCAQMD-28. A requirement to limit the movement of trains by small locomotives would have to be agreed upon by the PHL, BNSF, and UP. Rail operations at the Port are not controlled by the terminal operator or the Port and involve both the mainline rail carriers and PHL, the local switching company. A description of rail operations has been added to Final EIS/EIR Chapter 2 and is included below. As discussed, PHL and the mainline locomotives both play a role in building and transporting trains Port-wide, and the ultimate number of locomotives needed to pull trains depends on the trains length. For example, PHL may use smaller locomotives while building the train but when built, the ultimate length may require larger locomotives to pull the train over great distances. The Draft EIS/EIR considered both scenarios in the air quality analysis to adequately model these scenarios.

Rail operations at on-dock rail yards in the Port of Los Angeles involve a number of entities. The terminal operator moves containers to and from the on-dock facility. Containers are off-loaded and loaded directly from and onto trains. Railcars are then coupled with other cars traveling to the same destination. The coupled railcars are called a unit train. Unit trains vary in length between 105 and 140 railcars, with each railcar carrying two 40-foot containers. These unit trains are usually built by Pacific Harbor Line (PHL). PHL is a third-party, independent rail company that provides rail transportation, yard switching, maintenance and dispatching services to the San Pedro Bay Ports. PHL manages all rail dispatching and switching functions at the on-dock rail yards at the two ports, including:

- Scheduling and overseeing all train movements;
- Organizing railroad cars carrying containers of imported goods and switching them onto various tracks to form unit trains; and
- Breaking down unit trains arriving at the ports, switching railroad cars onto various tracks and distributing them to nine marine terminals where containers are loaded onto ships for export.

The Port is served by two Class 1 railroads, Burlington Northern Santa Fe (BNSF) and Union Pacific (UP), often referred to the main line or line haul rail companies. After PHL has built a unit train, BNSF or UP will hook up their line-haul locomotive(s) to the train and pull the train out of the on-dock rail yard on to the Main-line tracks to the eventual destination. PHL locomotives will occasionally pull portions of a unit train out of the on-dock facility to one of the near dock ICTFs. A loaded double-stack train is typically pulled by three or four line-haul locomotives, although, if PHL pulls the train, it would be hauled by two or three smaller locomotives.

PHL contracts with the Ports of Los Angeles and Long Beach to operate the rail traffic control system. Agreements with BNSF and UP for international cargo are usually handled by the shipping lines. Many shipping lines have a contract with both BNSF and UP.

In addition to switching and scheduling services for the on-dock facilities, PHL also serves as a go-between for trains carrying supplies from various parts of the United States to be delivered directly to Los Angeles- and Long Beach-area businesses. For this carload function, PHL handles tank cars, automobile carriers, box cars, hopper cars, and various other types of cars. PHL currently operates with a base at Water Street Yard on Pier A in the Port. This base serves as a classification yard, crew on duty point, and locomotive service facility. LAHD plans to relocate this yard to Rear Berth 200 as part of the Berth 136-147 Container Terminal Project.

SCAQMD-29. A sulfur content of 2,200 ppm was used in the analysis for years prior to 2008. Page D3-6 of the Final EIS/EIR has been corrected to clarify this point.

SCAQMD-30. The annual ship calls presented in Draft EIS/EIR Chapter 2 are derived with the use of a single average cargo capacity vessel for each year by the Port. To better simulate the real world, the air quality analysis expanded these data into a fleet of vessels with cargo capacities that are expected to frequent the Project terminal in the future. The estimation of

these adjusted ship visits stayed within 10 percent of the average values developed by the Port.

SCAQMD-31. It is still unknown when the Project terminal will increase its daily hours of operation beyond 16, although it is expected to occur during the life of the lease agreement. The analysis of annual average daily emissions assumed a berth operation of 16 hours per day for all years. However, the analysis of peak daily emissions assumed a berth operation of 21 hours per day beginning in year 2015. Therefore, use of 21 hours produced a greater amount of cargo handling within the terminal compared to average conditions. The amount of TEU moves per crane hour does not change for any project scenario.

