

Provided below are responses regarding the feasibility of GHG mitigation measures recommended by the Attorney General's Office.

AG-1: Final EIS/EIR Mitigation Measure AQ-6 has been revised to increase the AMP compliance rate for 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 a 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 (AMP). 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 shall be required to use AMP while hoteling at 100% 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 U.S. 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 third-party invitees. MOL's APX service provides monthly service to Europe, the U.S. East Coast, and connections to the U.S. 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 third-party invitees, to fill extra terminal capacity. TraPac has recently lost a majority of their third-party invitees in part 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. Currently, AMP retrofits cost approximately \$800,000 per vessel. Through future lease amendments and the Port's Clean Air Action Plan (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 a hard time 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 leases.

AG-2: Incentives would not achieve earlier AMP implementation. 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 vessel string 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 U.S. West Coast and Asia and they are assumed to make up approximately 50 percent of TraPac's ship calls. The two year phase-in schedule allows time for AMP retrofits to be made on the entire vessel string during the vessel's scheduled dry-dock period. These retrofits are being done without financial incentives.

The phase-in schedule also allows time for the AMP infrastructure to be constructed on the berth. As discussed in Chapter 2, wharf improvements will take approximately two years to construct. Shore-side AMP infrastructure would be installed as part of the AMP improvements. The current schedule calls for installing AMP at Berth 145-147 within the first years with installation at Berths 136-139 during the second year. This construction schedule also includes the lead-time necessary for obtaining transformers from the Los Angeles Department of Water and Power.

The longer phase-in schedule (post-2010) is to accommodate MOL's APX class vessels and third-party invitees. MOL's APX service provides monthly service to Europe, the U.S. East Coast, and connections to the U.S. 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. As discussed above, TraPac will also contract with other shipping lines, referred to as third-party invitees, to fill extra terminal capacity. TraPac has recently lost a majority of their third-party invitees in part 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. The schedule assumes that these yet to be identified customers comply with the AMP requirements without financial incentives.

AG-3. Mitigation Measure AQ-22 has been modified to include the installation of stanchions equipped with solar power cells throughout the parking lot and backlands to further capture solar power.

Mitigation Measure AQ-22: Solar Panels. The Port shall install solar panels on the main terminal building. Solar panels would provide the terminal building with a clean source of electricity to replace some of its fossil fuel-generated electricity use. In addition, as part of project construction, the Port shall install stanchions

equipped with non-reflective solar power cells throughout the parking lot and backlands to further capture solar power.

- AG-4.** All mitigation measures would be the subject of a Mitigation Monitoring and Reporting Program (MMRP) to be approved by the Board of Harbor Commissioners if they elect to approve the proposed Project. For VSRP, the MMRP would state that vessel calls shall be monitored by the Environmental Management Division and the Marine Exchange, which is presently providing compliance data to the Ports on the ship arrivals and departures. In addition, the tenant would have to prepare annual reports. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board of Harbor Commissioners at a regularly scheduled public Board Meeting to disclose VSRP compliance rates.
- AG-5.** It is possible that there would be 100 percent compliance. The 95 percent compliance is provided to be conservative to allow for situation where a ship could not comply for safety reasons. As discussed above, the MMRP would include oversight by the Port and annual reporting requirements. Compliance would be monitored through such reports (see response to comment AG-4).
- AG-6.** As discussed in response to comment AG-4, all mitigation measures become part of the lease and are tracked through the MMRP.
- AG-7.** 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. The features would reduce the 15 minutes of on-terminal truck idling currently assumed in the air quality analysis.
- AG-8.** At present, the availability/feasibility of requiring idling restrictions on terminal equipment and its effect on terminal operations is unknown. The Port will review the feasibility of such measures through the CAAP's Technology Advancement Program (TAP), and if warranted, include such measures in the next revision to the CAAP.
- AG-9.** Truck stops provide plug-ins for trucks that are stopped for an extended period of time for example, when the truck is parked overnight. During overnight stops, truck drivers often idle their engines to operate air conditioning or heat in their sleeper cabs, or on-board appliances. Plug-in facilities allow the truck to turn its engine off and draw electricity from the grid to operate heating and/or cooling systems and on-board appliances. The trucks at the TraPac terminal do not park or idle in one place long enough to plug-in. As discussed above, TraPac's new terminal design, plus a container optical character recognition scanning system, eliminates the need for queuing at the gate. Once in the terminal, the truck idles only to yield to other traffic and when hooking or un-hooking loads. These movements are short-term and occur at various locations making plug-in receptacles impractical. Therefore, this is not a feasible measure.

