



# INTER OFFICE MEMORANDUM

**TO:** Sabrina B. Landreth  
City Administrator

**FROM:** William Gilchrist  
Director, PBD

**SUBJECT:** Construction-Related Air Quality Plan  
for Southeast and Central  
Gateway sites at the  
Oakland Army Base

**DATE:** November 22, 2017

City Administrator  
Approval

Date

11/30/17

## RECOMMENDATION

Approve the construction-related Air Quality Plan (version dated October 16, 2017) for the Prologis development parcels located in the Southeast and Central Gateway areas of the Oakland Army Base subject to the following conditions:

1. Prologis shall inform the Bay Area Air Quality Management District and the California Air Resources Board when construction commences at each of these sites and provide contact information for a project representative at the site.
2. No operational activities at each of these sites shall commence until the City Administrator approves the Air Quality Plan for the operational phase of each of these sites.

## EXECUTIVE SUMMARY

Prologis, one of the developers of the Oakland Army Base redevelopment project, has prepared an Air Quality Plan to reduce potential air quality impacts during construction of the proposed trade and logistics warehouses or other uses that will be located on the Southeast and Central Gateway parcels. The mitigation measures for the project require City Administrator approval of the Air Quality Plan.

## BACKGROUND

The Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (“SCA/MMRP”) for the Oakland Army Base project contains requirements for reducing the potential environmental impacts of the project, including requirements for the following plans and strategies to reduce impacts related to air quality and trucking:

- Construction Management Plan (SCA AIR-1)
- Construction-Related Air Pollution Controls (SCA AIR-2)
- Truck Management Plan (Mitigation 4.3-7)
- Maritime and Rail-Related Emissions Reduction Plan (Mitigation 4.4-3b)
- Truck Diesel Emission Reduction Plan (Mitigation 4.4-4)
- Transportation Control Measures (Mitigation 4.4-5)
- Energy-Conserving Fixtures and Designs (Mitigation 4.4-6)
- Demonstration Projects (Mitigation 5.4-1)
- Parking and Transportation Demand Management (SCA TRANS-1)
- Construction Traffic and Parking (SCA TRANS-2)
- Traffic Control Plan – Hazardous Materials (Mitigation 4.3-13)

Mitigation Measure PO-1 (Stakeholder Review of Air Quality and Trucking Plans) requires the City to conduct a public process in the development and review of the air quality and trucking components of these plans to comply with the above requirements and requires City Administrator approval of these plans.

On December 5, 2013 the City Administrator approved the plan to comply with construction-related air quality requirements for the horizontal infrastructure phase of the project (e.g., new streets and utilities).

As the Army Base project is developed over time, individual developers of the project's vertical elements (e.g., new buildings and permanent activities) will submit plans to comply with these air quality mitigation measures. The first vertical development to be implemented is the trade and logistics warehouse by Prologis which is currently under construction at the Northeast Gateway<sup>1</sup> (also referred to as CE-1) at the corner of Maritime Street and Burma Road.

On October 2, 2016 the City Administrator approved the plan to comply with construction-related air quality requirements for construction at the Northeast Gateway site.

The second vertical development to be implemented will be at the Southeast and New Central Gateway sites where Prologis is proposing to construct two trade and logistics warehouses plus a shipping container storage facility. Prologis has submitted an Air Quality Plan for Construction that would apply to both of these parcels, the Southeast Gateway (also referred to as CE-2) and the New Central Gateway (also referred to as CC-1).<sup>2</sup>

On May 1, 2017 Prologis submitted an initial version of a plan to comply with air quality requirements during construction (referred to as the "Air Quality Plan") for CE-2 and CC-1. On May 9, 2017 City staff held a meeting to review this initial version with staff from the Alameda

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<sup>1</sup> The "Northeast Gateway" and "CE-1" are terms used to refer to the northern portion of the East Gateway area.

<sup>2</sup> The "Southeast Gateway" and "CE-2" are the terms used to refer to the southern portion of the East Gateway area which is a development site of approximately 14.5 acres. The "New Central Gateway" and "CC-1" are the terms used to refer to the area previously referred to as Central Gateway. The "New Central Gateway" is a development site of approximately 28 acres.

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County Public Health Department, Bay Area Air Quality Management District (BAAQMD), California Air Resources Board (ARB) and the Environmental Protection Agency (EPA). Input from the meeting including questions and recommendations on specific items were forwarded to Prologis.

On August 3, 2017 Prologis submitted a draft of the Air Quality Plan (see *Attachment A*) which responded to much of the input from the air quality agencies at the May 9 meeting. On August 4, 2017, the draft Air Quality Plan was released to stakeholders for the official public review period as required by Mitigation Measure PO-1; the official 17-day public review period was extended to 28 days to allow more time for review, from August 4 to September 1, 2017. The City received comments from the Alameda County Public Health Department and California Air Resources Board (see *Attachment B*). The comments are summarized and discussed in the “Key Issues” section below. On August 11, 2017 Prologis submitted the Construction Management Plan (CMP) which covers many elements of construction in addition to the Air Quality Plan. On August 24, 2017 the Construction Management Plan (CMP) was released to stakeholders for a 17-day public review period, though this is not required by Mitigation Measure PO-1.<sup>3</sup> The City received one comment letter on the CMP from the Alameda County Public Health Department (also included in *Attachment B*).

On August 23, 2017 a quarterly meeting attended by air quality stakeholders, including community-based organizations, community residents, and interested government agencies was held. Prologis made a presentation about how the Air Quality Plan (Aug. 3, 2017 version) had been refined and strengthened compared the Air Quality Plan for their first construction site at the Northeast Gateway approved in October 2016, and how it had been revised since the version reviewed by City and air district staff on May 9, 2017.

Following the end of the public-review period, City staff met with Prologis to discuss enhancements to the Air Quality Plan to address the written comments from the air quality agencies and comments stated at the quarterly stakeholder meeting. In response to these comments, Prologis submitted a technical analysis of some of the comments, prepared by Mitchell Air Quality consultant dated October 6, 2017, as well as revisions to the Air Quality Plan. The latest version of the Air Quality Plan, dated October 16, 2017, is attached (see *Attachment C*) along with City staff responses to the public comments on the previous version of the Plan. (see *Attachment D*).

## **KEY ISSUES**

This is the third Air Quality Plan for construction that the City has reviewed for the Army Base project as summarized in the “Background” section of this memorandum. This Plan incorporates the enhancements that were included in the previous plans, and because of that, the amount and

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<sup>3</sup> The initial draft Air Quality Plan submitted on August 3, 2017 only pertained to compliance with air quality requirements as required by the project mitigation measures. However, due to stakeholder interest in construction issues related to other topics besides air quality, Prologis submitted its entire Construction Management Plan – which addresses other topics in addition to air quality.

scope of the public comments received about this Plan were limited. Public comments received on this draft Air Quality Plan focused on three subjects: removing or clarifying confusing statements; requiring the cleanest construction equipment; and limiting the age of delivery trucks that will serve these construction sites. These items are further discussed below. Also, refer to the responses to public comment letters prepared by City staff (see *Attachment D*) which contain detailed response to the public comments.

- **Off-Road Construction Equipment:** To reduce emissions from off-road construction equipment, the use of late-model equipment with low-emission Tier 4 engines is required. If such equipment is not available, Tier 3 engines can be used but only under circumstances specifically outlined in the Air Quality Plan which require the contractor to document the unavailability of this equipment within their own fleet and to document their unsuccessful search for such equipment from at least three equipment rental agencies in the area.

Additionally, the Plan requires that the two most utilized pieces of construction equipment per job site, meaning the equipment projected to have the most utilization hours, must have Tier 4 engines. The contractor shall submit an estimated equipment-hour projection to the City with verification that Tier 4 equipment will be used for the two pieces of equipment projected to have the most utilization hours for each of these construction sites.

The Air Quality Plan provides additional details on equipment compliance and monitoring. For example, contractors can complete the required reporting of off-road equipment using the California Air Resources Board's Diesel Off-Road Online Reporting System ("DOORS") and all off-road equipment must be properly reported and labeled. The requirement added by the City Administrator to the previous Air Quality Plan for construction of the Northeast Gateway – that Prologis submit the list of equipment brought on-site and the corresponding engine tier - is included in this Plan such that a condition of approval is not required.

- **Electric Power:** Portable construction equipment will be powered by electricity from the project site's grid instead of diesel-powered generators thereby reducing emissions.
- **Electric Construction Equipment:** All scissor lifts and small construction tools will be electric, not diesel powered, thereby reducing emissions.
- **Idling Reduced for Construction Equipment and Construction Delivery Trucks:** Trucks delivering to the construction sites as well as diesel construction equipment will be prohibited from idling for more than two minutes. The statewide Air Resources Board regulation is a five-minute maximum idle time, so this Air Quality Plan requires an idling time which is 60% more restrictive than the statewide regulation.
- **Compliance:** The Air Quality Plan states that the entirety of the Plan will be provided to bidders so that the requirements of the Plan are included in all bids received and will be

included in the construction contracts that will be awarded by Prologis. This was added to the Plan to address a condition of approval from the previous air quality plan, for construction of Prologis' Northeast Gateway parcel, which required that Prologis obligate its contractors to comply with the Air Quality Plan through its construction contracts. This requirement was included in the current Plan, such that a condition of approval is not needed. The Air Quality Plan also states that a Compliance Manager that will monitor and facilitate implementation of construction-related environmental requirements. All contractors will maintain daily logs that can be submitted to the Compliance Manager. The Compliance Manager will complete training courses offered by the California Air Resources Board for emissions evaluation.

- Requirements before Operational Phases: The air quality mitigation measures for the Army Base address both the construction phase and the operational phase of the project. The Air Quality Plan which is the subject of this memo covers the construction phase; Prologis will seek approval of an Air Quality Plan for the operational phase of each building at a later date, prior to operation of each facility. The recommendation contained in this memorandum to approve this Air Quality Plan for construction includes a condition that "no operational activities at each of these sites shall commence until the City Administrator approves the Air Quality Plan for the operational phase of each of these sites." This condition of approval is intended to address a concern previously expressed by the public that the Air Quality Plan for operations need to be tied to the leases for each development parcel. The City will have a 66-year lease with Prologis for the CE-2 and CC-1 parcels and this lease will require compliance with all applicable environmental requirements (which includes all mitigation measures). Therefore, a separate condition of approval is not necessary to require approval of the operational Air Quality Plan prior to Prologis entering into a sublease with a tenant.

An additional recommendation from the public was to restrict the age of the delivery trucks which will serve these construction sites such that all delivery trucks must have a 2010 or newer engine. Staff looked into the feasibility of implementing this recommendation, as did Prologis (see *Attachment E*). Trucks are regulated at a statewide level by the California Air Resources Board (CARB) under what is officially called the "Truck and Bus Rule." Imposing a requirement different from this statewide regulation, for trucks delivering to two construction sites, was not found to be practically feasible based on the complexity of construction practices. To require rental agencies, delivery companies, concrete companies and other parties to hold aside a portion of their fleet to deliver to these construction sites was determined not practically feasible. The CARB statewide Truck and Bus Rule will apply to all the medium and heavy-duty trucks which will deliver to these construction sites and contractors will be required to submit a Certificate of Compliance with this Statewide Rule, per Section 3.3d of the Plan. Refer to Attachments D, E and F for more detail.

## CONCLUSION

The stakeholder review requirements for the proposed Air Quality Plan have been satisfied and the Air Quality Plan has been revised in response to comments received from the public. Staff

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believes the Air Quality Plan is adequate and recommends that the City Administrator approve the Plan.

Pursuant to Mitigation Measure PO-1 (Stakeholder Review of Air Quality and Trucking Plans), following the City Administrator's approval of the Air Quality Plan staff will make an informational presentation to the City Council about the Air Quality Plan.

Please contact Patricia McGowan, Environmental Coordinator for the OAB at (510) 238-3588, if you have any questions.



WILLIAM GILCHRIST

Director, Planning and Building Department

Reviewed by:

Darin Ranelletti

Deputy Director

Planning and Building Department

Prepared by:

Patricia McGowan

Environmental Coordinator for the OAB

Planning and Building Department

**Attachments:**

- A. *Draft Air Quality Plan for Construction of CE-2 and CC-1, prepared by Prologis. (titled "Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2: Southeast Gateway and CC-1: New Central Gateway parcels; dated August 3, 2017)*
- B. *Public Comment Letters Received in Response to Draft Air Quality Plan for Construction of CE-2 and CC-1 (the version dated August 3, 2017).*
- C. *Revised Air Quality Plan for Construction of CE-2 and CC-1, prepared by Prologis (titled "Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2: Southeast Gateway and CC-1: New Central Gateway parcels; dated October 16, 2017)*
- D. *City response to public comment letters, dated October 30, 2017.*
- E. *Letter from Mitchell Air Quality consultant, dated October 6, 2017.*
- F. *Summary of the California Air Resources Board Truck and Bus Rule.*
- G. *Construction Management Plan for Construction of CE-2 and CC-1, dated October 23, 2017.*

## **Attachment A**

**Draft Air Quality Plan for Construction of CE-2 and CC-1**, prepared by Prologis  
(titled "Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2: Southeast Gateway  
and CC-1: New Central Gateway parcels; dated August 3, 2017)



# Prologis Oakland Global Logistics Center

*Prepared For:*

**City of Oakland  
Planning & Building Dept.  
250 Frank Ogawa Plaza  
Oakland, CA 94612**

*Prepared By:*

**Prologis  
3353 Gateway Blvd.  
Fremont, CA 94538  
+1 510 656 1900 Phone  
+1 510 656 4320 Fax**

[www.prologis.com](http://www.prologis.com)

## **Diesel Emissions Reduction and Air Quality Plan for Construction of**

**CE-2: Southeast Gateway  
Parcel**

**CC-1: New Central Gateway  
Parcel**

*Submitted on:*

v0: May 1, 2017  
v1: August 3, 2017



**PROLOGIS®**

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# 1. PROJECT OVERVIEW & SITE PLAN

This Construction Air Quality (AQ) Plan covers the remaining Prologis projects, to be built on the Southeast Gateway and New Central Gateway of the Oakland Army Base Redevelopment site. See Fig. 1 below, showing the area and phase breakdown, which are further detailed in narrative below. The area under this AQ Plan is outlined in red.

The Southeast Gateway is Phase 2 of the Prologis projects, and consists of a 14.1-acre parcel located at the Southeast corner of Maritime St. and Burma Rd. Prologis is proposing to develop a 231,000 sf spec trade and logistics building and associated site improvements on this site.

The New Central Gateway site is Phase 3 of the Prologis projects, and consists of a 27-acre parcel located at the Southwest corner of Maritime St. and Burma Rd. Prologis plans to develop this site in two phases: SubPhase A) 16.5 acres, the westerly portion, as a container depot yard for Conglobal; and SubPhase B) 11.1 acres, the easterly portion, as a spec trade and logistics building, approximately 188,000 sf, with associated site improvements.

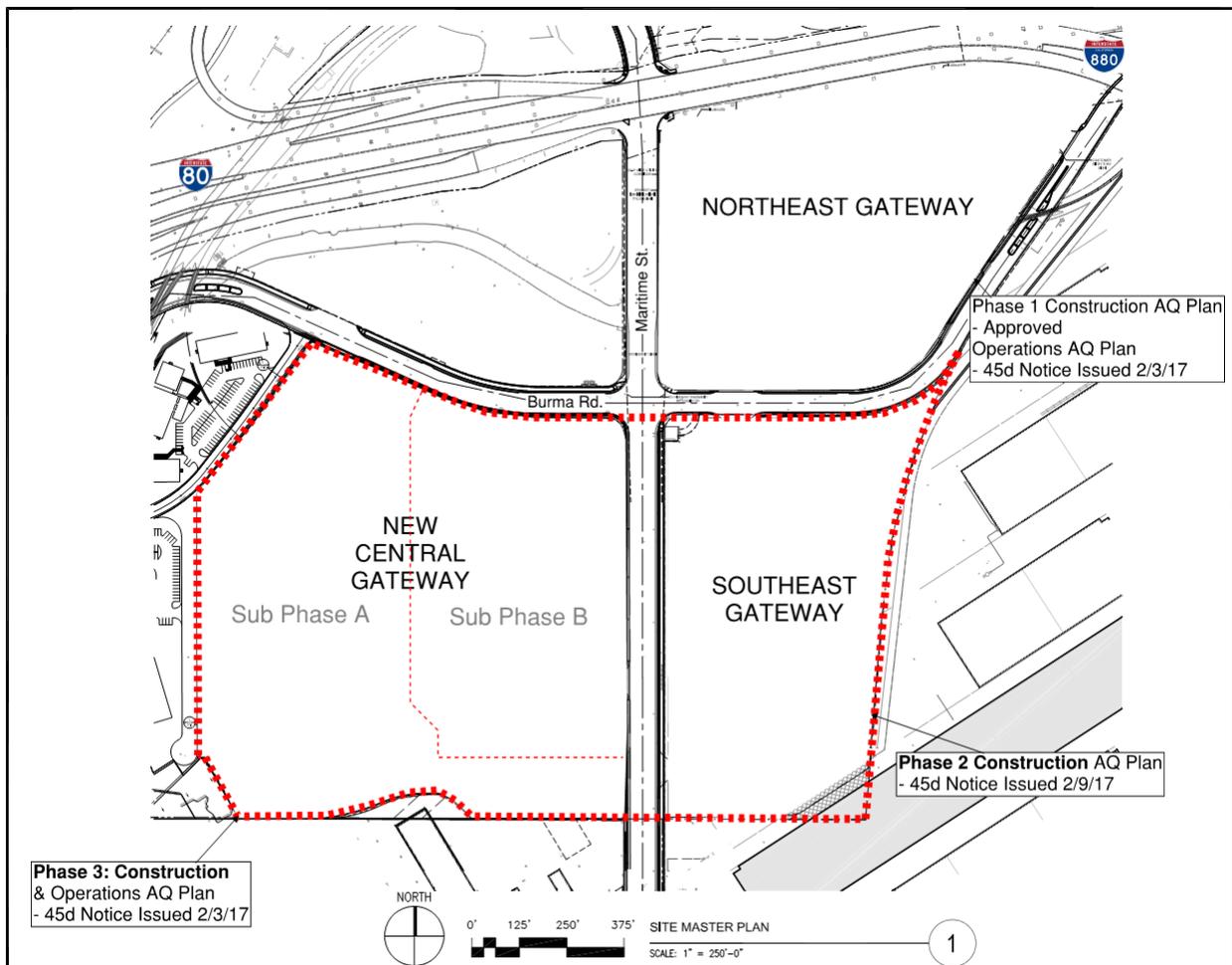


Figure 1 - Prologis Master Site Plan

## **2. SCA AIR-1: Construction Management Plan**

### **2.1 Requirements**

- a. The project applicant shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan (CMP) that identifies the conditions of approval and mitigation measures to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval and mitigation measures.

### **2.2 CMP Response**

- b. Prologis will submit the CMP to the City of Oakland Planning and Building Departments during the plan check review process for site or building permits. Similar to the Northeast Gateway site, the CMP will include all of the AQ elements included this Construction AQ Plan.

## **3. SCA AIR-2: Construction Related Air Pollution Controls**

### **3.1 Requirements**

- a. The entirety of this AQ Plan will be provided to all bidders on the Project, so that it is included in any bids received, and will be included in contracts let.
- b. During Construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD).
- c. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- d. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- e. Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- g. Requirement: Limit vehicle speeds on unpaved roads to 15 miles per hour.
- h. Idling times on diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the

- maximum idling time to three minutes (40% more restrictive than the five minutes as required by Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.
- i. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be shall be minimized either by shutting equipment off when not is use or reducing the maximum idling time to three minutes and fleet operators must develop a written idling policy (as required by Title 13, Section 2449 of the California Code of Regulations.)
  - j. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
  - k. Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.
  - l. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
  - m. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
  - n. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
  - o. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
  - p. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
  - q. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity.
  - r. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
  - s. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

- t. All trucks and equipment, including tires, shall be washed off prior to leaving the site. Tire washing station will be included at each construction entrance. Water will be contained on-site and reused where possible.
- u. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- v. Site accesses to a distance of 50 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel over filter fabric, consistent with the California Stormwater Quality Association's (CASQA) Best Management Practice (BMP) Handbook, Stabilized Construction Entrance/Exit Detail TC-1, as authorized by the National Pollutant Discharge Elimination System (NPDES) Permit administered by the EPA.
- w. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449 of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet Emissions and Performance Requirements one year in advance of any fleet deadlines. The project applicant shall provide written documentation that the fleet requirements have been met.
- x. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).

### **3.2 Dust Control Mitigation Plan**

- a. Use water trucks to water exposed surfaces during construction activities at least twice daily or more frequently if winds exceed 15 mph. Suspend excavation, grading, and demolition activities when average wind speed exceeds 20 mph. Maintain minimum soil moisture of 12% as indicated by laboratory samples or a moisture meter. Use reclaimed water for dust mitigation whenever feasible. Monitoring process will include: 1) Checking weather reports daily prior to starting construction activity to prepare for wind speeds as necessary. 2) Monitoring weather and dust as day progresses by setting up an anemometer wind speed sensor and checking periodically. 3) Increasing dust control watering as wind speeds increase to maintain minimum 12% moisture content, or to a point at which the earth becomes tacky.
- b. Cover truck loads with tarpaulins or keep loads 2 feet below the sideboard of the truck bed to eliminate wind contact with soil or other loaded materials.

- c. Require all operators tracking dirt/mud onto public roadways to have a wet power vacuum sweeper present daily during these activities and remove tracked dirt/mud at the end of each day or more frequently if needed.
- d. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders.
- e. As soon as practical and prior to rainy season, cover all access roads and/or permanent roads and building pads with aggregate or asphalt concrete to mitigate tracking of dirt and/or mud offsite.
- f. Cover all inactive soil material stockpiles with plastic sheeting or non-toxic soil binders. Water all active stockpiles to maintain 12% moisture.
- g. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- h. Replant vegetation in disturbed areas as quickly as possible.
- i. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- j. Draft and implement a Project SWPPP. The onsite QSP (TBD) will monitor runoff before, during, and after rain events. Deficiencies will be logged and corrected immediately. Inactive construction areas will be properly addressed with BMPs to eliminate erosion. Required BMPs will be outlined in the SWPPP and enforced with reporting and inspection.
- k. Post signage and enforce 15 mph speed limit requirement for unpaved roads (Exhibit A).
- l. Post signage and enforce dust complaint reporting requirement (Exhibit B). Take corrective action to remedy complaints within no more than 48 hours after receiving the complaint.
- m. The Project Dust Compliance Manager will monitor and facilitate the implementation of mitigation measures. The Contractor will maintain Daily Inspection Logs throughout the Project.

- n. Limit inactive construction areas (previously graded areas inactive for one month or more) by installing planting, finished hardscape, and paving as soon as possible.
- o. Designate onsite Superintendent (identity TBD) as the person to monitor the dust control program and to order increased watering, as necessary.
- p. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- q. Replant vegetation in disturbed areas as quickly as possible.
- r. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- s. Tire washing station will be included at each construction entrance and all equipment, including tires will be washed off prior to leaving the site.
- t. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders
- u. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449. All written documentation that fleet requirements have been met will be submitted to the City of Oakland for record.
- v. Install coatings meeting VOC content requirements specified in Project Specification.

### **3.3 Emission Control Mitigation Plan**

- a. All contractors will be encouraged to use Tier 4 off-road engines for all equipment brought to the site, as available. At a minimum, contractors will be required to use Tier 3 off-road engines for all equipment brought on-site. If Contractor must rent equipment, the Contractor shall contact a minimum of three (3) rental agencies in the Bay Area. If Tier 4 equipment is not available, Tier 3 equipment must be provided. Additionally, the two (2) most used pieces of equipment (equipment projected to have the most utilization hours), shall be Tier 4. Contractors shall provide Reporting and Labeling documentation required and enforced by CARB. In addition, each contractor shall submit specific list of equipment being proposed for this project site. Compliance officer to use this documentation to verify equipment meets requirement meets either Tier 4 or Tier 3 engine requirement, and ensure that equipment with Tier 1 or Tier 2 engines are not delivered or used on the site.

- b. All contractors will be encouraged to use post 2010 model water trucks, as available.
- c. Fuel being used will be compliant with California standards and consistent with regulatory requirements for Ultra Low Sulfur Diesel (USLD). Use late model (defined as Tier 4, manufactured post 2008, or Tier 3, manufactured post 2006) heavy-duty diesel-powered equipment, as well as zero and near-zero emission equipment at the Project Site to the extent that it is readily available in the San Francisco Bay Area.
- d. Utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available and cost effective in the San Francisco Bay Area.
- e. All scissor lifts and small tools will be electric. Use low-emission diesel fuel for all heavy-duty diesel-powered equipment.
- f. Rely on the electricity infrastructure surrounding the construction sites rather than electrical generators powered by internal combustion engines to the extent feasible. Temporary electric service from existing infrastructure will be provided on the job-site for contractors to use for small tools and equipment.
- g. Keep all construction equipment properly tuned by a certified mechanic in accordance with the manufacturer's specifications. Operators will provide the Contractor with written documentation of equipment maintenance for all equipment to be used onsite. These maintenance logs shall be made available upon request.
- h. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449 (CARB Off-Road Diesel Regulations). All written documentation that fleet requirements for equipment to be used onsite have been met will be submitted to the City of Oakland for record.
- i. The CARB Off-Road Diesel Vehicle Regulations will be enforced on this project using the requirements currently in effect and enforced by CARB. All emission standards and related requirements set forth in the CARB Regulations apply on the schedules set forth in the Regulations. <https://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

### **3.4 Idling Policy**

- a. Equipment operators must limit their unnecessary idling to 5 minutes. There are exceptions for vehicles that need to idle to perform work (such as a cranes providing hydraulic power to the boom), vehicles being serviced, or in a queue waiting for work. See Exhibit C for signage describing the Project Idling Policy.

### **3.5 Reporting and Labeling**

- a. Sellers of any equipment to be used on the Project must provide disclosure of the Off-Road regulation (exact language provided in the regulation) on the bill of sale or invoice, and must keep records that the disclosure was provided for three years after the sale. The seller must also report the vehicle sale to CARB via DOORS within 30 days of the sale.
- b. Reporting can be completed using DOORS (Diesel Off-road online Reporting System), which is CARB's free online reporting tool for the Off-Road regulation. Additionally, hard copy reporting forms may be submitted. All equipment providers must review and update their information by March 1 of each year that annual reporting is required. Large fleets (fleet size > 5,000 HP) must report annually from 2012 to 2023, medium fleets (2,501 HP < fleet size < 5,000 HP) from 2016 to 2023, and small fleets (fleet size < 2,500 HP) from 2018 to 2028. For each annual reporting date, a fleet must report any changes to the fleet, hour meter readings (for low-use vehicles and vehicles used a majority of the time, but not solely, for agricultural operations), and also must submit the Responsible Official Affirmation of Reporting (ROAR) form. All of these items should be submitted using DOORS. In the event that a fleet cannot, or does not want to meet the fleet average emissions target in a given year, it may instead choose to comply with the BACT (Best Available Control Technology) requirements, which requires installation of VDECS (Verified Diesel Emission Control Strategies), ie. exhaust retrofits, on a certain percentage of their fleet.
- c. All fleet equipment used onsite shall be properly labeled. After a fleet reports their vehicles to CARB, each vehicle is assigned a unique Equipment Identification Number (EIN). The fleet must label its vehicles within 30 days of receiving EINs. Labeling provisions of the Off-Road regulation were amended in December 2010 to require labels on both sides of each vehicle. Additionally, fleets reported as 'captive attainment area fleets' must have labels with a green background instead of red.

### **3.6 Restrictions on Adding Vehicles**

- a. The Off-Road regulation restricts fleets from adding vehicles with older tier engines. Contractors adding fleet equipment to be used on the Project shall comply with the following restrictions at a minimum of one year in advance of dates listed below.

- b. Ban on adding Tier 0s – Effective January 1, 2014, a fleet may not add a vehicle with a Tier 0 engine to its fleet. (Note no Tier 0 engines will be permitted onsite).
- c. Prohibition on adding Tier 1s – Also effective January 1, 2014, for large and medium fleets, and January 1 2016 for small fleets, a fleet may not add any vehicle with Tier 1 engine. The engine tier must be tier 2 or higher. (Note no Tier 1 engines will be permitted onsite).
- d. Prohibition on adding Tier 2s – Beginning January 1, 2018, for large and medium fleets, and January 1, 2023, for small fleets, a fleet may not add a vehicle with a Tier 2 engine to its fleet. The engine tier must be Tier 3 or higher. (Note no Tier 2 engines will be permitted onsite).

### **3.7 Enforcement**

- a. Signage will be posted notifying Contractors that all equipment onsite is subject to the requirements of CCR Title 13, Section 2449 (CARB Off-Road Diesel Regulations) and must meet Emissions and Performance Requirements one year in advance of any fleet deadlines and enforced with inspection and reporting.
- b. The Project Compliance Manager will monitor and facilitate the implementation of mitigation measures. Any off-road equipment that exhibits conditions outside of the manufacturer’s specifications, or emits excessive visible smoke, shall be prohibited from operating on-site. All contractors will be subject to this provision and will maintain Inspection Logs daily throughout the project. Compliance Manager will complete online ARB courses for Visible Emissions Evaluation to enhance ability to ensure fleets are in compliance with CARB Regulations.
- c. Post signage limiting truck and equipment idling time to five minutes or less, in accordance with CCR Title 13, Section 2485 & 2449. (Exhibit C)
- d. A program to enforce and monitor vehicle compliance will be developed to ensure that vehicles associated with the Project comply with applicable local, regional, state, and federal air quality requirements. The program will include a gate check component to control vehicle access to and from the Project site and may include a voluntary decal program (i.e., “sticker program”) whereby vehicles determined to be in compliance with Project requirements will be issued an exterior decal to assist in identifying compliant vehicles.

Exhibit A – Speed Limit Sign



**Exhibit B – Complaint Sign**

**ATTENTION**

**PERMITTED CONSTRUCTION HOURS:  
Monday-Friday 7AM-7PM**

There will be no work on site outside of permitted hours without written permission from City of Oakland.

**FOR CONCERNS REGARDING DUST,  
CONSTRUCTION NOISE, EROSION OR ANY  
CONSTRUCTION ACTIVITY ON THIS PROJECT  
PLEASE CONTACT:**

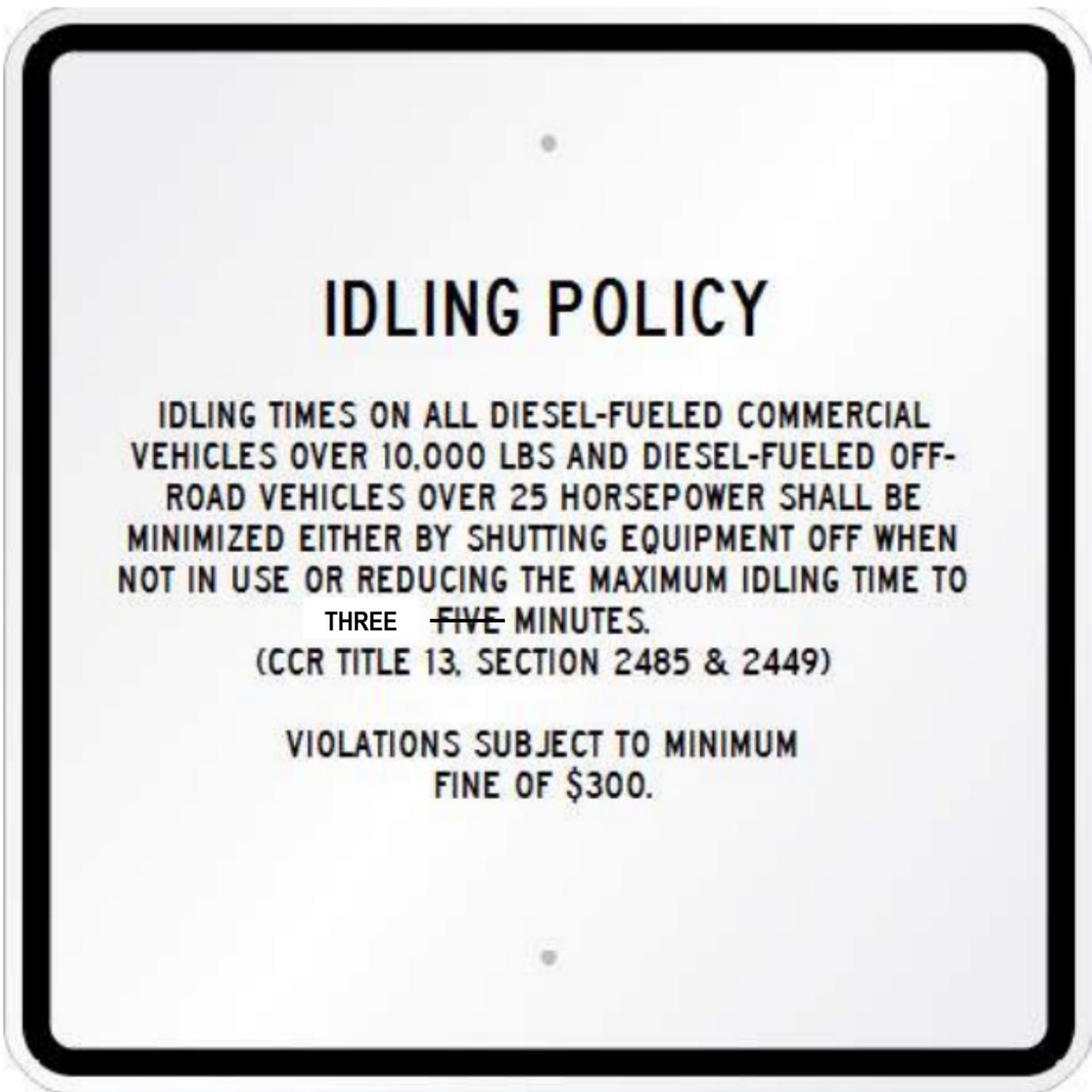
**During Construction Hours – TBD  
After Construction Hours -TBD**

**CITY OF OAKLAND CODE COMPLIANCE:  
(510) 238-3381**

**OAKLAND POLICE DEPARTMENT 24 HR LINE:  
(510) 777-3333**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT:  
(800) 334-6367**

**Exhibit C – Idling Policy Sign**



## **Attachment B**

### **Public Comment Letters**

Received in Response to Draft Air Quality Plan for Construction of CE-2 and CC-1  
(the version dated August 3, 2017)



# Air Resources Board



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

**Mary D. Nichols, Chair**  
1001 I Street • P.O. Box 2815  
Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)

**Edmund G. Brown Jr.**  
Governor

August 30, 2017

Ms. Patricia McGowan  
Environmental Coordinator  
City of Oakland  
Planning and Building Department  
250 Frank H. Ogawa Plaza, Suite 3315  
Oakland, California 94612

Dear Ms. McGowan:

Thank you for providing the California Air Resources Board (CARB) the opportunity to comment on the Diesel Emissions Reduction and Air Quality Plan (AQ Plan or Plan) for Construction of CE-2: Southeast Gateway Parcel and CC-1: New Central Gateway Parcel (Project Site or Site). The AQ Plan provides an opportunity to ensure the cleanest possible construction practices and equipment are utilized while developing the Project Site. Eliminating and minimizing air quality impacts from the construction of this project is vital to protecting the health of nearby communities.

The AQ Plan outlines the requirements and mitigations that Site contractors will comply with to achieve emission reductions generated by on Site construction activity. CARB previously submitted comments on May 31, 2016, on the Northeast Gateway Construction Management Plan, and we acknowledge that the City of Oakland (City) staff modified several measures in this Plan based on those comments. However, CARB staff finds that several requirements in the AQ Plan need further clarification and strengthening in order to ensure proper implementation and that the Plan achieves the less-than-significant impacts determination made in the 2012 Oakland Army Base Project Initial Study/Addendum. These clarifications or strengthened requirements will help ensure that construction of the Project Site ultimately avoids or substantially lessens the significant and unavoidable impact to air quality identified in the 2002 Final Environmental Impact Report, by requiring all feasible<sup>1</sup> mitigation measures be incorporated (see Cal. Pub. Resources Code § 21081; 14 CCR § 15126.2(b).

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<sup>1</sup>For the purposes of CEQA, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. (California Code of Regulations, title 14, section 15364.)

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

To that end, CARB staff recommends the following clarifications or modifications:

1. Section 3.1.w.: Reference to CARB's Regulation for In-Use Off-Road Diesel Fueled Fleets (Off-Road Regulation) for performance requirements one year in advance of the regulation is confusing and irrelevant since the City is specifying specific tiers of equipment to be used on Site. Such language should be omitted from future air quality or construction plans subject to Mitigation PO-1.
2. Section 3.3.a.: This measure indicates that all contractors will be encouraged to use Tier 4 off-road engines for all equipment brought on Site, as available, and at minimum Tier 3 off-road engines. In addition, only the two most used pieces of equipment on Site are required to be Tier 4. To achieve the most diesel emission reductions from off-road equipment, the City should require that all off-road construction equipment used on Site, greater than 25 horsepower, meet U.S. EPA Tier 4 emission standards. Tier 4 equipment became available as early as 2008 for some horsepower categories, with the rest being made available in the 2012 timeframe. Therefore, CARB believes it is very unlikely there will be a shortage of Tier 4 equipment, and that it is technically feasible to require all Tier 4 equipment be used on Site. In addition, the City should require that Prologis enter into contractual agreements with construction companies capable of meeting this requirement. This would increase the enforceability of this mitigation and minimize potential construction delays as a result of subcontractors seeking Tier 4 rental equipment once construction has started.
3. Section 3.3.b.: This measure indicates that all contractors will be encouraged to use post-2010 model water trucks, as available. To be most protective of the local community from construction diesel emissions, the City should strengthen this measure to require, not encourage, that all water trucks and all other heavy-duty diesel trucks greater than 14,000 gross vehicle weight rating used on Site be equipped with 2010 or newer engines. Emissions from truck traffic (including construction trucks) severely impact the surrounding communities, and the City should take additional steps beyond CARB regulatory requirements and require the use of 2010 or newer engines. In a memo to "Staff of the Air Quality Agencies and Stakeholders", dated August 15, 2017, the City stated that "the trucks...are all independent truckers who are not hired by the general contractor...such a requirement imposed by [Prologis] on the general contractor/sub-contractors would be unenforceable and unrealistic." CARB disagrees with this statement, and believes it can be enforceable by requiring that Prologis enter into contractual agreements with construction

companies capable of meeting this requirement. In addition, an independent trucker could easily supply a print out of the truck's information (including engine model year and license plate) currently reported in CARB's Truck and Bus Reporting System (TRUCRS) and a Certificate of Reported Compliance in order to verify it has a 2010 or newer engine and is part of a compliant fleet.

4. Section 3.3.d.: This measure indicates that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) will be utilized on Site to the extent that the equipment is readily available and cost-effective in the Bay Area. For enforceability, the City should require that Prologis enter into contractual agreements with construction companies capable of meeting this requirement.
5. Section 3.4.a.: Sections 3.4.h. and 3.4.i. limit idling to 3 minutes. However, this section states that "equipment operators must limit their unnecessary idling to 5 minutes." CARB believes this was most likely an error, and therefore should be corrected to limit idling to 3 minutes.
6. Sections 3.5.a. and b.: These sections are reiterating the requirements for selling and reporting off-road vehicles per CARB's Off-Road Regulation. CARB recommends removing these sections, as they are paraphrasing the requirements and could contain inaccuracies and cause confusion for off-road fleets. If the City includes information on reporting and labeling for off-road vehicles, direct fleets to the website for the Off-Road Regulation, available at: [www.arb.ca.gov/ordiesel](http://www.arb.ca.gov/ordiesel).
7. Section 3.5.c.: CARB recommends removing the language paraphrasing the labeling requirements of the Off-Road Regulation. Instead, this section should point to the regulation language, by stating: "All fleet equipment used on Site shall be properly reported and labeled, as required per CCR Title 13, Section 2449 (CARB's Off-Road Regulation)."
8. Section 3.6: This section, in general, describes components of CARB's Off-Road Regulation regarding adding older equipment to a fleet. Similarly to comment 1, above, including this information is confusing. The adding vehicles requirements are irrelevant, since the City is specifying specific tiers to be used on site. Such language should be omitted from future air quality or construction plans subject to Mitigation PO-1.