Hoteling times were estimated by assuming that cranes serviced vessels by the amounts stated in the Draft EIS/EIR (Page 3.2-43) during a 16-hour day and then cargo movement remained idle for the remaining 8 hours of the day. Then the following day, crane service continued until completion of the TEUs moves per vessel capacity (as identified on Draft EIS/EIR page 3.2-43), unless service still was not complete, which would require another day of crane service. Additional time was added upon completion of crane service to take into consideration various non-cargo handling activities, and the durations of all of these activities were summed to produce a total hoteling time by vessel size. The following is how hoteling time was estimated for a 5,000 to 6,000 TEU capacity vessel, which would move 8,017 TEUs per ship visit:

- Day 1: 3,740 TEUs moved in 16 hours + 8 hours of idle hoteling;
- Day 2: 3,740 TEUs moved in 16 hours + 8 hours of idle hoteling;
- Day 3: 537 TEUs moved in ~3 hours + 21 hours of idle hoteling (very conservative); and
- Total hoteling time = 72 hours.

SCAQMD-32. TraPac staff reviewed these data and concluded that they are applicable to proposed shipping activities (personal communication, Scott Axelson 2006).

SCAQMD-33. TraPac states that on-terminal trucks dwelling times have decreased by about 50 percent since 2001, due to automating their out gate and empty yard and the addition of the appointment system. They estimate that current truck idling times average about 10 to 15 minutes and that they will maintain this level in future years (personal communication, with Scott Axelson 2006).

SCAQMD-34. Please see response to comment SCAQMD-3.

SCAQMD-35. Future emission estimates for the relocated Pier A rail yard assume that annual locomotive activities within this facility will increase by 15 percent from 2003 to 2007 and then remain constant thereafter. This assumption is presented in footnote of Table D1.2-CB-48 in Appendix D1.

SCAQMD-36. Please see response to comment SCAQMD-2.

SCAQMD-37. It is acknowledged that many of the Port-wide CAAP measures, such as the Clean Trucks Program, will affect terminals that are not in the process of new development plans or revising their lease agreements, such as the No Project identified in this EIS/EIR. However, because these programs have not yet been fully developed, they are not assumed in emissions reductions.

SCAQMD-38. Thank you for your comment. Please see response to comment SCAQMD-9. Additionally, a contractor would choose equipment that can most efficiently perform a given dredge activity.

SCAQMD-39. Table 3.2-23 presents the correct Project increments but incorrect CEQA Baseline values. The Final EIS/EIR includes correct CEQA Baseline values.

SCAQMD-40. Appendix D2.1 of the Draft EIS/EIR provides tabulated summaries of data used to estimate year 2010 annual and daily emissions for each Project scenario. However, some of the incremental calculations that compare Project alternative daily emissions to baseline emissions are in error. Appendix D2.1 of the Final EIS/EIR includes these corrected calculations. Additionally, Appendix D2.1 of the Final EIS/EIR presents 2010 peak daily emission calculations for each Project scenario.

SCAQMD-41. The results of the sensitivity analyses performed for the China Shipping Draft EIS/EIR is applicable and adequate for use by the Berths 136-147 EIS/EIR. These analyses were performed for (1) vessels that transit the fairway, (2) trucks that travel on roadways north of Anaheim Street along I-110 and Alameda Street, and (3) trains that travel along the San Pedro Subdivision rail line and north of Anaheim Street are the exact same domains of sources associated with the operation of the Project. However, Appendix D3 presents the results of these types of sensitivity analyses that include Project emissions.

SCAQMD-42. The useful life of 15 years is a fleet average and not a limitation. The useful life of equipment ultimately depends on total hours of operation, quality of maintenance, and proper operation techniques. So long as the Project complies with Mitigation Measures AQ-7 and AQ-8, these requirements would be adequate to control emissions from these sources.

SCAQMD-43. The purpose of Tables D3-6 and D3-8 is to summarize the maximum CEQA and NEPA incremental health impacts. A CEQA increment is equal to the Project scenario impact at a location minus the CEQA Baseline impact at that same location. The CEQA Baseline analyses used to develop the data in Tables D3-6 and D3-8 are identical. In the case of residential cancer risk, the CEQA Baseline condition is summarized in Figure D3-10. The unmitigated CEQA incremental cancer risks over the entire modeling domain are equal to the data in Figure D3-12 minus Figure D3-10 and the results are presented in Figure D3-13. Since the mitigated Project cancer risks (Figure D3-15) are so close in values to the CEQA Baseline cancer risks (Figure D3-10), the location of the maximum mitigated CEQA incremental cancer risk (as shown in Figure D3-16) shifts to a location that differs from the location of the maximum unmitigated CEQA incremental cancer risk. Therefore, the CEQA Baseline health risk values are different in these 2 tables.