AG-10. Mitigation Measure AQ-17, in conjunction with the lease measure 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 seven years following the effective date of the permit, new air quality technological advancements, subject to the party's mutual agreement on operational feasibility and cost sharing.”

In addition, 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 diesel particulate matter (DPM), NO_x, and SO_x emissions from main engines and auxiliary engines. In addition, this measure would also incorporate design changes and technology to reduce GHG emissions where available.

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 in mind. 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.

Indeed, the preface to the Port's CAAP includes the following statement by joint Board's of Harbor Commissioners related to GHGs.

“Third, we should recognize that the recently enacted California Global Warming Solutions Act of 2006 (AB 32) requires carbon emissions be reduced back to 1990 levels by the year 2020. In light of the growth prospects of the two Ports that means we must switch to carbon-free fuels (i.e., green electricity) and other carbon-free technologies in every possible application as soon as possible. Toward that end we propose that our respective staffs include such technology in our Technology Advancement Program. As part of that effort, the Ports pledge to contribute, and raise from other interested parties, the many millions need to fund this vital effort.”

The TAP included an initial \$15 million to fund new technology. To date some of the funds have been utilized to fund a diesel-hybrid tug and electric drayage truck. These are Port-wide measures the will benefit Port-wide emission reductions and will indirectly benefit all the Port terminals.

Additionally, the Report by the International Council on Transportation was taken into consideration in the development of the CAAP for criteria pollutants. In fact, the Port of Los Angeles is presently carrying out a number of the measures listed for ships while “at Port,” including:

- Develop GHG emission inventories – Underway at the Port of Los Angeles;
- Market-based measures for vessels – As provided above, the Port has in the past and may be considering some limited incentives. However, there are serious financial limitations on the extent to which the Port can provide incentives and still be able to carry out its legal mandates to maintain and modernize the Port. Presently the Port’s main goal is to reduce particulates, which are having a local and regional effect on public health. In that regard, the Port of Los Angeles, along with the Port of Long Beach, has approved the CAAP and the Clean Truck Program. The Clean Truck Program by itself is estimated at an expenditure of \$2 Billion over the next five years. As provided in these responses, many of these measures will have GHG benefits; and
- Implement fuel economy standards by vessel class – This measure is not feasible because it is outside the purview of the Port of Los Angeles and needs to be carried forward either at the National level through USEPA or through the International Maritime Organization which sets standards for ships.

AG-11. The Port agrees that additional solar panels can be added and Mitigation Measure AQ-22 has been amended as follows:

Mitigation Measure AQ-22: Solar Panels. The ~~applicant~~ Port shall install solar panels on the main terminal building. Solar panels would provide the terminal building with a clean source of electricity to replace some of its fossil fuel-generated electricity use. In addition, as part of construction, the Port shall install

stanchions equipped with non-reflective solar power cells throughout the parking lot and backlands to further capture solar power.

- AG-12.** As part of the proposed Project, the building would be designed as a LEED certified Gold Level building which would include light-colored, reflective roof materials.
- AG-13.** In accordance with the Port's Leasing Policy, the operator would be required to implement an environmental management system approach to activities at their terminal, including their own office operations. This would include the operator to set goals for office recycling with the rates identified in Mitigation Measure AQ-23 set as the minimum. The Port shall work with the tenant to identify methods to first reduce and reduce office products.
- AG-14.** The Project would include planting and maintaining shade trees around the TraPac Terminal, such as around the terminal building, near the gate structure, and along the facility's perimeter. It is not possible to plant trees in many parts of a container terminal where they would interfere with terminal operations. In addition, additional tree planting/landscaping has been provided for around the relocated Pier A Yard (see Mitigation Measure NOI-2). As part of the Project, the Port is also building a 30-acre landscaped buffer, which will include trees.
- AG-15.** Electric power is being used at the TraPac Terminal where such application is operationally feasible. Presently, all container cranes are electric. In addition, TraPac has committed to using electric rail-mounted gantry cranes (RMGs) in the new intermodal yard. TraPac also indicates that they are interested in electric rubber-tired gantry cranes (RTGs) on the their backland, but that they plan to evaluate the results of Port tests being conducted at other terminals at the Port before they commit to this measure due to a number of operational and safety issues. Currently, diesel powered RTGs can be moved all around the backlands. Electric RTGs must be plugged in, thereby limiting mobility; electric RTGs also have safety issues that need to be resolved. The Port will conduct tests to examine the best physical terminal layout and whether overhead or trenched electricity provides the most flexible backlands operation.