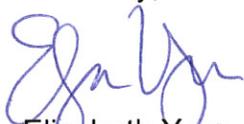
Ms. Patricia McGowan  
August 30, 2017  
Page 4

9. Section 3.7.a.: Again, meeting the requirements of the Off-Road Regulation one year in advance is irrelevant, therefore signage indicating this requirement is not needed.
10. Section 3.7.c.: This section refers to Exhibit C, which shows a sign stating that idling must be limited to three minutes or less. However, the language in this section references limiting idling to five minutes or less. This language should be corrected to say three minutes or less, which makes it consistent with the referenced Exhibit C.

CARB staff believes our recommended changes will further reduce harmful diesel emissions from the Site construction activities and reduce impacts to the nearby communities. In addition, we understand that the AQ Plan relates solely to the construction activities at the Project Site and that other plans for operations are forthcoming. We look forward to engaging on those plans as well, and hope that the City will commit to releasing the most robust, health protective plans possible for this and future projects. We are available to provide further assistance or clarify our comments as needed.

If you have questions, please contact Robbie Morris, Air Pollution Specialist, at (916) 327-0006 or [robbie.morris@arb.ca.gov](mailto:robbie.morris@arb.ca.gov).

Sincerely,



Elizabeth Yura, Chief  
Freight Activity Branch  
Transportation and Toxics Division

cc: See next page

Ms. Patricia McGowan  
August 30, 2017  
Page 5

cc: Ms. Margaret Gordon  
Co-Director  
West Oakland Environmental  
Indicators Project  
349 Mandela Parkway  
Oakland, California 94607

Brian Beverage  
Co-Director  
West Oakland Environmental  
Indicators Project

Mr. Richard Grow, Lead  
Environmental Justice Workgroup  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street, ENF-4-2  
San Francisco, California 94105

Ms. Anna Lee  
Work Group Coordinator  
Alameda County Public Health Department  
1000 Broadway, Suite 500  
Oakland, California 94607

Mr. Dave Vintze  
Air Quality Planning Manager  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109



This document was received via e-mail from Anna Lee  
Alameda County Public Health Department  
regarding the **Diesel Emissions Reduction and Air Quality Plan for Construction** of  
the Southeast Gateway Parcel (CE-2) and New Central Gateway Parcel (CC-1)  
at the Oakland Army Base

August 31, 2017

Dear Pat:

Thank you for the opportunity to comment on the Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2 Southeast Gateway Parcel and CC-1 New Central Gateway Parcel (Plan). Thank you also for the opportunity to meet with you and Darin Ranelletti on May 9, 2017 to review a preliminary draft of the Plan. The follow-up summary table of comments and changes to the Prologis Construction Air Quality plan that City staff produced helped in tracking these complex technical issues.

The Prologis Construction Air Quality plan presents both an opportunity to engage the community at large on air quality issues and sets the path towards utilizing the cleanest engines and equipment at the Oakland Army Base. As you know, there are historical and present day environmental challenges burdening the West Oakland community that contribute to adverse cumulative health impacts. Improving both the engagement process and identifying strong strategies to reduce and prevent air pollution ensures that adequate implementation of the MMRPs and supports a vision towards equitable health outcomes.

1. SCA AIR-1 - Construction Management Plan

- a. The City and Prologis staff clarified in the August 23rd, 2017 Stakeholder meeting that the Construction Management Plan includes things like noise, haul routes, hours of operation, fire hydrant and emergency services and is part of PO-1 of the MMRP. These are issues that pertain to public health and is of interest to the public. For the future, I recommend sending these plans out jointly with the Construction Air Quality Plans so that the public can have a fully-informed picture of the entire construction phase and a less cumbersome process of tracking and responding in a streamlined comment period.
- b. Furthermore, the City should consider creating an overarching Plan that lays out baseline requirements and policies to promote public health for the Oakland Army

Base. This would be an opportunity to create a strong vision and goals around improving air quality and community health and lay out clear expectations for future development that can later be tailored to the specific land uses and tenants. It would also help with streamlining the engagement process.

2. Applicable parties - Sometimes the Plan includes language that says, “Require all operators...” but for other measures, Prologis simply lists the emissions control strategy. The Plan needs to specify a responsible party either in the specific measure or in an introductory paragraph to a section.
  - a. It is not clear how all Sub-contractors and Operators will be brought up to speed on all the relevant requirements in this Plan. Prologis should include language that specifies how Operators will be educated on the requirements, such as education at daily tailgate meetings and/ or having them sign a log indicating that they have been updated on the relevant mitigation measures and requirements.
3. SCA AIR-2 - Construction Related Air Pollution Controls
  - a. 3.1.h and i - The current Construction Air Quality Plan was strengthened to a commitment to a 3 minute idling limit for diesel-fueled commercial vehicles over 10,000 lbs and off-road vehicles over 25 horsepower. While this is beyond the state regulation and a step in the right direction, 2 minute idling limit is the best practice published in BAAQMD’s “Planning Healthy Places” document. Also, as noted in the August 23 Air Quality Stakeholder meeting, the idling limit needs to be made consistent throughout the document, including the Idling Policy section 3.4.a and Enforcement section 3.7.c. Both sections currently specify 5 minutes.
4. Emission Control Mitigations
  - a. Section 3.3.a - This section was strengthened by including language to encourage Tier 4 off-road engines; requiring the use of Tier 3; requiring Sub-contractors to call at least 3 rental agencies for the Tier 4 equipment first and utilizing Tier 4 engines for the two pieces of equipment used the most. The City should require the use of Tier 4 engines for all off-road engines to achieve the strongest mitigations possible.
  - b. Section 3.3.b - On-road trucks - Language in this section encourages the use of 2010 model water trucks. To be more health protective, the City should require a

commitment to model year 2010 or newer on-road trucks (including concrete, water and delivery trucks).

- c. Section 3.3.e and 3.3.f - These sections say that scissor lifts and small tools will be electric and the use of low-emission diesel fuel for all heavy-duty diesel-powered equipment. These sections also specify that electricity will be used from infrastructure from areas surrounding the construction sites rather than diesel electric generators. The City should require language specifying where Prologis will get temporary electricity and that the use of diesel electric generators are a last resort if they lose power from PG&E.
5. 3.7.b - Enforcement - This is another section where the City could ask for more specificity from Prologis on how the Project Compliance Manager could be educating the Operators on the requirements, i.e. tailgate meetings, signing a log that the Operators have been updated on mitigation measures and requirements.

Moving forward, the City should consider requiring infrastructure for zero and near zero emissions delivery trucks in the Operations Plan given the emphasis on first and last trip distribution in the presentation from Prologis in the August 23 Air Quality Stakeholder meeting. There has been planning efforts on piloting this already, including the MTC Freight Emissions Reduction Action Plan.

The Health Department looks forward to continued partnership with City of Oakland around ensuring all Oaklanders breathe clean air and lead healthy lives. Please feel free to contact me if you have any questions or need clarification.

Best,

Anna Lee  
Alameda County Public Health Department

This document was received via e-mail from Anna Lee  
Alameda County Public Health Department  
regarding the **Construction Management Plan** for  
the Southeast Gateway Parcel (CE-2) and New Central Gateway Parcel (CC-1)  
at the Oakland Army Base

September 11, 2017

Subject: Comments on Prologis Construction Management Plan for Southeast and New Central Gateway Sites

Dear Patricia:

Thank you for the opportunity to comment on the Prologis Construction Management Plan for Southeast and New Central Gateway Parcels (Plan). The Prologis Plan contains relevant information to understanding the broader health impacts from construction at this site. As you know, there are historical and present day environmental challenges burdening the West Oakland community that contribute to adverse cumulative health impacts. Improving both ways to include the community in a clear and accessible process and identifying the strongest feasible strategies to reduce health impacts ensures adequate implementation of the MMRPs and supports a vision towards equitable health outcomes.

1. Streamlining the Planning Process and Goal-setting
  - a. As was mentioned in the previous comment letter submitted on August 31, 2017, the Air Quality Construction Plan and the Construction Management Plan both include topics that pertain to public health and subject to PO-1 of the MMRPs. The City should try to have a more integrated planning process, sending plans out and presenting information jointly so that the public can have a fully-informed picture of the entire construction phase. This will help to streamline the planning and commenting process. Also, the City should consider laying out a broad visionary document around promoting sustainability and environmental justice to set up clear expectations for future development at the Oakland Army Base. These steps build on the ones that staff have put in place recently to improve the process, gain trust from the public and provide strong leadership.
2. Applicable parties - As previously mentioned, the Plan includes language that applies the mitigations to the Project Applicant. The City should require language to ensure

that the mitigations apply to all Operators and include language specifying how the Operators will be educated on all the relevant requirements in this Plan.

### 3. Noise Impacts

a. SCA NOI-1 7.1.f. - The Plan says that requests to Building Services to work outside the normal construction work hours (7am-7pm) require a neighborhood survey to notify nearby residents and businesses within 300 feet of the job site. Given this site is within the very large Oakland Army Base and on the other side of the freeway, I recommend starting the 300 foot buffer for residences where residential land uses actually begin to be inclusive of more West Oakland residents. This might mean starting from the edge of the I-880 freeway/ Frontage Road.

#### b. Exhibit P - Neighborhood Survey and Notice.

- i. This could be a helpful tool for notifying local residents and businesses and gathering input and information related to noise impacts. The City should request that Prologis include a description of what is being built in addition to the scope of construction activity to give a fuller picture of what is happening at the site. The City should also ensure that information is clearly highlighted about late night construction activities, if approved.
- ii. This exhibit looks identical to Exhibit M, Sample Public Notice, and does not include a survey. The City should request that a draft of the Survey portion of this exhibit be included in the Plan before approvals. Some things to possibly include in the survey are: existing concerns about noise from construction at this site, information about the use (residence/ businesses/ day care, park or other sensitive receptor), concerns about future construction noise, particularly late at night, and what those are, ideas for how to mitigate noise impacts, ways to be contacted and whether more information is desired.
- iii. The City should specify that both renters and owners should be notified.
- iv. The contact on the Notice is a Building Services staff person, but it is unclear how the City will report out to the community on construction noise or other

complaints. The OAB staff should be able to coordinate with Building Services staff and receive notification if major concerns or complaints get sent to Building Services and this should be reported out to the public and at the Stakeholders meetings.

- c. SCA NOI-3 7.3 Noise Complaint Procedures and Mitigation Plan - Given Prologis will send out a Neighborhood Survey and Notification, the City should require that the information gathered from concerned community members should inform the Complaint Procedures and Mitigation Plan.
    - i. 7.3.d. The Plan states that noise complaints will all be logged. The City should request language to specify that a copy of the log will be provided to the OAB City Team. If major noise issues arise, it would be a pertinent topic to be shared and discussed with the Stakeholders Advisory Group.
  - d. JGL Acoustics, Inc Noise Analysis from July 15, 2016 shows that concrete pouring activity will occur outside the allowable work times and their modeling shows they do not expect to exceed levels in the Oakland noise ordinance. SCA NOI-1, states that construction activities required to occur between 7am and 7 pm, Monday through Saturday except for barging and unloading of soil. Any exceptions need to receive prior written approvals by the Building Services Department. The City should ensure that this finding be included in the survey and notice (Exhibits M and P) to the local community.
4. Fire Safety - this section was incomplete. The City should require that this plan be reviewed before approvals.
5. Transportation
- a. The Plan states that a Construction Traffic and Parking Mitigation Plan and Exhibit E may be submitted if encroachment into the public right-of-way is required and will submit it EBMUD, the Port and Caltrans and then the City and then will revise the plan. The City should ensure proper implementation of SCA TRANS-2 of the MMRPs, which basically says that the project sponsor shall develop a plan to reduce traffic congestion and the effects of parking demand by construction workers and that it should be submitted to the City Planning and Zoning, Building Services and Transportation Services upon considering in good faith such comments and

revision.

- b. Exhibit F - Haul Routes - The maps show the inbound truck route is Highway 24 to Brush St and 7th St. This route is along residential and other sensitive uses. To be more health protective, the City should consider using the route from Highway 24 to 580 to West Grand Ave to enter the Oakland Army Base. This would avoid driving through the neighborhood on local streets and reduce potential exposures to air pollution, noise and vibrations.
- c. This section is incomplete and missing SCA TRANS-1, which covers parking and transportation demand management and should be approved prior to approval of the first permit for construction.

Please let me know if you have any questions.

Best,

Anna Lee  
Alameda County Public Health Department

## **Attachment C**

**Revised** Air Quality Plan for Construction of CE-2 and CC-1, prepared by Prologis  
(titled “Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2: Southeast Gateway  
and CC-1: New Central Gateway parcels; **dated October 16, 2017**)



# Prologis Oakland Global Logistics Center

*Prepared For:*

**City of Oakland  
Planning & Building Dept.**  
250 Frank Ogawa Plaza  
Oakland, CA 94612

*Prepared By:*

**Prologis**  
3353 Gateway Blvd.  
Fremont, CA 94538  
+1 510 656 1900 Phone  
+1 510 656 4320 Fax

[www.prologis.com](http://www.prologis.com)

## **Diesel Emissions Reduction and Air Quality Plan for Construction of**

**CE-2: Southeast Gateway  
Parcel**

**CC-1: New Central Gateway  
Parcel**

*Submitted on:*

v0: May 1, 2017  
v1: August 3, 2017  
v2 final: October 16, 2017



**PROLOGIS**

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# 1. PROJECT OVERVIEW & SITE PLAN

This Construction Air Quality (AQ) Plan covers the remaining Prologis projects, to be built on the Southeast Gateway and New Central Gateway of the Oakland Army Base Redevelopment site. See Fig. 1 below, showing the area and phase breakdown, which are further detailed in narrative below. The area under this AQ Plan is outlined in red.

The Southeast Gateway is Phase 2 of the Prologis projects, and consists of a 14.1-acre parcel located at the Southeast corner of Maritime St. and Burma Rd. Prologis is proposing to develop a 231,000 sf trade and logistics building and associated site improvements on this site.

The New Central Gateway site is Phase 3 of the Prologis projects, and consists of a 27-acre parcel located at the Southwest corner of Maritime St. and Burma Rd. Prologis plans to develop this site in two phases: SubPhase A) 16.5 acres, the westerly portion, as a container depot yard for Conglobal; and SubPhase B) 11.1 acres, the easterly portion, as a trade and logistics building, approximately 188,000 sf, with associated site improvements.

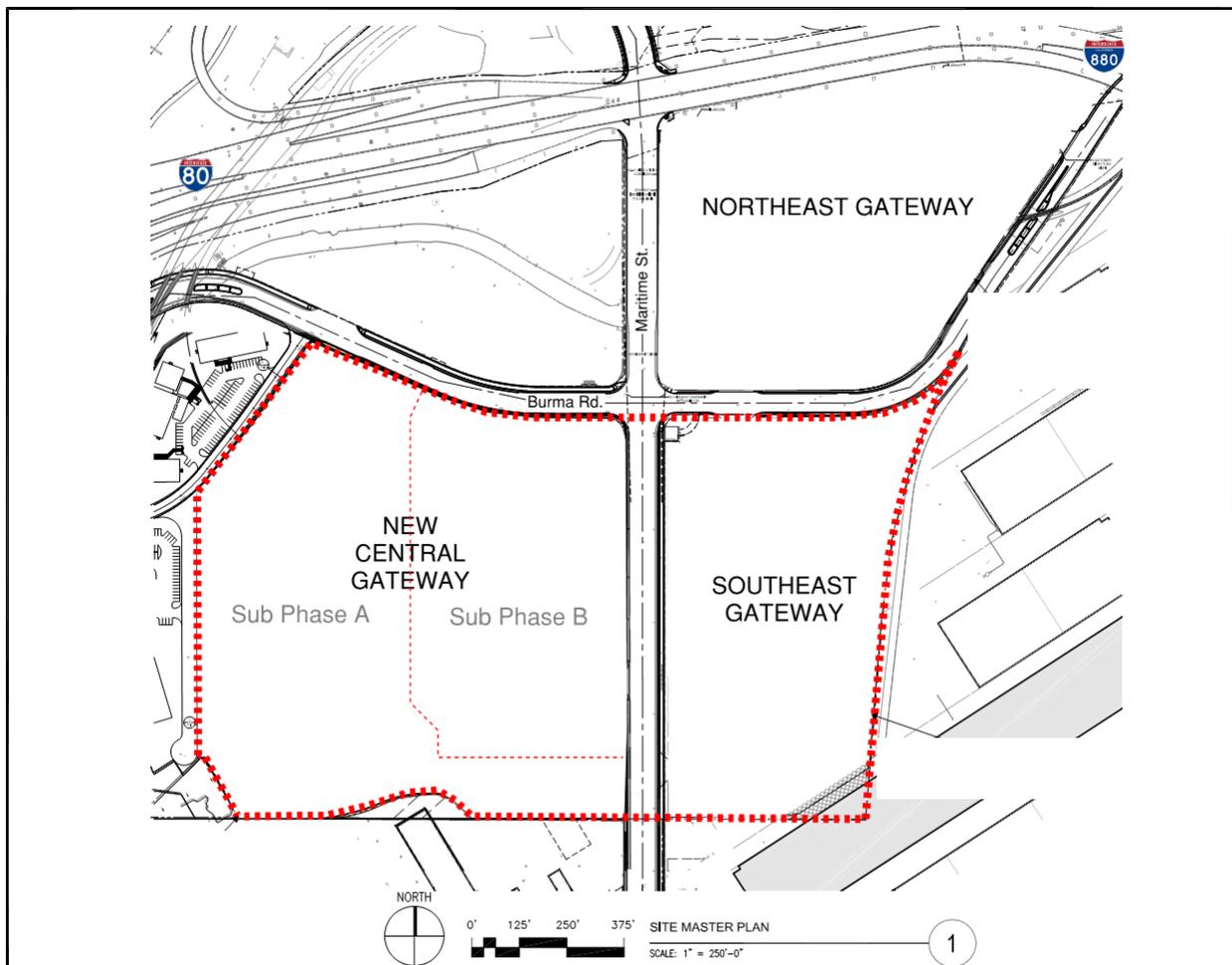


Figure 1 - Prologis Master Site Plan

## **2. SCA AIR-1: Construction Management Plan**

### **2.1 Requirements**

- a. The project applicant, Prologis, shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan (CMP) that identifies the conditions of approval and mitigation measures to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval and mitigation measures.

### **2.2 CMP Response**

- b. Prologis will submit the CMP to the City of Oakland Planning and Building Departments during the plan check review process for site or building permits. Similar to the Northeast Gateway site, the CMP will include all of the AQ elements included this Construction AQ Plan.

## **3. SCA AIR-2: Construction Related Air Pollution Controls**

### **3.1 Requirements**

- a. The entirety of this AQ Plan will be provided to all bidders on the Project, so that it is included in any bids received, and will be included in contracts let.
- b. During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD).
- c. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- d. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- e. Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- g. Requirement: Limit vehicle speeds on unpaved roads to 15 miles per hour.
- h. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a

certified mechanic and determined to be running in proper condition prior to operation.

- i. Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.
- j. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- k. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- l. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- m. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- n. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
- o. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity.
- p. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- q. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- r. All trucks and equipment, including tires, shall be washed off prior to leaving the site. Tire washing station will be included at each construction entrance. Water will be contained on-site and reused where possible.
- s. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- t. Site accesses to a distance of 50 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel over filter fabric, consistent with the California Stormwater Quality Association's (CASQA) Best Management Practice (BMP) Handbook, Stabilized Construction Entrance/Exit

Detail TC-1, as authorized by the National Pollutant Discharge Elimination System (NPDES) Permit administered by the EPA.

- u. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).

### **3.2 Dust Control Mitigation Plan**

- a. Use water trucks to water exposed surfaces during construction activities at least twice daily or more frequently if winds exceed 15 mph. Suspend excavation, grading, and demolition activities when average wind speed exceeds 20 mph. Maintain minimum soil moisture of 12% as indicated by laboratory samples or a moisture meter. Use reclaimed water for dust mitigation whenever feasible. Monitoring process will include: 1) Checking weather reports daily prior to starting construction activity to prepare for wind speeds as necessary. 2) Monitoring weather and dust as day progresses by setting up an anemometer wind speed sensor and checking periodically. 3) Increasing dust control watering as wind speeds increase to maintain minimum 12% moisture content, or to a point at which the earth becomes tacky.
- b. Cover truck loads with tarpaulins or keep loads 2 feet below the sideboard of the truck bed to eliminate wind contact with soil or other loaded materials.
- c. Require all operators tracking dirt/mud onto public roadways to have a wet power vacuum sweeper present daily during these activities and remove tracked dirt/mud at the end of each day or more frequently if needed.
- d. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders.
- e. As soon as practical and prior to rainy season, cover all access roads and/or permanent roads and building pads with aggregate or asphalt concrete to mitigate tracking of dirt and/or mud offsite.
- f. Cover all inactive soil material stockpiles with plastic sheeting or non-toxic soil binders. Water all active stockpiles to maintain 12% moisture.
- g. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- h. Replant vegetation in disturbed areas as quickly as possible.

- i. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- j. Draft and implement a Project SWPPP (Stormwater Pollution Prevention Plan). The onsite QSP (Qualified SWPPP Practitioner) will monitor runoff before, during, and after rain events. Deficiencies will be logged and corrected immediately. Inactive construction areas will be properly addressed with BMPs to eliminate erosion. Required BMPs will be outlined in the SWPPP and enforced with reporting and inspection.
- k. Post signage and enforce 15 mph speed limit requirement for unpaved roads (Exhibit A).
- l. Post signage and enforce dust complaint reporting requirement (Exhibit B). Take corrective action to remedy complaints within no more than 48 hours after receiving the complaint.
- m. The Project Dust Compliance Manager will monitor and facilitate the implementation of mitigation measures. The Contractor will maintain Daily Inspection Logs throughout the Project.
- n. Limit inactive construction areas (previously graded areas inactive for one month or more) by installing planting, finished hardscape, and paving as soon as possible.
- o. Designate onsite Superintendent (identity TBD) as the person to monitor the dust control program and to order increased watering, as necessary.
- p. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- q. Replant vegetation in disturbed areas as quickly as possible.
- r. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- s. Tire washing station will be included at each construction entrance and all equipment, including tires will be washed off prior to leaving the site.
- t. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders

- u. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449. All written documentation that fleet requirements have been met will be submitted to the City of Oakland for record.
- v. Install coatings meeting VOC content requirements specified in Project Specification.

### **3.3 Emission Control Mitigation Plan**

- a. During all construction activities, off-road construction equipment greater than 25 horsepower shall meet US EPA Tier 4 emission standards. If such equipment is not available, then equipment which meets Tier 3 engine standards can be used but only under the following circumstances:
  - All contractors must submit letters to the City of Oakland providing information on the availability of Tier 4 construction equipment to be used on each construction site and information on their search for Tier 4 rental equipment, should their fleet not have all the necessary Tier 4 equipment available for use on this project site.
  - If the contractor must rent equipment, then the contractor shall contact a minimum of three rental agencies in the Bay Area and submit documentation about the availability of such rental equipment.
  - If Tier 4 equipment is not available during the specified construction periods, then Tier 3 can be used, subject to restriction 3.3b below.
- b. The two most utilized pieces of construction equipment per job site (the equipment projected to have the most utilization hours) must be Tier 4 equipment. The contractor shall submit an estimated equipment-hour projection to the City of Oakland with verification that Tier 4 equipment will be used for the two pieces projected to have the most utilization hours.
- c. All contractors shall submit a list of specific off-road equipment being proposed for use at each project site. The Compliance Officer shall use this documentation to verify that equipment meets the requirements of Tier 4 or Tier 3, and shall ensure that equipment with Tier 1 or Tier 2 engines are not delivered to nor used on each construction site.
- d. During all construction activities, all On-Road trucks delivering materials and/or equipment to the site are required to comply with the Air Resources Board regulations for on-road trucks in the Truck and Bus Rule. Contractors shall furnish CARB Compliance certificates to the City of Oakland for on-road trucks demonstrating compliance with the Truck and Bus Rule.
- e. All contractors will be encouraged to use post 2010 model water trucks, as available.
- f. Fuel being used will be compliant with California standards and consistent with regulatory requirements for Ultra Low Sulfur Diesel (ULSD).

- g. Utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available and cost effective in the San Francisco Bay Area.
- h. All scissor lifts and small tools will be electric.
- i. Rely on the electricity infrastructure surrounding the construction sites rather than electrical generators powered by internal combustion engines to the extent feasible. Temporary electric service from existing infrastructure will be provided on the job-site for contractors to use for small tools and equipment. Contractor shall make substantial efforts to contact PG&E well in advance of start of construction to allow adequate time for the connection to temporary job site power. The use of diesel generators shall only be used as a last resort option.
- j. Keep all construction equipment properly tuned by a certified mechanic in accordance with the manufacturer's specifications. Operators will provide the Contractor with written documentation of equipment maintenance for all equipment to be used onsite. These maintenance logs shall be made available upon request.
- k. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449 (CARB Off-Road Diesel Regulations). All written documentation that fleet requirements for equipment to be used onsite have been met will be submitted to the City of Oakland for record.

### 3.4 Idling Policy

- a. All on-road trucks serving the construction sites shall minimize idling by shutting off the truck at all possible times. Additionally, all trucks used during construction of these sites shall be **prohibited from idling more than two minutes** when loading and unloading, staging, when waiting in a queue, or when not in active use. Exemptions from the two-minute idling rule will be allowed when required for safety, or when equipment is in use.
- b. All off-road diesel equipment over 25 horsepower sites shall minimize idling by shutting off the equipment at all possible times. Additionally, diesel off-road equipment used during construction of these sites shall be **prohibited from idling more than two minutes** when not in active use. Exemptions from the two-minute idling rule will be allowed when required for safety, when vehicles need to idle to perform work (such as cranes providing hydraulic power to the boom), or when equipment is in use.

- c. See Exhibit C for signage describing the Project Idling Policy.

### **3.5 Reporting and Labeling**

- a. Reporting can be completed using DOORS (Diesel Off-road online Reporting System), which is CARB's free online reporting tool for the Off-Road regulation. Further information on reporting and labeling for off-road vehicles is available at: [www.arb.ca.gov/ordiesel](http://www.arb.ca.gov/ordiesel).
- b. All fleet equipment used onsite shall be properly reported and labeled as required per CCR Title 13, Section 2449 (CARB's Off-Road Regulation). After a fleet reports their vehicles to CARB, each vehicle is assigned a unique Equipment Identification Number (EIN). The fleet must label its vehicles within 30 days of receiving EINs. Labeling provisions of the Off-Road regulation were amended in December 2010 to require labels on both sides of each vehicle. Additionally, fleets reported as 'captive attainment area fleets' must have labels with a green background instead of red. All construction contractors shall comply with and monitor compliance with Air Resources Board regulations for Off-Road construction equipment, CCR Title 13, Section 2449. To document compliance, all fleets shall provide ARB Certificates of Compliance with the Off-Road Regulations to the City of Oakland.

### **3.6 Enforcement**

- a. The Project Compliance Manager will monitor and facilitate the implementation of mitigation measures. Any off-road equipment that exhibits conditions outside of the manufacturer's specifications, or emits excessive visible smoke, shall be prohibited from operating on-site. All contractors will be subject to this provision and will maintain Inspection Logs daily throughout the project. Compliance Manager will complete online ARB courses for Visible Emissions Evaluation to enhance ability to ensure fleets are in compliance with CARB Regulations. Compliance Manager shall communicate Plan requirements to subcontractors in weekly tailgate or coordination meetings.
- b. Post signage limiting truck and equipment idling time to two minutes or less, in accordance with CCR Title 13, Section 2485 & 2449. (Exhibit C)

- c. A program to enforce and monitor vehicle compliance will be developed to ensure that vehicles associated with the Project comply with applicable local, regional, state, and federal air quality requirements.

Exhibit A – Speed Limit Sign



**Exhibit B – Complaint Sign**

**ATTENTION**

**PERMITTED CONSTRUCTION HOURS:  
Monday-Friday 7AM-7PM**

There will be no work on site outside of permitted hours without written permission from City of Oakland.

**FOR CONCERNS REGARDING DUST,  
CONSTRUCTION NOISE, EROSION OR ANY  
CONSTRUCTION ACTIVITY ON THIS PROJECT  
PLEASE CONTACT:**

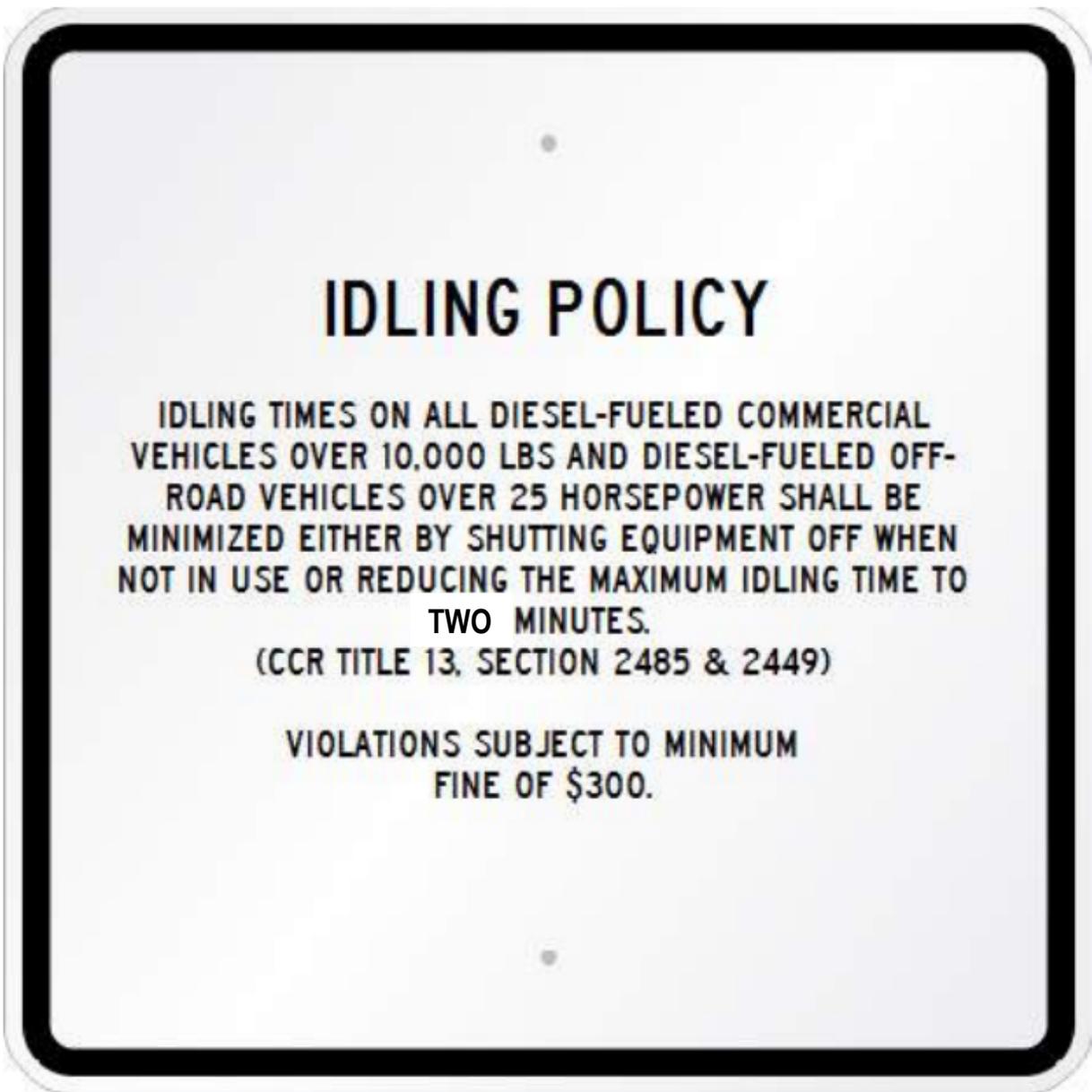
**During Construction Hours – TBD  
After Construction Hours -TBD**

**CITY OF OAKLAND CODE COMPLIANCE:  
(510) 238-3381**

**OAKLAND POLICE DEPARTMENT 24 HR LINE:  
(510) 777-3333**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT:  
(800) 334-6367**

**Exhibit C – Idling Policy Sign**



## **Attachment D**

**City response to public comment letters**  
(dated October 30, 2017)



# Air Resources Board



Matthew Rodriguez  
Secretary for  
Environmental Protection

Mary D. Nichols, Chair  
001 I Street • P.O. Box 2815  
Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)

Edmund G. Brown Jr.

**City of Oakland Response**  
to recommendations from ARB on the  
**Diesel Emission Reduction and Air Quality Plan**  
for Construction of CE-2 SE Gateway and CC-1 New Central Gateway at the Oakland Army Base  
October 30, 2017

August 30, 2017

Ms. Patricia McGowan  
Environmental Coordinator  
City of Oakland  
Planning and Building Department  
250 Frank H. Ogawa Plaza, Suite 3315  
Oakland, California 94612

Dear Ms. McGowan:

Thank you for providing the California Air Resources Board (CARB) the opportunity to comment on the Diesel Emissions Reduction and Air Quality Plan (AQ Plan or Plan) for Construction of CE-2: Southeast Gateway Parcel and CC-1 : New Central Gateway Parcel (Project Site or Site). The AQ Plan provides an opportunity to ensure the cleanest possible construction practices and equipment are utilized while developing the Project Site. Eliminating and minimizing air quality impacts from the construction of this project is vital to protecting the health of nearby communities.

The AQ Plan outlines the requirements and mitigations that Site contractors will comply with to achieve emission reductions generated by on Site construction activity. CARB previously submitted comments on May 31, 2016, on the Northeast Gateway Construction Management Plan, and we acknowledge that the City of Oakland (City) staff modified several measures in this Plan based on those comments. However, CARB staff finds that several requirements in the AQ Plan need further clarification and strengthening in order to ensure proper implementation and that the Plan achieves the less-than-significant impacts determination made in the 2012 Oakland Army Base Project Initial Study/Addendum. These clarifications or strengthened requirements will help ensure that construction of the Project Site ultimately avoids or substantially lessens the significant and unavoidable impact to air quality identified in the 2002 Final Environmental Impact Report, by requiring all feasible<sup>1</sup> mitigation measures be incorporated (see Cal. Pub. Resources Code § 21081; 14 CCR § 15126.2(b)).

<sup>1</sup>For the purposes of CEQA, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. (California Code of Regulations, title 14, section 15364.)

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website. <http://www.arb.ca.gov>.*

California Environmental Protection Agency

To that end, CARB staff recommends the following clarifications or modifications:

1. Section 3. 1.w. : Reference to CARB' s Regulation for In-Use Off-Road Diesel Fueled Fleets (Off-Road Regulation) for performance requirements one year in advance of the regulation is confusing and irrelevant since the City is specifying specific tiers of equipment to be used on Site. Such language should be omitted from future air quality or construction plans subject to Mitigation PO-1.  
*City Response: Agreed; this section had been deleted from the Oct. 16, 2017 version of the Plan.*
  
- 2 Section 3.3.a. : This measure indicates that all contractors will be encouraged to use Tier 4 off-road engines for all equipment brought on Site, as available, and at minimum Tier 3 off-road engines. In addition, only the two most used pieces of equipment on Site are required to be Tier 4. To achieve the most diesel emission reductions from off-road equipment, the City should require that all off-road construction equipment used on Site, greater than 25 horsepower, meet U.S. EPA Tier 4 emission standards. Tier 4 equipment became available as early as 2008 for some horsepower categories, with the rest being made available in the 2012 timeframe. Therefore, CARB believes it is very unlikely there will be a shortage of Tier 4 equipment, and that it is technically feasible to require all Tier 4 equipment be used on Site. In addition, the City should require that Prologis enter into contractual agreements with construction companies capable of meeting this requirement. This would increase the enforceability of this mitigation and minimize potential construction delays as a result of subcontractors seeking Tier 4 rental equipment once construction has started.  
*City Response: Section 3.3a in the Oct. 16, 2017 version of the Plan has been modified to require Tier 4 off-road construction equipment. If such equipment is not available, then the use of Tier 3 construction equipment will be allowed only under specified situations outlined in Section 3.3a. Additionally, per Section 3.3b, the two most utilized pieces of construction equipment, based on projected hours of usage at each specific construction site, are required to be Tier 4. Refer to the letter from Mitchell Air Quality, dated Oct. 6, 2017 for the projected emission reduction from this requirement compared to the statewide average.*
  
- 3 Section 3.3.b.: This measure indicates that all contractors will be encouraged to use post-2010 model water trucks, as available. To be most protective of the local community from construction diesel emissions, the City should strengthen this measure to require, not encourage, that all water trucks and all other heavy-duty diesel trucks greater than 14,000 gross vehicle weight rating used on Site be equipped with 2010 or newer engines. Emissions from truck traffic (including construction trucks) severely impact the surrounding communities, and the City should take additional steps beyond CARB regulatory requirements and require the use of 2010 or newer engines. In a memo to "Staff of the Air Quality Agencies and Stakeholders", dated August 15, 2017, the City stated

Ms. Patricia McGowan

August 30, 2017

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that "the trucks... are all independent truckers who are not hired by the general contractor... such a requirement imposed by [Prologis] on the general contractor/sub-contractors would be unenforceable and unrealistic." CARB disagrees with this statement, and believes it can be enforceable by requiring that Prologis enter into contractual agreements with construction companies capable of meeting this requirement. In addition, an independent trucker could easily supply a print out of the truck's information (including engine model year and license plate) currently reported in CARB's Truck and Bus Reporting System (TRUCRS) and a Certificate of Reported Compliance in order to verify it has a 2010 or newer engine and is part of a compliant fleet.

*City Response: The ARB Truck and Bus Rule is the State regulation which applies to medium and heavy-duty trucks which will deliver to these construction sites. Contractors and delivery companies serving these construction sites will be required to submit a Certificate of Compliance with this statewide Rule, per Section 3.3d of the Oct. 16, 2017 version of the Plan. We are recommending to the City Administrator that implementation of a more stringent standard, as recommended in your letter, which would require construction trucks to exceed the ARB Rule by having 2010 or newer engines in advance of the January 1, 2020 effective date of that component of the Rule, is not economically or practically feasible. The statewide Truck and Bus Rule will require 2010 or newer engines from January 1, 2020 to 2023. For the City of Oakland to require implementation of that component of this Statewide Rule two to five years in advance for the two construction sites covered by this Plan is not practically feasible.*

*As you know, for the purposes of CEQA, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Please refer to the letter from Mitchell Air Quality, dated Oct. 6, 2017, which provides information about construction trucks. Specifically, this letter addresses the feasibility of requiring 2010 engine years for concrete trucks since this type of truck will comprise the largest number of trucks serving these construction sites. Central Concrete and CEMEX Concrete both have batch plants near the construction sites and, per the project applicant, are likely to bid these contracts. The fleets of both companies comply with the current standards of the Truck and Bus Rule, and both companies are in the process of upgrading their trucks in anticipation of the 2020-2023 phase-in of the stricter standard of the Truck and Bus Rule requiring 2010 engines. Both companies deliver concrete throughout the Bay Area and park their fleets of 229 to 420 trucks at their various locations in the Bay Area. The letter explains that concrete pouring is an on-demand and time-sensitive operation. The concrete mix in the barrel trucks needs to be delivered to the jobsite within an hour of loading, which requires that the companies have a full array of vehicular assets that can be flexibly deployed.*

*We are advising the City Administrator that requiring such companies to reserve certain trucks from their fleets to deliver to two construction sites at the OAB is an infeasible and impracticable requirement to impose on individual construction sites. Such a requirement would be operationally inefficient and could result in increased construction costs, construction delays or compromised construction quality. Please refer to the letter from Mitchell Air Quality for more information.*

- 4 Section 3.3.d. : This measure indicates that alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) will be utilized on Site to the extent that the equipment is readily available and cost-effective in the Bay Area. For enforceability, the City should require that Prologis enter into contractual agreements with construction companies capable of meeting this requirement.  
*City Response: We agree that the use of construction equipment powered by alternative fuel is a good component of this AQ Plan. We believe that encouraging its use, as stated in Section 3.3g, instead of requiring its use through contracts is appropriate at this time when such alternative fuel construction equipment is of limited availability.*
  5. Section 3.4.a.: Sections 3.4.h. and 3.4.i. limit idling to 3 minutes. However, this section states that 'equipment operators must limit their unnecessary idling to 5 minutes.' CARB believes this was most likely an error, and therefore should be corrected to limit idling to 3 minutes.  
*City Response: Agreed, and in fact we have further reduced the idling time to two minutes which is 60% more restrictive than the ARB regulation. Refer to Sections 3.4a and b of the Oct. 16, 2017 version of the Plan.*
  6. Sections 3.5.a. and b.: These sections are reiterating the requirements for selling and reporting off-road /vehicles per CARB s Off-Road Regulation. CARB recommends removing these sections, as they are paraphrasing the requirements and could contain inaccuracies and cause confusion for off-road fleets. If the City includes information on reporting and labeling for off-road vehicles, direct fleets to the website for the Off-Road Regulation, available at: [www.arb.ca.gov/ordiesel](http://www.arb.ca.gov/ordiesel).  
*City Response: Agreed; this section had been deleted from the Oct. 16, 2017 version of the Plan and Section 3.5a has been modified to redirect readers to the ARB website.*
  7. Section 3.5. c.: CARB recommends removing the language paraphrasing the labeling requirements of the Off-Road Regulation. Instead, this section should point to the regulation language, by stating: 'All fleet equipment used on Site shall be properly reported and labeled, as required per CCR Title 13, Section 2449 (CARB's Off-Road Regulation).'
- City Response: Agreed; Section 3.5b in the Plan dated Oct. 16, 2017 has been modified to reference the reporting and labeling requirements of CCR Title 13,*

Ms. Patricia McGowan  
August 30, 2017  
Page 5

*section 2449.*

- 8 Section 3.6: This section, in general, describes components of CARB's Off-Road Regulation regarding adding older equipment to a fleet. Similarly to comment 1, above, including this information is confusing. The adding vehicles requirements are irrelevant, since the City is specifying specific tiers to be used on site. Such language should be omitted from future air quality or construction plans subject to Mitigation PO-1.

