TRANSMITTAL 4: Wilmington Waterfront Development Project Mitigation List

AIR QUALITY: CONSTRUCTION

MM AQ-1: ***Harbor Craft Engine Standards.***

All harbor craft used during the construction phase of the proposed Project will, at a minimum, be repowered to meet the cleanest existing marine engine emission standards or EPA Tier 2. Additionally, where available, harbor craft will meet the proposed EPA Tier 3 (which are proposed to be phased-in beginning of 2009) or cleaner marine engine emission standards.

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

+ A piece of specialized equipment is unavailable in a controlled form within the State of California, including through a leasing agreement.
+ 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 is not yet approved, or the application has been approved, but funds are not yet available.
+ 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.

MM AQ-2: ***Dredging Equipment Electrification.***

All dredging equipment will be electric.

MM AQ-3: ***Fleet Modernization for Onroad Trucks***.

1. Trucks hauling materials such as debris or fill will be fully covered while operating off Port property.
2. Idling will be restricted to a maximum of 5 minutes when not in use.
3. EPA Standards:
   - Prior to December 31, 2011: All onroad heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used at the Port of Los Angeles will comply with EPA 2004 onroad emission standards for PM_{10} and NO_X (0.10 g/bhp-hr and 2.0 g/bhp-hr, respectively).

     In addition, all onroad heavy heavy-duty trucks with a GVWR of 19,500 pounds or greater used at the Port of Los Angeles will be equipped with a CARB-verified Level 3 device.
   - From January 1, 2012 on: All onroad heavy-duty diesel trucks with a GVWR of 19,500 pounds or greater used at the Port of Los Angeles will comply with EPA 2007 onroad emission standards for PM_{10} and NO_X (0.01 g/bhp-hr and 0.20 g/bhp-hr, respectively).

A copy of each unit's certified, USEPA rating and each unit's CARB or SCAQMD operating permit, shall be provided at the time of mobilization of each applicable unit of equipment.

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

+ A piece of specialized equipment is unavailable in a controlled form within the State of California, including through a leasing agreement.
+ 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 is not yet approved, or the application has been approved, but funds are not yet available.
+ 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.

MM AQ-4: ***Fleet Modernization for Construction Equipment***

1. Construction equipment will incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards.
2. Idling will be restricted to a maximum of 5 minutes when not in use.
3. Tier Specifications:
   - Prior to December 31, 2011: All offroad diesel-powered construction equipment greater than 50 horsepower (hp) will meet Tier-2 offroad emission standards, at a minimum. In addition, all construction equipment greater than 50 hp will be retrofitted with a CARB-certified Level 3 diesel emissions control device.
   - From January 1, 2012, to December 31, 2014: All offroad diesel-powered construction equipment greater than 50 hp, except ships and barges and marine vessels, will meet Tier-3 offroad emission standards, at a minimum. In addition, all construction equipment greater than 50 hp will be retrofitted with a CARB-certified Level 3 diesel emissions control device.
   - From January 1, 2015 on: All offroad diesel-powered construction equipment greater than 50 hp, except ships and barges and marine vessels, will meet Tier-4 offroad emission standards, at a minimum. In addition, all construction equipment greater than 50 hp will be retrofitted with a CARB-certified Level 3 diesel emissions control device.

The above "Tier Specifications" 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:

+ A piece of specialized equipment is unavailable in a controlled form within the State of California, including through a leasing agreement.
+ 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 is not yet approved, or the application has been approved, but funds are not yet available.

+ 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.

MM AQ-5: ***Additional Fugitive Dust Controls.***

The calculation of fugitive dust (PM_{10}) from proposed project earth-moving activities assumes a 61% reduction from uncontrolled levels to simulate rigorous watering of the site and use of other measures (listed below) to ensure compliance with SCAQMD Rule 403.

The construction contractor will further reduce fugitive dust emissions to 90% from uncontrolled levels. The construction contractor will designate personnel to monitor the dust control program and to order increased watering, as necessary, to ensure a 90% control level. Their duties will include holiday and weekend periods when work may not be in progress.

The following measures, at minimum, must be part of the contractor Rule 403 dust control plan:

- Active grading sites will be watered 1 additional time per day beyond that required by Rule 403.
- Contractors will apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas (previously graded areas inactive for ten days or more).
- Construction contractors will provide temporary wind fencing around sites being graded or cleared.
- Trucks hauling dirt, sand, or gravel will be covered or will maintain at least 2 feet of freeboard in accordance with Section 23114 of the California Vehicle Code.
- Construction contractors will install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off tires of vehicles and any equipment leaving the construction site. Pave road and road shoulders.
- The use of clean-fueled sweepers will be required pursuant to SCAQMD Rule 1186 and Rule 1186.1 certified street sweepers. Sweep streets at the end of each day if visible soil is carried onto paved roads on site or roads adjacent to the site to reduce fugitive dust emissions.
- A construction relations officer will be appointed to act as a community liaison concerning onsite construction activity including resolution of issues related to PM10 generation.
- Traffic speeds on all unpaved roads will be reduced to 15 mph or less.
- Temporary traffic controls such as a flag person will be provided during all phases of construction to maintain smooth traffic flow.
- Construction activities that affect traffic flow on the arterial system will be conducted during off-peak hours to the extent practicable.
- The use of electrified truck spaces for all truck parking or queuing areas will be required.