The Port is actively pursuing advanced technology, including electric RTGs and hybrid yard tractors through the TAP. Because a number of these technologies decrease fuel costs, terminal operators have expressed interest in implementing such technologies. However, such technology is still being tested and cannot be required at this time. Mitigation Measure-17 would require the Berths 136-147 tenant to review, in terms of feasibility, any Port-identified or other new emissions-reduction technology, including yard equipment, and report to the Port. We are unaware of any approved/certified fuel-cell equipment that could be used in mobile source applications at the TraPac Terminal.

In addition to pursuing electric equipment, TraPac has installed energy capacitors on all gantry cranes and substations. Energy capacitors are also called power factor correction (devices). Capacitors react opposite of inductors. Cranes, HVAC, and

refrigeration equipment, or anything that has a motor has inductance that causes inductive reactances; this creates a "lagging" power factor. The current will lag behind the voltage and the spacing causes inductive reactive losses (energy losses also called "wattless energy" or reactive power losses). For electricity to be used efficiently, the voltage and current should be in unison. Properly sized capacitors will counter act the inductance and move the current closer to the voltage. The end result is less waste of electric energy and efficient operation, less heat generated by the motor, and less breakdown. In addition to saving energy, motors and equipment last longer because equipment is running more efficient with less heat losses.

AG-16. Please see response to comment AG-8. At present, the availability/feasibility of requiring idling restrictions on terminal equipment and its effect on terminal operations is unknown. The Port will review the feasibility of such measures through the TAP, and if warranted, include such measures in the next revision to the CAAP.

AG-17. The Port is an active member of California Climate Action Registry (CCAR) and is preparing a Port-wide inventory that will identify both sources of GHGs and potential strategies to reduce such gases Port-wide. The Port is currently not pursuing carbon offsets due to issues with accounting and verifiability.

As discussed on page 3.2-10 of the Draft EIS/EIR, GHGs are a global issue. Unlike criteria pollutants that have mainly localized effects and therefore require local reductions, increased emissions of GHGs are resulting in global effects, namely climate change, and reductions do not need to be local to reduce environmental impacts. As such, a number of organizations and companies have begun to offer voluntary carbon offset programs. Under such systems, the Port could purchase offsets, which are emission reductions elsewhere, to compensate for the GHG emissions at the Port, resulting in a net reduction of global GHGs. While the Port agrees with carbon offset programs in concept, currently such programs are not strictly regulated and the Port cannot verify or guarantee that the credits actually result in GHG emission reductions. However, the Port believes that it is best served by doing on-site measures because of significant costs associated with existing clean air programs, and the concurrent benefits of reducing criteria pollutants and diesel PM which are the most critical environmental issue facing our communities.

On November 1, 2007, the Port of Los Angeles approved a progressive ban on older trucks serving the Port. As a result, trucks entering the Port will have reduced emissions, including reduced GHGs. It is possible that fees will be imposed as a Port-wide program in support of this progressive ban. This fee, which may be considered as early as December of 2007, would be directed at the reduction of NOx and diesel PM from the truck fleet as a priority due to the very significant near term health concerns associated with these pollutants and the contribution of NOx towards the regions nonattainment status for ozone. The reduction in these emissions could also contribute to reduction in GHGs since the Clean Truck Program also includes an LNG program. Recently the two Ports invested over \$20 million dollars in contracts to fund the start-up of an LNG fleet to serve the Port terminals.

AG-18. The Ports CAAP already contains a significant alternative fuel component particularly for the use of LNG as part of the Clean Trucks Program including incentive programs. The first step of this Program, which includes a progressive ban on older trucks, was approved by the Board of Harbor Commissioners on November 1, 2007. The reduction in emission as a result of this program would also contribute to reduction in GHGs (see above). The Clean Truck Program is presently valued at \$1.8 billion. The Port is contributing over \$100 million over the next five years, and to date has sponsored truck replacements through the Gateway City Program totaling over \$15 million. The Clean Truck Program also includes an LNG program. Recently the two Ports invested over \$20 million in contracts to fund the start-up of an LNG fleet to serve the Port terminals. The CAAP also includes the TAP for developing and testing new technology. Included in this to date is the testing of an electric drayage truck that could be use for short trips to the near dock rail yards. The port may also be testing of a hybrid drayage truck associated with this program

Biofuel use at the Port is not being heavily pursued due to reported increases in NO_x emissions. Accordingly yard equipment using biofuel are not expected to meet the percent NO_x reduction assumed in the Draft EIS/EIS. As discussed in the Draft EIS/EIR (page 3.2-3), while the South Coast Air Basin has been in attainment for NO_x since 1991, the region is now considered a maintenance area for NO_x and local air agencies are pursuing further reductions prevent regional increases from increased population.