*City Response: Agreed; this section had been deleted from the Oct. 16, 2017 version of the Plan.*

- 9 Section 3.7.a.: Again, meeting the requirements of the Off-Road Regulation one year in advance is irrelevant, therefore signage indicating this requirement is not needed.

*City Response: Agreed; this section had been deleted from the Oct. 16, 2017 version of the Plan*

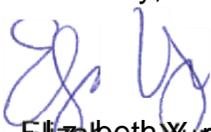
- 10 Section 3.7.c.: This section refers to Exhibit C, which shows a sign stating that idling must be limited to three minutes or less. However, the language in this section references limiting idling to five minutes or less. This language should be corrected to say three minutes or less, which makes it consistent with the referenced Exhibit C.

*City Response: Agreed. Exhibit C in the Oct. 16, 2017 version of the Plan had been corrected and we have further reduced the idling time to two minutes which is 60% more restrictive than the ARB regulation.*

CARB staff believes our recommended changes will further reduce harmful diesel emissions from the Site construction activities and reduce impacts to the nearby communities. In addition, we understand that the AQ Plan relates solely to the construction activities at the Project Site and that other plans for operations are forthcoming. We look forward to engaging on those plans as well, and hope that the City will commit to releasing the most robust, health protective plans possible for this and future projects. We are available to provide further assistance or clarify our comments as needed.

If you have questions, please contact Robbie Morris, Air Pollution Specialist, at (916) 327-0006 or [robbie.morris@arb.ca.gov](mailto:robbie.morris@arb.ca.gov).

Sincerely,



Elizabeth Yura, Chief  
Freight Activity Branch  
Transportation and Toxics Division

cc: See next page

cc: Ms. Margaret  
Gordon Co-  
Director  
West Oakland  
Environmental Indicators  
Project  
349 Mandela Parkway  
Oakland, California  
94607

Brian Beveridge  
Co-Director  
West Oakland  
Environmental Indicators  
Project

Mr. Richard Grow, Lead  
Environmental Justice  
Workgroup  
U S. Environmental Protection Agency,  
Region 9 75 Hawthorne Street, ENF-4-2  
San Francisco California  
94105

Ms. Anna Lee  
Work Group Coordinator  
Alameda County Public Health  
Department 1000 Broadway, Suite 500  
Oakland, California  
94607

Mr. Dave Vintze  
Air Quality Planning Manager  
Bay Area Air Quality Management  
District 939 Ellis Street  
San Francisco, California  
94109

**City of Oakland Response**  
**to recommendations from Alameda Co. Public Health Dept. on the**  
**Diesel Emission Reduction and Air Quality Plan**  
**for Construction of CE-2 SE Gateway and CC-1 New Central Gateway**  
**at the Oakland Army Base**  
**October 30, 2017**

The following document was received via e-mail from Anna Lee,  
Alameda County Public Health Department

August 31, 2017

Dear Pat:

Thank you for the opportunity to comment on the Diesel Emissions Reduction and Air Quality Plan for Construction of CE-2 Southeast Gateway Parcel and CC-1 New Central Gateway Parcel (Plan). Thank you also for the opportunity to meet with you and Darin Ranelletti on May 9, 2017 to review a preliminary draft of the Plan. The follow-up summary table of comments and changes to the Prologis Construction Air Quality plan that City staff produced helped in tracking these complex technical issues.

The Prologis Construction Air Quality plan presents both an opportunity to engage the community at large on air quality issues and sets the path towards utilizing the cleanest engines and equipment at the Oakland Army Base. As you know, there are historical and present day environmental challenges burdening the West Oakland community that contribute to adverse cumulative health impacts. Improving both the engagement process and identifying strong strategies to reduce and prevent air pollution ensures that adequate implementation of the MMRPs and supports a vision towards equitable health outcomes.

1. SCA AIR-1 - Construction Management Plan

- a. The City and Prologis staff clarified in the August 23rd, 2017 Stakeholder meeting that the Construction Management Plan includes things like noise, haul routes, hours of operation, fire hydrant and emergency services and is part of PO-1 of the MMRP. These are issues that pertain to public health and is of interest to the public. For the future, I recommend sending these plans out jointly with the Construction Air Quality Plans so that the public can have a fully-informed picture of the entire construction phase and a less cumbersome process of tracking and responding in a streamlined comment period.

*City Response: The diesel emission reduction / air quality plan for construction will typically be prepared by the applicant well in advance of preparing the other components of the Construction Management Plan. We will strive to make the process as straight-forward and uncomplicated for the public and the Stakeholders as possible but we may find in the future that releasing the diesel emission reduction / air quality plan for public comment, prior to the construction management plan, could be necessary.*

- b. Furthermore, the City should consider creating an overarching Plan that lays out baseline requirements and policies to promote public health for the Oakland Army Base. This would be an opportunity to create a strong vision and goals around improving air quality and community health and lay out clear expectations for future development that can later be tailored to the specific land uses and tenants. It would also help with streamlining the engagement process.

*City Response: The Standard Conditions of Approval/Mitigation Monitoring and Reporting Program which was adopted by the City Council for the former Oakland Army Base (OAB) outlines the requirements that the City must follow. We will continue to work with your Agency, plus BAAQMD and ARB, to improve air quality and public health, and to have an effective engagement process.*

2. Applicable parties - Sometimes the Plan includes language that says, "Require all operators..." but for other measures, Prologis simply lists the emissions control strategy. The Plan needs to specify a responsible party either in the specific measure or in an introductory paragraph to a section.

- a. It is not clear how all Sub-contractors and Operators will be brought up to speed on all the relevant requirements in this Plan. Prologis should include language that specifies how Operators will be educated on the requirements, such as education at daily tailgate meetings and/ or having them sign a log indicating that they have been updated on the relevant mitigation measures and requirements.

*City Response: Agreed. Section 3.6 of the Oct. 16, 2017 version of the Plan states that the Project Compliance Manager will monitor and facilitate the implementation of the measures in the AQ Plan, and that weekly tailgate or coordination meetings will be held with subcontractors to communicate the requirements of this Plan.*

3. SCA AIR-2 - Construction Related Air Pollution Controls

- a. 3.1.h and i - The current Construction Air Quality Plan was strengthened to a commitment to a 3 minute idling limit for diesel-fueled commercial vehicles over 10,000 lbs and off-road vehicles over 25 horsepower. While this is beyond the state regulation and a step in the right direction, 2 minute idling limit is the best practice published in BAAQMD's "Planning Healthy Places" document. Also, as noted in the August 23 Air Quality Stakeholder meeting, the idling limit needs to be made

consistent throughout the document, including the Idling Policy section 3.4.a and Enforcement section 3.7.c. Both sections currently specify 5 minutes.

*City Response: Agreed. Section 3.4 a and b of the Oct. 16, 2017 version of the Plan allows a maximum two-minute idling limit for on-road vehicles and off-road equipment. This is 60% more restrictive than the current ARB regulations.*

#### 4. Emission Control Mitigations

- a. Section 3.3.a - This section was strengthened by including language to encourage Tier 4 off-road engines; requiring the use of Tier 3; requiring Sub-contractors to call at least 3 rental agencies for the Tier 4 equipment first and utilizing Tier 4 engines for the two pieces of equipment used the most. The City should require the use of Tier 4 engines for all off-road engines to achieve the strongest mitigations possible.

*City Response: Section 3.3a in the Oct. 16, 2017 version of the Plan has been modified to require Tier 4 off-road construction equipment. If such equipment is not available, then the use of Tier 3 construction equipment will be allowed only under specified situations outlined in Section 3.3a. Additionally, per Section 3.3b, the two most utilized pieces of construction equipment, based on projected hours of usage at each specific construction site, are required to be Tier 4. Refer to the letter from Mitchell Air Quality, dated Oct. 6, 2017 for the projected emission reduction from this requirement compared to the Statewide average.*

- b. Section 3.3.b - On-road trucks - Language in this section encourages the use of 2010 model water trucks. To be more health protective, the City should require a commitment to model year 2010 or newer on-road trucks (including concrete, water and delivery trucks).

*City Response: The ARB Truck and Bus Rule is the State regulation which applies to medium and heavy-duty trucks which will deliver to these construction sites. Contractors and delivery companies serving these construction sites will be required to submit a Certificate of Compliance with this statewide Rule, per Section 3.3d of the Oct. 16, 2017 version of the Plan. We are recommending to the City Administrator that implementation of a more stringent standard, as recommended in your letter, which would require construction trucks to exceed the ARB Rule by having 2010 or newer engines in advance of the January 1, 2020 effective date of that component of the Rule, is not economically or practically feasible. The Statewide Truck and Bus Rule will require 2010 or newer engines from January 1, 2020 to 2023. For the City of Oakland to require implementation of that component of this Statewide Rule two to five years in advance for the two construction sites covered by this Plan is not practically feasible.*

*As you know, for the purposes of CEQA, "feasible" means capable of being*

*accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. Please refer to the letter from Mitchell Air Quality, dated Oct. 6, 2017, which provides information about construction trucks. Specifically, this letter addresses the feasibility of requiring 2010 engine years for concrete trucks since this type of truck will comprise the largest number of trucks serving these construction sites. Central Concrete and CEMEX Concrete both have batch plants near the construction sites and, per the project applicant, are likely to bid these contracts. The fleets of both companies comply with the current standards of the Truck and Bus Rule, and both companies are in the process of upgrading their trucks in anticipation of the 2020-2023 phase-in of the stricter standard of the Truck and Bus Rule requiring 2010 engines. Both companies deliver concrete throughout the Bay Area and park their fleets of 229 to 420 trucks at their various locations in the Bay Area. The letter explains that concrete pouring is an on-demand and time-sensitive operation. The concrete mix in the barrel trucks needs to be delivered to the jobsite within an hour of loading, which requires that the companies have a full array of vehicular assets that can be flexibly deployed. We are advising the City Administrator that requiring such companies to reserve certain trucks from their fleets to deliver to two construction sites at the OAB is an infeasible and impracticable requirement to impose on individual construction sites. Such a requirement would be operationally inefficient and could result in increased construction costs, construction delays or compromised construction quality. Please refer to the letter from Mitchell Air Quality for more information.*

- c. Section 3.3.e and 3.3.f - These sections say that scissor lifts and small tools will be electric and the use of low-emission diesel fuel for all heavy-duty diesel-powered equipment. These sections also specify that electricity will be used from infrastructure from areas surrounding the construction sites rather than diesel electric generators. The City should require language specifying where Prologis will get temporary electricity and that the use of diesel electric generators are a last resort if they lose power from PG&E.

*City Response: Agreed; Section 3.3h of the Oct. 16, 2017 version of the Plan states that all scissor lifts and small tools will be electric, NOT diesel powered. And Section 3.3i of the Oct. 16, 2017 version of the Plan states that the contractor shall make substantial efforts to contact PG&E will in advance of the start of construction to allow adequate time for the connection to temporary power for the job site. It also states that the use of diesel generators shall be only as a last resort.*

5. 3.7.b - Enforcement - This is another section where the City could ask for more specificity from Prologis on how the Project Compliance Manager could be educating the Operators on the requirements, i.e. tailgate meetings, signing a log that the Operators have been updated on mitigation measures and requirements.

*City Response: Agreed. Section 3.6 of the Oct. 16, 2017 version of the Plan states that the Project Compliance Manager will monitor and facilitate the implementation of the measures in the AQ Plan, and that weekly tailgate or coordination meetings will be held with subcontractors to communicate the requirements of this Plan.*

Moving forward, the City should consider requiring infrastructure for zero and near zero emissions delivery trucks in the Operations Plan given the emphasis on first and last trip distribution in the presentation from Prologis in the August 23 Air Quality Stakeholder meeting. There has been planning efforts on piloting this already, including the MTC Freight Emissions Reduction Action Plan.

The Health Department looks forward to continued partnership with City of Oakland around ensuring all Oaklanders breathe clean air and lead healthy lives. Please feel free to contact me if you have any questions or need clarification.

Best,

Anna Lee  
Alameda County Public Health Department

City of Oakland Response  
to recommendations from Alameda Co. Public Health Dept. on the  
**Construction Management Plan**  
for Construction of CE-2 SE Gateway and CC-1 New Central Gateway Parcel  
at the Oakland Army Base  
October 30, 2017

The following document was received via e-mail from Anna Lee  
Alameda County Public Health Department

September 11, 2017

Comments on Prologis Construction Management Plan for Southeast and New Central Gateway

Dear Patricia:

Thank you for the opportunity to comment on the Prologis Construction Management Plan for Southeast and New Central Gateway Parcels (Plan). The Prologis Plan contains relevant information to understanding the broader health impacts from construction at this site. As you know, there are historical and present day environmental challenges burdening the West Oakland community that contribute to adverse cumulative health impacts. Improving both ways to include the community in a clear and accessible process and identifying the strongest feasible strategies to reduce health impacts ensures adequate implementation of the MMRPs and supports a vision towards equitable health outcomes.

1. Streamlining the Planning Process and Goal-setting

As was mentioned in the previous comment letter submitted on August 31, 2017, the Air Quality Construction Plan and the Construction Management Plan both include topics that pertain to public health and subject to PO-1 of the MMRPs. The City should try to have a more integrated planning process, sending plans out and presenting information jointly so that the public can have a fully-informed picture of the entire construction phase. This will help to streamline the planning and commenting process. Also, the City should consider laying out a broad visionary document around promoting sustainability and environmental justice to set up clear expectations for future development at the Oakland Army Base. These steps build on the ones that staff have put in place recently to improve the process, gain trust from the public and provide strong leadership.

*City Response: The diesel emission reduction / air quality plan for construction will typically be prepared by the applicant well in advance of preparing the other components of the Construction Management Plan. We will strive to make the*

*process as straight-forward and uncomplicated for the public and the Stakeholders as possible but we may find in the future that releasing the diesel emission reduction / air quality plan for public comment, prior to the construction management plan, could be necessary.*

*Regarding your comment to laying out a broad visionary document for the OAB, the Reuse Plan for the former OAB provides a broad vision and the Standard Conditions of Approval / Mitigation Monitoring and Reporting Program (SCA/MMRP) outline the requirements that the City and Port must follow.*

2. Applicable parties - As previously mentioned, the Plan includes language that applies the mitigations to the Project Applicant. The City should require language to ensure that the mitigations apply to all Operators and include language specifying how the Operators will be educated on all the relevant requirements in this Plan.

*City Response: This Plan applies to the contractors and subcontractors involved in construction of these two sites. The Project Compliance Manager will monitor and facilitate the implementation of the requirements of the Plan.*

3. Noise Impacts

- a. SCA NOI-1 7.1.f. - The Plan says that requests to Building Services to work outside notify nearby residents and businesses within 300 feet of the job site. Given this site is within the very large Oakland Army Base and on the other side of the freeway, I recommend starting the 300 feet buffer for residences where residential land uses actually begin to be inclusive of more West Oakland residents. This might mean starting from the edge of the I-880 freeway/ Frontage Road.

*City Response: The requirements of Standard Condition of Approval (SCA) Noise-1 were adopted by the Oakland City Council and specifically state notification within 300 feet of the construction site. The spirit of the SCA Noise-1 is to allow comments by people who could be impacted by construction noise if work beyond the normal hours of construction is proposed. The letter prepared by a noise consultant, see Exhibit R of the CMP, shows no noise impacts at 2,300 feet from the construction site. Additionally, no noise complaints were received during the construction of the Phase 1 building, referred to as CE-1, which was built by the same applicant. So, we are recommending to the City Administrator that both the spirit and the letter of the regulations are met by applying SCA Noise-1 as stated in the adopted SCA/MMRP.*

- b. Exhibit P - Neighborhood Survey and Notice.

- i. This could be a helpful tool for notifying local residents and businesses and

gathering input and information related to noise impacts. The City should request that Prologis include a description of what is being built in addition to the scope of construction activity to give a fuller picture of what is happening at the site. The City should also ensure that information is clearly highlighted about late night construction activities, if approved.

- ii. This exhibit looks identical to Exhibit M, Sample Public Notice, and does not include a survey. The City should request that a draft of the Survey portion of this exhibit be included in the Plan before approvals. Some things to possibly include in the survey are: existing concerns about noise from construction at this site, information about the use (residence/ businesses/ day care, park or other sensitive receptor), concerns about future construction noise, particularly late at night, and what those are, ideas for how to mitigate noise impacts, ways to be contacted and whether more information is desired.

The City should specify that both renters and owners should be notified.

*City Response: A neighborhood survey is required if residences are located within 300 feet of the construction site. No residences are located within this distance; the nearest residence is 2,300 feet away, so a neighborhood survey and notice will not be required.*

- iii. The contact on the Notice is a Building Services staff person, but it is unclear how the City will report out to the community on construction noise or other complaints. The OAB staff should be able to coordinate with Building Services staff and receive notification if major concerns or complaints get sent to Building Services and this should be reported out to the public and at the Stakeholders meetings.

*City Response: Agreed; per your recommendation, if major noise issues arise, we will bring this to the attention of the Stakeholders group.*

c. SCA NOI-3 7.3 Noise Complaint Procedures and Mitigation Plan - Given Prologis will send out a Neighborhood Survey and Notification, the City should require that the information gathered from concerned community members should inform the Complaint Procedures and Mitigation Plan.

- i. 7.3.d. The Plan states that noise complaints will all be logged. The City should request language to specify that a copy of the log will be provided to the OAB City Team. If major noise issues arise, it would be a pertinent topic to be shared and discussed with the Stakeholders Advisory Group.

*City Response: Agreed. Section 7.3 of the CMP outlines how noise complaints will be handled and the Noise Complaint Mitigation Plan, contained in the CMP, states that complaint logs will be submitted to the City Building Services Division both monthly and upon request. Additionally, per your recommendation, if major noise issues arise, we will bring this to the attention of the Stakeholders group. For information, during construction of the Phase 1 building (constructed by this applicant) no noise complaints were received.*

- d. JGL Acoustics, Inc Noise Analysis from July 15, 2016 shows that concrete pouring activity will occur outside the allowable work times and their modeling shows they do not expect to exceed levels in the Oakland noise ordinance. SCA NOI-1, states that construction activities required to occur between 7am and 7 pm, Monday through Saturday except for barging and unloading of soil. Any exceptions need to receive prior written approvals by the Building Services Department. The City should ensure that this finding be included in the survey and notice (Exhibits M and P) to the local community.

*City Response: A neighborhood survey is required if residences are located within 300 feet of the construction site. No residences are located within this distance; the nearest residence is 2,300 feet away, so a neighborhood survey and notice will not be required.*

4. Fire Safety - this section was incomplete. The City should require that this plan be reviewed before approvals.

*City Response: Agreed. The Oakland Building Services Division will coordinate with the Oakland Fire Department regarding the fire safety section prior to approval of the CMP.*

5. Transportation

- a. The Plan states that a Construction Traffic and Parking Mitigation Plan and Exhibit E may be submitted if encroachment into the public right-of-way is required and will submit it EBMUD, the Port and Caltrans and then the City and then will revise the plan. The City should ensure proper implementation of SCA TRANS-2 of the MMRPs, which basically says that the project sponsor shall develop a plan to reduce traffic congestion and the effects of parking demand by construction workers and that it should be submitted to the City Planning and Zoning, Building Services and Transportation Services upon considering in good faith such comments and revision.
- b. Exhibit F - Haul Routes - The maps show the inbound truck route is Highway 24 to Brush St and 7th St. This route is along residential and other sensitive uses. To be more health protective, the City should consider using the route from Highway

24to580 to West Grand Ave to enter the Oakland Army Base. This would avoid driving through the neighborhood on local streets and reduce potential exposures to air pollution, noise and vibrations.

*City Response: We appreciate this observation. The submitted Haul Routes were previously approved by the Oakland Department of Transportation but we will bring this component of the Haul Routes to their attention. The Oakland Building Services Division will coordinate with the Oakland Department of Transportation regarding the inbound Haul Route from the direction Highway 24 prior to approval of the CMP.*

- c. This section is incomplete and missing SCA TRANS-1, which covers parking and transportation demand management and should be approved prior to approval of the first permit for construction.

*City Response: A transportation demand management plan, which contains policies to encourage carpooling and the use of mass transit, is not required for construction employees. It is typically submitted prior to construction because after construction, the applicant and tenants can occupy the building. In the case of the buildings covered by this CMP, transportation demand management plans will be required prior to issuance of the certificate of occupancy because the building permits will be issued in phases. So, concurrent with the issuance of the permit to build the interior of the building, such TMP's will be required and must be approved prior to the certificate of occupancy for each building/use.*

Please let me know if you have any questions.

Best,

Anna Lee  
Alameda County Public Health Department

## **Attachment E**

**Letter from Mitchell Air Quality consultant**  
(dated October 6, 2017)

# Mitchell Air Quality Consulting

October 6, 2017

Cory Chung, Vice-President – Development Manager  
Prologis  
3353 Gateway Blvd.  
Fremont, CA 94538

**Subject: Construction Equipment Mitigation Assessment for the Prologis Oakland Global Logistics Center Project in Oakland, California**

Dear Mr. Chung:

Mitchell Air Quality Consulting (MAQC) has prepared the following assessment of the effects of applying additional mitigation measures to reduce air pollutant emissions during the construction of Oakland Global Logistics Center.

The analysis assessed the emissions from construction of a generic warehouse in Alameda County using the CalEEMod 2013 emission model to determine the benefits of using equipment certified to Environmental Protection Agency (EPA) Tier 4 Standards compared to the Statewide average and to the equipment used in Phase 1 of the project. The equipment used in Phase 1 was tracked for each contractor using diesel equipment on the project site. The CalEEMod default equipment list was modified to match the percentages of equipment certified to Tier 3, Tier 4 Interim, and Tier 4 Final standards used on Phase 1 of the project. A second analysis was prepared using Tier 4 Interim and Tier 4 Final equipment. The final scenario used all Tier 4 Final equipment to determine the benefit from using all Tier 4 Final and no Tier 4 Interim equipment. The results are presented in Table 1.

**Table 1: Construction Equipment Emission Mitigation Scenarios**

Scenario	Emissions (tons)			
	NO <sub>x</sub>	Percent Reduction from Statewide Average	PM <sub>2.5</sub>	Percent Reduction from Statewide Average
Statewide Average	37.48	0.00%	1.9245	0.00%
Phase 1 Fleet (Tier 3, 4I, and 4F)	11.46	69.44%	0.3933	79.56%
Tier 4I and 4F only (with Phase 1 4I quantities)	4.06	89.16%	0.1061	94.49%
Tier 4 Only	2.91	92.24%	0.1061	94.49%
Reduction from Phase 1 Fleet Mix to all Tier 4 Final	8.5	22.8%	0.29	14.92%

The example project analysis shows that emissions using the equipment mix containing the same percentages of Tier 3, Tier 4 Interim, Tier 4 Final used on Phase 1 would result in a 69.4 percent decrease in NOx emissions and a 79.6 percent decrease in PM2.5 emissions compared to the statewide average construction equipment. Using all Tier 4 Final equipment would provide an additional 22.8 percent NOx reduction and a 14.9 percent reduction in PM2.5 compared to the fleet mix percentages from Phase 1. The all Tier 4 fleet would provide a 92.2 percent NOx reduction and a 94.5 percent PM2.5 reduction compared to the statewide average.<sup>1</sup> The conclusion that may be drawn from this analysis is that for the pollutant of most concern (PM2.5), just encouraging (and not requiring) the use of Tier 4 over Tier 3 equipment resulted in an almost 80 percent emissions reduction as compared to statewide averages and mandating all Tier 4 equipment to be used at the site would only provide a minimal improvement over the actual equipment used during the first phase of project construction. Given today's active and equipment-constrained construction market, it is not feasible to provide 100 percent Tier 4 equipment and meet the schedule and cost framework that enables a project to be built.

NOx emissions are precursors to regional ozone formation and would have an insignificant impact on NO<sub>2</sub> concentrations in the local community and on regional ozone formation from secondary photochemical reactions. The PM2.5 emissions are mostly comprised of diesel particulate matter (DPM) that is a toxic air contaminant. The nearest sensitive receptor is approximately 3,000 feet from the project site. It is unlikely that project construction activities would result in a significant increase in cancer risk at this distance. The California Air Resources Board Air Quality Land Use Handbook indicates that DPM emission concentrations and related health risk decrease by 70 to 80 percent within 1,000 feet from the source of emissions. Therefore, the increase in emissions from the project would not be distinguishable from background concentrations of DPM emissions at the receptor location. Although, the project emissions would make a cumulative contribution to impacts from all sources of TAC emissions in the area, the BAAQMD threshold for cumulative toxic impacts (rescinded due to legal challenge) did not provide a quantitative cumulative contribution threshold for projects constructed in areas with existing significant impacts from other sources. CEQA case law indicates that the threshold for cumulative contribution is not zero.

In any case, the project emissions would result in a miniscule increase in risk at the nearest receptor and in the wider community. Finally, the mix of Tier 3 and Tier 4 equipment proposed by the application provides a substantial reduction in emissions and should be considered feasible mitigation whereas Tier 4 may not be available when needed due to the high level of construction activity occurring in the region and the age distribution of the equipment currently in use in the Bay Area.

### **On Road Construction Delivery Trucks**

The project will require deliveries of materials by heavy duty trucks during project construction. The issue to be addressed is whether it is feasible for Prologis to require vendors to use trucks that are 2010 or newer and what would be the difference in emissions relying on business as usual compared with requiring the 2010 or newer trucks. Multiple vendors are expected to deliver materials to the site, but the largest source

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<sup>1</sup> Please note that this analysis shows the relative benefits of each mitigation strategy and is not intended to provide an estimate of the project's actual emissions.

of truck trips will be concrete deliveries. The contractor estimates that over the course of 2 – 3 months of the most intense concrete pouring activity at each remaining site, there will be approximately 1,800 concrete truck trips from the batch plant to the site. Prologis requested truck age and emission data from the two most likely concrete suppliers that bid on concrete for Phase 1 (Central and CEMEX) and would likely make deliveries for future project phases. The following summarizes the Central and CEMEX fleet information.

Central has a medium size truck fleet with 229 trucks registered with the Air Resources Board (ARB) in California. Of the 229 trucks, 216 are in operation, 95 are 2010 or newer, and 95 are MY 2000 or newer and equipped with particulate filter retrofits. The remaining 26 active trucks are not equipped with particulate filters.

CEMEX has a larger truck fleet with 900 trucks registered with the Air Resources Board (ARB) in California. Of the 900 trucks, 420 are 2010 or newer, 220 are 2004-2006 trucks equipped with particulate filter retrofits, and the remaining 260 are older trucks without particulate filters.

Since 2007 all new trucks sold in California are required to reduce PM emissions by 98 percent compared to uncontrolled engines. PM filters used in retrofits of older trucks are required to reduce PM emissions by at least 85 percent, but often achieve reductions as high as 98 percent. The ARB Truck and Bus Rule requires all trucks to meet 2010 engine emission standards during a 2020 to 2023 phase in period (several years after the buildings are scheduled to be built) with some exceptions based on fleet size and compliance options. PM compliance is achieved either by purchasing a newer used truck built to the model year (MY) 2007 or later emissions standard and factory equipped with a PM filter, or by installing a retrofit PM filter on an existing truck. Ultimately by 2023, the Regulation requires that trucks operating in most regions of the State have an engine that is MY 2010 or newer, which has significantly lower PM and NOx emissions. This means that older trucks operated by Central, CEMEX and the other vendors making deliveries in State will ultimately be replaced or retrofitted to comply with the regulation. However, in the interim period, a minority of deliveries will continue to be made by trucks with engines that are 2009 and older that are in full compliance with all regulations.

Central supplied all the concrete on Phase 1 and the following analysis provides more details regarding the Central truck fleet that operates closest to the site. Central operates 216 trucks from their 12 Bay Area locations of which 14 trucks are housed at their Oakland location. The vast majority of projects in Oakland would be served by trucks stationed in Oakland except in periods of high demand. On those days, trucks would be brought in from other locations to serve the Oakland projects. The Bay Area Central fleet is relatively new with an average vintage of 2009. Of the 216 trucks, 95 or 44 percent are 2010 or newer. The fleet includes 190 trucks equipped with PM filters, both factory (2007 and newer) and retrofit engines (2000-2006). In total, 88 percent of the Central fleet is equipped with PM filters that reduce emissions by up to 98 percent. Therefore, on average only 12 percent of deliveries in the Bay Area would be made by vehicles without PM filters. Concrete pouring is an on-demand, time sensitive operation, as the mix in the barrel needs to be delivered to the site within an hour of loading, or else the concrete hardens in the truck or will not meet specifications once set and cannot be used in the ultimate construction. It is critical to keep the flow of concrete deliveries continuous, until the pour is done to avoid costly waste and rework. On a

typical large pour day, the site will receive 80 to 100 concrete deliveries with different trucks that cycle from the plant to the site. Even without a 2010 or newer truck mandate, there is still an 88 percent chance that the site will get a 2010 or newer or older retrofit truck. The minimal potential air quality benefit of mandating only 2010 and newer vehicles is offset by the lack of feasibility to ensure that such vehicles are available when actually needed for a job. Concrete suppliers such as Central and CEMEX serve multiple customers per day and need to have the flexibility to dispatch trucks as needed per the demand, and cannot “reserve” certain trucks to exclusively serve certain sites. It is infeasible to require that 100 percent of the trucks delivering to the site be 2010 or newer as that could lead to delays in concrete service and potential rework as described above.

The analysis examined the emission differences between using on-road heavy duty trucks for construction delivery trips that are 2010 and newer compared to a 2004 truck without a PM filter. EMFAC 2014 was used to estimate PM<sub>2.5</sub> emissions from trucks meeting these criteria. EMFAC 2014 incorporates the benefits of the ARB Truck and Bus Rule. The Truck and Bus Rule requires all trucks to meet 2010 engine emission standards during a 2020 to 2023 phase in period with some exceptions based on fleet size and compliance options. The results of the analysis are presented below.

The Central fleet is 44 percent 2010 or newer and 88 percent is equipped with PM filters. Based on EMFAC 2014 emission factors, vehicles with PM filters (MY 2010 and newer) operate at a rate of 0.0103 grams per mile and the vehicles without PM filters (MY 2004) operate at rate of 0.1109 grams per mile. The running emissions for the current Central blended fleet average heavy duty T7 truck PM<sub>2.5</sub> emissions are 0.0224 grams per mile. Based on these rates, the Central fleet average is 79.8 percent cleaner than trucks without PM filters. Using all trucks that are 2010 or newer would result in a 54.1 percent reduction in PM<sub>2.5</sub> per mile emissions compared to the Central average fleet rate, however this transition will happen over time, as the remaining 12% of Central’s non-filtered fleet is modified.

Keep in mind that the emissions from non-local trucks will not occur near the project site. Truck trips may originate anywhere the product is stored or manufactured which could be from other states or regions of California.

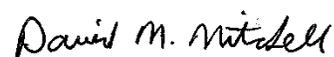
Although using newer than average trucks would provide an additional emission reduction, requiring deliveries to the site to be limited to a certain age vehicle would not be feasible due to lack of control over the trucking fleets that could make deliveries to the site. Prologis has no authority to require Central, CEMEX, or other suppliers to use only new trucks for its project. For deliveries other than concrete, materials are often hauled by independent contract haulers, not contractor fleet trucks. Materials are purchased from different vendors depending on supply availability and cost. Freight companies cannot keep newer trucks idle while waiting for a delivery requiring a newer vehicle. Delivery trucks compliant with the ARB Truck and Bus Rule are legally authorized to transport goods in California and prohibiting some trucks from out of state to make deliveries could be seen as a violation of Interstate Commerce regulations. Experience in the immediate Oakland market has shown that local independent operators generally have older trucks. Requiring use of trucks which exceed the ARB regulations could actually negatively impact emission reduction by increasing travel distances in order to locate a newer compliant truck and could potentially disqualify local vendors that may have an older but ARB compliant truck fleet.

In summary:

- The analysis shows that the construction equipment mix of Tier 3 and Tier 4 engines used for Phase 1 of the Project substantially reduced NOx and PM2.5 emissions – by almost 80 percent below the statewide averages. The Project will endeavor to meet or exceed this trend, however cannot have the mandate of 100 percent Tier 4 imposed due to constraints on the local equipment market and practicalities of how the project needs to get built on a certain schedule.
- Regulating on-road trucks coming to the Project is not something that Prologis has the control or power over. The trucks that come to the site will be legally compliant with the ARB Truck and Bus rule.
- It is infeasible to mandate suppliers and material delivery operators to use newer trucks to deliver to the Project. If implemented even as a policy only, there would be negative impacts to Project schedule, overall feasibility, and the local economy.
- The most impactful on-road trucks serving the Project are concrete deliveries. The major area concrete suppliers have a reasonably new or retrofitted ARB certified fleet, and that alone substantially reduces emissions by a meaningful amount.

If you have any questions regarding this analysis, please call me at (559) 246-3732, or via email at [dmitchell@mitchellaq.com](mailto:dmitchell@mitchellaq.com)

Sincerely,



David M. Mitchell, Owner  
**Mitchell Air Quality Consulting**  
1164 E. Decatur Avenue  
Fresno, CA 93720

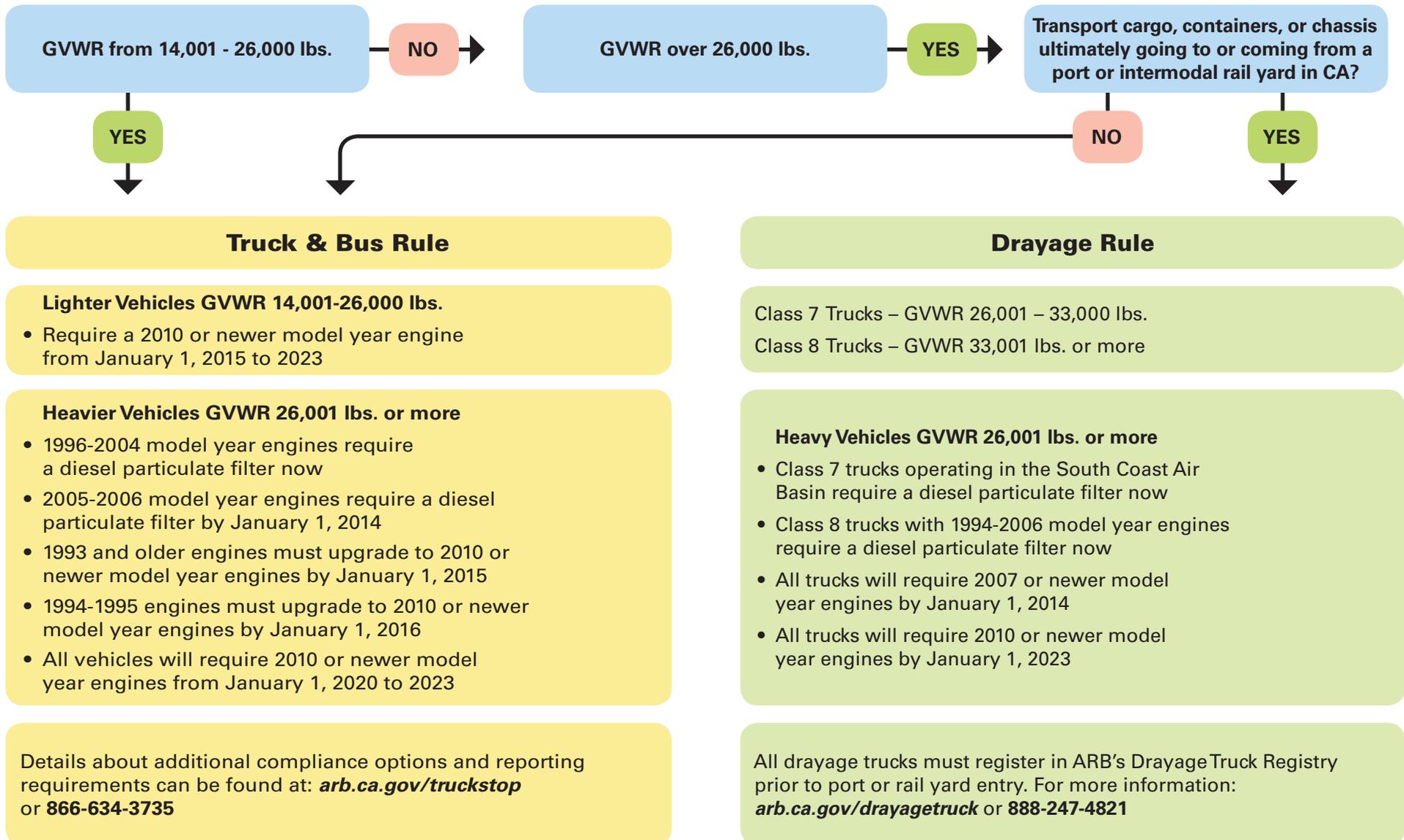


## **Attachment F**

**Summary of the California Air Resources Board Truck and Bus Rule**



**Diesel vehicles with a gross vehicle weight rating (GVWR) over 14,000 lbs. that operate in California (including those based out of state) must comply with ARB rules.**



Note: This page summarizes portions of ARB’s Drayage and Truck and Bus rules and should not be substituted for the actual regulatory language or requirements. Your fleet may also be subject to other ARB regulations. Please contact ARB’s hotlines listed on this page for additional information.

**Attachment G**

**Construction Management Plan**  
**for the Southeast Gateway Parcel (CE-2) and New Central Gateway Parcel (CC-1)**

Dated October 23, 2017

Appendix A contains the  
Air Quality Plan for Construction of the Southeast Gateway Parcel (CE-2) and  
the New Central Gateway Parcel (CC-1)  
Dated October 16, 2017



# Prologis Oakland Global Logistics Center

*Prepared For:*

**City of Oakland  
Planning & Building Dept.**  
250 Frank Ogawa Plaza  
Oakland, CA 94612

*Prepared By:*

**Prologis**  
3353 Gateway Blvd.  
Fremont, CA 94538  
+1 510 656 1900 Phone  
+1 510 656 4320 Fax

[www.prologis.com](http://www.prologis.com)

## Construction Management Plan

**CE-2: Southeast Gateway  
Parcel**

**CC-1: New Central Gateway  
Parcel**

*Submitted on:*

v0: August 11, 2017  
v1: August 24, 2017  
v2: October 23, 2017



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## 1.0 PROJECT OVERVIEW & SITE PLAN

This Construction Management Plan (CMP) covers the remaining Prologis projects, to be built on the Southeast Gateway and New Central Gateway of the Oakland Army Base Redevelopment site. See Fig. 1 below, showing the area and phase breakdown, which are further detailed in narrative below. The areas covered under this CMP are outlined in red.