MM AQ-6: ***Best Management Practices***

The following types of measures for construction equipment (including onroad trucks) will be used where applicable and feasible:

1. Use diesel oxidation catalysts and catalyzed diesel particulate traps.
2. Maintain equipment according to manufacturers' specifications.
3. Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use.
4. Install high-pressure fuel injectors on construction equipment vehicles.
5. Maintain a minimum buffer zone of 300 meters between truck traffic and sensitive receptors.
6. Improve traffic flow by signal synchronization.
7. Enforce truck parking restrictions.
8. Provide on-site services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria services, automated teller machines, etc.
9. Re-route construction trucks away from congested streets or sensitive receptor areas.
10. Use electric power in favor of diesel power where available.
11. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow.
12. Schedule construction activities that affect traffic flow on the arterial system for off-peak hours, to the extent possible
13. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off site.
14. Configure construction parking to minimize traffic interference.

LAHD will implement a process by which to select additional BMPs to further reduce air emissions during construction. LAHD will determine the BMPs once the contractor identifies and secures a final equipment list and project scope. LAHD will then meet with the contractor to identify potential BMPs and work with the contractor to include such measures in the contract. BMPs will be based on Best Available Control Technology (BACT) guidelines and may also include changes to construction practices and design to reduce or eliminate environmental impacts.

MM AQ-7: ***General Mitigation Measure.***

For any of the above mitigation measures (MM AQ-1 through AQ-6), if a CARB-certified technology becomes available and is shown to be as good as or better in terms of emissions performance than the existing measure, the technology could replace the existing measure pending approval by the Port.

MM AQ-8: ***Special Precautions near Sensitive Sites.***

All construction activities located within 1,000 feet of sensitive receptors (defined as schools, playgrounds, daycares, and hospitals) shall notify each of these sites in writing at least 30 days before construction activities begin.

GREENHOUSE GAS MEASURES

MM AQ-9: ***Construction Recycling.***

Demolition and/or excess construction materials will be separated on-site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site. Materials with recycled content will be used in project construction. Chippers on site during construction will be used to further reduce excess wood for landscaping cover.

MM AQ-10: ***Energy Efficiency.***

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping, and sun screens to reduce energy use.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
- Install light colored "cool" roofs, cool pavements, and strategically placed shade trees.
- Provide information on energy management services for large energy users.
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.
- Install light emitting diodes (LEDs) for outdoor lighting.
- Limit the hours of operation of outdoor lighting.
- Provide education on energy efficiency.

MM AQ-11: ***Renewable Energy.***

- Require the installation of solar and/or wind power systems, solar and tankless hot water heaters, and energy efficient heating ventilation and air conditioning by Port tenants, where feasible. Educate Port tenants about existing incentives.
- Use combined heat and power in appropriate applications.

MM AQ-12: ***Water Conservation and Efficiency.***

- Create water-efficient landscapes.
- Install water-efficient irrigation systems and devices, such as soil moisture–based irrigation controls.
- Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.

- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage stormwater and protect the environment. (Retaining stormwater runoff on site can drastically reduce the need for energy-intensive imported water at the site.)
- Devise a comprehensive water conservation strategy appropriate for the proposed Project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate.
- Provide education about water conservation and available programs and incentives.

MM AQ-13: ***Solid Waste Measures.***

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers in public areas.
- Provide education and publicity about reducing waste and available recycling services.

MM AQ-14*: Land Use Measures*.

- Incorporate public transit into project design.
- Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.
- Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling, or walking.

MM AQ-15: ***Transportation and Motor Vehicles.***

- Limit idling time for commercial vehicles, including delivery and construction vehicles.
- Use low- or zero-emission vehicles, including construction vehicles.
- Promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).
- Increase the cost of driving and parking private vehicles by, for example, imposing tolls and parking fees.
- Promote “least polluting” ways to connect people and goods to their destinations.
- Incorporate bicycle lanes and routes into street systems.
- Incorporate bicycle-friendly intersections into street design. Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience.
- Create bicycle lanes and walking paths.