AG-19. Maintenance and upkeep of trucks should be the responsibility of the truck owner. In this regard, the Port's Clean Truck Program will include a requirement for maintenance of drayage trucks calling at the Port. Further, including mandatory tire checking at the terminal would have to be weighed against emissions created by additional truck idling to carry this out. Presently, the terminal operator is responsible for chassis maintenance including tire maintenance.

AG-20. As discussed in response to comment AG- 17, the Port is taking primary financial and implementation responsibilities for cleaning up of the dirty trucks calling at the Port. This is estimated at a \$2 billion program over the next five years (see San Pedro Bay Clean Air Action Plan). Measures identified here relating to ships and terminal equipment are already considered in the customer's business plan. While the Port may consider some level of incentive associated with certain specific activities aimed at reducing emissions Port-wide, these provisions will be limited due to the need of the Port to utilize funds received by customers to maintain and upgrade of Port facilities. Such programs would be implemented through a Port-wide tariff. However, Mitigation Measure AQ-13 has been modified to include consideration of GHGs as shown below.

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 Ports believe 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. Mitigation Measure AQ-17 includes the opportunity to include new ship technology in the future.

AG-21. Currently, all new MOL vessel builds include AMP retrofits and MOL has adopted use of the refrigerant R134a, which has an ozone depletion coefficient of zero. MOL also has a program to address and implement measures for maintaining and improving the vessel performance (fuel efficiency and speed). Examples include operational changes such as reducing navigation speed and select optimum routes depending on the situation and technological changes such as energy-saving designed vessels and Propeller Boss Cap Fins (PBCF) systems. In regards to refrigerant use, CFC refrigerants were traditionally used on ships for air conditioning systems and refrigeration of food, as well as to refrigerate cargo containers; and Halon was used in onboard fire extinguishing systems. MOL adopted R-22 (HCFC), which has a smaller ozone depletion coefficient than R-12 (CFC) on vessels launched after the late 1970s. In 2002, MOL began to use R-404A, eliminated Halon fire-extinguishing equipment in favor of carbon dioxide systems, stopped using R-12 and adopted R134a, which has an ozone depletion coefficient of zero. Additionally, according to TraPac, refrigerated containers are checked 2-3 times a day for leaks repaired immediately if a leak is detected.

The terminal is not the proper location to serve as an inspection station for trucks especially in regards to the space that would be required to do this and in the interest

in not incurring additional idling time and waiting by the truck drivers. The appropriate responsibility for this lies with the owner of the truck.

- AG-22.** Due to the very high value of refrigerated containers (ranging from \$20,000 to \$50,000/container) shippers conduct a pre-departure inspection of all containers. In addition, the use of HFC is rapidly disappearing from use as discussed in response to comment AG-20. These procedures have been confirmed this with TraPac as well as APM Terminals at the Port. Inspections at the terminal are conducted frequently to ensure no loss of cargo. The literature cited in this publication (Drewry 1996) is now 11 years old and does not reflect existing operations. Therefore, the value of creating a new monitoring program and fee structure on International Carriers is not warranted.
- AG-23.** Please see response to comment AG-20 regarding HFCs and response to comment AG-10 for additional information on customer incentive programs.
- AG-24.** Currently TraPac currently services refrigerated containers at the terminal as part of their normal practices.
- AG-25.** The placement of the on-dock rail yard at the facility was done in part to reduce emissions, which would also include GHGs. In fact this action is consistent with the report cited above: *Center For Clean Air Policy, Analysis of Measures for Reducing Transportation Emissions in California* (Oct. 2005). In accordance with CAAP measure RL-2, by 2011, all diesel-powered Class 1 switcher and helper locomotives entering Port facilities will use 15-minute idle restrictors. In addition, Mitigation Measure AQ-14 requires the on-dock rail yard to incorporate the cleanest locomotive technologies into their operations, and must be consistent with CAAP measure RL-2. These devices are also required on PHL switchers.
- AG-26.** The Port will utilize the most energy efficient lighting in the terminal that would meet the lighting and safety and security needs of a 24-hour operating terminal. Where the existing lighting does not meet current POLA standards, fixtures would be replaced during proposed Project construction with more efficient lamps. The existing and replacement lamps would be high pressure sodium lights at 10,000 watts per fixture. However, the new lamps would be 20 percent more efficient than the existing lamps, as they do not waste input energy by producing non-useable light in the form of glare (See Draft EIS/EIR Section 3.12, Utilities and Public Service).