The Southeast Gateway is Phase 2 of the Prologis projects, and consists of a 14.1-acre parcel located at the Southeast corner of Maritime St. and Burma Rd. Prologis is proposing to develop a 232,750 sf spec trade and logistics building and associated site improvements on this site.

The New Central Gateway site is Phase 3 of the Prologis projects, and consists of a 27-acre parcel located at the Southwest corner of Maritime St. and Burma Rd. Prologis plans to develop this site in two phases: SubPhase A) 16.5 acres, the westerly portion, as a container depot yard for Conglobal; and SubPhase B) 11.1 acres, the easterly portion, as a spec trade and logistics building, approximately 188,000 sf, with associated site improvements.

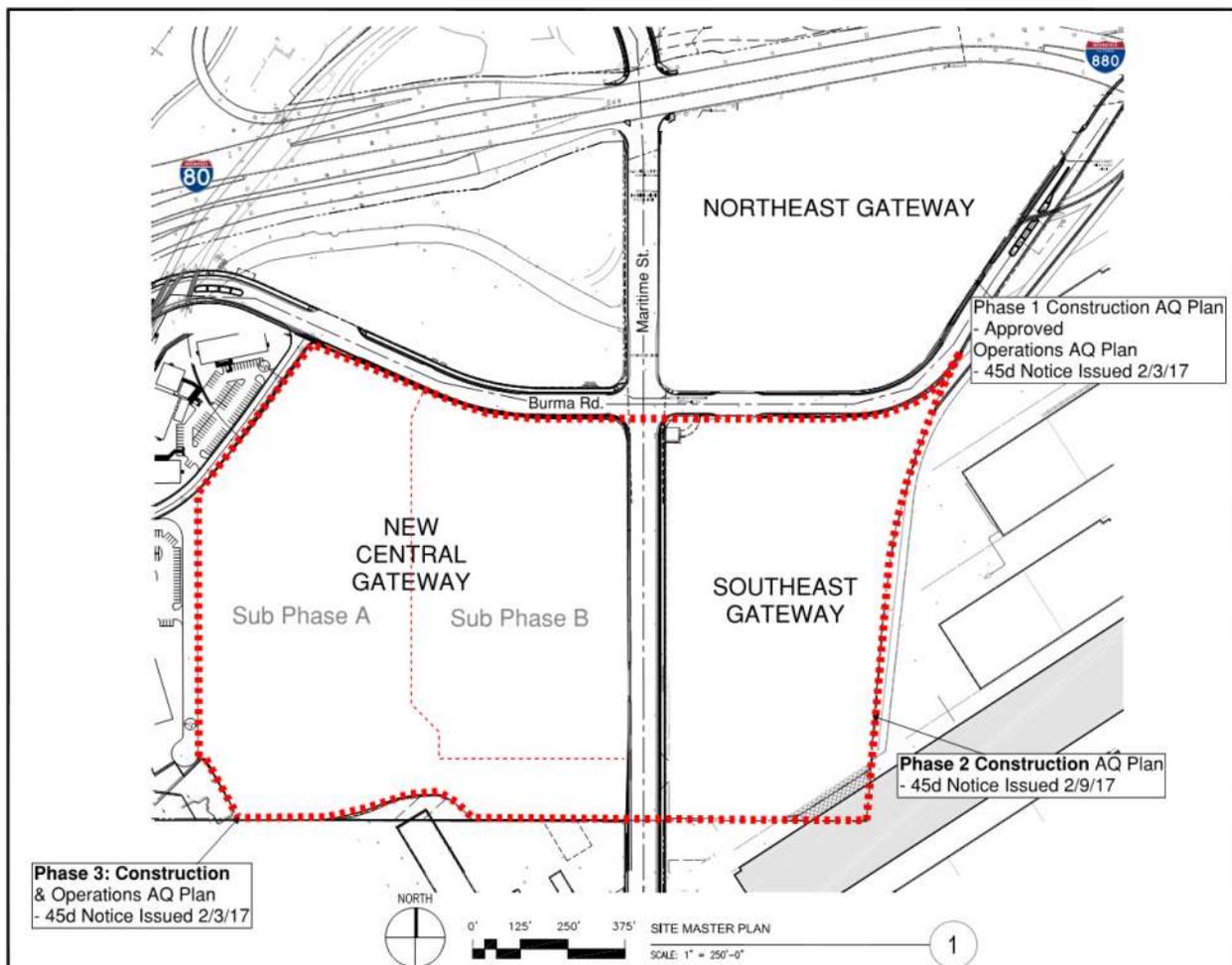


Figure 1 – Site Plan

## 2.0 AIR QUALITY

### 2.1 SCA AIR-2: Construction Related Air Pollution Controls

See Appendix A for separate Diesel Emissions Reduction and Air Quality Plan for Construction v2 dated 10/16/17, taking into consideration stakeholder comments as required by MM PO-1.

## 3.0 CULTURAL RESOURCES

### 3.1 SCA CULT-1: Archaeological Resources

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading and/or construction.

**Requirements:**

Pursuant to Section 15064.5 of the CEQA Guidelines in the event of an unanticipated discovery of an archaeological resource during ground disturbing activities the following provisions shall be instituted:

**Archaeological Resource Discovery Plan:**

- a. Halt all activities within a 50-foot radius of discovery of prehistoric or historic subsurface cultural resources, contact a qualified archaeologist or paleontologist to review discovery, and immediately notify the City.
- b. Determine avoidance measures and/or further actions in consultation with City and a qualified archaeologist or paleontologist. Basin Research Associates, Inc., 510-430-8441

### 3.2 SCA CULT-2: Human Remains

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading and/or construction.

**Requirements:**

Pursuant to Section 15064.5 of the CEQA Guidelines in the event of an unanticipated discovery of human skeletal remains during ground disturbing activities the following provisions shall be instituted:

**Human Remains Discovery Plan:**

- a. Halt all activities upon discovery of human skeletal remains, contact the Alameda County Coroner to review discovery, and immediately notify the City.
- b. Cease all activities within a 50-foot radius of discovery if the County Coroner determines that the remains are Native American, until appropriate arrangements are made.

### 3.3 SCA CULT-3: Paleontological Resources

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading and/or construction.

**Requirements:**

Pursuant to Section 15064.5 of the CEQA Guidelines in the event of an unanticipated discovery of a paleontological resource during ground disturbing activities the following provisions shall be instituted:

Paleontological Resource Discovery Plan:

- a. Halt all activities within a 50-foot radius of discovery of prehistoric or historic subsurface cultural resources, contact a qualified archaeologist or paleontologist to review discovery, and immediately notify the City.
- b. Determine avoidance measures and/or further actions in consultation with City and a qualified archaeologist or paleontologist. Basin Research Associates, Inc., 510-430-8441

## 4.0 GEOLOGY AND SOILS

### 4.1 SCA GEO-1: Erosion and Sedimentation Control Plan

**Mitigation Implementation/Monitoring:** Prior to issuance of a demolition, grading, or building permit; and ongoing throughout demolition, grading, and/or construction:

**Requirements:**

The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.660 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan for review and approval by the Building Services Division. The erosion and sedimentation control plan shall include all necessary measures to be taken to prevent excessive storm water runoff or carrying by storm water runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading operations. The plan shall include, but not be

limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and storm water retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated storm water runoff and sediment volumes shall be included, if required by the Director of Development or designee. The plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.

**Erosion and Sediment Control Mitigation Plan:**

Erosion Control Plans (*Exhibit B*) are submitted to the Oakland Building Services Department as required for a grading permit pursuant to Section 15.04.660 of the Oakland Municipal Code. As required by code the Erosion Control Plan provides for the following:

- Prevents excessive storm water runoff
- Utilizes appropriate short-term erosion control methods, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, storm water retention basins, and devices to trap, store, and filter sediment.
- The storm drain system shall be inspected to verify that the onsite system is cleared of debris and/or sediment. A copy of the survey shall be submitted to the City for review and approval.
- Grading will be prohibited between October 15 and April 15 unless written authorization is obtained from the City Building Services Division.

**5.0 HAZARDS AND HAZARDOUS MATERIALS**

**5.1 SCA HAZ-1: Best Management Practices for Soil and Groundwater Hazards**

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

The project applicant shall implement all of the following Best Management Practices (BMPs) regarding potential soil and groundwater hazards:

- a. Soil generated by construction activities shall be stockpiled onsite in a secure and safe manner or if designated for off-site disposal at a permitted facility, the soil shall be loaded, transported and disposed of in a safe and secure manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state and federal agencies laws, in particular, the Regional Water Quality Control Board (RWQCB) and/or the Alameda County Department of Environmental Health (ACDEH) and policies of the City of Oakland. The excavation, on-site management, and off-site disposal of soil from Project areas within the OARB shall follow the DTSC-approved RAP/RMP.
- b. Groundwater pumped from the subsurface shall be contained onsite in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies of the City of Oakland, the RWQCB and/or the ACDEH. The on-site management and off-site disposal of groundwater extracted from Project areas within the OARB shall follow the DTSC-approved RAP/RMP for Project areas within the OARB. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building (pursuant to the Standard Condition of Approval regarding Radon or Vapor Intrusion from Soil and Groundwater Sources).
- c. Prior to issuance of any demolition, grading, or building permit, the applicant shall submit for review and approval by the City of Oakland, written verification that the appropriate federal, state or county oversight authorities, including but not limited to the RWQCB and/or the ACDEH, have granted all required clearances and confirmed that the all applicable standards, regulations and conditions for all previous contamination at the site. The applicant also shall provide evidence from the City's Fire Department, Office of Emergency Services, indicating compliance with the Standard Condition of Approval requiring a Site Review by the Fire Services Division pursuant to City Ordinance No. 12323, and compliance with the Standard Condition of Approval requiring a Phase I and/or Phase II Reports.

**Hazards and Hazardous Material Mitigation Plan:**

See *Exhibit O* for closure reports related to RMP/RAP. See *Exhibit N* for Fire Safety Phasing Plan.

All subcontractors shall be required by to comply with the RAP/RMP and Soils Management Plan which includes provisions for the following:

- a. All soil stockpiles shall be consolidated in a safe and secure manner.

- b. Soil shall be profiled prior to off-haul and disposal.
- c. All soils determined to be unsuitable for reuse onsite shall be loaded, transported and disposed of in a secure and safe manner and in accordance with applicable local, state, and federal laws, regulations, and/or policies.
- d. Groundwater pumped onsite shall be contained in a safe and secure manner and will only be disposed of at permitted facilities.

## 5.2 SCA HAZ-2: Hazards Best Management Practices

See *Exhibit O* and *Appendix B* for completion reports related to RMP/RAP

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

### **Requirements:**

The project applicant and construction contractor shall ensure Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- a. Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction.
- b. Avoid overtopping construction equipment fuel gas tanks.
- c. During routine maintenance of construction equipment, properly contain and remove grease and oils.
- d. Properly dispose of discarded containers of fuels and other chemicals.
- e. Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all USTs, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.
- f. If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions

described in the City's Standard Conditions of Approval (and DTSC-approved RAP/RMP for Project area within the OARB), as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

**Hazards Best Management Practices Mitigation Plan:**

- a. During construction comply with the RAP/RMP and Soils Management Plan.
- b. Prepare a Project Storm Water Pollution Prevention Plan (SWPPP) that includes site hazardous materials and waste management BMPs, proper procedures for storing and handling construction materials onsite, and cleanup measures for accidental releases.
- c. Collect environmental samples if suspected contamination, abandoned drums, USTs, elevator shafts, clarifiers, or subsurface hydraulic lifts are encountered during construction, and immediately notify Mark Arniola with the City of Oakland at (510) 238-7371.
- d. Prepare task-specific Health and Safety Plan for construction activities in areas with known or suspected contamination.
- e. Follow recommendations provided by a qualified environmental consultant for the profiling, handling, treating, transportation, and/or disposal of any other materials classified as potentially hazardous waste.
- f. Any suspect contamination encountered during construction requires compliance with the RAP/RMP and notification of appropriate parties, including the City (Mark Arniola) and regulatory agencies.

## **6.0 HYDROLOGY AND WATER QUALITY**

### **6.1 SCA HYD-1: Storm Water Pollution Prevention Plan (SWPPP)**

**Mitigation Implementation/Monitoring:** Prior to and ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

The project applicant must obtain coverage under the General Construction Activity Storm Water Permit (General Construction Permit) issued by the State Water Resources Control Board (SWRCB). The project applicant must file a notice of intent (NOI) with the SWRCB. The project applicant will be required to prepare a storm water pollution prevention plan (SWPPP) and submit the plan for review and approval by the Building Services Division. At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage

and maintenance; a list of pollutants likely to contact storm water; site-specific erosion and sedimentation control practices; a list of provisions to eliminate or reduce discharge of materials to storm water; Best Management Practices (BMPs), and an inspection and monitoring program. Prior to the issuance of any construction-related permits, the project applicant shall submit to the Building Services Division a copy of the SWPPP and evidence of submittal of the NOI to the SWRCB. Implementation of the SWPPP shall start with the commencement of construction and continue through the completion of the project. After construction is completed, the project applicant shall submit a notice of termination to the SWRCB.

**Storm Water Pollution Prevention Action Items:**

- Prepare a construction SWPPP signed by a Qualified SWPPP Developer (QSD).
- File a NOI with the SWRCB.
- Submit SWPPP to the Water Board and City for review and approval.
- File a NOT with the SWRCB at the completion of construction.
- On behalf of the Developer and/or its Contractor, a QSP will perform periodic inspections to confirm compliance.

## **7.0 NOISE**

### **7.1 SCA NOI-1: Days/Hours of Construction Operation**

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

The project applicant shall require construction contractors to limit standard construction activities as follows:

- a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Saturday, except that barging and unloading of soil shall be allowed 24 hours per day, 7 days per week for about 15 months.
- b. Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division. The project applicant shall also submit an air

quality report prepared by a qualified professional evaluating the air quality impacts of the special activities, if the duration of each activity exceeds 6 months.

- c. No construction activity shall take place on Sundays or Federal holidays, except as noted above.
- d. Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.
- e. Applicant shall use temporary power poles instead of generators where feasible.
- f. All requests to Building Services to work outside normal work days & hours require a Neighborhood Survey (*Exhibit P*) to be circulated at least 10-days in advance of proposed work to nearby residents and businesses within 300 feet of the job site. A draft of the Neighborhood Survey needs to be approved by Building Services prior to circulating it for community input. Results of the survey are forwarded to Building Services 2 days in advance of scheduled work, to be considered prior to granting written authorization.

**Construction Work Hours Plan:**

Developer and/or its Contractor will specify in the Project Plans, install signage, and perform periodic inspections, including gate checks, to confirm the following actions:

- a. Construction activities will be conducted Monday through Saturday from 7:00am to 7:00 pm. (*Exhibit H*)
- b. Sunday and holiday hours will be from 7:00 am to 4:00 pm with prior City approval and shall conform to the City of Oakland Weekend Noise Ordinance restrictions.
- c. Utilize temporary power poles instead of generators when feasible.

**7.2 SCA NOI-2: Noise Control**

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and

Zoning Division and the Building Services Division review and approval, which includes the following measures:

- a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- b. Except as provided herein, Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c. Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.
- d. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

**Noise Control Mitigation Plans:**

Developer and/or its Contractor will specify in the Project Plans, install signage (*Exhibit H*), and perform periodic inspections to confirm the following actions:

- a. Use BACTs for noise control on construction equipment and trucks.
- b. Use hydraulically or electrically powered impact tools.
- c. Use exhaust mufflers when pneumatically powered tools are imperative.
- d. Locate stationary noise sources as far from receptors as possible.
- e. Limit the noisiest phases of construction to periods of no more than 10 consecutive days.
- f. Comply with decibel levels and other aspects of the City of Oakland Noise Ordinance.

**7.3 SCA NOI-3: Noise Complaint Procedures**

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- a. A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department (during regular construction hours and off-hours).
- b. A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours).
- c. The designation of an on-site construction complaint and enforcement manager for the project.
- d. Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity.
- e. A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

**Noise Complaint Mitigation Plan:**

Developer and/or its Contractor will perform periodic inspections to confirm the following actions:

- a. The project team will hold a pre-construction meeting with the Building Services Division staff to discuss noise control measures and to provide an opportunity for inspection and verification of noise control measures.
- b. The project team will post signage with construction hours of operation and contact information for the Building Services Department, Oakland Police Department and the Contractor's noise enforcement representatives. The Contractor's noise enforcement representative(s) is/are responsible for documenting complaints in the Noise Complaint Log and remedying complaints within 48 hours after receiving the complaint.

- c. The project team will notify neighbors and occupants within 300 feet of the project site at least 30 days in advance of extreme noise generating activities.
- d. All noise complaints received will be documented in the Noise Complaint Log (Exhibit J). At a minimum the following information will be documented in the log: date of complaint, contact information for person providing a noise complaint, reason for the complaint, action taken and/or resolution. Additionally, an email will be notified within 48 hours with an explanation of the corrective measures taken, if applicable. Complaint Logs (Exhibit I) will be maintained up to date and shall be submitted to the Building Services Division monthly and upon request.

#### **7.4 SCA NOI-6: Pile Driving and Other Extreme Noise Generators**

**Mitigation Implementation/Monitoring:** Ongoing throughout demolition, grading, and/or construction activities.

**Requirements:**

To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:

- a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings.
- b) Implement “quiet” pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions.
- c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.

d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts.

e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.

**Extreme Noise Generator Mitigation Plan:**

Developer, its Contractor, and/or its consultant will:

- a. In the event of a noise complaint, will contract with a qualified acoustical engineer to access construction noise levels at City approved monitoring locations, in order to verify compliance with Oakland Noise Regulations related to construction. The consultant will produce a site-specific noise reduction plan with recommended noise control measures for review and approval by Building Services, and the project sponsors will apply all prescribed noise reduction measures in this plan.
- b. Developer and/or its Contractor will perform periodic inspections to confirm compliance.
- c. Hire qualified noise consultant for initial noise assessment and provide written letter with findings. See Exhibit R – Noise Consultant Review Letter.

**8.0 PUBLIC SERVICES**

**8.1 SCA PSU-2: Fire Safety Phasing Plan, MM 4.9-3**

Mitigation Implementation/Monitoring: Prior to issuance of a demolition, grading, and/or construction and concurrent with any p-job submittal permit.

Requirements:

The Port and City shall require developers within their respective jurisdictions to notify OES of their plans in advance of construction or remediation activities. Each developer proposing construction in the redevelopment project area would be required to notify OES prior to initiation of construction, so that OES may plan emergency access and egress taking into consideration possible conflicts or interference during the construction phase. The developer would also be required to notify OES once construction is complete.

**Fire Safety Phasing Plan:**

The Developer or its Contractor will:

- a. Notify California Emergency Management Agency (CalEMA, formerly OES) prior to and at the completion of construction.
- b. Submit a separate fire safety phasing plan (Exhibit N) to the Planning and Zoning Division and Fire Services Division for their review and approval. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features.

## **9.0 TRANSPORTATION**

### **9.1 SCA TRANS-2: Construction Traffic and Parking**

Mitigation Implementation/Monitoring: Prior to the issuance of a demolition, grading or building permit; and ongoing throughout demolition, grading, and/or construction.

#### **Requirement:**

The project sponsor and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project (see also SCA TRANS-1, especially “h”) and other nearby projects that could be simultaneously under construction. The project sponsor shall develop a construction management plan. The plan shall be submitted to EBMUD, the Port, and Caltrans for their review and comment ten (10) business days before submittal to the City. The project sponsor shall consider in good faith such comments and revise the plan as appropriate. The revised plan shall be submitted for review and approval by the City’s Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

- a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.
- b) Notification procedures for adjacent project sponsors and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.
- d) A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.
- e) Provision for accommodation of pedestrian flow.
- f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on-street spaces (see also SCA TRANS-1, especially “h”).

- g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.
- h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible.
- i) No materials or equipment shall be stored on the traveled roadway at any time.
- j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.
- k) All equipment shall be equipped with mufflers.
- l) Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.
- m) A traffic construction management analysis was performed which recommended certain improvements to the Adeline/5th and Adeline/3rd Street and Adeline Street intersection, which is discussed under construction impacts of the Traffic and Transportation section of the 2012 OARB Initial Study/Addendum. The requirement for these improvements is not applicable to Prologis's vertical project.

**Construction Traffic and Parking Mitigation Plan:**

The Developer, its Contractor, or its consultant will prepare a Traffic Control Plan if encroachment into the public right-of-way is required. When required, a Traffic Control Plan will be submitted to EBMUD, the Port, and CalTrans for review and comment no less than 10 days prior to submittal to the City. Incorporate comments and revise plan as appropriate.

- a. Submit the Traffic Control Plan to the City for review and approval prior to undertaking any project construction that affects pedestrian or vehicular circulation in the public right-of-way.
- b. Schedule major truck trips and deliveries to avoid peak traffic hours.
- c. Designate construction access routes, construction staging areas, remediation staging areas, construction and visitor parking areas, and pedestrian walkways. Delineate these areas on Project plans. (See *Exhibit D & F*). All truck traffic involving vehicles over 2 tons are restricted to pre-approved tuck route (*Exhibit F*). This will be a contractual requirement. In addition, this requirement will be communicated at the each subcontractor preconstruction meeting and weekly subcontractor meetings

- d. Notify adjacent property owners and occupants and public safety personnel and erect electronic message boards in advance of major deliveries, detours, and/or lane closures. (*Exhibit M*)
- e. Survey and document existing conditions prior to construction. Repair damage to streets caused by construction equipment within one week of occurrence unless damage is anticipated to continue. Immediately repair damage that is a threat to public health or safety.
- f. Transport heavy equipment to the site by truck/trailer.
- g. Require all operators tracking dirt/mud onto public roadways to have a wet power vacuum sweeper present daily during these activities and remove tracked dirt/mud at the end of each day or more frequently if needed. (See Dust Control Mitigation Plan)
- h. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. (See *Exhibit B* and Dust Control Mitigation Plan)
- i. Draft and implement a Project SWPPP. Required BMPs will be outlined in the SWPPP and enforced with reporting and inspection.
- j. Inspect construction area and vicinity daily, and collect and properly dispose of construction-related litter, whether located on the property, within the public rights-of-way, or adjacent properties.
- k. Post signage and enforce traffic control measures with reporting and/or inspection.
- l. Develop a process for receiving, responding to, and tracking complaints. (See *Exhibit J*)
- m. The Project Compliance Manager will monitor and facilitate the implementation of mitigation measures. The Compliance Manager will maintain Daily Inspection Logs throughout the Project. (See *Exhibit L*)
- n. All equipment will be equipped with mufflers to reduce pollutants and noise. Developer, its Contractor, and/or its consultant will perform periodic inspections to confirm compliance.
- o. An updated Project Truck Log (*Exhibit K*) will be submitted to Building Services monthly and upon request. The log will summarize all deliveries and off-hauls involving weights (truck + haul load) of 2 to 5 tons, and > 5 tons.
- p. Project Truck Log (*Exhibit K*) and pre-and post-construction videos (*Exhibit Q*) will be taken to assess potential wear and tear solely due to traffic directly and specifically attributable to construction of the Project.

## **10.0 UTILITIES**

### **10.1 SCA UTL-2: Waste Reduction and Recycling**

**Mitigation Implementation/Monitoring:** Prior to the issuance of a demolition, grading or building permit.

**Requirement:**

The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency. Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at <http://www2.oaklandnet.com/Government/o/PWA/o/FE/s/GAR/OAK024368> or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.

**Waste Reduction and Recycling Plan:**

The Developer, its Contractor, or its consultant will:

- a. Prepare a Waste Reduction and Recycling Plan. Submit the plan to the City for review and approval.
- b. Identify and track all waste for applicability of reuse or diversion.

## **LIST OF EXHIBITS**

EXHIBIT A – SITE PLAN

EXHIBIT B – EROSION CONTROL PLAN

EXHIBIT C – PROJECT SCHEDULE

EXHIBIT D – SITE LOGISTICS PLAN

EXHIBIT E – TRAFFIC CONTROL PLAN

EXHIBIT F – HAUL ROUTE

EXHIBIT G – SIGNAGE: SPEED LIMIT

EXHIBIT H – SIGNAGE: DUST REPORTING, NOISE COMPLAINTS, WORK HOURS

EXHIBIT I – SIGNAGE: IDLING POLICY

EXHIBIT J – DUST AND NOISE COMPLAINT LOG FORM

EXHIBIT K – PROJECT TRUCK LOG FORM

EXHIBIT L – DAILY SITE INSPECTION LOG FORM

EXHIBIT M – SAMPLE PUBLIC NOTICE

EXHIBIT N – FIRE SAFETY PHASING PLAN

EXHIBIT O – RAP/RMP INFORMATION

EXHIBIT P – NEIGHBORHOOD SURVEY AND NOTICE

EXHIBIT Q – PRECONSTRUCTION VIDEO

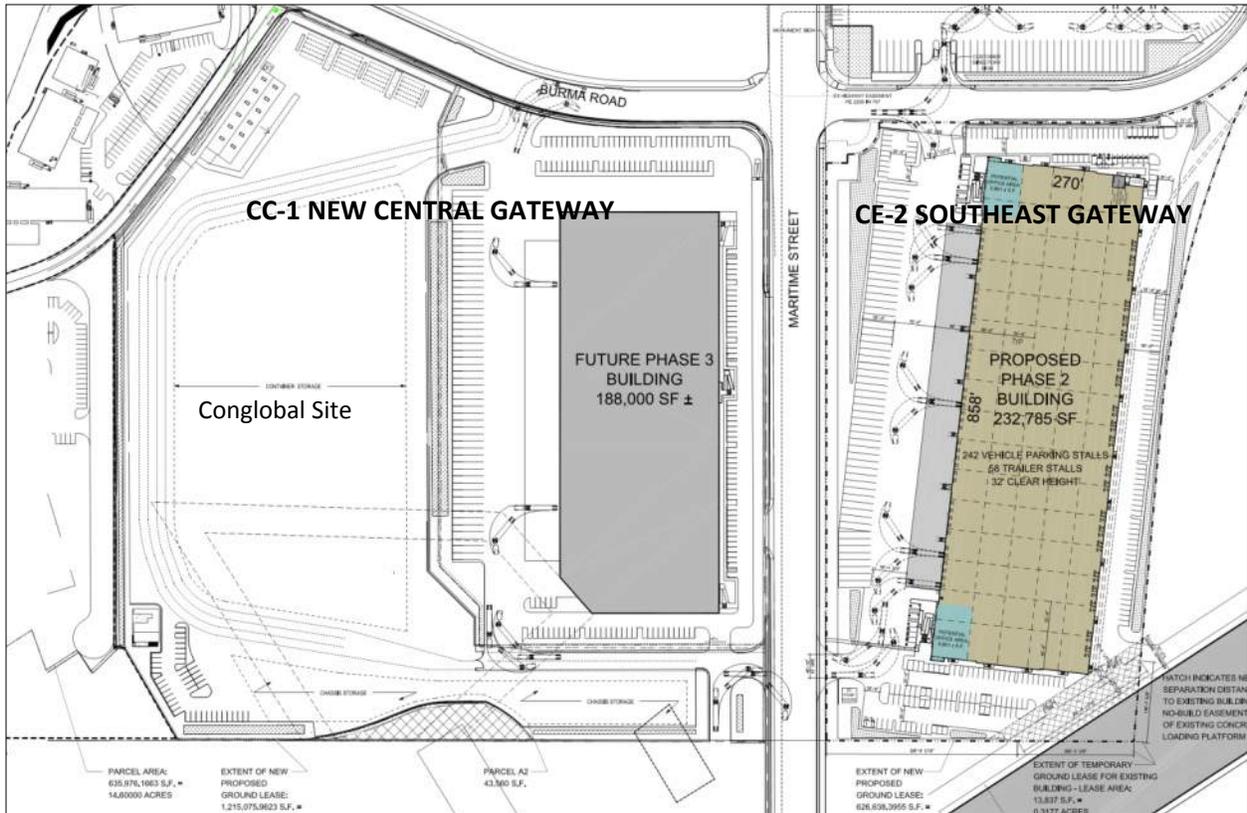
EXHIBIT R – NOISE CONSULTANT REVIEW LETTER

## **Appendices:**

Appendix A – DIESEL EMISSIONS AND AIR QUALITY PLAN

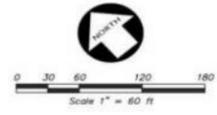
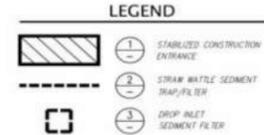
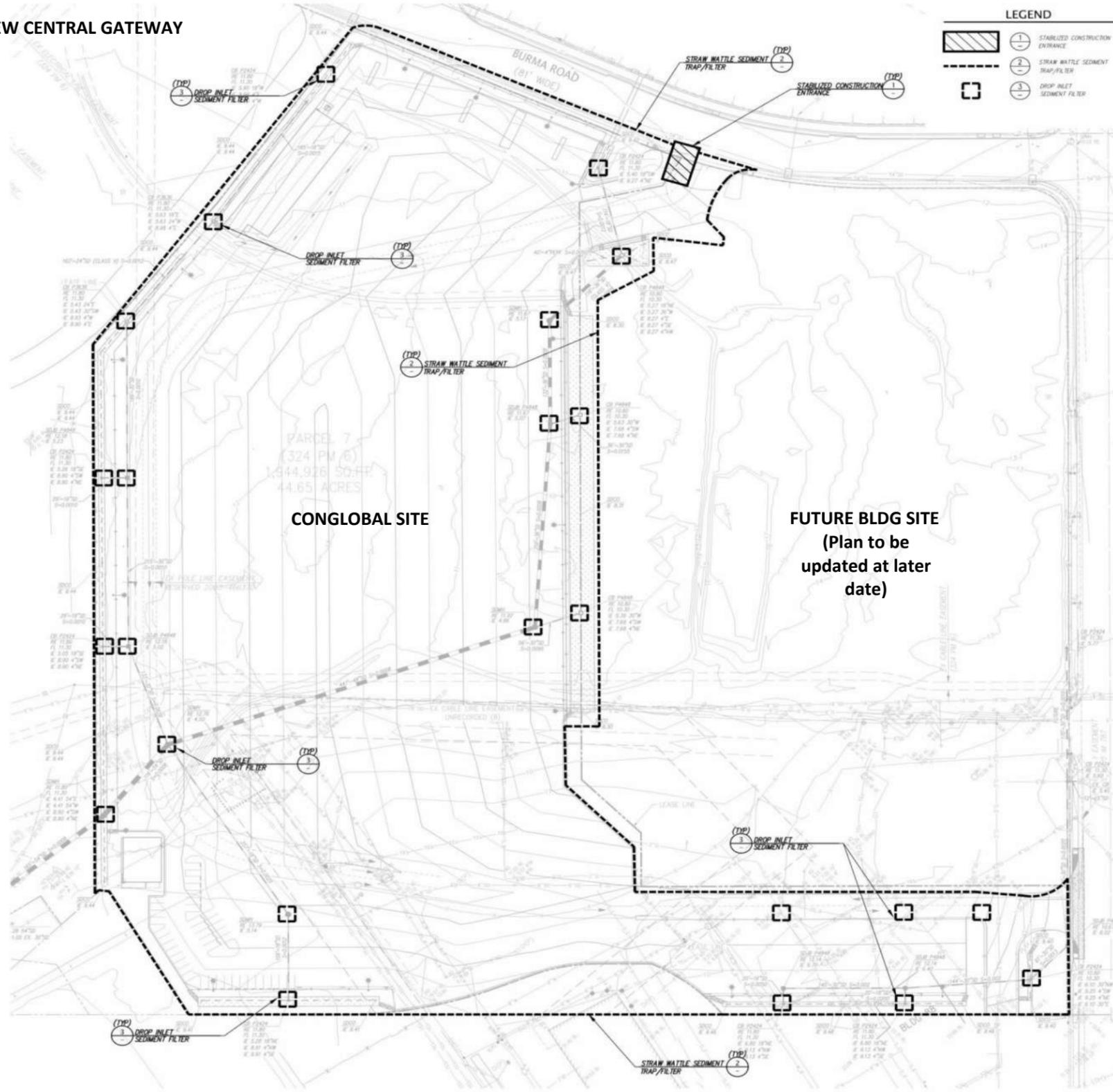
Appendix B – DTSC COMPLETION CERTIFICATES

# EXHIBIT A – SITE PLAN



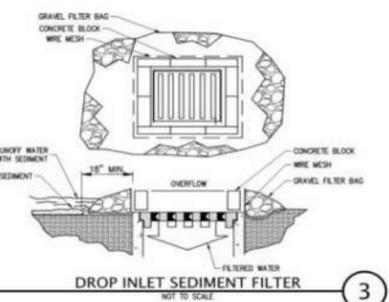
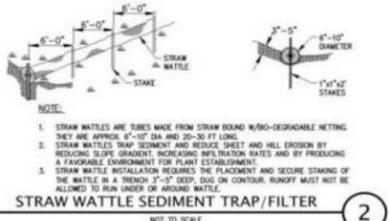
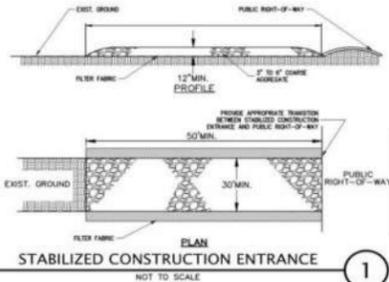


B.2 – CC-1 NEW CENTRAL GATEWAY



**EROSION & SEDIMENT CONTROL MEASURES**

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE EFFECTIVE FOR THE DURATION OF CONSTRUCTION.
2. AFTER THE UNDERGROUND STORM DRAIN SYSTEM IS INSTALLED, THE CATCH BASINS WILL BE INSTALLED (AS SOON AS PRACTICAL) AND ROCK BARRIER BAGS WILL BE PLACED AROUND THESE CATCH BASINS AS SHOWN ON THIS PLAN UNTIL THE SITE IS PAVED.
3. SHOULD THE ON-SITE STORM DRAINS NOT BE INSTALLED COMPLETELY BY OCTOBER 15, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS AT THE EXISTING STORM PIPES STUBBED TO THE SITE.
4. PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION PLAN:  
NAME: TBD  
ADDRESS: TBD  
TELEPHONE: TBD
5. THE CONTRACTOR SHALL PLACE 3"-6" COARSE AGGREGATE AS A DRAINAGE ROADWAY (12" MIN. THICK FOR THE FULL WIDTH AND 50 FEET LONG) AT EACH O/N ENTRANCE TO SITE. ANY AGG. THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THAT SAME DAY AND AS REQUIRED BY THE CITY OF OAKLAND.
6. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE CITY ENGINEER.
7. ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LOADED RUN-OFF TO ANY STORM DRAINAGE SYSTEM.
8. THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING DRAINAGE PLANS ARE TO BE RESUBMITTED FOR CITY APPROVAL PRIOR TO THE SEPTEMBER FIRST OF EACH SUBSEQUENT YEAR UNTIL THE SITE IMPROVEMENTS ARE ACCEPTED BY THE CITY.
9. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY.
10. SEDIMENT BASINS SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE PLAN.
11. BARRIERS AND TEMPORARY STROPPLES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.
12. ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBANK FLOW.
13. NETS WHICH ARE NOT USED IN CONJUNCTION WITH ROCK BARRIER BAGS OR SEDIMENT BASINS SHOULD BE COVERED OR OTHERWISE ADJUSTED TO PREVENT WINDUP UNLESS THE AREA DRAINED IS UNDISTURBED OR STABILIZED.
14. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF THE ENGINEER.
15. DETAILS FOR THE CONSTRUCTION OF FACILITIES ARE SHOWN ON THESE PLANS.
16. THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT. SEE SHEET C2 FOR OTHER INFORMATION.



**RMV**  
Architecture & Interior  
160 Pine Street  
San Francisco, CA 94111  
Tel: 415.781.9800  
Fax: 415.788.5216  
www.rmv.com

REFERENCE DRAWINGS  
NOT FOR CONSTRUCTION

**KIER & WRIGHT**  
CIVIL ENGINEERS & SURVEYORS, INC.  
2810 Colton Canyon Road, Suite 200, 94618  
Livermore, California 94551, Tel: 925.249.8788

SY	Description	Date

ISSUE: CONCEPT  
**CONGLOBAL INDUSTRIES OAKLAND DEPOT**  
11 BURMA ROAD  
NEW CENTRAL GATEWAY,  
OAKLAND, CALIFORNIA

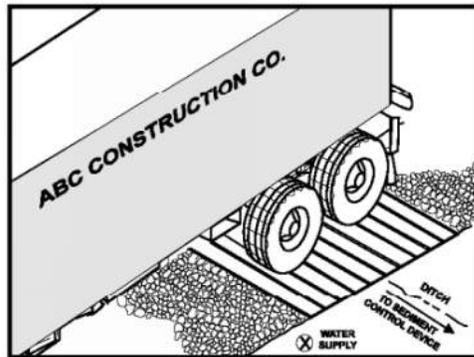
**PROLOGIS**  
3383 GATEWAY BLVD.  
FREMONT, CALIFORNIA 94538  
TELEPHONE: 510.656.1900

Date: 03/31/2017  
Project No: A13533-2  
Sheet Title: EROSION CONTROL PLAN  
Sheet No: C5

Released for Construction  
Not Released for Construction

# Entrance/Outlet Tire Wash

TC-3



### Objectives

EC	Erosion Control	
SE	Sediment Control	<input checked="" type="checkbox"/>
TC	Tracking Control	<input checked="" type="checkbox"/>
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

### Legend:

- Primary Objective
- Secondary Objective

### Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

### Potential Alternatives

- TC-1 Stabilized Construction Entrance/Exit

### Description and Purpose

A tire wash is an area located at stabilized construction access points to remove sediment from tires and under carriages and to prevent sediment from being transported onto public roadways.

### Suitable Applications

Tire washes may be used on construction sites where dirt and mud tracking onto public roads by construction vehicles may occur.

### Limitations

- The tire wash requires a supply of wash water.
- A turnout or doublewide exit is required to avoid having entering vehicles drive through the wash area.
- Do not use where wet tire trucks leaving the site leave the road dangerously slick.

### Implementation

- Incorporate with a stabilized construction entrance/exit. See TC-1, Stabilized Construction Entrance/Exit.
- Construct on level ground when possible, on a pad of coarse aggregate greater than 3 in. but smaller than 6 in. A geotextile fabric should be placed below the aggregate.
- Wash rack should be designed and constructed/manufactured for anticipated traffic loads.
- Provide a drainage ditch that will convey the runoff from the wash area to a sediment trapping device. The drainage ditch should be of sufficient grade, width, and depth to carry the wash runoff.
- Use hoses with automatic shutoff nozzles to prevent hoses from being left on.
- Require that all employees, subcontractors, and others that leave the site with mud caked tires and undercarriages to use the wash facility.
- Implement SC-7, Street Sweeping and Vacuuming, as needed.

### Costs

Costs are low for installation of wash rack.