BIOLOGICAL MEASURES: CONSTRUCTION

MM BIO-1. ***Debit Inner Harbor Mitigation Bank.***

The loss of 2,200 square feet (0.05 acres) of Inner Harbor marine habitat will be mitigated by debiting the required credits from the Inner Harbor Mitigation Bank, per the terms and conditions established in the MOU between LAHD, CDFG, NMFS, and USFWS (City of Los Angeles 1984). The MOU provides that for each acre of marine habitat impacted within the Inner Harbor the mitigation bank will be debited 0.5 credit. Thus the 0.05 acre of marine habitat impacted in the Inner Harbor will result in a debit from the mitigation bank of 0.025 credit.

MM BIO-2. ***Pile Driving Monitoring.***

A qualified biologist hired by the LAHD will be required to monitor the area in the vicinity of pile-driving activities for any fish kills during pile driving. If there are any reported fish kills, pile driving will be halted and the USACE and NMFS will be notified via the Port's Environmental Management Division. The biological monitor will also note (surface scan only) whether marine mammals are present within 100 meters of the pile driving and, if any are observed, temporarily halt pile driving until the observed marine mammals move beyond this distance.

CULTURAL RESOURCES

MM CR-1: ***Conduct Future Cultural Resources Studies along the Waterfront Red Car Line Once Determined.***

Archival research indicates that archaeological resources may be located within the Waterfront Red Car Line proposed project area. According to the records search, **t**wo prehistoric sites (CA-LAn-150 and CA-LAn -283) are located adjacent to the proposed Waterfront Red Car Line location and one archaeological site, CA-LAn-2135H, is located less than $\frac{1}{8}^{th}$ of a mile from the proposed approximate alignment. In addition, archival and historic map research has indicated the potential for subsurface archaeological deposits associated with the early development of Wilmington within the Avalon Development District and the Waterfront Red Car Line.

The LAHD will ensure that, prior to final design approval for affected parcels, a qualified archaeologist will be retained to perform additional Phase I level archaeological surveys and research to determine the potential for prehistoric and historical archaeological deposits within these portions of the proposed project area in accordance with professional standards and guidelines.

MM CR-2: ***Incorporate the Tracks into the Design Plan.***

The proposed Project will incorporate the Pacific Electric Railway tracks into the project design in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (Weeks and Grimmer 1995).

MM CR-3: ***Generate Monitoring/Treatment Plan Prior to Demolition and/or Ground Disturbing Activities.***

A phased approach to mitigation would reduce any potential impacts to archaeological resources to less-than-significant. Prior to any ground-disturbing activities and/or demolition, a treatment/monitoring plan would be generated. This document would address areas where potentially significant historical archaeological deposits are likely to be located within the proposed commercial portion of the project area. The research design/treatment plan would also include methods for: (1) archaeological monitoring during demolition of existing buildings (2) subsurface testing after demolition and (3) data recovery of archaeological deposits. A detailed historic context that clearly demonstrates the themes under which any identified subsurface deposits would be determined significant would be included in the document as well as anticipated artifact types, artifact analysis, report writing, repatriation of human remains and associated grave goods, and curation.

MM CR-4: ***Monitor in Vicinity of Government Depot Portion of the Wilmington Waterfront District.***

Because the Phase I historical resources study (ICF Jones & Stokes 2008) has identified a low potential for historical archaeological deposits associated with a Civil War era Government Depot within a portion of the *Wilmington Waterfront District* and because ground-disturbing activities a could impact potentially CRHR and/or NRHP-eligible historical archaeological deposits , prior to any ground-disturbing activities:

- A monitoring plan be generated that would address areas where potentially significant archaeological deposits are likely to be located within this portion of the project area and clearly demonstrates the themes under which any deposits would be determined significant.
- LAHD will require at least one pre-field meeting with environmental management staff, project engineers, construction contractors, and construction inspectors to discuss the monitoring protocols and issues related to treatment of identified archaeological resources.
- A qualified archaeologist shall monitor all ground-disturbing activities in the vicinity of the Government Depot within the *Wilmington Waterfront District* portion of the project area. The qualified archaeological monitor will have demonstrated knowledge of, and experience with the treatment of historical archaeological resources.
- Due to potentially hazardous soil conditions associated with the DWP facility (as included in the project description), a safety plan will be generated in conjunction with the LAHD that addresses all issues associated with contamination and remediation. It is further recommended that the qualified archaeological monitor also be 40-hour Hazwoper certified.