SCAQMD-44. The purpose of the Project HRA is to determine difference in impacts between the Project and baseline scenarios and not the MICR. These results define the Project impacts under CEQA and NEPA. The data in Figures D3-10 through D3-29 can be used to identify the

residential MICR for each Project scenario. Coincidentally, the residential cancer risk values presented in Table D3-6 are the residential MICR values.

SCAQMD-45. Please see response to comment SCAQMD-41.

SCAQMD-46. Please see response to comment SCAQMD-41.

SCAQMD-47. Please see response to comment SCAQMD-41.

SCAQMD-48. Trucks would travel over a substantial portion of the total terminal area. Therefore, it is adequate to evenly spread their emissions across this area, as presented in Figure D3-2. There are two gate systems that provide truck access to the terminal: one at the southern end of the terminal and one in the middle. These distant access points will assist in spreading truck emissions over a large portion of the terminal. Additionally, the analysis simulated congested truck traffic conditions at these two entry and/or exit points.

SCAQMD-49. The CARB used area sources to simulate most Port emission sources, whereas the Project analyses used volume sources. Hence, it is not surprising that there are differences in release heights between the two analyses. The following describes the selection process for the Project source release heights that exceed those used by the CARB in their Ports HRA.

1. Ocean going vessel (OGV) transit within the Port. The CARB uses a single release height of 50 meters (m) for all modes of vessel transit. For OGV transit in the Port, the Project analyses used a release height equal to 50 percent above the OGV average stack height (39 m), or 59 m. This value was determined from a series of visual observations of container ship exhaust plumes at the Port (SAIC 2006). Photographs of some of these observations are available upon request.

2. OGV berthing and docking mode. The Project analyses used a release height equal to 100 percent above stack height, or 78 m. This assumption is consistent with visual observations and air dispersion theory, as the lower wind speeds at Berths 136-147 and the near zero speed of the vessel at berth results in a much lower apparent wind speed experienced by the vessel, compared to vessels that transit within or outside of the harbor. This lower apparent vessel wind speed results in a higher plume rise.

3. OGV hoteling release heights. The CARB uses a single release height of 43 m for all vessel types. The Project analyses used three different release heights to simulate parameters of four vessel sizes associated with the Project OGV fleet: 36 m, 37 m, and 45 m. These data were derived from data collected from a vessel-boarding program for the Port of Los Angeles 2001 Baseline Air Emissions Inventory (Starcrest 2005).

4. Vessel assist tug boats. The CARB uses a release height of six m, which in about the stack height for many assist tug boats. However, the Project analyses added plume rise to this height to eliminate buoyancy in the plume, as recommended by the USEPA for the development of volume sources.

5. Terminal equipment. The CARB used release heights ranging from 2.4 to 3.9 m. The Project analyses used an average release height of 4.6 m for all terminal

equipment, which is the stack height of many types of the equipment, plus a nominal amount of plume rise.

6. On-Terminal trucks. The CARB used a release height of four m. The Project analyses used an average release height of 4.6 m for on-terminal trucks, which is the stack height of many trucks, plus a nominal amount of plume rise.

7. Yard and line-haul locomotives within the project rail yard. The CARB used a release height of five m for these sources. The Project analyses used a release height of 6.2m. These sources were assigned a release height equal to their average stack heights of 4.6m, plus a minimum vertical plume rise. Based on a screening-level modeling analysis conducted for the Roseville Rail Yard Study, a minimum plume rise of 2.1m was assumed for slow-moving (Notch 1) or idling locomotives (CARB 2004c).

SCAQMD-50. Please see Figure 1 in the publication at http://www.portoflosangeles.org/AQ_Monitoring/Workplan.pdf. The Final EIS/EIR also includes this figure in Appendix D3.