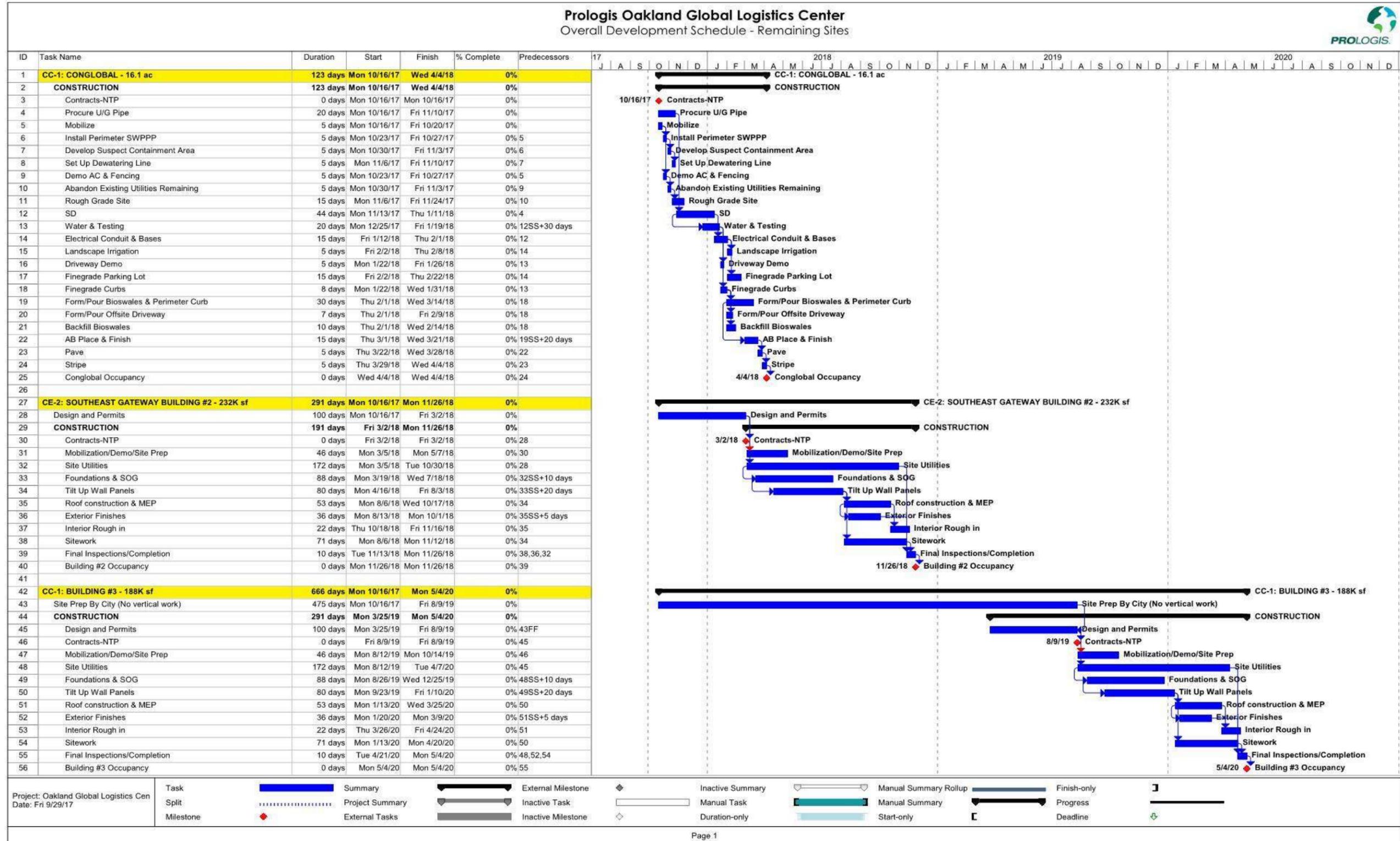
### Inspection and Maintenance

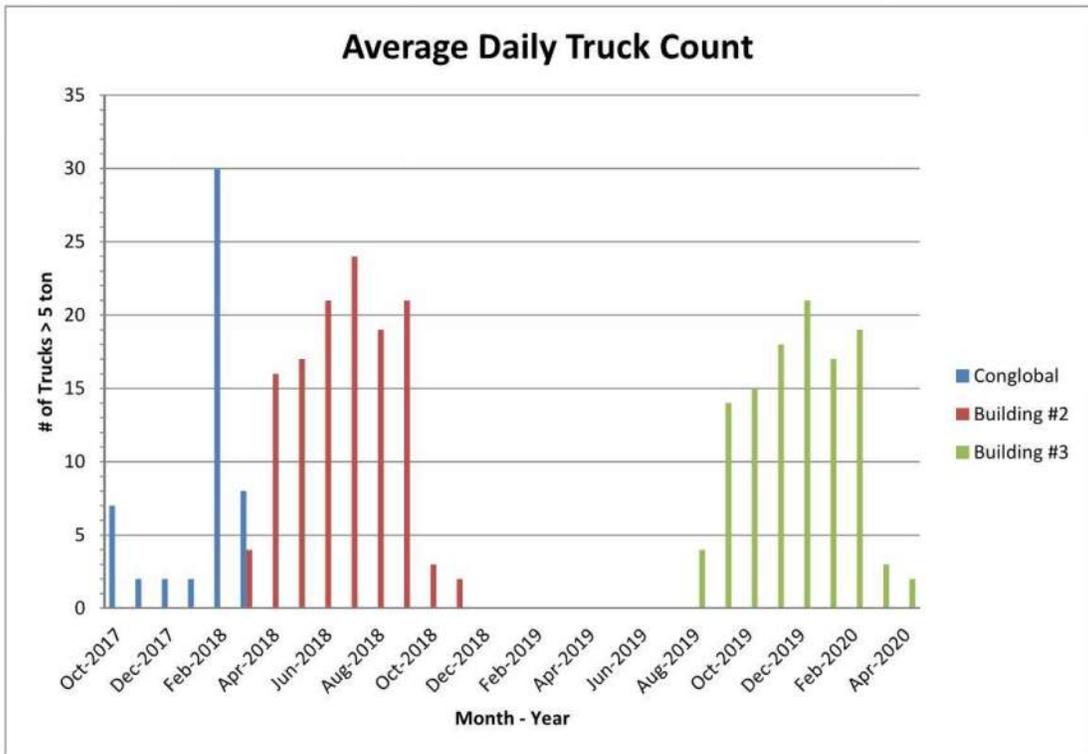
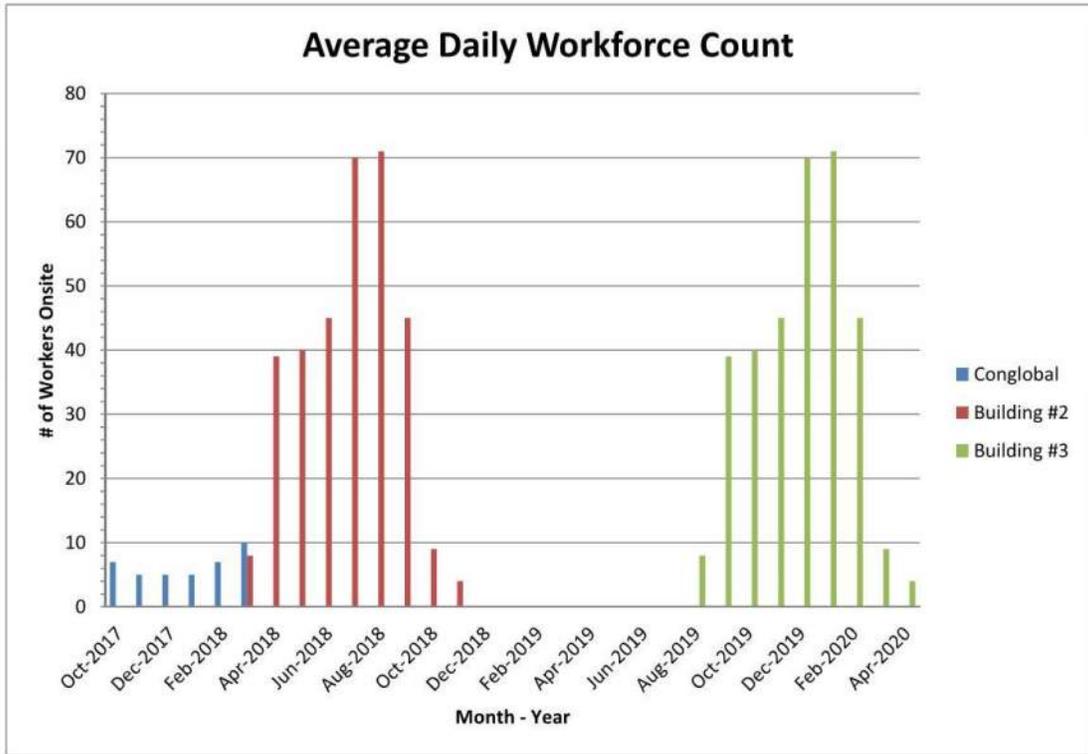
- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly during the rainy season and of two-week intervals in the non-rainy season to verify continued BMP implementation.
- Inspect BMPs subject to non-stormwater discharge daily while non-stormwater discharges occur.
- Remove accumulated sediment in wash rack and/or sediment trap to maintain system performance.
- Inspect routinely for damage and repair as needed.



To be used at all construction entrances/exits

EXHIBIT C – PROJECT SCHEDULE





Note: Months with most trucks represents likely paving or concrete pour timeframes.

**EXHIBIT D – SITE LOGISTICS PLAN**

**D.1 – CE-2 SOUTHEAST GATEWAY**

**Monetta, John**

**From:** Trujillo, Miguel  
**Sent:** Monday, November 20, 2017 2:47 PM  
**To:** Monetta, John  
**Cc:** Quesada, Bill; Orduna, Enrique  
**Subject:** RE: Prologis Oakland Army Base Remaining Sites Fire Safety Phasing Plan  
**Attachments:** Fire Safety During Construction Contractor form July 2017.docx; Major Project Under Construction (7-13-17).xls

John and Bill,

The attached plans are approved as detailed.

Please see the standard California Fire Code requirements for construction sites.

Maybe the last 3 items would not be applicable to small projects or those projects without /wood combustible construction.

Bill, we can always meet at a later date to discuss details so these conditions can be placed on your approval.

Thank you,  
 Miguel

**From:** Monetta, John  
**Sent:** Monday, November 20, 2017 11:55 AM  
**To:** Trujillo, Miguel <MTrujillo@oaklandnet.com>  
**Cc:** Quesada, Bill <BQuesada@oaklandnet.com>  
**Subject:** FW: Prologis Oakland Army Base Remaining Sites Fire Safety Phasing Plan

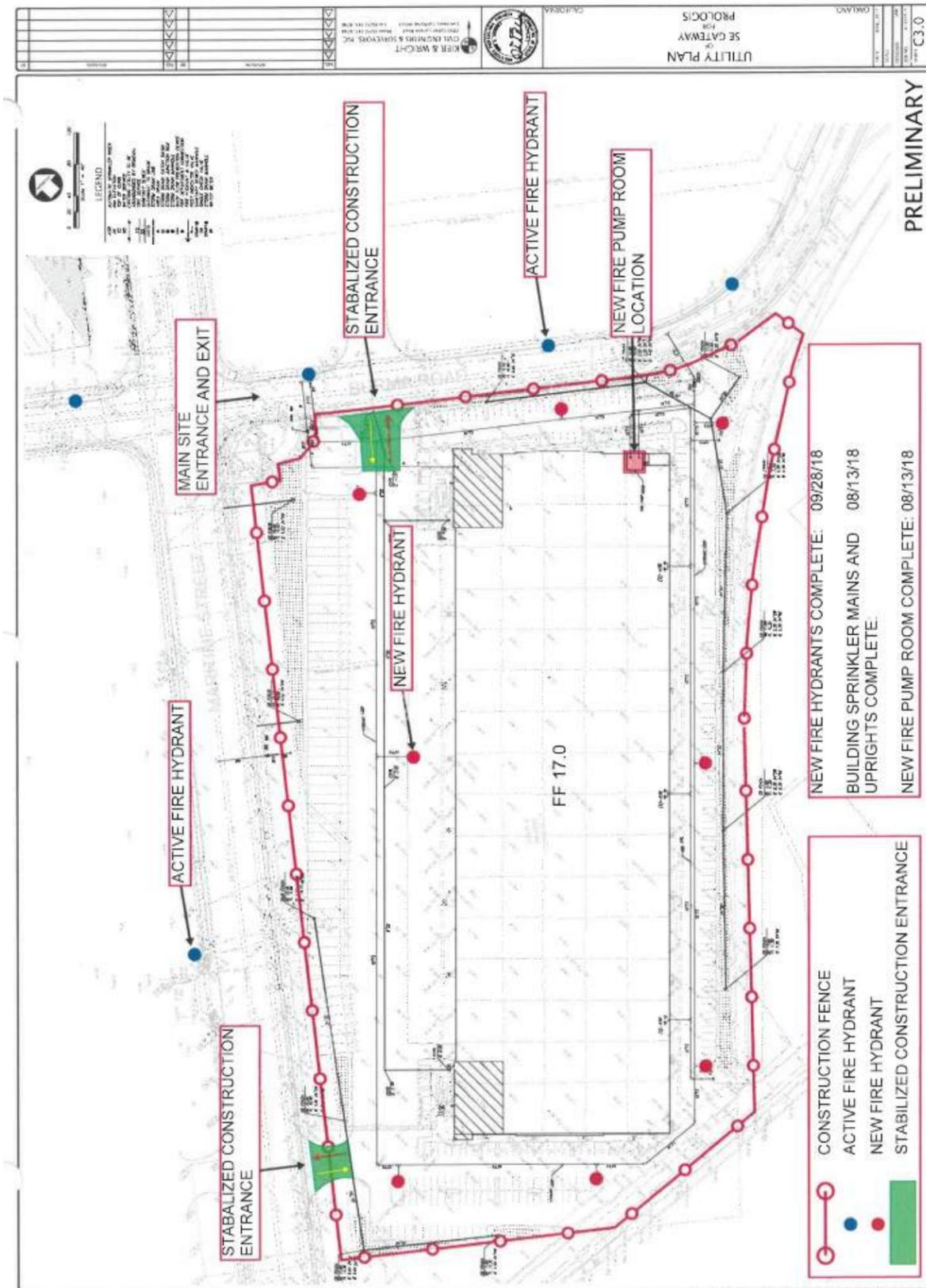
Miguel:

Please find attached the two Fire Safety Phasing Plans for your review and approval. Hard signature on the plans or an email responding back that the attached are approved will work.

Please let me know if you have any questions.

Thank you,

**JOHN MONETTA** PROJECT MANAGER I  
 CITY OF OAKLAND, City Administrator's Office  
 Oakland Army Base Project Implementation  
 250 Frank H. Ogawa Plaza, 5<sup>th</sup> Floor, Oakland CA 94612  
 Tel: 510.238.7125 Fax: 510.238.3691



**D.2 – CC-1 CONGLOBAL NEW CENTRAL GATEWAY**

**Monetta, John**

**From:** Trujillo, Miguel  
**Sent:** Monday, November 20, 2017 2:47 PM  
**To:** Monetta, John  
**Cc:** Quesada, Bill; Orduna, Enrique  
**Subject:** RE: Prologis Oakland Army Base Remaining Sites Fire Safety Phasing Plan  
**Attachments:** Fire Safety During Construction Contractor form July 2017.docx; Major Project Under Construction (7-13-17).xls

John and Bill,

The attached plans are approved as detailed.

Please see the standard California Fire Code requirements for construction sites.

Maybe the last 3 items would not be applicable to small projects or those projects without /wood combustible construction.

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Thank you,  
 Miguel

**From:** Monetta, John  
**Sent:** Monday, November 20, 2017 11:55 AM  
**To:** Trujillo, Miguel <MTrujillo@oaklandnet.com>  
**Cc:** Quesada, Bill <BQuesada@oaklandnet.com>  
**Subject:** FW: Prologis Oakland Army Base Remaining Sites Fire Safety Phasing Plan

Miguel:

Please find attached the two Fire Safety Phasing Plans for your review and approval. Hard signature on the plans or an email responding back that the attached are approved will work.

Please let me know if you have any questions.

Thank you,

**JOHN MONETTA** PROJECT MANAGER I  
 CITY OF OAKLAND, City Administrator's Office  
 Oakland Army Base Project Implementation  
 250 Frank H. Ogawa Plaza, 5<sup>th</sup> Floor, Oakland CA 94612  
 Tel: 510.238.7125 Fax: 510.238.3691

Note: Plan to be updated at later date to include Logistics Plan for Building #3 portion of CC-1 site.



CONGLOBAL – Project Logistics Plan  
 Fire Safety Phasing Plan



**PROLOGIS** 6000FELLOW TOP GRADE  
 CONSTRUCTION

## **EXHIBIT E – TRAFFIC CONTROL PLAN**

At this time, it is not anticipated that there will be any lane closures or work in the public right-of-way associated with this construction. The Developer, its Contractor, or its Consultant will prepare a Traffic Control Plan if encroachment into the public right of way is required. When required, a Traffic Control Plan will be submitted to EBMUD, the Port, and CalTrans for review and comment no less than 10 days prior to submittal to the City. Incorporate comments and revise plan as appropriate.

# EXHIBIT F – HAUL ROUTES

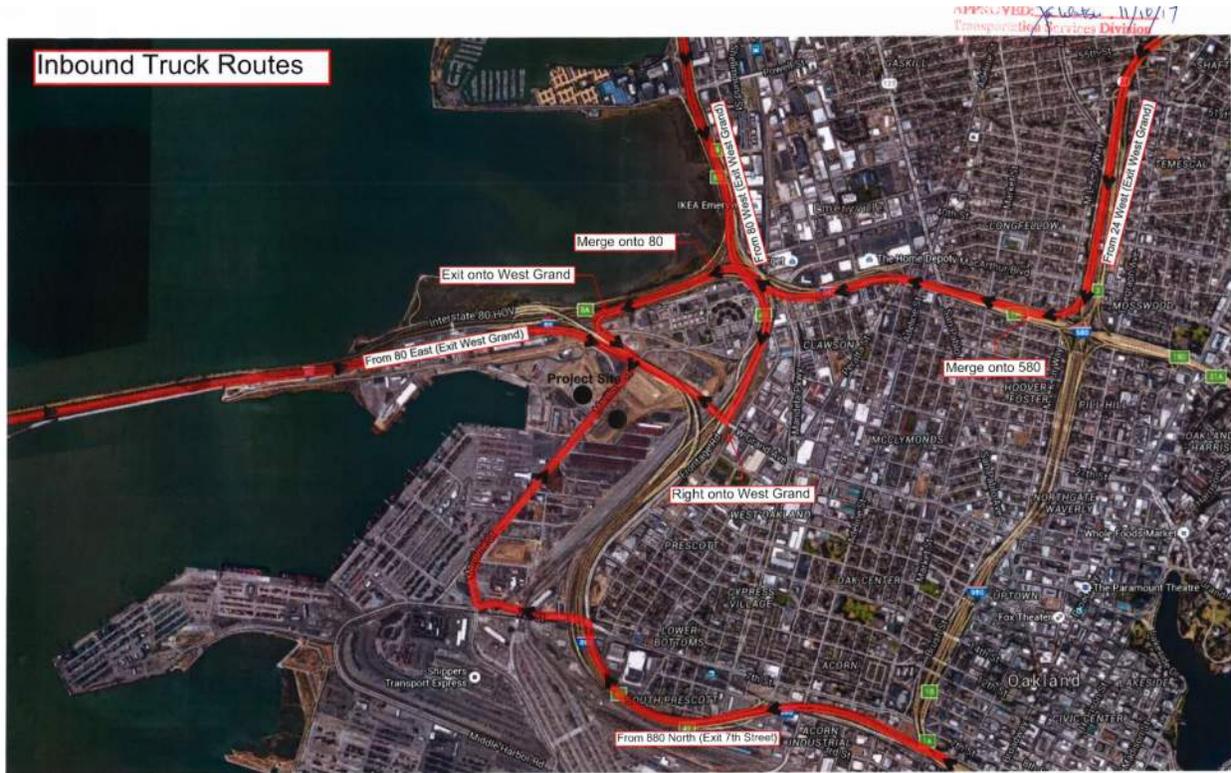
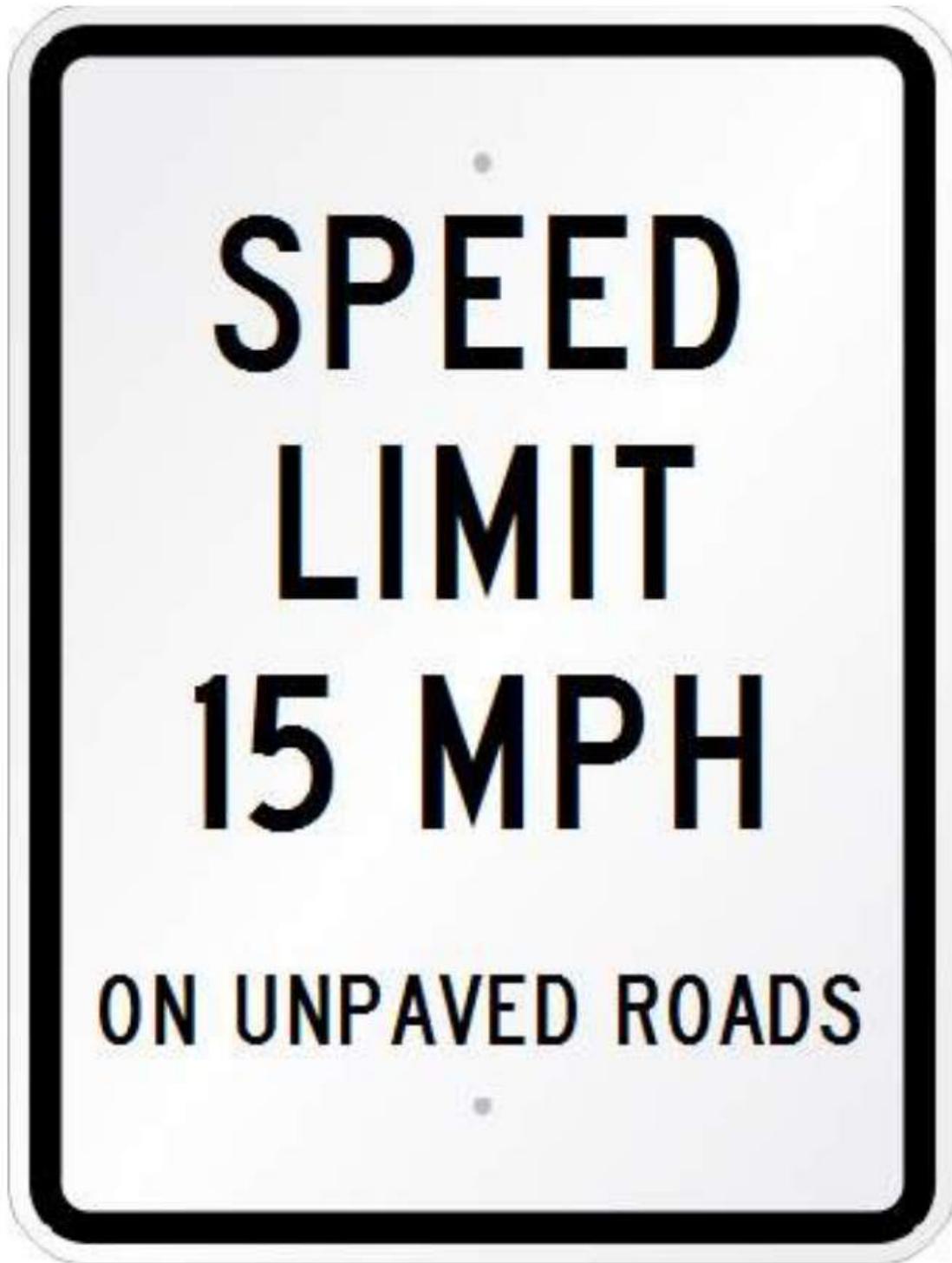


EXHIBIT G – SIGNAGE: SPEED LIMIT



**ATTENTION**

**PERMITTED CONSTRUCTION HOURS:  
MONDAY - SATURDAY 7AM - 7PM**

**There will be no work on site outside of  
permitted hours without written permission  
from the City of Oakland.**

**FOR CONCERNS REGARDING DUST,  
CONSTRUCTION NOISE, EROSION, OR ANY  
CONSTRUCTION ACTIVITY ON THIS  
PROJECT PLEASE CONTACT:**

**During Construction Hours: Randy Knaus, 925-580-4756  
After Construction Hours: Randy Knaus, 925-580-4756**

**City of Oakland Code Compliance:  
(510) 238-3381  
Oakland Police Department 24 Hr Line:  
(510) 777-3333  
Bay Area Air Quality Management District:  
(800) 334-6367**

Note: Sign shall be updated accordingly as each individual project team is identified or updated.

**ATTENTION**

**PERMITTED CONSTRUCTION HOURS:  
MONDAY - SATURDAY 7AM - 7PM**

There will be no work on site outside of  
permitted hours without written permission  
from the City of Oakland.

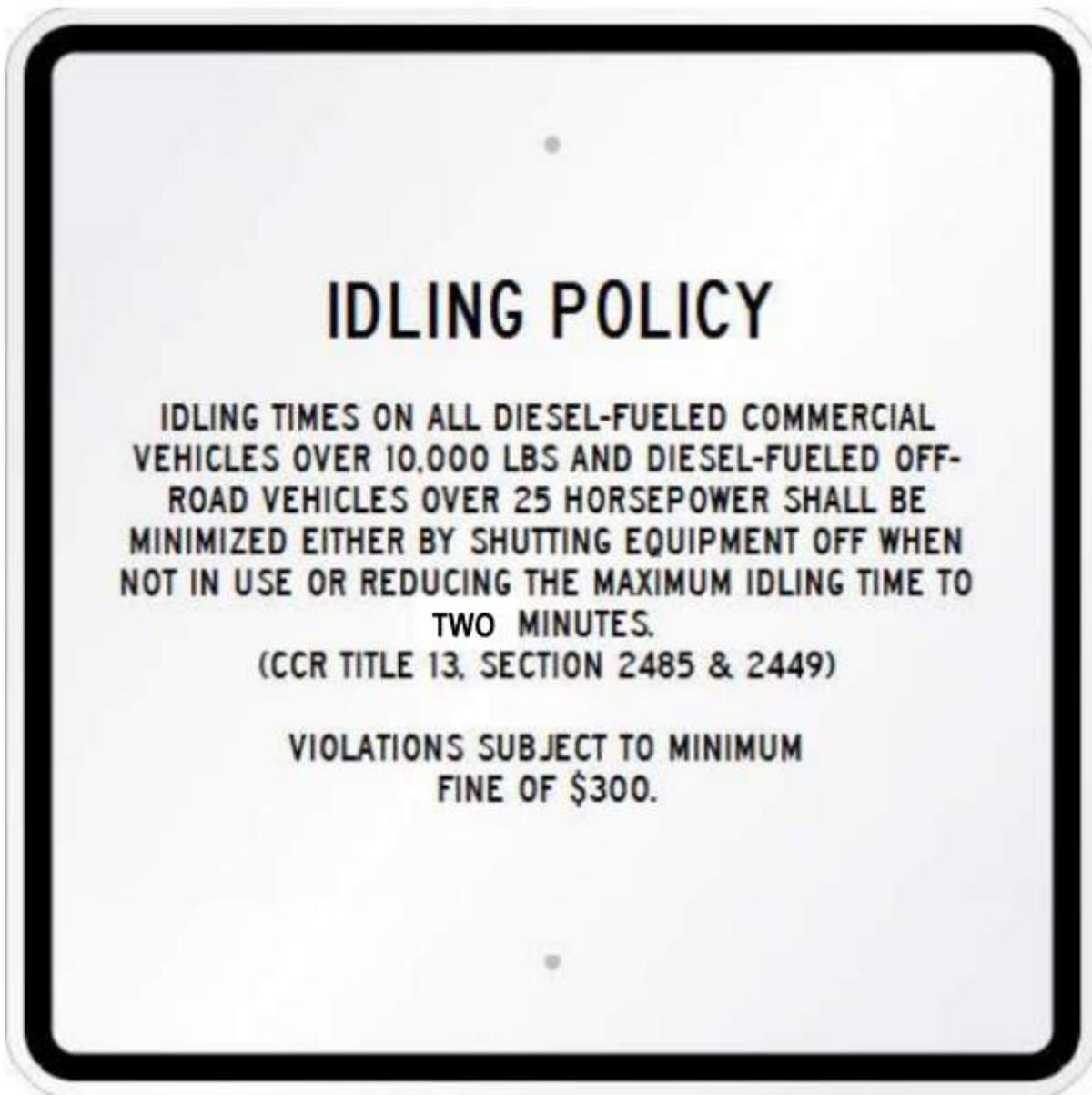
**FOR CONCERNS REGARDING DUST,  
CONSTRUCTION NOISE, EROSION, OR ANY  
CONSTRUCTION ACTIVITY ON THIS  
PROJECT PLEASE CONTACT:**

During Construction Hours: Kevin Delany, 925-250-2116  
After Construction Hours: Kevin Delany, 925-250-2116

City of Oakland Code Compliance:  
(510) 238-3381  
Oakland Police Department 24 Hr Line:  
(510) 777-3333  
Bay Area Air Quality Management District:  
(800) 334-6367

Note: Sign shall be updated accordingly as each individual project team is identified or updated.

**EXHIBIT I – SIGNAGE: IDLING POLICY**









## EXHIBIT M – SAMPLE PUBLIC NOTICE

G.W.C. WHITING  
(1883-1974)

WILLARD HACKERMAN  
PRESIDENT AND CEO

FOUNDED 1909

# THE WHITING-TURNER CONTRACTING COMPANY

(INCORPORATED)

## ENGINEERS AND CONTRACTORS

4690 CHABOT DRIVE, SUITE 120  
PLEASANTON, CALIFORNIA 94588  
925-485-0800  
FAX 925-485-0854  
www.whiting-turner.com

CONSTRUCTION MANAGEMENT  
GENERAL CONTRACTING  
DESIGN-BUILD  
SPECIALTY CONTRACTING  
OFFICE/HEADQUARTERS  
RETAIL/SHOPPING CENTERS  
HEALTHCARE  
BIOTECH/PHARMACEUTICAL  
HIGH TECH/CLEANROOM

INSTITUTIONAL  
DATA CENTERS  
SPORTS AND ENTERTAINMENT  
INDUSTRIAL  
WAREHOUSE/DISTRIBUTION  
MULTI-FAMILY RESIDENTIAL  
ENVIRONMENTAL  
BRIDGES, CONCRETE

WRITER'S DIRECT NUMBER IS  
925-271-6606

Dear Neighbors,

I am writing to inform you of the upcoming work at the Prologis Northeast Gateway project located in the City of Oakland. The project site is located on the cross streets of Maritime and Burma Road.

Commencement of construction work is scheduled to begin on or around 7/15/2016. Your property address is within a 300' radius of the project site and this letter is providing notice that construction activities involved with construction may exceed the 90dBA level for a period of 10 working days between 7/28/2016 and 8/11/16.

Any construction work over 90dBA is considered an extreme noise generating activity. The City of Oakland requires all property owners within 300' of the project to be notified 30 days prior to any extreme noise activities taking place. Any work over 90dBA will be performed between the hours of 8:00 a.m. and 4:00 p.m. Monday thru Friday. Construction work that may exceed 90dBA will include:

1. The installation and erection of concrete panels.
2. Removal of construction debris into trucks via excavators and front loader equipment.
3. Construction equipment including, but not limited to, excavators, loaders, mobile crane, and dump trucks.

Whiting-Turner looks forward to working closely with our new neighbors and would like to create a solid relationship with them. If a complaint shall arise, please contact the undersigned below, and all complaints received will be noted in a Complaint Log. The log will include at a minimum the following information: The date of complaint, contact information for all complainant(s), reason for complaint, action taken, and resolution notes. Corrective measures will be immediately taken to address any and all complaints, should they occur. Copies of the Complaint Log will be submitted to Inspections Services monthly and, if so desired, upon request. These noise complaint procedures will be posted along the perimeter of the construction site prior to the commencement of construction. Should you have any noise complaints during construction please follow these procedures.

Most of the extreme noise generating activities will take place during the excavation work during the early stages of the project. We will send additional notices as required for additional upcoming work. If you would like to receive email notifications in lieu of or in addition to a hard copy please provide your email address to [Steve.Rodriguez@whiting-turner.com](mailto:Steve.Rodriguez@whiting-turner.com).

Additional project information may be requested should you have any questions by contacting the undersigned.

Sincerely,

Steve Rodriguez  
Whiting-Turner Contracting Company  
925-271-6590  
[Steve.Rodriguez@whiting-turner.com](mailto:Steve.Rodriguez@whiting-turner.com)

## **EXHIBIT N – FIRE SAFETY PHASING PLAN**

To be inserted after Fire Dept. approval.

# EXHIBIT O –RAP/RMP INFORMATION

## O.1 – SOUTHEAST GATEWAY RAP/RMP INFO

Table 1  
Risk Management Plan and Remedial Action Plan Information  
Southeast Gateway Property  
Oakland, California

RAP/RMP Designation	Northing	Easting	Location / Description	Constituents of Concern	Summary of Actions	Final Report Reference	Remedial Action Certification	Conditions / Exceptions / Comments
RMP 29	1479387	485337	The western portion of Building 806 was used to store hazardous materials	TPH, PAHs, Metals, VOCs, Pesticides	No action required, soil samples analyzed were less than the remediation goals.	Maetec, 2011	3/17/2011	
Category LBP / Spills	NA	NA	Potential lead-based paint in soil and potential historical spills to soil adjacent to Buildings 804, 805, 806, and 807.	Lead, metals, PAHs, VOCs	No action required, soil samples analyzed were less than the remediation goals.	The Bodhi Group, 2014	4/11/2014	
Category RR	NA	NA	Pending	TPH, PAHs, Metals	Pending	Pending	Pending	
Category Utilities	NA	NA	Pending	TPH, PAHs, VOCs, Metals	Pending	Pending	Pending	

The Bodhi Group, 2014 - Final Completion Report, Potential Impacts to Shallow Soil From Lead Based Paint on Buildings 804 Through 808, 830, 832, 834, 90, and 991, and Historical Spills and Stains North of 14th Street, Former Oakland Army Base, Economic Development Conveyance Area, Oakland, California, February.

Maetec, 2011 - Letter regarding Revised Request for Completion - RMP Locations 7, 22, and 29, Former Oakland Army Base - Economic Development Conveyance Area, Oakland, California, February 25.

TPH - Total petroleum hydrocarbons  
PAHs - Polycyclic aromatic hydrocarbons  
VOCs - Volatile organic compounds  
RMP - Risk Management Plan  
RAP - Remedial Action Plan  
LBP - Lead Based Paint  
RR - Railroad

## O.2 – NEW CENTRAL GATEWAY RAP/RMP INFO

**Table 1**  
**Risk Management Plan and Remedial Action Plan Information**  
**Central Gateway Property**  
**Oakland, California**

RAP/RMP Designation	Northing	Existing	Locations / Description	Constituents of Concern	Summary of Actions	Final Report Reference	Action Certification Date	Conditions / Exceptions / Comments
RMP 8	2126709.1088	6040036.6407	Vehicle service garage in Bldg. 5-4 prior to 1979, contained three (1,700) gallon gasoline ASTs. TPH, PAHs, and metals detected in soil and TPH and metals detected in groundwater during OBRA/Army Phase II.	TPH, PAHs, Metals	No action required. TPH, VOCs, and metals remain in soil and groundwater at concentrations less than remediation goals.	Montclari, 2011	6/28/2011	
RMP 9	2126135.6337	6040108.8122	A grease trap located near the Building 60. TPH and acetone were detected previously in soil. No chemicals were detected in groundwater.	TPH, VOCs, Metals	Grease trap removed in 2013. No action required. Lead detected in soil above remediation goals, but included as part of Building 99 Debris Area. TPH, VOCs, and other metals remain in soil at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	
RMP 10	2126049.0027	6039996.5720	Former paint storage shed located north of Bldg. 99.	TPH, VOCs, Metals	No action required. TPH, VOCs, and metals remain in soil at concentrations less than remediation goals.	Montclari, 2011	6/28/2011	Vinyl chloride detected at 0.9 ug/L, exceeds commercial ESL for VI, will require VI assessment.
RMP 11	2126052.9759	6039975.6179	Former paint shop located north of Bldg. 99. Metals, VOCs, and TPH detected in soil and metals and VOCs detected in groundwater during OBRA/Army Phase II.	TPH, VOCs, Metals	No action required. TPH, VOCs and metals remain in soil below remediation goals. VOCs and metals remain in groundwater below remediation goals.	EKL, 2009	4/5/2010	Vinyl chloride detected in groundwater 50 feet south at a concentration of 13.8 ug/L, will require VI assessment.
RMP 15	2125986.8269	6040425.6955	Former Building 70 washrack.	TPH, Metals	Washrack demolished at an unspecified date. TPH and metals remain in soil at concentrations less than remediation goals.	AMEC, 2012	6/26/2012	
RMP 16	2126135.6563	6040629.9211	Former Building 6 incinerator for destroying classified documents.	PAHs, Metals	No evidence of ash observed during foundation removal. PAHs and metals remain in soil at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	
RMP 17	2126151.1828	6040646.3709	Former Building 42 was a PX gas station with associated tanks 42A and 42B. Soil samples collected near the former building contained low concentrations of TPH, BTEX, PAHs, and VOCs during OBRA/Army Phase II. Groundwater samples contained low concentrations of petroleum VOCs.	TPH, VOCs, Metals	USTs removed in 1965. TPH, VOCs, and metals remain in soil below remediation goals. TPH and VOCs remain in groundwater at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	RMP 17 relates to the gas station building, and RMPs 101 and 103 relate to the former USTs.
RMP 18	2126158.4906	6040663.4316	Former Building 41 washrack associated with the former PX gas station. Metals, PAHs, and pesticides detected in soil and metals detected in groundwater during OBRA/Army Phase II.	TPH, VOCs, Metals	Washrack demolished in 1965. No evidence of releases observed during foundation removal. TPH, VOCs and metals remain in soil at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	
RMP 19	2126272.3044	6040825.9750	An oil/water separator located northeast of Bldg. 5 was connected to a floor drain system for Bldg. 5. The oil/water separator may not have been removed.	TPH, VOCs, Metals	No removal records for the oil water separator exist, no evidence of feature identified during testing; residual TPH, VOCs and metals in soil and groundwater below remediation goals.	Montclari, 2011	6/28/2011	Vinyl chloride detected at 0.6 ug/L, exceeds commercial ESL for VI, will require VI assessment.
RMP 86	2125938.5441	6040184.0242	Building 85 photograph processing laboratory	TPH, VOCs, Metals	No action required. VOCs and metals remain in soil and groundwater at concentrations less than remediation goals.	EKL, 2009	4/5/2010	
RMP 93	2126249.6750	6040610.1176	One former 550-gal diesel UST (Tank 2A). Residual chemicals in soil.	TPH, VOCs, PAHs	UST removed in 1999. TPH, VOCs, PAHs and metals present in soil at concentrations less than remediation goals. TPH, VOCs, and PAHs present in groundwater concentrations less than remediation goals.	EKL, 2009	4/5/2010	Regional Board NFA granted on January 10, 2003
RMP 101	2126193.1387	6040671.8019	UST 42A. Soil samples collected near the former building contained low concentrations of TPH, BTEX, PAHs, and VOCs during OBRA/Army Phase II. Groundwater samples contained low concentrations of petroleum VOCs.	TPH, VOCs, metals	UST reportedly removed in 1965, geotechnical investigation and test pits in 2013 confirmed removal. TPH and metals remain in soil at concentrations less than remediation goals. Petroleum VOCs remain in groundwater at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	Regional Board granted NFA on December 20, 2013
RMP 102	2126142.0666	6040615.4500	UST 42B. Soil samples collected near the former building contained low concentrations of TPH, BTEX, PAHs, and VOCs during OBRA/Army Phase II. Groundwater samples contained low concentrations of petroleum VOCs.	TPH, VOCs	UST removed in 1965, geotechnical investigation and test pits in 2013 confirmed removal. TPH and metals remain in soil at concentrations less than remediation goals. Petroleum VOCs remain in groundwater at concentrations less than remediation goals.	AMEC, 2013	12/13/2013	Regional Board granted NFA on December 20, 2013
RMP 105	2126426.0020	6040392.0419	One former 1000-gal diesel UST (Tank 1A).	TPH, VOCs, PAHs	UST removed in 1999. TPH, VOCs and PAHs remain in soil at concentrations less than remediation goals. TPH and PAHs remain in groundwater at concentrations less than remediation goals.	EKL, 2009	4/5/2010	City of Oakland granted an NFA on April 9, 2001. Regional Board granted NFA on December 20, 2013
RMP 106	2126219.0122	6040576.2416	One former 550-gal diesel UST (Tank 2).	TPH, VOCs, PAHs	UST removed in 1990. Petroleum VOCs remain in soil at concentrations less than remediation goals. TPH, PAHs, and petroleum VOCs present in groundwater at concentrations less than remediation goals.	EKL, 2009	4/5/2010	Regional Board reportedly issued an NFA, no date provided in report, undated Regional Board letter in Appendix A references 5 USTs with TK number scheme.