In the event that subsurface deposits are identified during monitoring, ground disturbing activities will halt within 100 feet of the find to allow the qualified archaeologist can assess the find(s) and determine if treatment of the resource(s) is required

MM CR-5: ***Stop Work if Previously Unidentified Resources Are Encountered during Ground Disturbing Activities.***

In the event that any artifact or an unusual amount of bone, shell, or nonnative stone is encountered during construction, work will be immediately stopped and relocated to another area. The contractor will stop construction within 100 feet of the exposed resource until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and CCR, Title 14, Section 15064.5(f)). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; historic trash pits containing bottles and/or ceramics; or

structural remains. If the resources are found to be significant, they will be avoided or will be mitigated consistent with SHPO Guidelines. All construction equipment operators will attend a preconstruction meeting presented by a professional archaeologist retained by the Port that will review types of cultural resources and artifacts that would be considered potentially significant, to ensure operator recognition of these materials during construction.

Prior to beginning construction, the Port will meet with applicable Native American Groups, including the Gabrieliño/Tongva Tribal Council to identify areas of concern. In addition to monitoring, a treatment plan will be developed in conjunction with the Native American Groups to establish the proper way of extracting and handling all artifacts in the event of an archaeological discovery.

MM CR-6: ***Develop a Program to Mitigate Impacts on Nonrenewable Paleontologic Resources prior to Excavation or Construction of any Proposed Project Components.***

This mitigation program will be conducted by a qualified vertebrate paleontologist and will be consistent with the provisions of CEQA, as well as the proposed guidelines of the Society of Vertebrate Paleontology. This program will include, but not be limited to:

1. Assessment of site-specific excavation plans to determine areas that will be designated for paleontological monitoring during initial ground disturbance.
2. Development of monitoring protocols for these designated areas. Areas consisting of artificial fill materials will not require monitoring. Paleontologic monitors qualified to Society of Vertebrate Paleontology standards will be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors must be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring may be reduced if some of the potentially fossiliferous units described herein are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources.
3. Preparation of all recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts on the resources.
4. Identification and curation of all specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation and CEQA compliance (Scott and Springer 2003). The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts on significant paleontologic resources is not considered complete until such curation into an established museum repository has been fully completed and documented.
5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate lead agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, will signify completion of the program to mitigate impacts on paleontologic resources.

GEOLOGICAL RESOURCES

MM GEO-1: ***Seismic Design.***

A site-specific geotechnical investigation will be completed by a California-licensed geotechnical engineer and/or engineering geologist. The design and construction recommendations will be incorporated into the structural design of proposed project components.

GROUNDWATER AND SOILS

MM GW-1. ***Preparation of a Soil Management Plan or Phase II Environmental Site Assessment.***

LAHD will prepare a soil management plan prior to construction and will implement it during all phases of construction. Disturbed soils will be monitored for visual evidence of contamination (e.g., staining or discoloration). Soil will also be monitored for the presence of VOCs using appropriate field instruments such as organic vapor measurement with photoionization detectors or flame ionization detectors. If the monitoring procedures indicate the possible presence of contaminated soil, a contaminated soil contingency plan will be implemented and will include procedures for segregation, sampling, and chemical analysis of soil. Contaminated soil will be profiled for disposal and will be transported to an appropriate hazardous or non-hazardous waste or recycling facility licensed to accept and treat the type of waste indicated by the profiling process. The contaminated soil contingency plan will be developed and in place during all construction activities. If these processes generate any contaminated groundwater that must be disposed of outside of the dewatering/NPDES process, the groundwater will be profiled, manifested, hauled, and disposed of in the same manner.

Alternatively, preparation of a Phase II ESA will be prepared. In general, the Phase II ESA will include the following:

- A work plan that includes the number and locations of proposed soil/monitoring wells, sampling intervals, drilling and sampling methods, analytical methods, sampling rationale, site geohydrology, field screening methods, quality control/quality assurance, and reporting methods. Where appropriate, the work plan is approved by a regulatory agency such as the LAFD or the RWQCB.
- A site-specific health and safety plan signed by a Certified Industrial Hygienist.
- Necessary permits for encroachment, boring completion, and well installation.
- A traffic safety plan.
- Sampling program (fieldwork) in accordance with the work plan and health and safety plan. Fieldwork is completed under the supervision of a State of California registered geologist.
- Hazardous materials testing through a state-certified laboratory.
- Documentation including a description of filed procedures, boring logs/well construction diagrams, tabulations of analytical results, cross-sections, an evaluation of the levels and extent of contaminants found, and conclusions and recommendations regarding the environmental condition of the site and the need for further assessment. Recommendations may include additional assessment or handling of the contaminants found though the contaminated soil contingency plan. If the contaminated soil contingency plan is inadequate for the contamination

found, a remedial action plan will be developed. Contaminated groundwater will generally be handled through the NPDES/dewatering process.

- Disposal process including transport by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the identified type of waste.