In addition, the following two mitigation measures are included in the Project.

Mitigation Measure AQ-20: Compact Fluorescent Light Bulbs. All interior terminal building lighting shall use compact fluorescent light bulbs. Fluorescent light bulbs produce less waste heat and use substantially less electricity than incandescent light bulbs.

Mitigation Measure AQ-22: Energy Audit. The tenant shall conduct a third party energy audit every five years and install innovative power saving technology where feasible, such as power factor correction systems and lighting power regulators. Such systems help to maximize usable electric current and eliminate wasted electricity, thereby lowering overall electricity use.

AG-27. Employees working at the terminals are predominantly members of the ILWU who primarily live in the area near the Port, and are called as needed from the ILWU hiring hall in Wilmington. The dispatch of these employees is complicated by the fact that workers may not know from day to day which terminal within the Los Angeles/Long Beach Port complex they may be working or the hours they may be working. The gang deployment is set to a large extent by the arrival times of ships arriving at the Port. In addition, the Port does not have any control of terminal workers and the relationship of the work force with the terminal operator is governed by long term contracts negotiated between the steamship line association and the union. While the Port is incorporating bike paths into its commercial/recreational waterfront developments, it is not safe for bicycles to have access to industrial facilities at the Port. There is no public transit system serving the port terminals.

AG-28. Mitigation measures AQ-2, AQ-3, and AQ4 have been modified to help reduce emissions, including GHGs from on-road and off-road construction equipment:

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 year 2007 emission standards for Phase I. In addition, Phase II construction (post 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 year 2010 emission standards where available. Trucks hauling materials such as debris or fill shall be fully covered while operation off Port property.

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 3 NO_x emission standards. The construction 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 ARB 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 Nonroad Diesel Engine Rule (USEPA 1998 and 2004). Equipment not designated Tier 23 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 fuel. 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.

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 ~~540~~ 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 mitigation measures identified above would further reduce GHGs. At this time, the Port is not sure of availability of equipment and therefore has not calculated or taken credit for GHG reductions as a result of these measures.

- AG-29.** As a Department of the City of Los Angeles, the Port is somewhat restricted in its contracting methods, which include under other restrictions, the need to select the lowest responsive bidder. However, the Project construction procurement process would include a selection system that favors bidders with clean construction equipment. Final EIS/EIR mitigation measures would result in further emission reductions than assumed in the Draft EIR/SIS. However, due to availability issues, these reductions have not been quantified.
- AG-30.** This is a standard requirement of Port contracts. Construction materials such as concrete and asphalt are reused in construction at the facility or elsewhere in the Port. The Port presently has its own crusher facility for this purpose.
- AG-31.** The Port is an active member of CCAR and is preparing a Port-wide inventory that will identify both sources of GHGs and potential strategies to reduce such gases Port-wide. The Port is currently not pursuing carbon offsets due to issues with accounting and verifiability (see response to comment AG-16).

As discussed on page 3.2-10 of the Draft EIS/EIR, GHGs are a global issue. Unlike criteria pollutants that have mainly localized effects and therefore require local reductions, increased emissions of greenhouse gases are resulting in global effects, namely climate change, and reductions do not need to be local to reduce environmental impacts. As such, a number of organizations and companies have begun to offer voluntary carbon offset programs. Under such systems, the Port could purchase offsets, which are emission reductions elsewhere, to compensate for the greenhouse gas emissions at the Port, resulting in a net reduction of global GHGs. While the Port agrees with carbon offset programs in concept, currently such programs are not strictly regulated and the Port cannot verify or guarantee that the credits actually result in GHG emission reductions.

In addition, the Port is best served by doing on-site measures because of significant costs associated with existing clean air programs, and the concurrent benefits of reducing criteria pollutants and diesel PM which are the most critical environmental issues facing our communities.