Table 1  
Risk Management Plan and Remedial Action Plan Information  
Central Gateway Property  
Oakland, California

RAP/RMP Designation	Northing	Eastng	Location / Description	Constituents of Concern	Summary of Actions	Final Report Reference	Action Certification Date	Conditions / Exceptions / Comments
RMP 107	2126285.9988	6040823.6260	One former 550-gal waste oil UST (Tank 19).	TPH, VOCs, PAHs, Metals	UST removed in 1996, some over-excavation of soil performed. TPH, VOCs, and metals remain in soil at concentrations less than remediation goals	EKL 2009, Montclari, 2011.	6/28/2011	Report states NFA requested from Regional Board in 1997, unable to locate letter
RMP 108	2126441.6813	6040399.1522	One former 1000-gal fuel oil UST (Tank 1).	TPH, VOCs, PAHs	UST removed in 1990. TPH, petroleum VOCs, and PAHs remain in soil and groundwater at concentrations less than remediation goals.	EKL 2009	4/5/2010	Regional Board reportedly issued and NFA, no date provided in report, undated Regional Board letter in Appendix. A references 5 USTs with "TK" number scheme.
RMP 109	2126277.6268	6040742.7391	One former 2,000-gal diesel UST (Tank 20).	TPH, VOCs, PAHs	UST removed in 1999. TPH, petroleum VOCs, and PAHs remain in soil at concentrations less than remediation goals.	EKL 2009	4/5/2010	Regional Board NFA granted on January 10, 2003
RMP 154	2126119.0000	6040363.0000	Lead and TPH detected in soil above remediation goals during Building 1 RAP site excavation. Baitan Avenue access restrictions delayed removal.	TPH, Lead	Additional soil removal actions performed in 2013. Excavation continued to expand and to remove soil containing TPH (lead above remediation goal completed). Excavation activities terminated when additional access restrictions were encountered. New RMP 162 created for remaining TPH impacted soil not removed to the southwest. New RMP 163 created for remaining TPH impacted soil beneath existing light pole. One sidewall sample from the western portion of the excavation contained lead above remediation goal that was attributed to Building 99 Debris Area	AMEC, 2013	12/13/2013	Delayed removal from Building 1 RAP site. One sidewall soil sample location (154CS024) from the western portion of the excavation contained lead above remediation goal attributed to Building 99 Debris Area.
RMP 155	2126118.0000	6040568.0000	Lead in soil under the southern end of Building 6.	Lead	Additional soil removal actions performed in 2013. Final confirmation samples for lead and TPH were at concentrations less than remediation goals. Residual TPH and lead in soil remain at concentrations less than remediation objectives. Groundwater investigated as part of ORP Building 1 RAP Site.	AMEC, 2013	12/13/2013	Delayed removal from Building 1 RAP site.
RMP 156	2126208.0000	6040196.0000	Lead impacted soil around former Building 88 to be part of Building 1 RAP site.	TPH, PAHs, Lead	Soil excavation was performed in 2013. TPH, metals and PAHs present in soil at concentrations less than remediation objectives.	AMEC, 2013	12/13/2013	
RMP 162	2126096.1812	6040421.9576	TPH in soil at concentrations exceeding remediation goals in samples RMP154CS023, RMP154CS027 and RMP154CS028	TPH	Further soil excavation to the southwest pending	EKL 2016	Pending	Work Plan calls for developer to perform.
RMP 163	2126111.0887	6040362.0755	TPH in soil at concentrations exceeding remediation goals in sample RMP154CS002	TPH	Further soil excavation around light pole pending	EKL 2016	Pending	Work Plan calls for developer to perform.
RMP 164	2126455	6040423	During excavation activities related to pier removal for Building 1 in 2014, a 250-gal UST was discovered. No record for this UST exists but speculated to have stored diesel fuel.	TPH, VOCs, PAHs	UST removed in 2014, no evidence of a release observed on soil and groundwater. TPH and metals remain in soil at concentrations less than remediation goals. TPH remains in groundwater at concentrations less than remediation goals.	AMEC, 2014	12/29/2014	No references to Regional Board NFA letter identified.
RMP 167A	2125730	6040259	Lead impacted soil around former Building 88	Lead	Excavation complete, soil disposal pending	EKL 2017	Pending	
RMP 168	2126497	6040298	Area around historical sampling locations DEBRISCS001, DEBRISCS002, BAITAANC004, and BAITAANC005.	PAHs	PAHs in soil exceeding remedition goals; additional characterization in progress to determine if remedial action is warranted.	Pending	Pending	Final EKI report pending completion of utility abandonment
Categorical LBP	NA	NA	Potential lead-based paint in soil adjacent to Building 60	Lead	No action required, soil samples analyzed were less than the remediation goal for lead.	AMEC, 2013	12/13/2013	
Categorical RR	NA	NA	Railroad tracks east of Building 6	None	The railroad ballast was removed in 2013, no visual staining or elevated VOC readings detected and in accordance with procedures no samples collected for laboratory analysis.	AMEC, 2013	12/13/2013	Final EKI report pending completion of utility abandonment
ORP Building 1 RAP Site	NA	NA	Waste material containing petroleum hydrocarbons and lead under acidic conditions from historical Oil Recycling Plant operations between the late 1920's through 1941. Waste material existed beneath fill placed for construction of Building 1, which was demolished in 2002. Area of chemical impact existed north of Buildings 60 and 70, and west of Building 6. Groundwater flow was calculated in a northerly direction.	TPH, Lead	Over 12,000 tons of excavated soil was treated to stabilize lead and transported off-site for disposal. Over burden and imported soil was tested and used for backfill material. Confirmation soil sampling confirmed removal of soil exceeding remediation goals, with the exception of three locations that contained access issues and were designated as RMPs 154, 155, and 156. TPH and lead remain in soil at concentrations less than remediation objectives. Post-excavation groundwater monitoring identified TPH and VOCs in groundwater at concentrations less than remediation objectives.	AMEC, 2009a, AMEC, 2009b	6/18/2009, 10/22/2009	Monitoring well abandonment documentation not identified. Will require VI assessment.

**Table 1**  
**Risk Management Plan and Remedial Action Plan Information**  
 Central Gateway Property  
 Oakland, California

RAP/RMP Designation	Northing	Easting	Location / Description	Constituents of Concern	Summary of Actions	Final Report Reference	Action Certification Date	Conditions / Exceptions / Comments
Building 99 RAP Site	NA	NA	Building 99 was constructed in 1918 for ship building and several other metal working and equipment maintenance activities. The majority of Building 99 and related features were located off-Site to the south. However, groundwater impacted with VOCs (primarily vinyl chloride) associated with this area exists on to the southern portion of the Site. The extent of historical groundwater impact by vinyl chloride is illustrated by the Building 99 RAP Site boundary on Figure 2.	VOCs	No action required since all VOCs below remediation goals. Residual VOCs remain present in groundwater along the southern Site boundary.	Baseline, 2007	6/24/2009	Source for VOCs in groundwater remains unknown. Monitoring well abandonment documentation not identified. Will require V1 assessment
Building 99 Debris Area	2126544.88 2126208.25 2126042.87 2126042.88	6039897.39 6040257.41 6039826.37	The Building 99 Debris Area exists south of former Building 1 and encompasses former Building 60 on the southwestern portion of the Site. The area was filled with dredge material and imported fill in the early 1940's. The origin for the debris is not specifically known. The debris area exists at depths between 2.5 feet and 7.0 feet bgs and contains metals and PAHs at concentrations exceeding remediation goals, and Asbestos.	Metals, PAHs, ACMs	Contaminant with additional institutional controls was selected as the remedy for the Building 99 Debris Area. Containment consists of a clean soil cap and/or surface paving. Additional institutional controls consist of 1) surveying boundary coordinates; 2) creating a clean utility corridor for future development; 3) DTSC notification requirements prior to earthwork; and 4) additional health and safety requirements for earthwork.	EKL, 2013	12/31/2013	Monitoring well abandonment documentation not identified.

AMEC, 2009a - AMEC Geomatrix, Inc., Revised Remediation Completion Report, Former ORP/Building One Remediation, Former Oakland Army Base, EDC Area, Oakland, California, February 13.  
 AMEC, 2009b - AMEC Geomatrix, Inc., Annual Groundwater Monitoring Report, Former ORP/Building 1 Area Remediation Project, Former Oakland Army Base/Economic Development Conveyance Area, Oakland, California, July 24.  
 AMEC, 2012 - AMEC Environment & Infrastructure, Inc., Letter regarding Request for Completion - RMP Locations 15 and 91, and Summary of Remediation Activities at RMP Location 98, Former Oakland Army Base, Economic Development Conveyance Area, Oakland, California, June 6.  
 AMEC, 2013 - AMEC Environment & Infrastructure, Inc., Letter regarding Request for Completion or Remediation Activities, RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156, Railroad Ballast and Lead Based Paint Categorical RMPs, Former Oakland Army Base, Economic Development Conveyance Area, Oakland, California, December 12.  
 AMEC, 2014 - AMEC Environment & Infrastructure, Inc., Letter regarding Request for Completion - RMP Locations 164 Underground Storage Tank Location, Former Oakland Army Base, Economic Development Conveyance Area, Oakland, California, August 6.  
 EKL, 2009 - Erler & Kainowski, Inc., Request for Completion, VOCs in Groundwater Near Building 99 RAP Site, July.  
 EKL, 2013 - Erler & Kainowski, Inc., Request for Completion - RMP Locations 11, 75, 86, 93, 105, 106, 107, 108, and 109 in the Central Gateway Area, Former Oakland Army Base - EDC Area, Oakland, California, October 15.  
 EKL, 2016 - Erler & Kainowski, Inc., Completion Report for the Building 99 Debris Area, Former Oakland Army Base - EDC Area, Oakland, California, July 29.  
 EKL, 2017 - Erler & Kainowski, Inc., Work Plan for Remediation of RMP Locations 162 and 163, Gateway Development Area, Former Oakland Army Base, Oakland, California, April 21.  
 Montclair, 2011 - Montclair Environmental Management, letter regarding Request for Completion - RMP Location 167A, Gateway Development Area, Former Oakland Army Base, Oakland, California, May 25.  
 TPH - Total petroleum hydrocarbons  
 PAHs - Polycyclic aromatic hydrocarbons  
 VOCs - Volatile organic compounds  
 PCBs - Polychlorinated biphenyls  
 ACMs - Asbestos-containing material  
 BTEX - benzene, toluene, ethylbenzene, and total xylenes  
 UST - Underground storage tank  
 AST - Aboveground storage tank  
 NFA - No Further Action  
 RMP - Risk Management Plan  
 RAP - Remedial Action Plan  
 bgs - below ground surface  
 gal - gallon  
 µg/l - micrograms per liter  
 V1 - vapor intrusion

## EXHIBIT P –NEIGHBORHOOD SURVEY AND NOTICE

NEIGHBORHOOD SURVEY/ NOTICE

Project Name

Project Address

RE: PROPOSED SATURDAY WORK SCHEDULE: [Insert Dates]

Dear Neighbor:

[Explain the purpose of letter is to inform neighbors that a 'request' has been made to Building Services to authorize work on numerous upcoming Saturdays, and that input from neighbors is being solicited.)

[Insert explanation of WHY this work needs to be accomplished outside of normal working DAYS or HOURS (i.e. M-F, 7am – 7pm).

[Explain the site management measures that are and will remain in place to control noise, dust, parking, traffic and other impacts related to this job site].

WHAT: Scope of Construction Activity that you are requesting to do, including size of work force, equipment to be used, etc... **[Work scope must be limited to relatively quiet work to satisfy the Oakland Noise Ordinance limit of 55 dba on weekends in residential areas. No material deliveries, off hauling, or other loud unenclosed activities]**

WHERE: Work location to be limited to inside only with windows and doors closed.

WHEN: 9am – 5pm, Saturdays from xx/xx/xx to yy/yy/yy. **[Our Office will only authorize up to 4 Saturdays at a time, until a track record of complaint-free performance is established that we can support. We also reserve the right to withdraw Saturday authorization for failure to satisfy important construction-related Planning Conditions of Approval]**

Please forward your comments, questions, or concerns to (contact info for project managers, including phone # and email address) or to Bill Quesada, Oakland Building Services, (510) 238-6345, [bquesada@oaklandnet.com](mailto:bquesada@oaklandnet.com).

For emergencies or site complaints regarding this construction site, please contact the job superintendent (contact # and email of the on-site job superintendent). **[The GC must maintain a job superintendent on-site all day for each requested Saturday, to manage construction and complaints. No subs working alone].**

## EXHIBIT Q –PRECONSTRUCTION VIDEO

Prologis or its Contractor will contract with Municon Consultants to perform pre and post construction video surveys per the quote below:



### 1.00 PRE- AND POST-CONSTRUCTION VIDEO SURVEY OF TRUCK HAUL ROUTES.

#### 1.01 General.

You have informed us that you need a pre- and post-construction video survey of the approved inbound and outbound truck haul routes of your project. The truck haul route map shows the use of city streets, freeway on- and-off ramps and city streets. We will perform a video survey of the pavement conditions of the streets you identified as truck haul routes. Maritime Street from West Grand Avenue to 7<sup>th</sup> Street, West Grand Avenue from Frontage Road to Maritime Street and E. Burma Road which runs alongside the site, 7<sup>th</sup> Street from Maritime Street to Brush Street and Brush Street from 7<sup>th</sup> Street to 19<sup>th</sup> Street.

Our video survey is not a "Pavement condition evaluation" as we will offer no recommendations or conclusions as to the causes of distress observed or remaining service life of the pavement, and we will not perform deflectometer or other tests on the pavement.

#### 1.10 Scope.

##### 1.11 PRE-CONSTRUCTION VIDEO SURVEY

Municon will perform a pre-construction video survey of pavement conditions of **Maritime Street** from West Grand Avenue to 7<sup>th</sup> Street, **West Grand Avenue** from Frontage Road to Maritime Street, **Burma Road** from its intersection with Maritime Street to its end at the cul de sac of Burma, **7<sup>th</sup> Street** from Maritime Street to Brush Street and **Brush Street** from 7<sup>th</sup> Street to 19<sup>th</sup> Street. We will survey all the lanes, sidewalks, gutters and other existing facilities. We will document existing conditions in high definition digital videography using a HD digital video camera. We will contemporaneously narrate the video with descriptions of the location being viewed and any distress, damage or other anomalies, the direction of the camera view, and the date and time at the time of videotaping. We will perform the video survey of the pavement conditions for a:

LUMP SUM.....\$6,000.

##### 1.12 POST-CONSTRUCTION VIDEO SURVEY

Upon the end of your project, Municon will perform a post-construction video survey of pavement conditions of the same roads documented in our pre-construction video survey. We will perform the post-construction video survey of the pavement conditions for a:

LUMP SUM.....\$6,000.



# Municon Consultants

Vibration Monitoring, Construction Instrumentation, Photo Surveys

### 1.13 WORK PRODUCTS –VIDEO SURVEY RECORDS.

We will submit to you two (2) bound copies of our report, which will include DVDs (or, if permitted, USB storage device) with the original HD video files as recorded, a letter describing our survey and attesting to taking the video, and a site plan showing the areas surveyed. Electronic copies of the documentation will be included on the DVDs.

The costs for preparing the documentation and production of our reports are included in the costs for the survey above.

### 1.20 TIMING AND SCHEDULE.

We anticipate that we can complete our video survey in one full day in the field, including travel time. We request one week of advance notice, if possible, to begin work on the surveys.

Processing of the data and report production require additional office efforts beyond the field time. Reports will be delivered within two (2) weeks of the completion of the field survey.

**VIDEO SURVEY TOTAL .....\$12,000.**

**\*\*\* No sections 2, 3 or 4 in this proposal \*\*\***



## EXHIBIT R – NOISE CONSULTANT REVIEW LETTER

Oakland Global Logistics Center, Phase 2  
September 29, 2017  
Page 1 of 5



September 29, 2017

Prologis, L.P.  
3353 Gateway Blvd.  
Fremont, CA 94538

Attention: Cory Chung  
Subject: Oakland Global Logistics Center, Phase 2  
Construction Noise Impacts

Ladies & Gentlemen:

This report addresses the issue of construction noise impacts from the proposed project located on the south side of West Grand Avenue on both sides of Maritime Street in Oakland, CA. The project consists of 3 parts, which will be constructed sequentially at different times: a container storage area and two warehouse buildings. Figure 1 shows the site location relative to the nearby freeways with the proposed project parts highlighted in yellow. CE-2 will be a warehouse building with an approximate floor area of 232,762 square feet, and CC-1b will be a warehouse building with an approximate floor area of 188,000 square feet. Both buildings will have loading docks on the west side and a parking lot on the other sides. CC-1a will be a paved container storage area. Figure 2 presents a site plan for the project. This report specifically addresses the issue of environmental noise impacts resulting from the construction of these three elements.

Figure 1.

Aerial view showing the location of the site (shown in yellow) relative to nearby freeways and nearest residences (shown by red triangles).



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Issaquah, WA 98027

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(425) 649-0737 (fax)

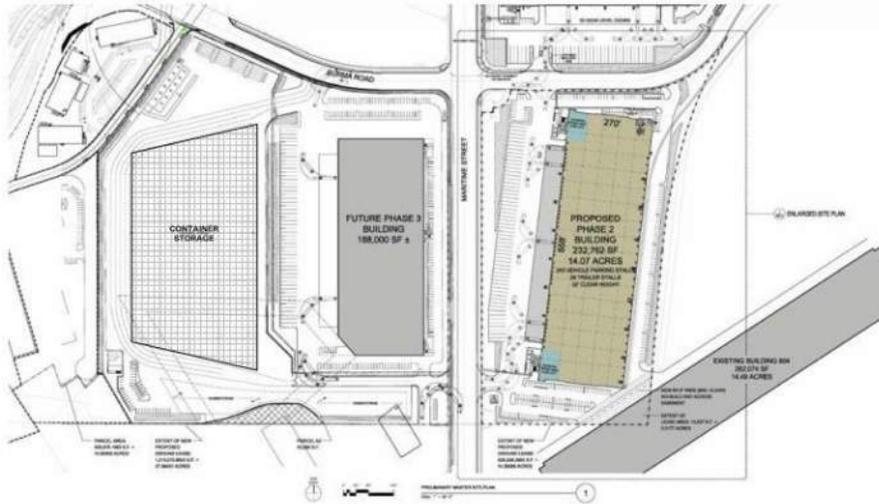


Figure 2. Site plan for Phase 2 showing container storage area and 2 new buildings.

As shown in Figure 2 the project is surrounded on all sides by local streets, and beyond these streets is additional industrial property. The nearest residential property is on the east side of I-880, more than 2,000 feet southeast of the proposed project.

*Standard Conditions of Approval*

This project has received several conditions of approval related to noise. SCA NOI-1 requires that construction activities are limited to 7:00 AM to 7:00 PM Monday through Saturday. It is my understanding that concrete work will occur outside of the allowed construction hours for a period of 6 days to pour the building slab and 8 days to pour the tilt up walls. It will be important to ensure that late night construction work meets the requirements of OMC 8.18.020 relating to nuisance noise impacts to residential areas.

*Oakland Construction Noise Ordinance*

Table 17.120.04 in the Oakland Noise Ordinance establishes maximum allowable noise levels for construction projects impacting industrial, commercial, and residential receiving properties. The maximum allowable noise level during the 7 AM to 7 PM weekday period on commercial and industrial property is 85 dB for short term operations

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and 70 dBA for long term operations. . The maximum allowable noise level during the 7 AM to 7 PM weekday period on residential property is 80 dBA for short term operations and 65 dBA for long term operations. On weekends the maximum allowable levels are 15 dBA lower for short term operations and 10 dBA lower for long term operations.

*Construction Noise Sources*

According to the Contractor, Table 1 presents a listing of the major noise sources associated with the late night construction phase of this project. Table 2 identifies the noise sources that are expected to operate during normal construction hours. Equipment sound levels and usage factors were obtained from the FHWA Construction Noise Handbook. The usage factor represents the percentage of the time that the noise source is generating its maximum noise level.

Late night work is expected to last for 6 days to pour the building floor slab, with as many as 13 concrete trucks per hour and start times beginning as early as 1:00 AM and as late as 4:00 AM. Late night work for pouring the tilt up walls is expected to last for 8 days, with as many as 8 trucks per hour and a proposed start time of 4 AM. At any one time, the maximum number of concrete trucks on the construction site is expected to be 4.

*Predicted Construction Noise Levels*

Construction noise levels were computed in the vicinity of the subject project using the internationally recognized computer model CadnaA (ver. 4.6.156). The assessment of late night operations assumed continuous operation of 7 concrete trucks on site with 4 diesel generators to create power for the lights. The total on-site sound power level for all of the late night sources is 126 dB (ref. 1 picowatt), taking into account the usage factor and the total number of concrete truck on site at one time. The predicted total late night construction noise level at the adjacent properties and at the nearest residences is shown in Table 3.

Table 1. Late night noise sources and expected source noise level.

Source Description	Number of Sources/Hr.	Usage Factor (%)	LpA (dBA @ 50 feet)	Est. LwA (dB ref. 1 pW)
Concrete Trucks	13	40%	85	117
Generator (lights)	4	100%	80	112

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Table 2. Construction sources and source noise levels occurring from 7 AM to 7 PM.

Source Description	Number of Sources	Usage Factor (%)	LpA (dBA @ 50 feet)	Est. LwA (dB ref. 1 pW)
Grading Scraper	1	40	85	117
Loader	2	40	80	112
Grader	1	40	85	117
Water Truck	2	40	84	116
Skip Loader	2	40	80	112
Paving Machine	1	50	85	117
Roller Compactor	1	20	85	117
Vibratory Plate Compactor	1	20	80	112
Transfer Dump Truck	1	40	84	116
Power Tool Generator	2	50	82	114
Power Tool Compressor	1	40	80	112
Backhoe	2	40	80	112
Dump Truck	2	40	84	116
Concrete Truck	2	40	85	117
Concrete Pump	1	20	82	114
Concrete Saw	1	50	85	117
Crawler Crane	1	16	85	117
Diesel Boom Lift	2	20	85	117
Diesel Forklift	2	50	85	117
Street Sweeper	1	50	85	117
Excavator	1	40	85	117
Diesel Scissor Lift	1	20	85	117

Table 3. Predicted project noise levels (dBA) for CE-2.

Receiver	Day/Night	Distance to Nearest Source	Noise Level	Max. Allowed
Residence A	Late Night	2,301 feet	44.8	45
Residence B	Late Night	2,741 feet	43.6	45
Residence C	Late Night	3,989 feet	39.3	45
Residence A	Daytime	2,301 feet	48.1	65
Residence B	Daytime	2,741 feet	47.0	65
Residence C	Daytime	3,989 feet	42.4	65

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Table 4. Predicted project noise levels (dBA) for CC-1b.

Receiver	Day/Night	Distance to Nearest Source	Noise Level	Max. Allowed
Residence A	Late Night	3,057 feet	44.8	45
Residence B	Late Night	3,385 feet	43.9	45
Residence C	Late Night	4,927 feet	41.7	45
Residence A	Daytime	3,057 feet	46.0	65
Residence B	Daytime	3,385 feet	45.1	65
Residence C	Daytime	4,927 feet	41.5	65

Table 5. Predicted project noise levels (dBA) for CC-1a.

Receiver	Day/Night	Distance to Nearest Source	Noise Level	Max. Allowed
Residence A	Late Night	3,562 feet	43.0	45
Residence B	Late Night	3,965 feet	42.2	45
Residence C	Late Night	5,284feet	41.0	45
Residence A	Daytime	3,562 feet	44.2	65
Residence B	Daytime	3,965 feet	43.4	65
Residence C	Daytime	5,284feet	41.5	65

The predicted construction noise levels shown in Tables 3, 4, and 5 meet the requirements of the Oakland noise ordinance. It should be emphasized that the nearest residences are all located on the other side of I-880, and the background noise level from this freeway will likely exceed the predicted construction noise levels by a significant margin, even in the middle of the night. As a result, it is extremely unlikely that the construction noise would be audible anywhere in the residential area.

If you have any questions or comments regarding these findings, do not hesitate to contact me directly.

Very truly yours,  
 JGL Acoustics, Inc.

Jerry G. Lilly, P.E., FASA  
 President  
 Member INCE (*Bd. Cert.*), ASHRAE, ASTM, NCAC

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 Issaquah, WA 98027

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 (425) 649-0737 (fax)

**APPENDIX A - DIESEL EMISSIONS AND AIR QUALITY PLAN FOR CONSTRUCTION  
OF CE-2: SOUTHEAST GATEWAY PARCEL AND CC-1: NEW CENTRAL GATEWAY  
PARCEL**



# Prologis Oakland Global Logistics Center

*Prepared For:*

**City of Oakland  
Planning & Building Dept.**  
250 Frank Ogawa Plaza  
Oakland, CA 94612

*Prepared By:*

**Prologis**  
3353 Gateway Blvd.  
Fremont, CA 94538  
+1 510 656 1900 Phone  
+1 510 656 4320 Fax

[www.prologis.com](http://www.prologis.com)

## **Diesel Emissions Reduction and Air Quality Plan for Construction of**

**CE-2: Southeast Gateway  
Parcel**

**CC-1: New Central Gateway  
Parcel**

*Submitted on:*

v0: May 1, 2017  
v1: August 3, 2017  
v2 final: October 16, 2017



**PROLOGIS**

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# 1. PROJECT OVERVIEW & SITE PLAN

This Construction Air Quality (AQ) Plan covers the remaining Prologis projects, to be built on the Southeast Gateway and New Central Gateway of the Oakland Army Base Redevelopment site. See Fig. 1 below, showing the area and phase breakdown, which are further detailed in narrative below. The area under this AQ Plan is outlined in red.

The Southeast Gateway is Phase 2 of the Prologis projects, and consists of a 14.1-acre parcel located at the Southeast corner of Maritime St. and Burma Rd. Prologis is proposing to develop a 231,000 sf trade and logistics building and associated site improvements on this site.

The New Central Gateway site is Phase 3 of the Prologis projects, and consists of a 27-acre parcel located at the Southwest corner of Maritime St. and Burma Rd. Prologis plans to develop this site in two phases: SubPhase A) 16.5 acres, the westerly portion, as a container depot yard for Conglobal; and SubPhase B) 11.1 acres, the easterly portion, as a trade and logistics building, approximately 188,000 sf, with associated site improvements.

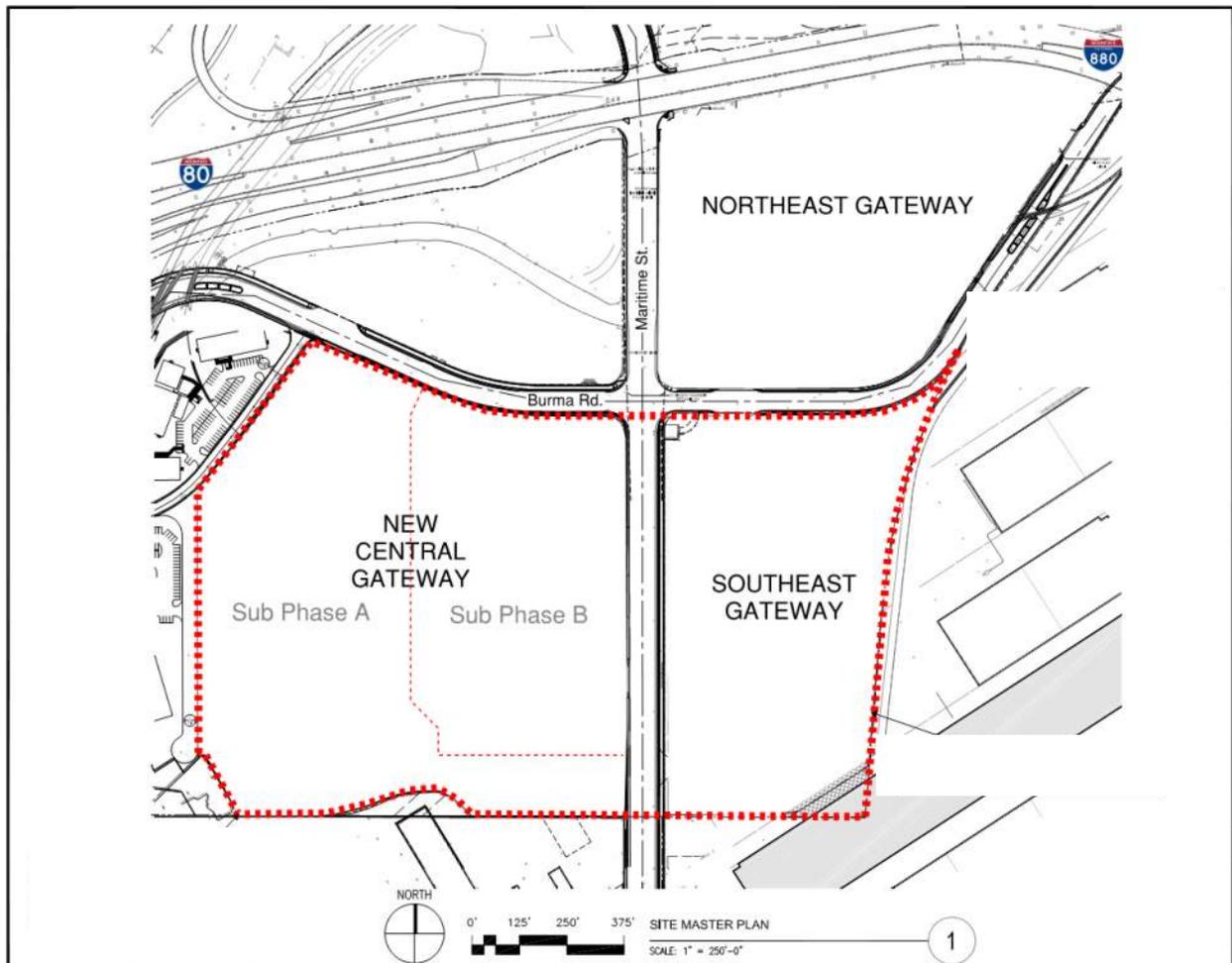


Figure 1 - Prologis Master Site Plan

## **2. SCA AIR-1: Construction Management Plan**

### **2.1 Requirements**

- a. The project applicant, Prologis, shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan (CMP) that identifies the conditions of approval and mitigation measures to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval and mitigation measures.

### **2.2 CMP Response**

- b. Prologis will submit the CMP to the City of Oakland Planning and Building Departments during the plan check review process for site or building permits. Similar to the Northeast Gateway site, the CMP will include all of the AQ elements included this Construction AQ Plan.

## **3. SCA AIR-2: Construction Related Air Pollution Controls**

### **3.1 Requirements**

- a. The entirety of this AQ Plan will be provided to all bidders on the Project, so that it is included in any bids received, and will be included in contracts let.
- b. During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD).
- c. Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
- d. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
- e. Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- f. Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).
- g. Requirement: Limit vehicle speeds on unpaved roads to 15 miles per hour.
- h. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a

certified mechanic and determined to be running in proper condition prior to operation.

- i. Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.
- j. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- k. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.
- l. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- m. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).
- n. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.
- o. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity.
- p. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- q. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- r. All trucks and equipment, including tires, shall be washed off prior to leaving the site. Tire washing station will be included at each construction entrance. Water will be contained on-site and reused where possible.
- s. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- t. Site accesses to a distance of 50 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel over filter fabric, consistent with the California Stormwater Quality Association's (CASQA) Best Management Practice (BMP) Handbook, Stabilized Construction Entrance/Exit

Detail TC-1, as authorized by the National Pollutant Discharge Elimination System (NPDES) Permit administered by the EPA.

- u. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).

### **3.2 Dust Control Mitigation Plan**

- a. Use water trucks to water exposed surfaces during construction activities at least twice daily or more frequently if winds exceed 15 mph. Suspend excavation, grading, and demolition activities when average wind speed exceeds 20 mph. Maintain minimum soil moisture of 12% as indicated by laboratory samples or a moisture meter. Use reclaimed water for dust mitigation whenever feasible. Monitoring process will include: 1) Checking weather reports daily prior to starting construction activity to prepare for wind speeds as necessary. 2) Monitoring weather and dust as day progresses by setting up an anemometer wind speed sensor and checking periodically. 3) Increasing dust control watering as wind speeds increase to maintain minimum 12% moisture content, or to a point at which the earth becomes tacky.
- b. Cover truck loads with tarpaulins or keep loads 2 feet below the sideboard of the truck bed to eliminate wind contact with soil or other loaded materials.
- c. Require all operators tracking dirt/mud onto public roadways to have a wet power vacuum sweeper present daily during these activities and remove tracked dirt/mud at the end of each day or more frequently if needed.
- d. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders.
- e. As soon as practical and prior to rainy season, cover all access roads and/or permanent roads and building pads with aggregate or asphalt concrete to mitigate tracking of dirt and/or mud offsite.
- f. Cover all inactive soil material stockpiles with plastic sheeting or non-toxic soil binders. Water all active stockpiles to maintain 12% moisture.
- g. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- h. Replant vegetation in disturbed areas as quickly as possible.

- i. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- j. Draft and implement a Project SWPPP (Stormwater Pollution Prevention Plan). The onsite QSP (Qualified SWPPP Practitioner) will monitor runoff before, during, and after rain events. Deficiencies will be logged and corrected immediately. Inactive construction areas will be properly addressed with BMPs to eliminate erosion. Required BMPs will be outlined in the SWPPP and enforced with reporting and inspection.
- k. Post signage and enforce 15 mph speed limit requirement for unpaved roads (Exhibit A).
- l. Post signage and enforce dust complaint reporting requirement (Exhibit B). Take corrective action to remedy complaints within no more than 48 hours after receiving the complaint.
- m. The Project Dust Compliance Manager will monitor and facilitate the implementation of mitigation measures. The Contractor will maintain Daily Inspection Logs throughout the Project.
- n. Limit inactive construction areas (previously graded areas inactive for one month or more) by installing planting, finished hardscape, and paving as soon as possible.
- o. Designate onsite Superintendent (identity TBD) as the person to monitor the dust control program and to order increased watering, as necessary.
- p. Install fencing with attached windscreen fabric on the windward side of the actively disturbed area of the construction site.
- q. Replant vegetation in disturbed areas as quickly as possible.
- r. Limit simultaneous occurrence of excavation, grading, and ground disturbance activities on the same area at any one time when feasible.
- s. Tire washing station will be included at each construction entrance and all equipment, including tires will be washed off prior to leaving the site.
- t. Install construction area entrances at all ingress and egress sites to ensure dirt is kept off of public roads. Construction area entrances will be built using fabric and 3x5 rock to facilitate tire soil removal prior to leaving the site (or as defined by the guidelines in the Best Management Practice Handbook). Ingress/egress sites will also provide dry brushing of loose soil from tires and fenders

- u. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449. All written documentation that fleet requirements have been met will be submitted to the City of Oakland for record.
- v. Install coatings meeting VOC content requirements specified in Project Specification.

### **3.3 Emission Control Mitigation Plan**

- a. During all construction activities, off-road construction equipment greater than 25 horsepower shall meet US EPA Tier 4 emission standards. If such equipment is not available, then equipment which meets Tier 3 engine standards can be used but only under the following circumstances:
  - All contractors must submit letters to the City of Oakland providing information on the availability of Tier 4 construction equipment to be used on each construction site and information on their search for Tier 4 rental equipment, should their fleet not have all the necessary Tier 4 equipment available for use on this project site.
  - If the contractor must rent equipment, then the contractor shall contact a minimum of three rental agencies in the Bay Area and submit documentation about the availability of such rental equipment.
  - If Tier 4 equipment is not available during the specified construction periods, then Tier 3 can be used, subject to restriction 3.3b below.
- b. The two most utilized pieces of construction equipment per job site (the equipment projected to have the most utilization hours) must be Tier 4 equipment. The contractor shall submit an estimated equipment-hour projection to the City of Oakland with verification that Tier 4 equipment will be used for the two pieces projected to have the most utilization hours.
- c. All contractors shall submit a list of specific off-road equipment being proposed for use at each project site. The Compliance Officer shall use this documentation to verify that equipment meets the requirements of Tier 4 or Tier 3, and shall ensure that equipment with Tier 1 or Tier 2 engines are not delivered to nor used on each construction site.
- d. During all construction activities, all On-Road trucks delivering materials and/or equipment to the site are required to comply with the Air Resources Board regulations for on-road trucks in the Truck and Bus Rule. Contractors shall furnish CARB Compliance certificates to the City of Oakland for on-road trucks demonstrating compliance with the Truck and Bus Rule.
- e. All contractors will be encouraged to use post 2010 model water trucks, as available.
- f. Fuel being used will be compliant with California standards and consistent with regulatory requirements for Ultra Low Sulfur Diesel (USLD).

- g. Utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available and cost effective in the San Francisco Bay Area.
- h. All scissor lifts and small tools will be electric.
- i. Rely on the electricity infrastructure surrounding the construction sites rather than electrical generators powered by internal combustion engines to the extent feasible. Temporary electric service from existing infrastructure will be provided on the job-site for contractors to use for small tools and equipment. Contractor shall make substantial efforts to contact PG&E well in advance of start of construction to allow adequate time for the connection to temporary job site power. The use of diesel generators shall only be used as a last resort option.
- j. Keep all construction equipment properly tuned by a certified mechanic in accordance with the manufacturer's specifications. Operators will provide the Contractor with written documentation of equipment maintenance for all equipment to be used onsite. These maintenance logs shall be made available upon request.
- k. All contractors will be bound by contract to comply with the requirements of CCR Title 13, Section 2449 (CARB Off-Road Diesel Regulations). All written documentation that fleet requirements for equipment to be used onsite have been met will be submitted to the City of Oakland for record.

### 3.4 Idling Policy

- a. All on-road trucks serving the construction sites shall minimize idling by shutting off the truck at all possible times. Additionally, all trucks used during construction of these sites shall be **prohibited from idling more than two minutes** when loading and unloading, staging, when waiting in a queue, or when not in active use. Exemptions from the two-minute idling rule will be allowed when required for safety, or when equipment is in use.
- b. All off-road diesel equipment over 25 horsepower sites shall minimize idling by shutting off the equipment at all possible times. Additionally, diesel off-road equipment used during construction of these sites shall be **prohibited from idling more than two minutes** when not in active use. Exemptions from the two-minute idling rule will be allowed when required for safety, when vehicles need to idle to perform work (such as cranes providing hydraulic power to the boom), or when equipment is in use.

- c. See Exhibit C for signage describing the Project Idling Policy.