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July 24, 2007

Commander
U.S. Army Corp of Engineers
Los Angeles District,
c/o Dr. Spencer D. Macneil
P. O. Box 53271
Los Angeles, CA 90053-2325

Dr. Ralph Appy
Director of Environmental Management Div.
425 S. Palos Verdes Street
San Pedro, CA 90731

RE: SCAG Clearinghouse No. I 20070405 Berths 136-147 Container Terminal

Dear Dr. Macneil and Dr. Appy:

Thank you for submitting the **Berths 136-147 Container Terminal** for review and comment. As areawide clearinghouse for regionally significant projects, SCAG reviews the consistency of local plans, projects and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

SCAG-1

We have reviewed the **Berths 136-147 Container Terminal**, and have determined that the proposed Project is not regionally significant per SCAG Intergovernmental Review (IGR) Criteria and California Environmental Quality Act (CEQA) Guidelines (Section 15206). Therefore, the proposed Project does not warrant comments at this time. Should there be a change in the scope of the proposed Project, we would appreciate the opportunity to review and comment at that time.

A description of the proposed Project was published in SCAG's **July 1-15, 2007** Intergovernmental Review Clearinghouse Report for public review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this Project. Correspondence should be sent to the attention of the Clearinghouse Coordinator. If you have any questions, please contact me at (213) 236-1856. Thank you.

SCAG-2

Sincerely,

SHERYLL DEL ROSARIO
Associate Planner
Intergovernmental Review

Doc #138239

ADP NO. 070321-052

Southern California Association of Governments, July 24, 2007

SCAG-1. The comment concurs with the Draft EIS/EIR findings that the Project is not regionally significant per SCAG Intergovernmental Review (SIR) Criteria and CEQA Guidelines (Section 15206). Therefore, no revisions to the Final EIS/EIR are required. Your comment is appreciated and will be forwarded to the Board of Harbor Commissioners.

SCAG-2. Your comment is noted and will be forward to the Board of Harbor Commissioners for consideration.

CITY OF RANCHO PALOS VERDES

PLANNING, BUILDING, & CODE ENFORCEMENT

19 September 2007

Commander, U.S. Army Corps of Engineers
Los Angeles District
% Dr. Spencer D. MacNeil
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Los Angeles, CA 90053-2325

Port of Los Angeles
Dr. Ralph Appy, Director
Environmental Management Division
425 S. Palos Verdes St.
San Pedro, CA 90731

SUBJECT: Comments on Draft EIS/EIR for the Berths 136-147 Container Terminal (TraPac) Project

Dear Drs. MacNeil and Appy:

The City of Rancho Palos Verdes' is in receipt of the Draft EIS/EIR for the above-mentioned project. We appreciation that the Corps and the Port have extended the public comment period for this document in response to significant public concern. Our comments are as follows:

1. With respect to Aesthetics and Visual Resources, many Rancho Palos Verdes neighborhoods on the east side of the City enjoy views of the Vincent Thomas Bridge and Main Channel of the harbor. However, the analysis of aesthetic and visual impacts of the proposed project upon residential neighborhoods overlooking the harbor appears to have extended no farther than approximately one-quarter mile west of the project site. The Rancho Palos Verdes neighborhoods most affected by the visual aspects of the project are primarily located west of Western Avenue along Miraleste Drive, Palos Verdes Drive East and Crest Road, but these neighborhoods almost completely ignored by the draft EIS/EIR. In addition, the draft EIS/EIR concludes that the adverse visual and aesthetic impacts of the proposed project would not be significant, either individually or cumulatively. Although the proposed project involves one (1) less gantry crane than currently exists, the environmental analysis dismisses the use lower-profile cranes as infeasible "due to economic considerations and possible

RPV-1

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RPV-1

safety issues." What are these economic and safety issues? Also, does the analysis of aesthetic and visual impacts include the effects of a multi-colored "sea" of stacked cargo containers on the backland portions of the project site?

RPV-2

2. With respect to Air Quality, it is clear that this project would have both construction-related and operational air quality impacts upon surrounding communities. Our cursory review of the air quality impacts analysis in the draft EIS/EIR suggests that the baseline air quality conditions for this project are based upon a small number of sampling sites, only two (2) of which are located in or adjacent to residential areas. There appears to have been no sampling conducted west of the Harbor Freeway and/or Gaffey Street; the City of Rancho Palos Verdes is located at least a mile west of these thoroughfares. In addition, the draft EIS/EIR concludes that the adverse air quality impacts of the proposed project cannot be mitigated to less-than-significant levels in either the short or long term. Why has the Port's past air quality monitoring been so limited? Why can't the mitigation of air quality impacts be accelerated so as to all be accomplished in the short term (i.e., Phase 1) rather than deferring some of them to the long term (i.e., Phase 2)?