MM GW-2*: Site Remediation.*

Unless otherwise authorized by the lead regulatory agency for any given site, LAHD will remediate all contaminated soils within proposed project boundaries prior to or during demolition and grading activities. Remediation will occur in compliance with local, state, and federal regulations as described in Section 3.6.3 and as directed by the LACFD, DTSC, and/or RWQCB.

Soil remediation will be completed such that contamination levels are below health screening levels established by OEHHA of CalEPA and/or applicable action levels established by the lead regulatory agency with jurisdiction over the site. Soil contamination waivers may be acceptable as a result of encapsulation (i.e., paving) in upland areas and/or risk-based soil assessments, but would be subject to the discretion of the lead regulatory agency.

Existing groundwater contamination throughout the proposed project boundary will continue to be monitored and remediated, simultaneous and/or subsequent to site redevelopment, in accordance with direction provided by the RWQCB.

Unless otherwise authorized by the lead regulatory agency for any given site, areas of soil contamination that will be remediated prior to or in conjunction with proposed project demolition, grading, and construction will include, but not be limited to, the properties within and adjacent to the proposed Project as listed in the HMA and filed as Appendix F of this EIR.

MM GW-2a: ***Remediate Former Oil Wells in the Industrial District (Area A), Waterfront District (Area B), and within the Immediate Vicinity of the Waterfront Red Car Line/CCT (Area C).***

Locate the well using geophysical or other methods. Contact the Division of Oil, Gas, and Geothermal Resources (DOGGR) to review abandonment records and inquire whether re-abandonment is necessary prior to any future construction related to the proposed project. Implement corrective measures as directed by DOGGR. Successful site remediation will require compliance with MM GW-2.

MM GW-2b: ***Remediate Soil along Existing and Former Rail Lines.***

Soil along and immediately adjacent to existing and former rail lines that will be disturbed during construction will be assessed for the presence of herbicides, petroleum hydrocarbons, and metals. Successful site remediation will require compliance with MM GW-2.

MM GW-2c: ***Health Based Risk Assessment for the Marine Tank Farm.***

LAHD will prepare a HBRA to determine whether remediation of soil and/or groundwater is needed at the Marine Tank Farm site and, if so, determine the appropriate work plan to ensure the site would comply with applicable local, state, and federal laws. Successful site remediation will require compliance with MM GW-2.

MM GW-3: ***Contamination Contingency Plan for Non-Specific Facilities and Unidentified Sources of Hazardous Materials.***

LAHD will prepare a hazardous materials contingency plan addressing the potential for discovery of unidentified USTs, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes encountered during construction. The following will be implemented to address previously unknown contamination during demolition, grading, and construction:

a) All trench excavation and filling operations will be observed for the presence of free petroleum products, chemicals, or contaminated soil. Deeply discolored soil or suspected contaminated soil will be segregated from light colored soil. In the event unexpected suspected chemically impacted material (soil or water) is encountered during construction, the contractor will notify LAHD's Chief Harbor Engineer, the Director of Environmental Management, and Risk Management's Industrial Hygienist. LAHD will confirm the presence of the suspect material; direct the contractor to remove, stockpile, or contain the material; and characterize the suspect material identified within the boundaries of the construction area. Continued work at a contaminated site will require the approval of the Chief Harbor Engineer.

b) A photoionization detector (or other similar devices) will be present during grading and excavation of suspected chemically impacted soil.

c) Excavation of VOC-impacted soil will require obtaining and complying with a SCAQMD Rule 1166 permit.

d) The remedial option(s) selected will be dependent upon a number of criteria (including but not limited to types of chemical constituents, concentration of the chemicals, health and safety issues, time constraints, cost, etc.) and will be determined on a site-specific basis. Both off-site and onsite remedial options will be evaluated.

e) The extent of removal actions will be determined on a site-specific basis. At a minimum, the chemically impacted area(s) within the boundaries of the construction area will be remediated to the satisfaction of the lead regulatory agency for the site. The LAHD Project Manager overseeing removal actions will inform the contractor when the removal action is complete.

f) Copies of hazardous waste manifests or other documents indicating the amount, nature, and disposition of such materials will be submitted to the Chief Harbor Engineer within 30 days of project completion.

g) In the event that contaminated soil is encountered, all onsite personnel handling or working in the vicinity of the contaminated material will be trained in accordance with Occupational Safety and Health and Administration (OSHA) regulations for hazardous waste operations. These regulations are based on CFR 1910.120 (e) and 8 CCR 5192, which states that "general site workers" will receive a minimum of 40 hours of classroom training and a minimum of 3 days of field training. This training provides precautions and protective measures to reduce or eliminate hazardous materials/waste hazards at the work place.