### **3.5 Reporting and Labeling**

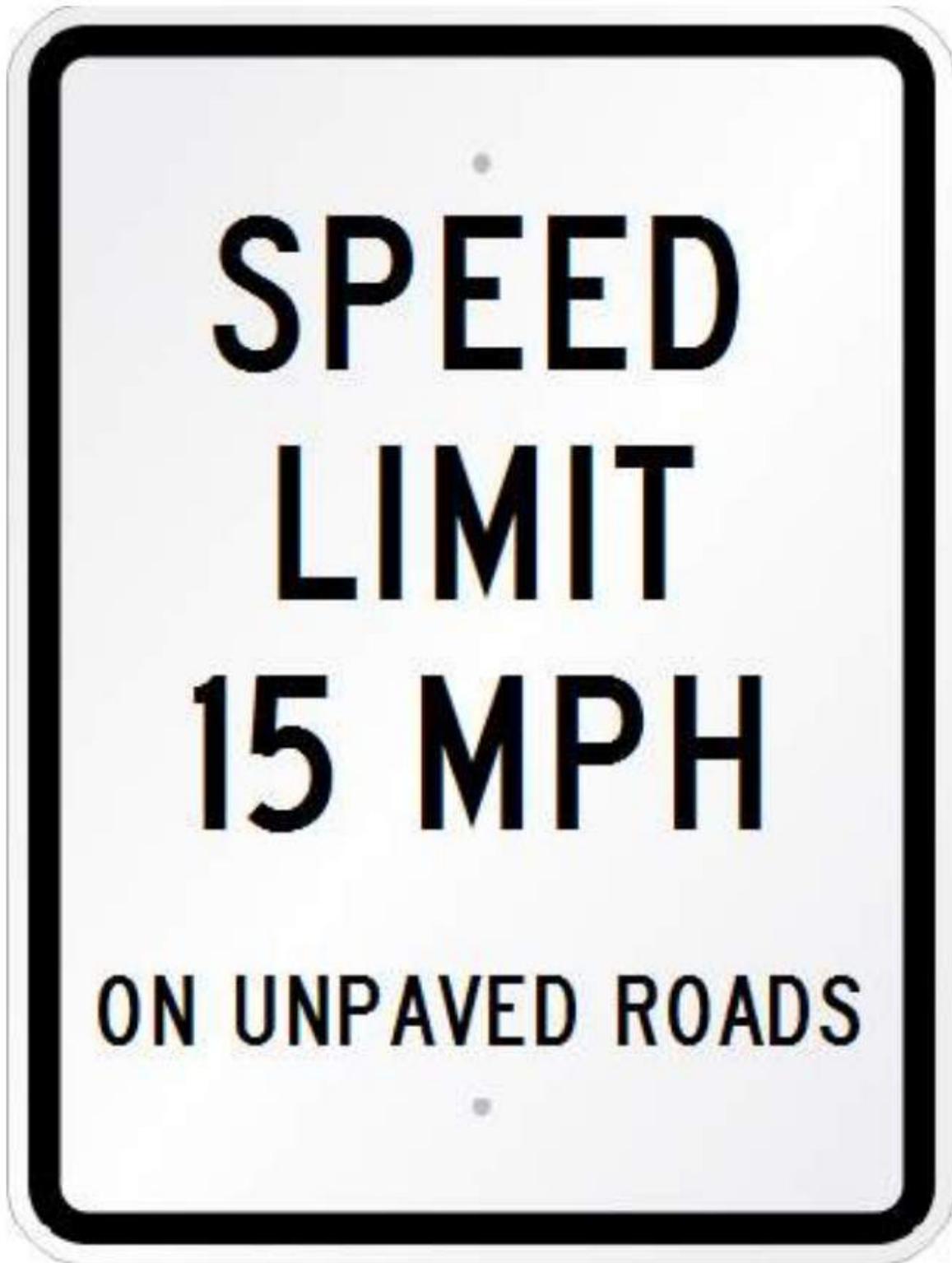
- a. Reporting can be completed using DOORS (Diesel Off-road online Reporting System), which is CARB's free online reporting tool for the Off-Road regulation. Further information on reporting and labeling for off-road vehicles is available at: [www.arb.ca.gov/ordiesel](http://www.arb.ca.gov/ordiesel).
- b. All fleet equipment used onsite shall be properly reported and labeled as required per CCR Title 13, Section 2449 (CARB's Off-Road Regulation). After a fleet reports their vehicles to CARB, each vehicle is assigned a unique Equipment Identification Number (EIN). The fleet must label its vehicles within 30 days of receiving EINs. Labeling provisions of the Off-Road regulation were amended in December 2010 to require labels on both sides of each vehicle. Additionally, fleets reported as 'captive attainment area fleets' must have labels with a green background instead of red. All construction contractors shall comply with and monitor compliance with Air Resources Board regulations for Off-Road construction equipment, CCR Title 13, Section 2449. To document compliance, all fleets shall provide ARB Certificates of Compliance with the Off-Road Regulations to the City of Oakland.

### **3.6 Enforcement**

- a. The Project Compliance Manager will monitor and facilitate the implementation of mitigation measures. Any off-road equipment that exhibits conditions outside of the manufacturer's specifications, or emits excessive visible smoke, shall be prohibited from operating on-site. All contractors will be subject to this provision and will maintain Inspection Logs daily throughout the project. Compliance Manager will complete online ARB courses for Visible Emissions Evaluation to enhance ability to ensure fleets are in compliance with CARB Regulations. Compliance Manager shall communicate Plan requirements to subcontractors in weekly tailgate or coordination meetings.
- b. Post signage limiting truck and equipment idling time to two minutes or less, in accordance with CCR Title 13, Section 2485 & 2449. (Exhibit C)

- c. A program to enforce and monitor vehicle compliance will be developed to ensure that vehicles associated with the Project comply with applicable local, regional, state, and federal air quality requirements.

Exhibit A – Speed Limit Sign



**Exhibit B – Complaint Sign**

**ATTENTION**

**PERMITTED CONSTRUCTION HOURS:  
Monday-Friday 7AM-7PM**

There will be no work on site outside of permitted hours without written permission from City of Oakland.

**FOR CONCERNS REGARDING DUST,  
CONSTRUCTION NOISE, EROSION OR ANY  
CONSTRUCTION ACTIVITY ON THIS PROJECT  
PLEASE CONTACT:**

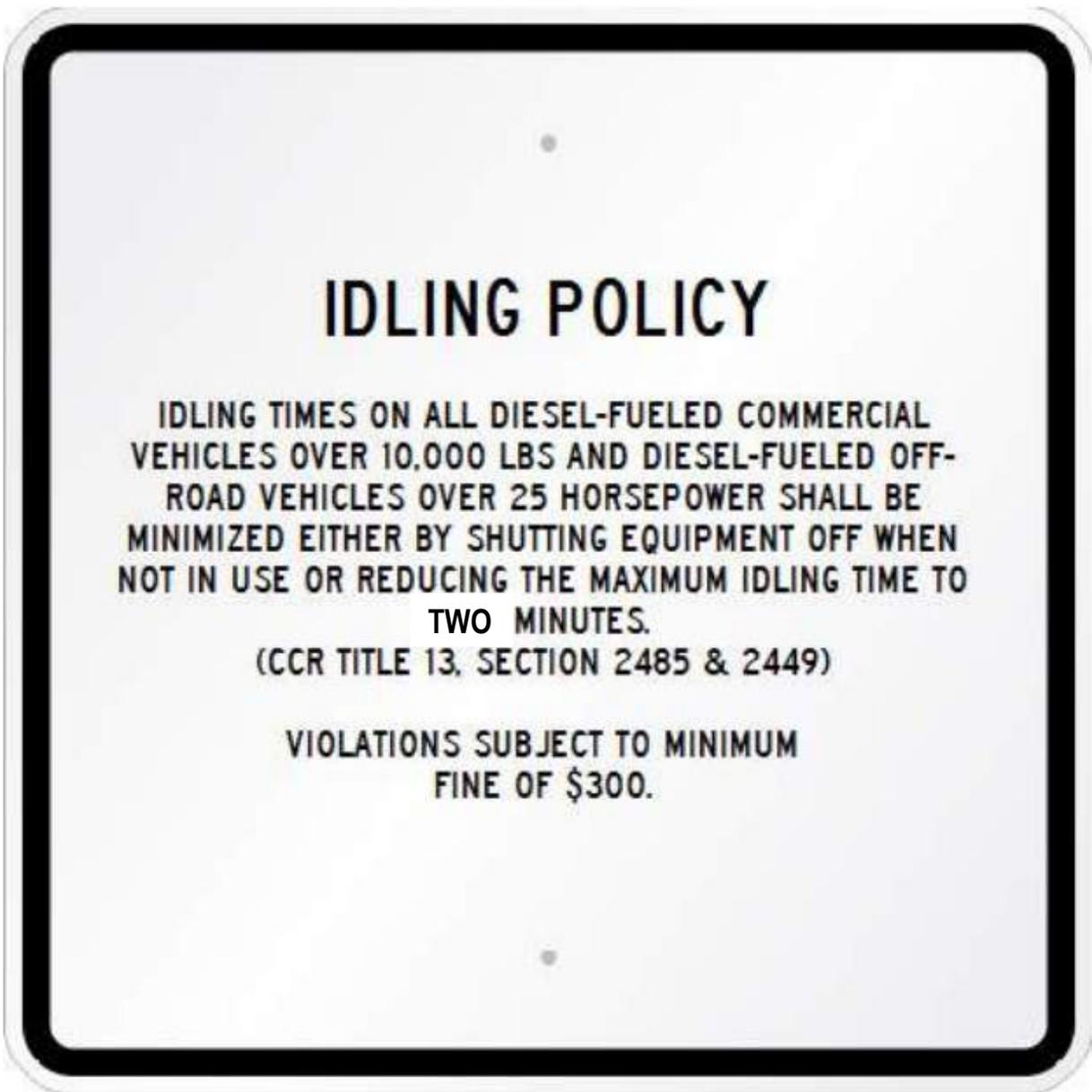
**During Construction Hours – TBD  
After Construction Hours -TBD**

**CITY OF OAKLAND CODE COMPLIANCE:  
(510) 238-3381**

**OAKLAND POLICE DEPARTMENT 24 HR LINE:  
(510) 777-3333**

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT:  
(800) 334-6367**

**Exhibit C – Idling Policy Sign**



**APPENDIX B - DTSC COMPLETION CERTIFICATES FOR RAP/RMP SITES ON CE-2  
AND CC-1**



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

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Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

October 22, 2009

Mr. Mark Arniola, P.G.  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

ANNUAL GROUNDWATER MONITORING REPORT, FORMER ORP/BUILDING 1  
AREA REMEDIATION PROJECT, FORMER OAKLAND ARMY BASE – ECONOMIC  
DEVELOPMENT CONVEYANCE AREA, OAKLAND, CALIFORNIA

Dear Mr. Arniola:

The Department of Toxic Substances Control (DTSC) has received the July 24, 2009 *Annual Groundwater Monitoring Report, Former ORP/Building 1 Area Remediation Project*, (Report) for the Former Oakland Army Base – Economic Development Conveyance Area, also known as the Oakland Gateway Development Area. The City of Oakland's consultant AMEC Geomatrix, Inc. submitted the Report. The Report presents groundwater monitoring results and recommends termination of the monitoring program at the Building 1 Area.

Pursuant to the May 19, 2003 Consent Agreement and the September 2008 DTSC-approved Operation and Maintenance Plan, DTSC requires groundwater monitoring at the Building 1 Area quarterly for five years to ensure that no chemicals of concern (COCs) are present at concentrations above the remediation goals. This groundwater monitoring program was intended to fulfill the following groundwater monitoring objectives:

- To verify that no volatile COCs in groundwater are present at concentrations above the remediation goals, and

Mr. Mark Arniola  
October 22, 2009  
Page 2

- To verify that no significant increases of concentrations of metals or other nonvolatile COCs are occurring.

The Operation and Maintenance Plan includes a provision for the City of Oakland to request a modification of the monitoring frequency and duration based upon the review of the groundwater data.

The City of Oakland conducted quarterly monitoring events in August 2008, November 2008, February 2009, and May 2009 at five monitoring wells B1MW001 through B1MW005. The results of four quarters of groundwater monitoring at the Building 1 Area indicate that both groundwater monitoring objectives described above have been met. No volatile COCs are present in groundwater at concentrations above remediation goals, and no significant increases in concentrations of metals or other non-volatile COCs are occurring.

Based on the information presented in the July 24, 2009 Report, DTSC concurs with the City of Oakland's request to terminate groundwater monitoring at the Building 1 Area.

Please destroy wells B1MW001 through B1MW005 in accordance with the procedures outlined in Appendix B, Section 2.6 of the DTSC-approved Quality Assurance Program Plan dated April 8, 2005. Upon well destruction, please prepare and submit a well destruction report to DTSC for documentation.

If you have any questions, please contact me at (510) 540-3770.

Sincerely,



Henry Wong  
Remedial Project Manager  
Brownfields and Environmental Restoration Program

See next page for email distribution.

Mr. Mark Arniola  
October 22, 2009  
Page 3

Email Distribution:

Mr. Mike Erickson  
Environmental Coordinator  
CALIBRE  
11001 West 120<sup>th</sup> Avenue, Suite 400  
Broomfield, Colorado 80021  
[michael.erickson@calibresys.com](mailto:michael.erickson@calibresys.com)

Ms. Lydia Huang, P.E.  
Senior Engineer  
Baseline Environmental Consulting  
5900 Hollis Street, Suite D  
Emeryville, California 94608-1119  
[lydia@baseline-env.com](mailto:lydia@baseline-env.com)

Mr. Jeffrey L. Rubin  
Associate Port Environmental Scientist  
Port of Oakland  
Environmental and Safety  
530 Water Street, 2<sup>nd</sup> Floor  
Oakland, California 94607  
[jrubin@portoakland.com](mailto:jrubin@portoakland.com)

Ms. Avery Pattern, P.G.  
Project Geologist  
AMEC Geomatrix, Inc.  
2101 Webster Street, 12<sup>th</sup> Floor  
Oakland, California 94612-3066  
[avery.pattern@amec.com](mailto:avery.pattern@amec.com)

Mr. Michael T. Steiger, P.E.  
Project Manager  
Erler & Kalinowski, Incorporated  
1870 Ogden Drive  
Burlingame, California 94010  
[msteiger@ekiconsult.com](mailto:msteiger@ekiconsult.com)

Ms. Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region 9  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
[tran.xuan-mai@epamail.epa.gov](mailto:tran.xuan-mai@epamail.epa.gov)

Mr. George Leyva, P.G.  
Project Manager  
San Francisco Bay Regional Water  
Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
[gleyva@waterboards.ca.gov](mailto:gleyva@waterboards.ca.gov)



## Department of Toxic Substances Control



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

**Edmund G. Brown Jr.**  
Governor

### REMEDIAL ACTION CERTIFICATION

Building 99 Debris Area  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong, P.E.  
Remedial Project Manager  
Brownfields and Environmental Restoration Program

12/31/2013  
Date

Karen M. Toth, P.E.  
Unit Chief  
Brownfields and Environmental Restoration Program

12/31/2013  
Date

**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Building 99 Debris Area  
Risk Management Plan (RMP) Location 85  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

- Building 99 Debris Area
- Debris Area near Building 99
- RMP Location 85
- Base Realignment and Closure Parcel 10
- Operable Unit 1
- Gateway Development Area
- Port Development Area
- Former Oakland Army Base – Economic Development Conveyance Area
- Oakland Army Base

B. Address of site if different from above:

The Debris Area is located north of Building 99 and south and south west of the former Building 1. The area is generally bordered by Bataan Street to the north, Corregidor Avenue to the west, and Attu Street to the south, in the City of Oakland, California

The Debris Area is approximately three acres with the following survey coordinates in the North American Datum - 1983 (NAD83), California Coordinate System (State Plane), Zone 3:

Northing	Easting
N 2,126,544.88	E 6,039,897.39
N 2,126,208.25	E 6,040,257.41
N 2,126,042.87	E 6,040,257.41
N 2,126,042.88	E 6,039,826.37

- C. Assessor's Parcel Number: O000-0507-001-11  
*(This number starts with the letter "O" and is followed by three zeros.)*
- D. DTSC Identification Numbers:
  - Site Code: 201537
  - EnviroStor ID: 01970016

**4. Responsible Parties:**

The City of Oakland owns approximately 90% of the Debris Area while the Port of Oakland owns a smaller portion.

**Landowners**

*City of Oakland Contact Person:*  
 Mr. Mark Arniola, PG  
 Environmental Program Specialist  
 Public Works Agency  
 Environmental Services Division  
 City of Oakland  
 250 Frank H. Ogawa Plaza, Suite 5301  
 Oakland, California 94612-2034  
 (510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

*Port of Oakland Contact Person:*  
 Mr. Jeffrey L. Rubin  
 Port Associate Environmental Scientist  
 Port of Oakland  
 Environmental and Safety

530 Water Street, 2<sup>nd</sup> Floor  
Oakland, California 94607  
(510) 627-1134  
[jrubin@portoakland.com](mailto:jrubin@portoakland.com)

## 5. **Project History:**

Prior to 1916, much of the area encompassing the former Oakland Army Base was natural tidal marsh or shallow open water. Subsequent land reclamation activities in the general areas created the land where the Army property is situated. The Army began operation at the former Oakland Army Base in the early 1940s, closed the base in September 1999, and transferred 363.5 acres of property to the City of Oakland in July 2003. In August 2006 the City of Oakland deeded approximately half of the transferred area to the Port of Oakland. DTSC has renamed the transferred 363.5-acre property as the “Oakland Gateway Development Area.”

On September 27, 2002, DTSC approved the Remedial Action Plan (RAP) and selected remedies for seven RAP Sites and approximately 150 Risk Management Plan (RMP) Locations. RAP Sites are large areas with contaminated soil and/or groundwater that must be remediated before infrastructure installation or redevelopment. In contrast, RMP Locations and features include washracks, sumps, oil/water separators, miscellaneous operations, USTs, aboveground storage tanks, former industrial and chemical handling locations, historical spills and stains, lead in soil around buildings, former polychlorinated biphenyl (PCB)-transformers and equipment locations, storm drains and sanitary sewers, railroad tracks, and marine sediments. The RAP has selected a presumptive remedy outlined in the Risk Management Plan (Appendix E of the RAP) for supplementing environmental data and implementing necessary cleanup actions during infrastructure installation or redevelopment.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction (Covenant)* for the Oakland Gateway Development Area, which includes the Debris Area, also identified as RMP Location 85. Since the former base property is not being remediated to residential or drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

## 6. **Debris Area:**

### **Description**

The debris-containing layer has been encountered at depths ranging from approximately 2.5 feet below ground surface (bgs) to 7 feet bgs within the Debris

Area. The shallow subsurface at the Debris Area has the following stratigraphic units:

- Surface Cover: Asphalt and baserock.
- Gravel-Bearing Fill: One or more layers of compacted gravels, gravelly sands, and silty or clayey sands with gravel with sporadic layers of fine to medium grained silty sand and/or clayey sand encountered at depths generally ranging from 0.5 to approximately 8 feet bgs.
- Debris-Containing Layer (if present): The debris-containing layer tends to occur at the bottom of the Gravel-Bearing Fill unit and on top of the Hydraulic Fill Sand encountered at depths ranging from approximately 2.5 to 7 feet bgs. The debris is generally gray brown to brownish black to black. The debris-containing layer contains brick fragments, glass, hexagonal tiles, mica gaskets, wire, assorted small rusted pieces of metal, wood fragments, charcoal, concrete, and locally abundant fragments of asbestos cloth/matting. The debris-containing layer generally has a fine sand matrix (possibly derived from the underlying Hydraulic Fill Sand during spreading and grading operations). The debris containing layer material tends to have a slight burned odor. The thickness is difficult to determine from boreholes due to generally poor sample recovery, but the apparent thickness of the debris-containing layer ranges from several inches up to approximately three feet.

The debris layer is a visually distinct layer containing debris and associated impacted soil with elevated lead and polycyclic aromatic hydrocarbon concentrations. The layer is easily identified by the presence of visible debris as well as by its darker color as compared with the overlying and underlying units.

The debris-containing layer, the main environmental concern of the Debris Area, also extends west beyond the former Oakland Army Base property onto the area designated as Berth 10. The debris containing layer on Berth 10 will be addressed separately under DTSC's oversight.

- Hydraulic Fill Sand: Fine to medium grained, loosely compacted, poorly-graded sand often with admixed shell fragments is encountered at depths ranging from approximately 2.5 to 16.5 feet bgs.

### **Investigation**

From 1994 through 2013, the Army, Port of Oakland, and City of Oakland assessed and investigated the Debris Area. Soil samples from the debris-containing layer at the Debris Area were analyzed to contain the following chemicals of concern (COCs) above their respective remediation goals: arsenic, cadmium, copper, lead, mercury, zinc, anthracene, benzo(a)anthracene,

benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluorene, and phenanthrene. The Debris Area also contains asbestos-containing materials (ACM).

The identified COCs were not detected above remediation goals in groundwater samples collected from the Debris Area. Since COCs in the debris-containing layer are not impacting shallow groundwater under current conditions, a low-permeability cover system is not necessary as part of a containment remedy. The existing cover material consisting of a minimum of two feet of overburden material currently provides the physical containment component of the recommended remedial action. In the future, new cover materials are anticipated to consist largely of pavement, roadways, and building slabs, as well as up to approximately one foot of additional gravel or soil placed as fill to elevate the grade of the Debris Area.

**Enhanced Risk Management Requirements**

Given that the debris-containing layer at the Debris Area contains COCs at concentrations above remediation goals, additional RMP protocols were necessary for the Debris Area. On July 25, 2013, DTSC issued a RMP Modification Letter specifying the following enhanced risk management requirements for the 3-acre Debris Area:

- The lateral extent of the Debris Area, with survey coordinates as a reference for future use by owners, tenants, and future site workers, will be documented in the former OARB environmental database. Survey coordinates defining the Debris Area, RMP location 85, are presented in the table below:

Northing	Easting
N 2,126,544.88	E 6,039,897.39
N 2,126,208.25	E 6,040,257.41
N 2,126,042.87	E 6,040,257.41
N 2,126,042.88	E 6,039,826.37

Survey coordinates are in the North American Datum – 1983 (NAD83), California Coordinate System, Zone 3.

- Clean utility corridors will be required through the Debris Area, if this area cannot be avoided during utility upgrades. A clean utility corridor will be constructed by removing existing soil to a minimum depth of two feet below and to the sides of any planned utility pipes and service lines, placing a visual marker (e.g., orange construction fencing or geotextile fabric) along the edges of the excavated corridor to demarcate the boundary between existing site soil and clean import fill, and refilling this space with clean import fill to provide a clean corridor for utility

maintenance on-site. This corridor can be constructed prior to or during utility installation.

- DTSC will be notified at least 30 calendar days before planned subsurface work within the boundaries of the Debris Area.
- All subsurface work will be monitored by a licensed California Professional Civil Engineer or Professional Geologist for RMP compliance.
- For subsurface excavation work, all material from the debris-containing layer or other soil with evidence of contamination will be placed in appropriate containers for characterization and off-site disposal at an appropriate permitted facility. Soil from all other layers that is observed to be free of contamination may be temporarily stockpiled on plastic, covered with plastic, and bermed to prevent run-off from entering the excavation or storm drain inlets. Soil from other layers can be reused to backfill the excavation or reused elsewhere within the RMP Implementation Area, provided the soil is demonstrated to not contain chemicals greater than Remediation Goals, and that the soil is placed beneath appropriate cover materials described in Section 6.4 of the RMP.
- In addition to the requirements for Site-Specific Health and Safety Plans (HSPs) specified in Section 7 of the RMP, the following items shall also be included in HSPs for subsurface work conducted within the boundaries of the Debris Area:
  - DTSC will have 15 calendar days to review and comment on the HSP before start of work;
  - Subsurface work shall not start unless DTSC comments on the HSP have been satisfactorily addressed;
  - The HSP will include a summary of the extent and description of the debris-containing layer;
  - The HSP will identify the hazards associated with the debris-containing layer;
  - The HSP will identify the unique chemical and physical hazards associated with the proposed work within the Debris Area and control measures to reduce the risk of exposure to these hazards;
  - The HSP will identify the appropriate air monitoring, mitigation, and protective measures for worker health and safety when conducting subsurface work within the Debris Area;

- The HSP will identify appropriate decontamination protocols for all tools and equipment contacting the debris-containing layer; and
- The HSP will provide dust action levels for lead concentrations and ACM in the breathing zone based on the maximum concentrations detected in the area of proposed subsurface work and identify mitigation measures to protect personnel.

**Completion Report**

On July 30, 2013, DTSC approved the July 29, 2013 *Completion Report for the Building 99 Debris Area* and concluded that the City of Oakland (a) had adequately assessed and investigated the Debris Area, (b) had demonstrated achievement of the remedial action objectives, and (c) had implemented the required institutional control remedy for the subject areas.

All RAP Sites and RMP Locations within the Oakland Gateway Development Area, upon remedy implementation, continue to be parts of the RMP Implementation Area. The August 8, 2003 *Covenant to Restrict Use of Property, Environmental Restriction* requires landowner(s) to follow the risk management protocols set forth in the RMP regarding planning and implementation of earthwork construction, redevelopment, and/or post-development activities.

**7. Type of Site:**

Included in EnviroStor?    Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____
Other (i.e., walk-in):	<u>  X  </u>		

**8. Size of Site:**

Approximately three acres

Small \_\_\_\_\_    Medium   X      Large \_\_\_\_\_    Extra Large \_\_\_\_\_

**9. Dates of Remedial Action**

The Army, City of Oakland, and Port of Oakland assessed, investigated and remediated the Debris Area (RMP Location 85) from January 1994 through July 2013. On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes the Debris Area.

**10. Response Action Taken on Site: (check appropriate action)**

Initial removal or remedial action (site inspection/sampling)

Final remedial action

RCRA enforcement/closure action

No action, further investigation verified that no cleanup action at site was needed

**A. Type of Remedial Action:**

The RAP selects the following remedies:

- In-situ chemical oxidation/reduction; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

**B. Estimated quantity of remediation waste/hazardous waste associated with the site (i.e., tons/gallons/ cubic yards) was:**

1.  Waste Treated Onsite Amount: \_\_\_\_\_

2.  Untreated (capped sites) Amount: 3 acres

3.  Soil Removed Amount: \_\_\_\_\_

4.  Groundwater Disposed Off-Site Amount: \_\_\_\_\_

5.  Institutional Controls

The institutional controls remedy applies to all Oakland Gateway Development Area property including the Debris Area.

**11. Cleanup Levels/Standards**

- A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan or workplan (if cleanup occurred as the result of a removal action workplan or interim remedial measures prior to development of a RAP)?

The 2002 RAP recommends containment utilizing a permeable cover system with existing institution controls and RMP protocols as remedial action for the Debris Area. The RAP describes that a permeable cover system may consist of existing clean soil, building slabs, asphalt roadways, and concrete pavement. The remedy at the Debris Area also includes additional site-specific RMP protocols as deemed necessary.

The remedial action for the Debris Area of containment with existing institutional controls and additional RMP protocols meets the soil remedial action objectives (RAOs) applicable to the Debris Area: (1) maintain existing conditions at the former Oakland Army Base to prevent direct contact with known or potentially impacted soil prior to implementation of remedial actions or redevelopment and (2) contain impacted soil that will not unreasonably interfere with planned land uses by maintaining existing cover or constructing new cover.

Similarly, the remedial action meets the groundwater RAOs applicable to the Debris Area: (1) implement institutional controls, alone or in combination with site-specific engineering controls as part of all selected remedies, to prevent incidental ingestion or dermal contact with impacted groundwater and (2) prevent further significant increases of concentrations of metals and other non-volatile COCs in groundwater.

- B. Were the specified cleanup standards met? Yes   X   No \_\_\_\_\_
- C. If "no", why not:

**12. DTSC Involvement in the Remedial Action:**

- A. Did DTSC order the Removal Action?  
Yes \_\_\_\_\_ No   X   Date of Order \_\_\_\_\_
- B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):
- \_\_\_\_\_ Sampling Analysis Procedures Date: \_\_\_\_\_
- \_\_\_\_\_ Health & Safety Protections Date: \_\_\_\_\_

\_\_\_\_\_ Removal/Disposal Procedures Date: \_\_\_\_\_

X Remedial Action Plan Date: September 27, 2002

\_\_\_\_\_ Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes X No \_\_\_\_\_ Name: Michael T. Steiger, P.E., C63348

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes X No \_\_\_\_\_ Name: Gerard Aarons, PG 7430  
Henry Wong, P.E., C81458

E. Did DTSC confirm completion of all remedial action?

Yes X No \_\_\_\_\_ Date of verification: July 30, 2013

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes \_\_\_\_\_ No X

G. Was there a community relations plan in place?

Yes X No \_\_\_\_\_

H. Was a remedial action plan or removal action workplan developed for this site?

Yes X No \_\_\_\_\_

I. Did DTSC hold a public meeting regarding the draft RAW or RAP?

Yes X No \_\_\_\_\_

J. Were public comments addressed?

Yes X No \_\_\_\_\_

Date of DTSC analysis and response: September 27, 2002

K. Are all of the facts cited above adequately documented in the DTSC files?

Yes X No \_\_\_\_\_

If no, identify areas where documentation is lacking.

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**13. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
Yes  No
- B. If yes, did EPA concur with all remedial actions?  
Yes  No
- C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup up until September 30, 2013:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002  
[tran.xuan-mai@epamail.epa.gov](mailto:tran.xuan-mai@epamail.epa.gov)

**14. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input checked="" type="checkbox"/> RWQCB	The Regional Water Quality Control Board staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____
<input type="checkbox"/> Caltrans	_____
<input type="checkbox"/> Other	_____

Name of contact persons and agency:

George Leyva, PG  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2352

**15. Post-Closure / Post-Remedy Activities:**

- A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes X No \_\_\_\_\_

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Alameda County Series Number 2003466371) for the Oakland Gateway Development Area, which includes the Debris Area. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential and drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for the Debris Area. The upcoming five-year review is schedule for completion in 2015.

- B. Have post-closure plans been prepared and approved by DTSC?  
Yes \_\_\_\_\_ No X

A post-closure plan is not required or necessary for this site.

- C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the Covenant and five-year review requirements shall continue in effect in perpetuity.

- D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

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Who is the DTSC contact person?

Henry Wong, P.E.  
Hazardous Substances Engineer  
Brownfields and Environmental Restoration Program  
(510) 540-3770  
[henry.wong@dtsc.ca.gov](mailto:henry.wong@dtsc.ca.gov)

E. Has cost recovery been initiated? Yes  No

Has DTSC received all payments? Yes  No

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, and RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed on August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..." Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008.

The City's, Port's, Army's and DTSC's management teams are working toward a resolution on this issue.

F. Were local planning agencies notified of the cleanup action?

Yes  No  If yes, the name and address of agency:

Mark Arniola, PG  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**16. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement \$ _____			

**17. Problems Encountered Which Caused Major Delays:** None

**18. Accomplishment Unique to the Project:** None

**19. Final Use of Site:** The City of Oakland and Port of Oakland plan to develop the Debris Area and vicinity for commercial and industrial land uses.



# Department of Toxic Substances Control



Linda S. Adams  
Acting Secretary for  
Environmental Protection

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

Edmund G. Brown Jr.  
Governor

## REMEDIAL ACTION CERTIFICATION

Risk Management Plan Locations 8, 10, 19, 97, and 107  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

### 1. Certification of Remedial Action:

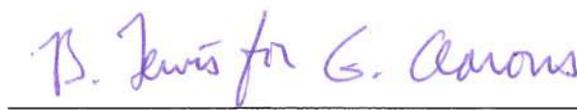
I hereby certify that the foregoing information is true and correct to the best of my knowledge.

  
Henry Wong  
Remedial Project Manager  
Brownfields and Environmental Restoration Program

June 28, 2011  
Date

  
Karen M. Toth, P.E.  
Unit Chief  
Brownfields and Environmental Restoration Program

June 28, 2011  
Date

  
Gerard Aarons, PG 7430, CHG 771  
Engineering Geologist  
Geological Services Unit  
Office of Geology  
Brownfields and Environmental Restoration Program

P.G. 4287  
C.E.G. 1414  
CHG 136  
June 28, 2011  
Date

**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

     DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

     DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

  X   DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Risk Management Plan (RMP) Locations 8, 10, 19, 97, and 107  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

RMP Locations

- RMP Location 8: Former service garage in Building S-4 with three 1,700-gallon gasoline aboveground tanks (ASTs)
- RMP Location 10: Former paint storage shed north of Building 99
- RMP Location 19: Oil-water separator northeast of Building 5
- RMP Location 97: Former gas service facility with two 1,700-gallon gasoline ASTs
- RMP Location 107: Former 250-gallon waste oil underground storage tank (UST) located northeast of Building 5 and adjacent to RMP Location 19

Alternative Names for the Project Site

- Gateway Development Area
- Central Gateway Area
- Former Oakland Army Base – Economic Development Conveyance Area

- Oakland Army Base (OARB)

B. Address of site if different from above:

The center coordinates in feet for the RMP Locations based on the North American Datum 1983 are as follows:

<u>RMP Location ID</u>	<u>Northing</u>	<u>Easting</u>
8	2126704	6040044
10	2126050	6040000
19	2126271	6040827
97	2126524	6039600
107	2126284	6040826

C. Assessor's Parcel Number: O000-0507-001-11  
(This number starts with the letter "O" and is followed by three zeros.)

D. DTSC Identification Numbers:

Site Code: 201537  
EnviroStor ID: 01970016

**4. Responsible Party:**

**Landowner**

City of Oakland

*Contact Persons:*

Mr. Mark Arniola  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**5. Brief History:**

Prior to 1916, much of the area encompassing OARB was natural tidal marsh or shallow open water. Subsequent land reclamation activities in the general areas created the land where OARB is situated. The Army began operation at OARB in the early 1940s, closed the base in September 1999, and transferred 363.5 acres of property to the City of Oakland in July 2003. In August 2006 the City of Oakland deeded approximately half of the transferred area to the Port of

Oakland. DTSC has renamed the transferred 363.5-acre property as the "Oakland Gateway Development Area."

On September 27, 2002, DTSC approved the Remedial Action Plan (RAP) and selected remedies for seven RAP Sites and approximately 150 RMP Locations. RMP Locations and features include washracks, sumps, oil/water separators, miscellaneous operations, underground storage tanks, aboveground storage tanks, former industrial and chemical handling locations, historical spills and stains, lead in soil around buildings, former polychlorinated biphenyl-transformers and equipment locations, storm drains and sanitary sewers, railroad tracks, and marine sediments. The RAP has selected a presumptive remedy outlined in the Risk Management Plan (Appendix E of the RAP) for supplementing environmental data and implementing necessary cleanup actions during infrastructure installation or redevelopment.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes RMP Locations 8, 10, 19, 97, and 107. Since the former base property is not being remediated to residential or drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

**6. RMP Locations 8, 10, 19, 97, and 107:**

On May 25, 2011, the City of Oakland finalized the *Request for Completion – RMP Locations 8, 10, 19/107, and 97* (Completion Request) documenting the achievement of the remedial action objectives for the following five RMP Locations:

*RMP Location 8*

RMP Location 8, covers approximately 5,000 square feet (ft<sup>2</sup>) of surface area, is a former vehicle service garage in Building S-4. The installation date of this service garage is unknown; the Army records show that the garage had serviced vehicles until 1979. Three 1,700-gallon gasoline ASTs were reportedly associated with the former service garage. At the time of inspection in July 2010, the City of Oakland did not observe evidence of the ASTs. It appears that the vehicle service garage had been in the northeastern portion of the Building S-4 and offices or storage areas occupied the rest of the building.

The City of Oakland collected two soil samples and two grab groundwater samples for metal, volatile organic compound (VOC), polycyclic aromatic hydrocarbon (PAH), total petroleum hydrocarbon as diesel (TPH-d), TPH as motor oil (TPH-mo), TPH as gasoline (TPH-g), and polychlorinated biphenyl

(PCB) analyses. Soil and groundwater analytical results do not show chemical of concern (COC) concentrations above remediation goals.

#### RMP Location 10

RMP Location 10 is a 120-ft<sup>2</sup>, former paint storage shed located north of Building 99. The installation and removal dates of this shed are unknown. At the time of inspection in July 2010, no evidence of the former paint storage shed was observed.

The Army and City of Oakland collected five soil samples and one grab groundwater sample for metal, VOC, PAH, TPH-d, TPH-mo, and PCB analyses. Soil and groundwater analytical results do not show COC concentrations above remediation goals.

#### RMP Location 19

RMP Location 19 is a former oil/water separator (OWS) with floor drain system adjacent to RMP Location 107 (waste oil UST 12) and Building 5. The OWS' installation and removal dates are unknown.

The City of Oakland collected two soil samples and one grab groundwater sample for metal, VOC, PAH, TPH-d, TPH-mo, and PCB analyses. Soil and groundwater analytical results do not show COC concentrations above remediation goals.

#### RMP Location 97

RMP Location 97, covers approximately 400 ft<sup>2</sup> of surface area, is a former gasoline service facility with two former 1,700-gallon horizontal steel ASTs located in a concrete pit near Building T-124. The two ASTs were reportedly installed in 1945 for gasoline storage and were removed in 1952. No previous investigations had been conducted in this area. In July 2010 the City of Oakland inspected the site and performed metal and radio detection of underground structures. No surface evidence of the service facility or ASTs was observed; no evidence of underground structures was detected.

The City of Oakland collected two soil samples and two grab groundwater samples for metal, VOC, PAH, TPH-d, TPH-mo, and TPH-g analyses. Soil and groundwater analytical results do not show COC concentrations above remediation goals.

#### RMP Location 107

RMP Location 107 is the backfilled excavation for the former UST 12 adjacent to RMP Location 19 (former OWS). The July 1997 Closure Report, prepared by the

U.S. Army Corps of Engineers, identifies that UST 12 was a 250-gallon waste oil UST constructed with steel.

In December 1996 the Army pumped waste oil from UST 12, removed the tank and piping, observed stained soil and noticed strong chemical odor, excavated the site to approximately 6 x 6 x 4 feet below ground surface, and collected one excavation floor soil sample and one sample from the stockpiled soil. Analytical results revealed that these soil samples contained COC concentrations up to 190 mg/kg of TPH extractable, 940 mg/kg of oil and grease, 12.9 mg/kg of lead, 18.4 mg/kg of chromium, 26.1 mg/kg of nickel, and 49.4 mg/kg of zinc. Based on these results, the Army determined that over-excavation was not necessary, lined the excavation with visqueen, and backfilled the site with clean imported backfill material. Approximately 5 cubic yards of chemical-impacted soil were trucked to Bay Area Soil in Richmond, California for recycling; approximately 200 gallons of waste oil were transported to Evergreen Oil in Newark, California for recycling.

Since RMP Locations 107 and 19 are adjacent to each other, the grab groundwater sample from boring RMP19SL001 is suitable for completion determination for both RMP Locations. The Army's and City of Oakland's soil and grab groundwater samples results do not show COC concentrations above remediation goals.

Approval of Completion Request

On June 28, 2011, DTSC approved the Completion Request and concluded that the City of Oakland (a) had adequately investigated RMP Locations 8, 10, 19, 97, and 107, (b) had demonstrated achievement of the remedial action objectives, and (c) had implemented the required institutional control remedy for the subject RMP Locations.

All RAP Sites and RMP Locations within the Oakland Gateway Development Area, upon remedy implementation, continue to be parts of the RMP Implementation Area. The August 8, 2003 *Covenant to Restrict Use of Property, Environmental Restriction* requires landowner(s) to follow the risk management protocols set forth in the RMP regarding planning and implementation of earthwork construction, redevelopment, and/or post-development activities.

**7. Type of Site:**

Included in EnviroStor? Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____
Other (i.e., walk-in):	<u>  X  </u>		

**8. Size of Site:**

RMP Locations 8, 10, 19, 97, and 107 encompass approximately 6,200 ft<sup>2</sup>.

Small  Medium  Large  Extra Large

**9. Dates of Remedial Action**

The Army and City of Oakland investigated RMP Locations 8, 10, 19, 97, and 107 from 1996 through 2010. The Army removed waste oil from UST 12 and impacted soil in 1996. On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 8, 10, 19, 97, and 107.

**10. Response Action Taken on Site: (check appropriate action)**

Initial removal or remedial action (site inspection/sampling)

Final remedial action

RCRA enforcement/closure action

No action, further investigation verified that no cleanup action at site was needed

**A. Type of Remedial Action:**

The RAP selects the following remedies for the RMP Locations:

- For locations where no contamination has been found to date, the area will be inspected and sampled in accordance with the RMP during redevelopment to confirm no contamination exists above remediation goals at these locations;
- For locations requiring additional soil and groundwater characterization, the areas will be inspected and sampled/monitored during redevelopment as outlined in the RMP;
- For locations requiring removal of an existing structure or sites where impacted soil is anticipated, the RMP assumes that an average of about 50 cubic yards of debris and contaminated soil will be removed at each site and disposed as hazardous substances at an off-site permitted facility; and

- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) was:

1. \_\_\_\_\_ Waste Treated Off-Site      Amount: \_\_\_\_\_
2. \_\_\_\_\_ Untreated (capped sites)      Amount: \_\_\_\_\_
3.   X   Soil Removed                      Amount: Five cubic yards
4.   X   Wastewater Removed              Amount: 200 gallons
5.   X   Institutional Controls  
 The institutional controls remedy applies to all Oakland Gateway Development Area property including RMP Locations 8, 10, 19, 97, and 107.

**11. Cleanup Levels/Standards**

A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan or workplan (if cleanup occurred as the result of a removal action workplan or interim remedial measures prior to development of a RAP)?

The RAP specifies risk-based remediation goals for meeting the remedial action objectives based on commercial and industrial reuses. Remediation goals for most chemicals are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each COC that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters (such as potential leachability of a chemical from soil to groundwater) when these values are more stringent than the calculated human health goals.