RPV-3

3. With respect to Noise, our cursory review of the impact analysis shows that there has been no consideration of project-related noise west of the Harbor Freeway and/or Gaffey Street. The proposed noise mitigation measures deal with short-term, construction-related impacts and do not reduce these impacts to less-than-significant levels. Furthermore, there appears to be no attempt to analyze, address or mitigate for operational noise impacts. Many Rancho Palos Verdes residents find that sounds from the harbor area are amplified as they move uphill to the west. With the ports of Los Angeles and Long Beach moving increasingly to 24-hour operations, we believe that the long-term operational noise impacts upon our residents may be significant. Why has no noise monitoring been conducted at higher elevations to the west of the project site? What kind of mitigation measures might be imposed to reduce long-term operational noise impacts to surrounding communities?

RPV-4

4. With respect to Ground Transportation, there (again) appears to have been no consideration given to project-related traffic impacts for areas west of the Harbor Freeway and/or Gaffey Street. Although the likelihood of project-related traffic being diverted all the way to Western Avenue—the City's major north/south arterial on the east side—seems remote, it does not seem to us remote that the cumulative effects of this project's construction and operational traffic with the large number of new residential units proposed in the San Pedro area would be insignificant. For example, the list of cumulative traffic generators does not

include the proposed 1,950-unit *Ponte Vista* condominium project and the Los Angeles Unified School District's proposed 810-seat high school on Western Avenue at the former Navy housing site, nor does it include many other mixed-use and residential developments in northwest and central San Pedro. The analysis of the cumulative ground transportation impacts of the project is woefully inadequate. RPV-4

Again, thank you for the opportunity to comment on this important project. If you have any questions or need additional information, please feel free to contact me at (310) 544-5228 or via e-mail at *kitf@rpv.com*.

Sincerely,

Kit Fox, AICP
Associate Planner

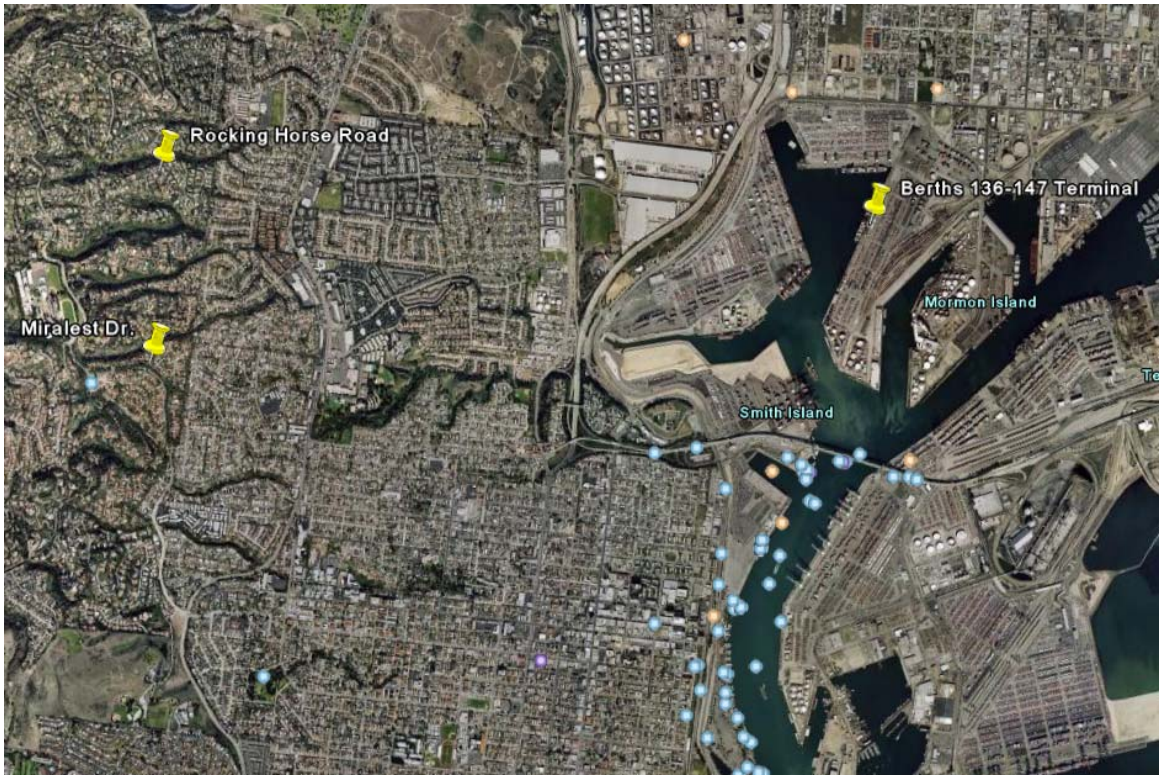
cc: Mayor Long and City Council
Carolyn Lehr, City Manager
Carol Lynch, City Attorney
Joel Rojas, Director of Planning, Building and Code Enforcement