h) In cases where potential chemically impacted soil is encountered, a real-time aerosol monitor will be placed on the prevailing downwind side of the impacted soil area to monitor for airborne particulate emissions during soil excavation and handling activities.

i) All excavations will be filled with structurally suitable fill material that is free from contamination.

j) Prior to dewatering activities, LAHD will obtain a NPDES permit. In areas of suspected contaminated groundwater, special conditions will apply with regard to acquisition of the NPDES permit, including testing and monitoring, as well as discharge limitations under the NPDES permits.

k) Soil along and immediately adjacent to existing and former rail lines that will be disturbed during construction will be assessed for the presence of herbicides, petroleum hydrocarbons, and metals.

l) Demolition of chemical/fuel storage facilities will include decommissioning and removal of USTs and ASTs in accordance with local and state regulatory agencies. These agencies will likely require soil and groundwater sampling. This sampling will be conducted in accordance with local and state regulatory agency requirements.

m) Prior to construction activities, LAHD, or its contractors, will conduct an evaluation of all buildings (built prior to 1980) to be demolished to evaluate the presence of asbestos-containing building materials and lead-based paint. Remediation will be implemented in accordance with the recommendations of these evaluations.

n) Upon discovery of soil or groundwater contamination, the lead agency responsible for site remediation will determine if the identified contaminants pose a health risk to the general public, operation personnel, or other possible human receptors present at Phase 1 operational locations. If it is determined that an adverse risk to the general public, operation personnel, or other human receptors is present, Phase 1 Project elements in operation will be closed as a precaution to prevent human exposure to toxic substances.

NOISE

MM NOI-1

The following procedures will help reduce noise impacts from construction activities:

a) **Temporary Noise Barriers**. When construction occurs within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) will be located between noise-generating construction activities and sensitive receptors.

b) **Construction Hours**. Construction will be limited to between 7:00 a.m. and 6:00 p.m. on weekdays; between 8:00 a.m. and 6:00 p.m. on Saturdays; and there will be no construction equipment noise anytime on Sundays. If extended construction hours are needed during weekdays under special circumstances, the LAHD and contractor will provide at least 72 hours notice to Banning's Landing Community Center. Under no circumstances will construction hours exceed the range prescribed by the City of Los Angeles Municipal Code.

c) **Construction Days.** Noise-generating construction activities will not occur on weekends or holidays unless critical to a particular activity (e.g., concrete work).

d) **Construction Equipment.** All construction equipment powered by internal combustion engines will be properly muffled and maintained.

e) **Idling Prohibitions.** Unnecessary idling of internal combustion engines near noise sensitive areas will be prohibited.

f) **Equipment Location.** All stationary noise-generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing noise sensitive land uses.

g) **Quiet Equipment Selection.** Quiet construction equipment will be selected whenever possible. Where feasible, noise limits established in the City of Los Angeles Noise Ordinance will be fully complied with.

h) **Notification.** Sensitive receptors including residences within 2,000 feet of the proposed project site will be notified of the construction schedule in writing prior to the beginning of construction.

i) **Reporting**. The LAHD will clearly post the telephone number where complaints regarding construction-related disturbance can be reported.

GROUND TRANSPORTATION

MM TC-1: ***Develop and implement a Traffic Control Plan throughout proposed project construction.***

In accordance with the City's policy on street closures and traffic diversion for arterial and collector roadways, the construction contractor will prepare a traffic control plan (to be approved by City and County engineers) before construction. The traffic control plan will include:

- a street layout showing the location of construction activity and surrounding streets to be used as detour routes, including special signage;
- a tentative start date and construction duration period for each phase of construction;
- the name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction; and
- written approval to implement traffic control from other agencies, as needed.

Additionally, the traffic control plan will include the following stipulations:

- provide access for emergency vehicles at all times;
- avoid creating additional delay at intersections currently operating at congested conditions, either by choosing routes that avoid these locations, or constructing during nonpeak times of day;
- maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified;
- provide adequate off-street parking areas at designated staging areas for construction-related vehicles;
- maintain pedestrian and bicycle access and circulation during proposed project construction where safe to do so; if construction encroaches on a sidewalk, a safe detour will be provided for pedestrians at the nearest crosswalk; if construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway;
- utilize flag persons wearing OSHA–approved vests and using a "Stop/Slow" paddle to warn motorists of construction activity;
- maintain access to Metro and LADOT transit services and ensure that public transit vehicles are detoured;
- post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area;
- post construction warning signs in accordance with local standards or those set forth in the *Manual on Uniform Traffic Control Devices* (Federal Highway Administration 2001) in advance of the construction area and at any intersection that provides access to the construction area;

- during lane closures, have contractor and/or LAHD notify LAFD and LAPD, as well as the Los Angeles County Sheriff's and Fire Departments, of construction locations to ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary;
- provide written notification to contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites; submit a copy of all such written notifications to the City of Los Angeles Planning Department; and
- repair or restore the road right-of-way to its original condition or better upon completion of the work.