City of Rancho Palos Verdes, September 19, 2007

RPV-1. This comment consists of three issue areas: 1) Rancho Palos Verdes neighborhoods most affected by the visual aspects of the Project are almost completely ignored by the Draft EIS/EIR; 2) economic and safety issues associated with lower-profile cranes; and 3) visual impacts of a multi-colored "sea" of stacked cargo containers on the backland portions of the Project site.

Issue 1 Response

Views from Rancho Palos Verdes neighborhoods on the east side of the City were considered in the analyses. Specific reference is made to the elevated, east-facing slopes of the Palos Verdes Peninsula that offer panoramic, although distant, views of the Ports of Los Angeles and Long Beach complex (Draft EIS/EIR Section 3.1.2.1.2.4, *Views from San Pedro and Rancho Palos Verdes*). As an example, a view from Rocking Horse Road, 2.8 miles west of the Project site and within Rancho Palos Verdes, was presented (see Figure 3.1-17).



This view, from a point 475 feet ASL, is equivalent to those from Miraleste Drive, which are from 2.7 to 2.8 miles southwest of the Project site and at elevations ranging from 470 to 670 feet. From Rocking Horse Road, the cranes at the Berths 136-147 Terminal are barely distinguishable within the larger panorama. Such would be the case for views from Miraleste Drive. Concerning the views from Crest Road, the highest point on the road is about 1,360 feet ASL and 3.5 miles from the Project site. The features of the Berths 136-147 Terminal would be even less discernible than as seen from Rocking Horse Road because it is lower than Crest Road. Although residential views within Rancho Palos Verdes and San Pedro are highly sensitive, it was correctly concluded that the great viewing distances from there to the

proposed Project area preclude critical viewing of the Project's features. Instead, much closer elevated residential views within San Pedro were chosen for detailed analysis to represent the "worst-case" in which the Project site was most exposed to public view (see Figures 3.1-13 through -16).

Reference to views of the Vincent Thomas Bridge and the Main Channel from Rancho Palos Verdes neighborhoods is not relevant to the proposed Project or alternatives. No feature of the Project would intercede in such views; for instance, see Figure 3.1-17, in which neither the bridge nor the Main Channel are in view. Views of the Project site from the roads noted are to the northeast, while the view of the bridge and Main Channel are to the east and southeast.

Issue 2 Response

Draft EIS/EIR Section 3.1.4.3.1 explains that the Port exhaustively investigated the use of low-profile cranes for container terminals to potentially reduce the overall height of container cranes, thereby lessening the potential for adverse aesthetic effects of the taller A-frame cranes. This study occurred over three years and was done to comply with Resolutions No. 6151 and No. 6165, approved by the Board of Harbor Commissioners in January and February of 2003, respectively. However, since that time, the use of low-profile cranes has been determined by the Port's Engineering Department to be infeasible due to economic and productivity considerations. Furthermore, use of such cranes was found not to reduce the potential for overall aesthetic impacts and to be associated with safety issues. As a result, Resolutions No. 6151 and No. 6165 were rescinded on February 8, 2006, and the installation of low-profile cranes is no longer required.

This discussion of low-profile cranes cross-references a more detailed discussion in Draft EIS/EIR Section 2.4.2.3. This discussion explains that the Port's investigation found low-profile cranes to be infeasible under CEQA Guidelines Section 15126.4(a) and CEQ Regulations 40 CFR 1502.16(h) due to economic and productivity considerations. Specifically, low-profile cranes are somewhat shorter than the standard A-frame cranes but are more bulky at the base. They were not found to reduce overall aesthetic impacts and they were found to cost significantly more than standard A-frame cranes. Because of this expense, combined with the relatively small reductions in visual impacts, low-profile cranes are not considered to be feasible mitigation measures. Additionally, low-profile cranes are associated with safety issues because they are much heavier than standard A-frame cranes.