MM TC-2: ***Reconfigure the southbound approach of Avalon Boulevard at the intersection of Avalon Boulevard and Anaheim Street.***

Prior to the initiation of Phase II construction, LAHD will consult with LADOT. The consultation will review the details of adding a right-turn lane in the southbound direction or an alternative measure that achieves the same results and would not create a new impact. Currently the southbound approach consists of one through/left-turn lane and one through/right-turn lane. The mitigation will result in one right-turn lane, one through lane, and one through/left-turn lane. This proposed mitigation will require the removal of two metered parking spaces along Avalon Boulevard to allow for the right-turn lane and the restriping of the northbound approach to properly align with the reconfigured southbound approach. A conceptual drawing illustrating the feasibility of this mitigation is provided in Figure 12 of the traffic report prepared for this project (Appendix I).

UTILITIES

MM UT-1: ***Secondary Sewer Line Installation.***

Once the design and utility connections are finalized, the LAHD will build a secondary sewer line of sufficient capacity to support the nearest, largest sewer line. The construction of the secondary sewer line would be carried out within public right-of-way or existing City streets. This line will comply with the City's municipal code, and will be built under permit by the City Bureau of Engineering.

MM UT-2: ***Water Conservation and Wastewater Reduction.***

The LAHD and Port tenants will implement the following water conservation and wastewater reduction measures to further reduce impacts on water demand and wastewater flows.

a. The landscape irrigation system will be designed, installed, and tested to provide uniform irrigation coverage for each zone. Sprinkler head patterns will be adjusted to minimize over spray onto walkways and streets. Each zone (sprinkler valve) will water plants having similar watering needs (do not mix shrubs, flowers and turf in the same watering zone). Automatic irrigation timers will be set to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones will be adjusted seasonally, reducing watering times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run time will be adjusted to avoid water runoff, especially when irrigating sloped property. Sprinkler times will be reduced once drought-tolerant plants have been established.

b. Selection of drought-tolerant, low-water-consuming plant varieties will be used to reduce irrigation water consumption. For a list of these plant varieties, refer to *Sunset Magazine*, October 1988, "The Unthirsty 100," pp. 74–83, or consult a landscape architect.

c. The availability of recycled water will be investigated as a source to irrigate large landscaped areas.

d. Ultra-low-flush water closets, ultra-low-flush urinals, and water-saving showerheads must be installed in both new construction and when remodeling. Low flow faucet aerators will be installed on all sink faucets.

e. Significant opportunities for water savings exist in air conditioning systems that utilize evaporative cooling (i.e., employ cooling towers). LADWP will be contacted for specific information of appropriate measures.

f. Recirculating or point-of-use hot water systems will be installed to reduce water waste in long piping systems where

MM UT-3: ***Recycling of Construction Materials.***

Demolition and/or excess construction materials will be separated on site for reuse/recycling or proper disposal. During grading and construction, separate bins for recycling of construction materials will be provided on site.water must be run for a considerable period before heated water reaches the outlet.

MM UT-4: ***Recycled Content Materials Use.***

Materials with recycled content, such as recycled steel from framing and recycled concrete and asphalt from roadway construction, will be used in project construction. Wood chippers registered through the California Air Resources Board's Portable Equipment Registration Program will be used on site during construction, using wood from tree removal, not from demolished structures, to further reduce excess wood for landscaping cover.

MM UT-5: ***AB 939 Compliance.***

The LAHD and Port tenants will implement a Solid Waste Management Program including the following measures to achieve a 50% reduction of current waste generation percentages by the build out year of 2020 and ensure compliance with the California Solid Waste Management Act (AB 939).

a. Provide space and/or bins for storage of recyclable materials within the proposed project site. All garbage and recycle bin storage space will be enclosed and plans will show equal area availability for both garbage and recycle bins within storage spaces.

b. Establish a recyclable material pick-up area for commercial buildings.

c. Participate in a curbside recycling program to serve the new development.

d. Develop a plan for accessible collection of materials on a regular basis.

e. Develop source reduction measures that indicate the method and amount of expected reduction.

f. Implement a program to purchase materials that have recycled content for project construction and operation (i.e., lumber, plastic, office supplies).

g. Provide a resident-tenant/employee education pamphlet to be used in conjunction with available Los Angeles County and federal source reduction educational materials. The pamphlet will be provided to all commercial tenants by the leasing/property management agency.

h. Include lease language requiring tenant participation in recycling/waste reduction programs, including specification that janitorial contracts support recycling.

MODIFICATIONS TO OR ADDITIONAL MITIGATION MEASURES IN THE FINAL EIR

The following mitigation measures were either added to or modified in the Final EIR. New text is denoted by underlining while deleted text is denoted by ~~strikethrough~~.

MM AQ-6: ***Best Management Practices*****.**

The following types of measures ~~are required on~~ for construction equipment (including onroad trucks) will be used where applicable and feasible:

1. Use diesel oxidation catalysts and catalyzed diesel particulate traps
2. Maintain equipment according to manufacturers' specifications
3. Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use
4. Install high-pressure fuel injectors on construction equipment vehicles
5. Maintain a minimum buffer zone of 300 meters between truck traffic and sensitive receptors
6. Improve traffic flow by signal synchronization
7. Enforce truck parking restrictions
8. Provide on-site services to minimize truck traffic in or near residential areas, including, but not limited to, the following services: meal or cafeteria services, automated teller machines, etc.
9. Re-route construction trucks away from congested streets or sensitive receptor areas
10. Use electric power in favor of diesel power where available.
11. Provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow
12. Schedule construction activities that affect traffic flow on the arterial system for off-peak hours, to the extent possible
13. Provide dedicated turn lanes for movement of construction trucks and equipment on- and off site
14. Configure construction parking to minimize traffic interference

LAHD will implement a process by which to select additional BMPs to further reduce air emissions during construction. ~~The~~ LAHD will determine the BMPs once the contractor identifies and secures a final equipment list and project scope. ~~The~~ LAHD will then meet with the contractor to identify potential BMPs and work with the contractor to include such measures in the contract. BMPs will be based on Best Available Control Technology (BACT) guidelines and may also include changes to construction practices and design to reduce or eliminate environmental impacts.

MM BIO-2. ***Pile Driving Monitoring*****.**

A qualified biologist hired by the LAHD will be required to monitor the area in the vicinity of pile-driving activities for any fish kills during pile driving. If there are any reported fish kills, pile driving will be halted and the USACE and NMFS will be notified via the LAHD's Environmental Management Division. The biological monitor will also note (surface scan only) whether marine mammals are present within 100 meters of the pile driving and, if any are observed, temporarily halt pile driving until the observed marine mammals move beyond this distance.

MM NOI-1:

The following procedures will help reduce noise impacts from construction activities:

a) **Temporary Noise Barriers**. When construction occurs within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) will be located between noise-generating construction activities and sensitive receptors.

b) **Construction Hours**. Construction will be limited to between 7:00 a.m. and 6~~9~~:00 p.m. on weekdays; between 8:00 a.m. and 6:00 p.m. on Saturdays; and there will be no construction equipment noise anytime on Sundays ~~as prescribed by the City of Los Angeles Municipal Code~~. If extended construction hours are needed during weekdays under special circumstances, the LAHD and contractor will provide at least 72 hours notice to Banning's Landing Community Center. Under no circumstances will construction hours exceed the range prescribed by the City of Los Angeles Municipal Code.

c) **Construction Days.** Noise-generating construction activities will not occur on weekends or holidays unless critical to a particular activity (e.g., concrete work).

d) **Construction Equipment.** All construction equipment powered by internal combustion engines will be properly muffled and maintained.

e) **Idling Prohibitions.** Unnecessary idling of internal combustion engines near noise sensitive areas will be prohibited.

f) **Equipment Location.** All stationary noise-generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing noise sensitive land uses.

g) **Quiet Equipment Selection.** Quiet construction equipment will be selected whenever possible. Where feasible, noise limits established in the City of Los Angeles Noise Ordinance will be fully complied with.

h) **Notification.** Sensitive receptors including residences within 2,000 feet of the proposed Project site will be notified of the construction schedule in writing prior to the beginning of construction.

i) **Reporting**: The LAHD will clearly post the telephone number where complaints regarding construction-related disturbance can be reported.

MM TC-2: ***Reconfigure the southbound approach of Avalon Boulevard at the intersection of Avalon Boulevard and Anaheim Street.***

Prior to the initiation of Phase II construction, LAHD will ~~add~~ consult with LADOT. The consultation will review the details of adding a right-turn lane in the southbound direction or an alternative measure that achieves the same results and would not create a new impact. Currently the southbound approach consists of one through/left-turn lane and one through/right-turn lane. The mitigation will result in one right-turn lane, one through lane, and one through/left-turn lane. This proposed mitigation will require the removal of two metered parking spaces along Avalon Boulevard to allow for the right-turn lane and the restriping of the northbound approach to properly align with the reconfigured southbound approach. A conceptual drawing illustrating the feasibility of this mitigation is provided in Figure 12 of the traffic report prepared for this project (Appendix I).