Issue 3 Response

The area of stacked cargo containers in the backland of the Berths 136-147 Terminal has been addressed. The presence of such stacked cargo at the Project site and the several container terminals in the Project vicinity is part of the character of the Ports of Los Angeles and Long Beach, which form a large and distinct landscape region (Section 3.1.2.2.2.1). As such, it is an inherent part of the Port environment. The discussion explains that "the appearance of many Port operations is functional in nature, characterized by … high-visibility colors such as orange, red, or bright green for mobile equipment such as cranes, containers, and railcars." (Section 3.1.2.2.2.1). The analysis specifically addresses backland storage containers and concludes that the backlands of the terminal would not be noticeable from critical public views. This is because the perimeter of stored containers lining John S. Gibson Boulevard and Harry Bridges Boulevard blocks views into the interior of the terminal from the ground-level critical positions in the vicinity (along "C" Street and near designated scenic routes).

Only from a nearby elevated position may the backlands and slip be viewed. The closest such position would be from the easternmost northbound lane of the Harbor Freeway. From this lane, at a point near the "C" Street offramp, limited views of the slip can be seen. However, these views are not effectively available because they are greatly abbreviated by intervening landforms and vegetation. Also, the slip is 90 degrees to the east of the direction of travel and, therefore, not functionally within the field-of-view (Section 3.1.4.3.1.).

Regarding the distant views from Rancho Palos Verdes, the stacked cargo is not a feature of the Project site that can be discerned in the context of the greater Port region, as demonstrated in Figure 3.1-17. The cargo's effect is primarily related to close-up, ground-based views from the perimeter of the terminal: views of features less than 40 feet high in the interior of the Project site are blocked from sight from all but close vantage points. Such views occur from "C" Street at the south edge of the community of Wilmington and nowhere else.

RPV-2. The Port has conducted ambient air quality monitoring within the Port region since February 2005. This sampling network includes four stations and two of these stations are within communities that experience some of the highest ambient impacts from Port emissions. The Draft EIS/EIR uses data from these four stations, plus data collected by the SCAQMD in North Long Beach to describe existing air quality in the Port area. The Draft EIS/EIR also relies on data collected by the SCAQMD within their SCAB sampling network to define the attainment status of ambient air quality standards.

The air dispersion modeling receptor domain extends from the Port area to just east of Western Avenue in San Pedro, as shown in Figure D3-1 in Appendix D3. The results of the air quality analyses in the Draft EIS/EIR show that Project impacts would continue to decrease in the direction west of the edge of this receptor grid.

RPV-3. The noise impact analysis did consider possible effects west of the I-110 Freeway. A noise measurement location, ST-9, was selected to characterize noise levels in this neighborhood. The site for this measurement was at the south end of the street near 1130 Cabrillo Avenue. During the daytime spot measurement at this location, vehicular traffic on the I-110 Freeway dominated the noise environment and was the only significant source of environmental noise affecting the area. Port activities were indistinguishable from other traffic noise. Construction and operational noise impacts were evaluated for the most affected receptors near each of the Project components. The only potential impact from Project-related noise that could affect receptors west of the I-110 Freeway to a greater degree than receptors nearer to the Project would be an increase in noise along the I-110 Freeway. Implementation of the proposed Project was found to cause no substantial change to the noise level along the freeway or other roadway segments. There would, therefore, be no impact to the noise environment in the neighborhoods west of I-110 resulting from the proposed Project.

RPV-4. See responses to comments NWSP-11 and NWSP-12 regarding cumulative analysis and trip distribution assumptions in the traffic study. Impacts from cumulative development in the area may result in impacts considered cumulatively significant. For the proposed Project, the 1999 and 2004 update of the Port Truck Origin-Destination study clearly indicates the origin-destination of trucks and the preferred routes. These routes are the I-110 Freeway, Alameda Street, Ocean/Seaside, and the I-710 Freeway. Little or no truck traffic is expected to be directed to arterial streets west of the I-110 Freeway.