The RAP, Table 7-11 lists numerical cleanup targets as the soil and groundwater remediation goals that correspond to a  $1 \times 10^{-6}$  incremental lifetime cancer risk for each COC. When more than ten carcinogenic COCs are present at concentrations exceeding remediation goals, the overarching remedial action objective is the cumulative target risk level of  $1 \times 10^{-5}$  for carcinogenic COCs applicable at each RAP Site and RMP Location.

Remediation goals represent the maximum allowable concentrations for the respective COCs and cannot be increased to allocate amongst the residual COCs to meet the overarching cumulative risk of  $1 \times 10^{-5}$ . However, remediation goals can be adjusted downward, as need, if the cumulative cancer risk level exceeds  $1 \times 10^{-5}$  or the total hazard index (HI) exceeds 1. Remedial action objectives are achieved when residual COCs in soil and groundwater are no greater than a cumulative HI of 1 or a cumulative carcinogenic risk of  $1 \times 10^{-5}$  for each potentially exposed population.

The Army investigated RMP Locations 8, 10, 19, 97, and 107 from 1996 through 2010. COC concentrations in soil and groundwater samples are below remediation goals. The number of samples and types of analyses at the subject RMP Locations are adequate to demonstrate that the remedial action objectives established in the DTSC-approved RAP/RMP have been met. RMP Locations 8, 10, 19, 97, and 107 are not significant sources of soil and groundwater contamination and no significant data gaps are evident.

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**12. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes  No  Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

\_\_\_\_\_ Sampling Analysis Procedures Date: \_\_\_\_\_

\_\_\_\_\_ Health & Safety Protections Date: \_\_\_\_\_

\_\_\_\_\_ Removal/Disposal Procedures Date: \_\_\_\_\_

Remedial Action Plan                      Date: September 27, 2002

Removal Action Workplan                      Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes  No  Name: Mary Stallard, PG, 4765

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes  No  Name: Gerard Aarons, PG, 7430

E. Did DTSC confirm completion of all remedial action?

Yes  No  Date of verification: June 28, 2011

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes  No

G. Was there a community relations plan in place?

Yes  No

H. Was a remedial action plan or removal action workplan developed for this site?

Yes  No

I. Did DTSC hold a public meeting regarding the draft RAW or RAP?

Yes  No

J. Were public comments addressed?

Yes  No

Date of DTSC analysis and response: September 27, 2002

K. Are all of the facts cited above adequately documented in the DTSC files?

Yes  No

If no, identify areas where documentation is lacking.

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**13. EPA Involvement in the Remedial Action:**

A. Was the EPA involved in the site cleanup?

Yes  No

B. If yes, did EPA concur with all remedial actions?

Yes  No

C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002  
[Tran.Xuan-Mai@epamail.epa.gov](mailto:Tran.Xuan-Mai@epamail.epa.gov)

**14. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input checked="" type="checkbox"/> RWQCB	The Regional Water Quality Control Board staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____
<input type="checkbox"/> Caltrans	_____
<input type="checkbox"/> Other	_____

Name of contact persons and agency:

George Leyva, P.G.  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2379  
[gleyva@waterboards.ca.gov](mailto:gleyva@waterboards.ca.gov)

**15. Post-Closure / Post-Remedy Activities:**

- A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes  No

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Alameda County Series Number 2003466371) for the Oakland Gateway Development Area, which includes RMP Locations 8, 10, 19, 97, and 107. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential and drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for RMP Locations 8, 10, 19, 97, and 107. The trigger date for a statutory five-year review was the mobilization date of first remedy implementation for the Oakland Gateway Development Area project (i.e., Building 1 RAP Site on November 28, 2005). Therefore, DTSC should review and approve the first statutory five-year review report on or before November 28, 2010. On June 10, 2010, the City of Oakland submitted the draft five-year review report to DTSC for review; however, DTSC delayed the review due to project funding disruption. On May 5, 2011, DTSC provided comments on the five-year review report.

- B. Have post-closure plans been prepared and approved by DTSC?  
Yes  No   
A post-closure plan is not required or necessary for this site.

- C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the Covenant and five-year review requirements shall continue in effect in perpetuity.

- D. Are deed restrictions proposed or in place? Yes  No

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

---

Who is the DTSC contact person?

Henry Wong  
Hazardous Substances Engineer  
Brownfields and Environmental Restoration Program  
(510) 540-3770  
[hwong@dtsc.ca.gov](mailto:hwong@dtsc.ca.gov)

E. Has cost recovery been initiated? Yes X No \_\_\_\_\_

Has DTSC received all payments? Yes \_\_\_\_\_ No X

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties ..."

To date the Army has not provided alternative mechanism for payment of oversight costs to DTSC and RWQCB. Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008. The Army's and DTSC's management teams are working toward a resolution on this issue.

F. Were local planning agencies notified of the cleanup action?

Yes X No \_\_\_\_\_ If yes, the name and address of agency:

Mark Arniola, P.G.  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland

250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**16. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement	\$ _____		

**17. Problems Encountered Which Caused Major Delays:** None

**18. Accomplishment Unique to the Project:** None

**19. Final Use of Site:** The City of Oakland plans to develop RMP Locations 8, 10, 19, 97, and 107 and vicinity for industrial and commercial land uses.



**Matthew Rodriguez**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Edmund G. Brown Jr.**  
Governor

### REMEDIAL ACTION CERTIFICATION

RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156, and  
Railroad Ballast and Lead-Based Paint Categorical RMP Locations  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong, P.E.  
Remedial Project Manager  
Brownfields and Environmental Restoration Program

12/13/2013

Date

Daniel Murphy, P.E.  
Unit Chief  
Brownfields and Environmental Restoration Program

12/13/13

Date

**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

    DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

    DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

  X   DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Risk Management Plan (RMP) Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156, and Railroad Ballast and Lead-Based Paint Categorical RMP Locations  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

RMP Locations

- RMP Location 9: Inactive grease trap adjacent to the Building 60
- RMP Location 16: Former incinerator used for incineration of classified documents located within Building 6
- RMP Location 17: Former PX gas station with associated appurtenances located at the former Building 42
- RMP Location 18: Former washrack at the former Building 41
- RMP Location 101: Gasoline Underground Storage Tank (UST) 42A associated with the former Building 42 PX gas station
- RMP Location 102: Gasoline UST 42B associated with the former Building 42 PX gas station

- RMP Location 154: Lead and total petroleum hydrocarbon (TPH) impacted soil present at edge of the former Building 1 Oil Recycling Plant soil excavation
- RMP Location 155: Lead impacted soil remaining below Building 6 from the Building 1 Oil Recycling Plant soil excavation
- RMP Location 156: Area of elevated lead concentration in soil near Building 60

Categorical RMP Locations

- Railroad Ballast: Railroad ballast located southeast of Building 6 along Maritime Street
- Lead-Based Paint: Lead-based paint related to Building 60

Alternative Names for the Project Site

- Buildings 6, 6T, 60, and 70 Demolition Project
- Building 1 RAP Site
- Base Realignment and Closure Parcels 9 and 10
- Operable Unit 1
- Gateway Development Area
- Former Oakland Army Base – Economic Development Conveyance Area
- Oakland Army Base

B. Address of site if different from above:

RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156 are generally bordered by Alaska Street to the north, Maritime Street to the east, Attu Street to the south, and Africa Street to the west, in the City of Oakland, California.

C. Assessor's Parcel Number: O000-0507-001-11  
(This number starts with the letter "O" and is followed by three zeros.)

D. DTSC Identification Numbers:

Site Code: 201537  
EnviroStor ID: 01970016

#### 4. **Responsible Parties:**

##### **Landowner**

City of Oakland

##### *Contact Person:*

Mr. Mark Arniola, PG  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

#### 5. **Project History:**

Prior to 1916, much of the area encompassing the former Oakland Army Base was natural tidal marsh or shallow open water. Subsequent land reclamation activities in the general areas created the land where the Army property is situated. The Army began operation at the former Oakland Army Base in the early 1940s, closed the base in September 1999, and transferred 363.5 acres of property to the City of Oakland in July 2003. In August 2006 the City of Oakland deeded approximately half of the transferred area to the Port of Oakland. DTSC has renamed the transferred 363.5-acre property as the "Oakland Gateway Development Area."

On September 27, 2002, DTSC approved the Remedial Action Plan (RAP) and selected remedies for seven RAP Sites and approximately 150 Risk Management Plan (RMP) Locations. RAP Sites are large areas with contaminated soil and/or groundwater that must be remediated before infrastructure installation or redevelopment. In contrast, RMP Locations and features include washracks, sumps, oil/water separators, miscellaneous operations, USTs, aboveground storage tanks, former industrial and chemical handling locations, historical spills and stains, lead in soil around buildings, former polychlorinated biphenyl (PCB)-transformers and equipment locations, storm drains and sanitary sewers, railroad tracks, and marine sediments. The RAP has selected a presumptive remedy outlined in the Risk Management Plan (Appendix E of the RAP) for supplementing environmental data and implementing necessary cleanup actions during infrastructure installation or redevelopment.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes RMP Locations 9, 16,

17, 18, 101, 102, 154, 155, and 156. Since the former base property is not being remediated to residential or drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

On April 2, 2013, DTSC approved the *Proposed RMP Implementation Plan for Building 6, 6T, 60, and 70 Demolition Project* (Implementation Plan) and associated work plans. The Implementation Plan addresses soil and groundwater sampling, field observation, and impacted soil removal during demolition of Buildings 6, 6T, 60 and 70.

On June 13, 2013, DTSC approved the *Remedial Design and Implementation Plan, Soil Treatment for the Building 6, 6T, 60, & 70 Demolition and Remediation Project* (RDIP) for Buildings 6, 6T, 60, and 70, which include the subject RMP Locations. The RDIP outlines onsite treatment using a permitted transportable treatment unit to treat approximately 2,660 cubic yards of lead-contaminated soil to meet the Resource Conservation and Recovery Act (RCRA) land disposal restrictions and disposal facility permit requirements for land disposal at a facility outside of California.

**6. RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156:**

On December 12, 2013, the City of Oakland finalized the *Request for Completion and Summary of Remediation Activities, RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156, Railroad Ballast and Lead Based Paint Categorical RMPs* (Completion Request) (a) presenting soil and groundwater data collected by the Army and supplemented by the City of Oakland, (b) summarizing the soil remediation activities, (c) evaluating whether the data satisfy RMP sampling requirements, and (d) documenting achievement of the remedial action objectives at the RMP Locations.

**RMP Location 9**

RMP Location 9 is a former inground grease trap located south of Building 60 near a former kitchen area. Building 60 was built in 1942 and was used as a base exchange and cafeteria.

• **1997 Basewide Preliminary Assessment/Site Inspection (PA/SI):**

In July 1997 the Army collected two soil samples at 2.5 and 4.0 feet below ground surface (bgs) from location K10S106. The soil samples were analyzed for volatile organic compounds (VOCs), TPH in diesel range (TPH-d), TPH in motor oil range (TPH-mo), and metals. All chemicals of concern (COCs) were detected with soil concentrations below remediation goals.

• **2013 Grease Trap Removal and Investigation:**

In March 2013 the City of Oakland removed the grease trap, excavated the adjacent soil to a depth of approximately four feet bgs with a boundary of approximately 10- by 10-foot, and collected two soil samples from the excavation floor and two soil samples one-foot below the excavation floor. Debris material was observed at the bottom of the northern portion of excavation. Soil samples were analyzed for VOCs, polycyclic aromatic hydrocarbons (PAHs), PCBs, pesticides, herbicides, TPH-d, TPH-m, and metals. Lead concentrations were detected at 1,400 mg/kg and 1,500 mg/kg from the northern limit of the excavation. All other COCs were detected with soil concentrations below remediation goals.

- Remedy Implementation:

Based on the finding of a debris layer in the grease trap excavation and analysis of the Building 99 Debris Area footprint, the City of Oakland requested in an email dated April 5, 2013 that RMP Location 9 be included as part of the Building 99 Debris Area and that the excavation be backfilled as soon as possible. In an April 11, 2013 email, DTSC concurred and approved backfilling the excavation without soil removal. On July 25, 2013, DTSC issued a RMP Modification Letter specifying enhanced risk management requirements for the 3-acre Building 99 Debris Area which includes RMP Location 9. As a result, the remedy for RMP Location 9 was deemed implemented.

### **RMP Location 16**

RMP Location 16 is the approximate location of a former incinerator at the former Building 6. The Army burned approximately 200 pounds per day of classified material consisted of Type 0 waste (i.e., paper tape, punch cards, and general paper refuse) in the incinerator. The incinerator was a single chamber unit, model CSN-150 manufactured by Pacific Coast Incinerators of Berkeley, California. Ash residue was reportedly disposed of in the Building 6 refuse dumpster. The incinerator's removal date is unknown.

- 2013 Remedial Action:

In April 2013 the City of Oakland observed removal of the Building 6 foundation. Remaining structure of the former incinerator, either above ground or below ground, was not observed. No evidence of ash was noted in the soil beneath the former incinerator location or in the general vicinity of Building 6. Four soil samples were collected and analyzed for PAHs and metals; all COCs were detected with concentrations below remediation goals.

### **RMP Location 17**

RMP Location 17 is the former Building 42 which served as the PX gas station. Building 42 was constructed in 1942, enlarged in 1954, and demolished in 1965 prior to construction of Building 6 in 1996. Fuel tanks associated with the former Building 42 were USTs 42A and 42B.

- **1998 Remedial Investigation:**

In July 1998 the Army collected nine soil samples at varying depths from one to five feet bgs and two grab groundwater samples. Soil samples collected near the former building contained low concentrations of TPH as gasoline (TPH-g), TPH-d, benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl ethyl ketone (MEK), naphthalene, vinyl acetate, acetone, and methylene chloride. Grab groundwater samples were detected with BTEX and several metals. All detected concentrations were below remediation goals.

- **2013 Remedial Action:**

In April 2013 the City of Oakland removed the Building 6 foundation and excavated two test pits to five feet bgs in the northern and western portions of the former Building 42. A small portion of the former Building 42 footprint remains covered by the former Building 6 sidewalk and eastern parking lot. Surface soil and subsurface soil were monitored with a photoionization detector (PID) and visually/manually inspected during the excavation activities. No evidence of odors or staining was observed and no elevated PID readings were noted during the excavation activities. Four soil samples were collected in each of the two test pits at three and five feet bgs for VOC, PAH, PCB, TPH-g, TPH-d, TPH-m, and metal analyses. All COCs were detected with concentrations below remediation goals.

Approximately 22 cubic yards of soil were removed from the two test pits excavated within the former Building 42 footprint. One 4-point composite soil sample was collected from the stockpile and analyzed for the VOCs, PAHs, PCBs, TPH-g, TPH-d, TPH-m, and metals. All COCs were detected with concentrations below remediation goals. The test pits at RMP Location 17 were backfilled with the stockpiled soil and compacted.

### **RMP Location 18**

RMP Location 18 is the former washrack identified as Building 41. The PA/SI reports that Building 41 was a former steam cleaning/washrack facility constructed in 1954 and demolished in 1965. The footprint of the former washrack overlaps with Building 6.

- 1998 Remedial Investigation:

Since the former washrack was adjacent to the former PX gas station (RMP Location 17), data from the PX gas station were also applicable to the washrack, where COC concentrations in soil and groundwater were below remediation goals.

- 2013 Remedial Action:

In April 2013 the City of Oakland removed the Building 6 foundation and excavated one test pit to five feet bgs in the northern portion of the former Building 41. A small portion of the former Building 42 footprint remains covered by the former Building 6 sidewalk and eastern parking lot. Surface soil and subsurface soil were monitored with a PID and visually/manually inspected during the excavation activities. No evidence of odors or staining was observed and no elevated PID readings were noted during the excavation activities. Four soil samples were collected in each of the two test pits at three and five feet bgs for VOC, PAH, PCB, TPH-g, TPH-d, TPH-m, and metal analyses. All COCs were detected with concentrations below remediation goals.

Approximately 12 cubic yards of soil were removed from a test pit excavated within the former Building 41 footprint. One 4-point composite soil sample was collected from the stockpile and analyzed for the VOCs, PAHs, PCBs, TPH-g, TPH-d, TPH-m, and metals. All analytes were found to be below the remediation goals. The test pit at RMP Location 18 was backfilled with the stockpiled soil and compacted.

### **RMP Locations 101 and 102**

RMP Locations 101 and 102 are the locations of former gasoline USTs 42A and 42B, respectively, associated with the former PX gas station (RMP Location 17). USTs 42A and 42B were located within the footprint of the Building 6 which was built in 1966. The tank capacities are unknown. The 2003 Final Environmental Baseline Survey for Transfer of the property states that the PX gas station's gasoline tanks (USTs 42A and 42B) were reportedly installed in 1942 and removed in 1965.

- 1998 Remedial Investigation:

In July 1998 the Army collected eight soil samples at locations ICF09S2, ICF09S3, K09S103 at varying depths from one to five feet bgs and two grab groundwater samples at locations ICF09S2 and ICF09S3. Soil samples collected near former USTs 42A and 42B contained low concentrations of TPH-g, TPH-d, TPH-m, BTEX, MEK, naphthalene, vinyl acetate, acetone, and methylene chloride. Ethylbenzene, toluene, and several metals were

detected in grab groundwater samples from ICF09S2 and ICF09S3. Benzene and total xylenes were also detected at low concentrations in the grab groundwater sample from ICF09S3. All detected soil and groundwater concentrations were below remediation goals.

- 2013 Remedial Action:

Remedial actions for USTs 42A and 42B performed in April 2013 consisted of observing the removal of the Building 6 foundation, conducting a geophysical survey, collecting soil samples, and if necessary, removing USTs and excavating impacted soil.

The City of Oakland conducted geophysical survey of a 50- by 60-foot area, each at the former USTs 42A and 42B locations. Anomalies with the size of a typical service station UST (i.e., eight feet diameter by 20 feet long) or other definitive UST indications in the immediate area surrounding the former UST locations were not detected.

At the UST 42A location, the City of Oakland excavated a trench approximately four to five feet wide and 16 to 20 feet long, and to five feet bgs. A second trench was dug perpendicular to the first trench to cover a larger area. These two trenches formed an x-configured test pit centered on the surveyed location of the UST 42A location. At the UST 42B location, the City of Oakland excavated trenches in similar dimensions with those of UST 42A trenches. Soils were monitored with a PID and visually/manually inspected during the excavation activities. No evidence of odors or staining was observed, no elevated PID readings were noted, and no evidence of any current or former USTs were observed in the test pit areas.

At the UST 42A test pit, four soil samples (i.e., RMP101CS001 through RMP101CS004) were collected. At the UST 42B test pit, four soil samples (i.e., RMP102CS001 through RMP102CS004) were collected. All eight soil samples from the USTs 42A and 42B locations were analyzed for VOCs, BTEX, PAHs, TPH-g, TPH-d, and metals; all COCs were detected with concentrations below remediation goals.

According to the Implementation Plan, one grab groundwater samples was supposed to be collected within 10 feet of the UST 42A location. One grab groundwater samples was also specified for the UST 42B location. During field observations at the USTs 42A and 42B locations, there was no evidence of petroleum contamination in the test pits. Results of soil samples collected at the water table from 5 to 5.5 feet bgs did not contain detectable concentrations of BTEX or TPH-g. TPH-g was not detected in a grab groundwater sample from boring ICF09S2 collected within 60 feet of the UST 42A location, also within 40 feet of the UST 42B location. BTEX was detected at very low concentrations (three orders of magnitude below

remediation goals for BTEX) from the grab groundwater sample from boring ICF09S2. Based on the field observations and soil and groundwater analytical results collected from near the USTs 42A and 42B locations, collecting an additional groundwater sample, at each UST location, was not warranted.

Approximately 11 cubic yards of soil were removed from the UST 42A test pit. One 4-point composite soil sample was collected from the stockpile and analyzed for the VOCs, BTEX, PAHs, TPH-g, TPH-d, and metals; all COCs were detected with concentrations below remediation goals. The UST 42A test pit was backfilled with the stockpiled soil and compacted. Similarly, the City of Oakland collected one 4-point composite soil sample from 11 cubic yards of stockpiled UST 42B soil, found all COC concentrations below remediation goals, and backfilled the UST 42B test pit with the stockpiled soil.

### **RMP Location 154**

RMP Location 154 is an area of approximately 14,300 square feet located south of the Building 1 RAP Site. In 2006 the City of Oakland remediated Building 1 RAP Site; however, confirmation sidewall sample B1CS-075 at the southern excavation boundary was analyzed to contain 15,000 mg/kg of lead. Additional excavation in the vicinity of B1CS-075 would have required the closure of Attu Street, a major truck transportation route. In September 2006 the City of Oakland and DTSC agreed that continued excavation was not practical at the time and the area in the vicinity of the Bataan Avenue and Attu Street intersection should be managed as a new RMP Location.

- **2013 Excavation:**

In April 2013 the City of Oakland excavated the lead and TPH impacted soil to a depth of approximately 4.5 to 6 feet within an approximate 70- by 210-foot excavation. Eighteen soil samples were collected from the excavation sidewalls and 10 soil samples were collected from the excavation floor. The soil samples were analyzed for lead, pH, TPH-d, and TPH-m. Due to elevated PID readings and odors noted in one area of the excavation, one bottom soil sample (RMP154CS026) was also analyzed for VOCs. Analytical results show that VOC concentrations were below remediation goals.

Thirteen of the 28 confirmation soil samples contained lead at up to 15,000 mg/kg, TPH-d at up to 17,000 mg/kg, and naphthalene at up to 5,400 mg/kg, above remediation goals of 750 mg/kg, 8,000 mg/kg, and 4.9 mg/kg, respectively. The area was over-excavated and confirmation samples collected. Confirmation soil samples were not collected at locations where over-excavations were extended below the water table. Grab groundwater samples were not collected because the groundwater was previously sampled as part of the Building 1 RAP Site.

- *Incorporation into Building 99 Debris Area:*

Soil sample RMP154CS024 contained 5,800 mg/kg of lead. This sample was left in place because it was co-located with the Building 99 Debris Area. The enhanced RMP provisions applicable to the Building 99 Debris Area also apply to location RMP154CS024.

- *Newly Identified RMP Locations to be Addressed during Redevelopment:*

Three soil sample from locations RMP154CS023, RMP154CS027, and RMP154CS028, collected on Bataan Avenue, contained TPH-d concentrations at 8,800 mg/kg, 10,000 mg/kg, and 13,000 mg/kg, respectively. These soil samples exceeded the TPH-d remediation goal of 8,000 mg/kg and were left in place at the Bataan Avenue excavation boundary to be addressed as a new RMP Location during redevelopment.

A soil sample from location RMP154CS002, collected approximately 10 feet north of an active utility pole, contained THP-d concentration at 17,000 mg/kg. Therefore, an approximate 20- by 20-foot area of TPH-d impacted soil was left in place to be addressed as a new RMP Location during redevelopment.

- *Excavated Soil Reuse and Offsite Disposal:*

Overburden and suspect soil were stockpiled separately onsite and 27 composite soil samples were collected from the resulting stockpiles. Soils deemed to be below remediation goals were reused onsite as backfill. Approximately 850 cubic yards of soil was determined to be above remediation goals but below the Soluble Threshold Limit Concentration and Toxicity Characteristic Leaching Procedure threshold for hazardous waste and was disposed of offsite as a non-hazardous waste at Potrero Hills Landfill in Suisun, California. Approximately 700 cubic yards of soil was determined to be a non-RCRA California hazardous waste and was disposed of at EDC Environmental in East Carbon, Utah.

- *Onsite Treatment of Excavated Soil:*

Soil that was determined to be above the regulatory limits for lead was deemed to be a RCRA hazardous waste soil and was treated onsite via soil stabilization processing pursuant to the RDIP. Approximately 1,450 cubic yards of soil deemed to be a RCRA hazardous waste, with an approximate weight of 1,763 tons, was excavated from RMP Location 154. Approximately 2,399 tons of soil was treated onsite from RMP Locations 154, 155, and 156 and subsequently disposed of at EDC Environmental in East Carbon, Utah.

Prior to stockpiling of treated soil, surface soil samples were collected in the area where the treated soil would be stockpiled. Post-treatment soil samples were collected following off haul of the treated soil on July 25, 2013. One post-removal stockpile sample collected beneath the RMP 154 stockpile at location RMP154SS011 contained lead at 3,300 mg/kg. Results of the other post-treatment and post-stockpile removal verification sampling showed that surface soil beneath the treatment system operation area and post-treatment stockpile area did not exceed remediation goals.

In response to the exceedance at location RMP154SS011, surface soil in the vicinity of the sample location was removed to a depth of less than six inches, and placed in three 55-gallon drums. Following the surface soil removal, an additional surface sample was collected and analyzed for lead, TPH-d, and TPH-m; analytical results indicated that the surface soil that contained elevated concentrations of lead had been removed. The soil placed in the drum was profiled and disposed of as non-RCRA California hazardous waste and subsequently disposed of at General Environmental Management of Rancho Cordova, in Rancho Cordova, California.

### **RMP Location 155**

RMP Location 155 was identified as an area for excavation based on lead exceeding the remediation goal in sidewall sample B1CS-072 associated with the Building 1 RAP Site excavation conducted in 2006. The excavation was not extended to remove the B1CS-072 location due to the presence of the former Building 6. RMP Location 155 is located beneath the former Building 6, which was demolished prior to the 2013 remedial activities.

- **2013 Excavation:**

In April and May 2013, the City of Oakland excavated lead and TPH impacted soil to a depth ranging from six to eight feet bgs within an approximate 80- by 45-foot excavation. Five soil samples were collected from the excavation sidewalls and one soil sample was collected from the excavation floor. The excavation was advanced until no visual/manual evidence of contamination was detected. This brought the excavation below the level of static groundwater toward the south side of the excavation; hence, no bottom soil confirmation samples were collected at the southern end of excavation. Grab groundwater samples were not collected because the groundwater was previously sampled as part of the Building 1 RAP. The samples were analyzed for lead, pH, TPH-d, and TPH-m.

One of the sidewall soil samples (RMP155CS002) contained lead at 1,100 mg/kg. The excavation in this area was expanded southward three feet and a new sidewall soil sample (RMP155CS007) was collected. Confirmation

sample RMP155CS007 did not contain lead concentration exceeding the remediation goal.

With the exception of the RMP155CS002 sample, which was subsequently over-excavated, lead, TPH-d, and TPH-m results for all sidewall and bottom samples were detected with concentrations below remediation goals.

- *Excavated Soil Reuse, Onsite Treatment, and Offsite Disposal:*

Overburden and suspect soils were stockpiled separately onsite and 15 composite and 48 individual (for VOCs) soil samples were collected from the resulting stockpiles. Soil deemed to be below remediation goals for all detected analytes were reused onsite as backfill.

In addition to the soil that was removed from the excavation, a large metal object, potentially part of a ship, was removed from the excavation. The object was removed from the site on July 22, 2013 for recycling at Schnitzer Steel in Oakland, California.

Soil that was determined to be a RCRA hazardous waste and was treated onsite pursuant to the RDIP. Soil from RMP Location 155 was treated along with soil from RMP Locations 154 and 156 as described previously. Approximately 2,399 tons of soil from the three RMP Locations was treated onsite. Approximately 300 cubic yards of soil from RMP Location 155 was deemed to be a RCRA hazardous waste. The treated soil was disposal of at EDC Environmental in East Carbon, Utah.

### **RMP Location 156**

RMP Location 156 is an area approximately 300 square feet located at the northeastern corner of the former Building 60. RMP Location 156 is also adjacent to the western edge of the Building 1 RAP Site, with soil sample B1TP001 contained lead at 2,500 mg/kg. The B1TP001 location was not excavated in 2006 because B1TP001 was located near the former Building 60 foundation.

- *2013 Excavation:*

In April 2013 the City of Oakland excavated RMP Location 156 in an approximate 20- by 15-foot area. Overburden soil was removed and visually inspected until suspect soil was encountered. Overburden soil and suspect soil was stockpiled separately. Suspect soil was then excavated to a depth of approximately five feet bgs. Four soil samples were collected from the excavation sidewalls and one soil sample was collected from the excavation floor. The excavation was advanced until no visual/manual evidence of contamination was detected. The samples were analyzed for PAHs, PCBs,

TPH-d, TPH-m, and metals; all COCs were detected with concentrations below remediation goals.

- *Excavated Soil Reuse, Onsite Treatment, and Offsite Disposal:*

The excavated soil was divided into overburden and suspect stockpiles and three composite soil samples were collected for disposal characterization. The excavation was backfilled by using a combination of clean imported fill and overburden soils that were sampled and determined to be approved for onsite reuse.

Soil that was determined to be above the regulatory limit for lead, was deemed to be a RCRA hazardous waste and was treated onsite. Approximately 13 cubic yards of soil were treated onsite in conjunction with the soil from RMP Locations 154 and 155. The treated soil was disposal of at EDC Environmental in East Carbon, Utah.

### **Railroad Ballast Categorical RMP Location**

Railroad ballast was present in an area approximately 24,000 square feet located on the eastern edge of the demolition project area between Building 6 and Maritime Street. The railroad tracks and ties were previously removed in this area and only ballast material remained.

- *2013 Ballast Removal:*

During the ballast removal activities in April 2013, the City of Oakland screened the ballast materials using visual/manual methods, as well as a PID. No staining or odors were noted, and no elevated PID readings were recorded from (1) the railroad ballast and (2) the exposed soil under the former railroad ballast. Therefore, no soil samples were collected from the railroad ballast or the soils underlying the railroad ballast materials.

The excavation was backfilled using a combination of clean imported fill and overburden soils that were sampled and determined to be approved for onsite reuse. The railroad ballast was stockpiled onsite for future reuse between the former Buildings 6 and 60.

### **Lead-Based Paint Categorical RMP Location**

Building 60 was built in 1942 and was used as a base exchange and cafeteria. The U.S. Army Corps of Engineers 1997 Lead-Based Paint Report identifies that Building 60 was painted with lead-based paint.

- 2013 Investigation:

To evaluate the potential for lead in soil adjacent to Building 60, three soil samples were collected in landscaped areas adjacent to Building 60. The samples were collected just prior to slab removal. Lead was detected in all three surface samples at concentrations ranging from 150 to 330 mg/kg, below the lead soil remediation goal of 750 mg/kg.

**Building 6, 6T, 60, and 70**

As part of the building demolition project, soil exposed beneath the Buildings 6, 60, and 70 foundations was observed for evidence of staining, discoloration, burn activities and odors, and screened with a PID pursuant to the RMP. The City of Oakland oversaw the removal of foundations and footings for Building 6, 60, and 70. Other than the overlapping RMP Location 155 at Building 6 and Building 99 Debris Area, evidence of contamination, odors, or elevated PID readings were not noted within the footprints of the former Buildings 6, 60, and 70.

Building 6T was a temporary manufactured building placed on top of asphalt. During building removal activities, no staining was observed on the asphalt in the footprint area. The asphalt under or adjacent to the former Building 6T was not removed.

**Approval of Completion Request**

On December 13, 2013, DTSC approved the December 12, 2013 Completion Request and concluded that the City of Oakland (a) had adequately assessed, investigated, and remediated RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156, and Railroad Ballast and Lead-Based Paint Categorical RMP Locations, (b) had demonstrated achievement of the remedial action objectives, and (c) had implemented the required institutional control remedy for the subject areas.

All RAP Sites and RMP Locations within the Oakland Gateway Development Area, upon remedy implementation, continue to be parts of the RMP Implementation Area. The August 8, 2003 *Covenant to Restrict Use of Property, Environmental Restriction* requires landowner(s) to follow the risk management protocols set forth in the RMP regarding planning and implementation of earthwork construction, redevelopment, and/or post-development activities.

**7. Type of Site:**

Included in EnviroStor?      Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____

Other (i.e., walk-in):   X  

**8. Size of Site:**

Approximately one acre

Small \_\_\_\_\_ Medium   X   Large \_\_\_\_\_ Extra Large \_\_\_\_\_

**9. Dates of Remedial Action**

The Army, City of Oakland, and Port of Oakland assessed, investigated and remediated RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156 from April 2002 through June 2013. On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156.

**10. Response Action Taken on Site: (check appropriate action)**

\_\_\_\_\_ Initial removal or remedial action (site inspection/sampling)

  X   Final remedial action

\_\_\_\_\_ RCRA enforcement/closure action

\_\_\_\_\_ No action, further investigation verified that no cleanup action at site was needed

**A. Type of Remedial Action:**

The RAP selects the following remedies:

- In-situ chemical oxidation/reduction; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

B. Estimated quantity of remediation waste/hazardous waste associated with the site (i.e., tons/gallons/ cubic yards) was:

1.  Waste Treated Onsite Amount: 2,399 tons
2.  Untreated (capped sites) Amount: \_\_\_\_\_
3.  Soil Removed Amount: 4,460 cubic yards
4.  Groundwater Disposed Off-Site Amount: \_\_\_\_\_
5.  Institutional Controls  
The institutional controls remedy applies to all Oakland Gateway Development Area property including RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156.

#### 11. Cleanup Levels/Standards

A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan or workplan (if cleanup occurred as the result of a removal action workplan or interim remedial measures prior to development of a RAP)?

The RAP, Table 7-11 lists numerical cleanup targets as the soil and groundwater remediation goals that correspond to a  $1 \times 10^{-6}$  incremental lifetime cancer risk for each COC. When more than ten carcinogenic COCs are present at concentrations exceeding remediation goals, the overarching remedial action objective is the cumulative target risk level of  $1 \times 10^{-5}$  for carcinogenic COCs applicable at each RAP Site and RMP Location.

Remediation goals represent the maximum allowable concentrations for the respective COCs and cannot be increased to allocate amongst the residual COCs to meet the overarching cumulative risk of  $1 \times 10^{-5}$ . However, remediation goals can be adjusted downward, as need, if the cumulative cancer risk level exceeds  $1 \times 10^{-5}$  or the total hazard index (HI) exceeds 1. Remedial action objectives are achieved when residual COCs in soil and groundwater are no greater than a cumulative HI of 1 or a cumulative carcinogenic risk of  $1 \times 10^{-5}$  for each potentially exposed population.

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**12. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes \_\_\_\_\_ No X Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

\_\_\_\_\_ Sampling Analysis Procedures Date: \_\_\_\_\_

\_\_\_\_\_ Health & Safety Protections Date: \_\_\_\_\_

\_\_\_\_\_ Removal/Disposal Procedures Date: \_\_\_\_\_

X Remedial Action Plan Date: September 27, 2002

\_\_\_\_\_ Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes X No \_\_\_\_\_ Name: Bethany P. Flynn, PG 5710

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes X No \_\_\_\_\_ Name: Gerard Aarons, PG 7430  
Henry Wong, P.E., C81458

E. Did DTSC confirm completion of all remedial action?

Yes X No \_\_\_\_\_ Date of verification: December 12, 2013

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes \_\_\_\_\_ No X

G. Was there a community relations plan in place?

Yes X No \_\_\_\_\_

H. Was a remedial action plan or removal action workplan developed for this site?

Yes X No \_\_\_\_\_

- I. Did DTSC hold a public meeting regarding the draft RAW or RAP?  
 Yes  No
- J. Were public comments addressed?  
 Yes  No   
 Date of DTSC analysis and response: September 27, 2002
- K. Are all of the facts cited above adequately documented in the DTSC files?  
 Yes  No
- If no, identify areas where documentation is lacking.
- 

**13. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
 Yes  No
- B. If yes, did EPA concur with all remedial actions?  
 Yes  No
- C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup up until September 30, 2013:

Xuan-Mai Tran  
 Remedial Project Manager  
 U.S. Environmental Protection Agency  
 Region IX  
 Federal Facilities Cleanup Branch  
 75 Hawthorne Street, (SFD-8-2)  
 San Francisco, California 94105  
 (415) 972-3002  
[tran.xuan-mai@epamail.epa.gov](mailto:tran.xuan-mai@epamail.epa.gov)

**14. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input checked="" type="checkbox"/> RWQCB	The Regional Water Quality Control Board staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____

\_\_\_\_\_ Caltrans \_\_\_\_\_

\_\_\_\_\_ Other \_\_\_\_\_

Name of contact persons and agency:

George Leyva, PG  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2352  
[george.leyva@waterboards.ca.gov](mailto:george.leyva@waterboards.ca.gov)

**15. Post-Closure / Post-Remedy Activities:**

- A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes X No \_\_\_\_\_

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Alameda County Series Number 2003466371) for the Oakland Gateway Development Area, which includes RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential and drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156. The upcoming five-year review is schedule for completion in 2015.

- B. Have post-closure plans been prepared and approved by DTSC?  
Yes \_\_\_\_\_ No X  
A post-closure plan is not required or necessary for this site.

- C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the Covenant and five-year review requirements shall continue in effect in perpetuity.

- D. Are deed restrictions proposed or in place? Yes  No

If yes, have deed restrictions been recorded with the County recorder?

Yes  No  Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

---

Who is the DTSC contact person?

Henry Wong, P.E.  
Hazardous Substances Engineer  
Brownfields and Environmental Restoration Program  
(510) 540-3770  
[henry.wong@dtsc.ca.gov](mailto:henry.wong@dtsc.ca.gov)

- E. Has cost recovery been initiated? Yes  No

Has DTSC received all payments? Yes  No

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, and RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed on August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..." Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008.

The City's, Port's, Army's and DTSC's management teams are working toward a resolution on this issue.

F. Were local planning agencies notified of the cleanup action?

Yes  X  No \_\_\_\_\_ If yes, the name and address of agency:

Mark Arniola, PG  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**16. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement \$ _____			

**17. Problems Encountered Which Caused Major Delays:** None

**18. Accomplishment Unique to the Project:** None

**19. Final Use of Site:** The City of Oakland plans to develop RMP Locations 9, 16, 17, 18, 101, 102, 154, 155, and 156 and vicinity for commercial and industrial land uses.



# Department of Toxic Substances Control



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

**Edmund G. Brown Jr.**  
Governor

## REMEDIAL ACTION CERTIFICATION

RMP Locations 15 and 91  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong  
Remedial Project Manager  
Brownfields and Environmental Restoration Program

6/26/2012

Date

Karen M. Toth, P.E.  
Unit Chief  
Brownfields and Environmental Restoration Program

6/26/2012

Date

Gerard Aarons, PG 7430, CHG 771  
Engineering Geologist  
Geological Services Unit  
Office of Geology  
Brownfields and Environmental Restoration Program

6/26/2012

Date

**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

     DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

     DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

  X   DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

RMP Locations

- RMP Location 15: Former Washrack adjacent to Building 70
- RMP Location 91: Benzidine at Former Used Oil Tank 21
- 

Alternative Names for the Project Site

- Central Gateway Development Area
- Former Oakland Army Base – Economic Development Conveyance Area
- Oakland Army Base
- Base Realignment and Closure (BRAC) Parcels 4 and 10
- Operable Unit 1

B. Address of site if different from above:

RMP Locations 15 and 91 are located northeast of Maritime Street in the City of Oakland, California. RMP Location 15 is located south of Building 70, encompassed by Bataan Avenue to the north, Buna Street to the

south, and railroad tracks to the east. RMP Location 91 is located south of Burma Road, west of its intersection with Maritime Street, and adjacent to railroad tracks.

C. Assessor's Parcel Number: O000-0507-001-11  
(This number starts with the letter "O" and is followed by three zeros.)

D. DTSC Identification Numbers:  
  
Site Code: 201537  
EnviroStor ID: 01970016

**4. Responsible Parties:**

**Landowner**

City of Oakland

*Contact Person:*  
Mark Arniola, PG  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**5. Brief History:**

Prior to 1916, much of the area encompassing the former Oakland Army Base was natural tidal marsh or shallow open water. Subsequent land reclamation activities in the general areas created the land where the Army property is situated. The Army began operation at the former Oakland Army Base in the early 1940s, closed the base in September 1999, and transferred 363.5 acres of property to the City of Oakland in July 2003. In August 2006 the City of Oakland deeded approximately half of the transferred area to the Port of Oakland. DTSC has renamed the transferred 363.5-acre property as the "Oakland Gateway Development Area."

On September 27, 2002, DTSC approved the Remedial Action Plan (RAP) and selected remedies for seven RAP Sites and approximately 150 RMP Locations. RMP Locations and features include washracks, sumps, oil/water separators, miscellaneous operations, underground storage tanks, aboveground storage tanks, former industrial and chemical handling locations, historical spills and stains, lead in soil around buildings, former polychlorinated biphenyl (PCB)-

transformers and equipment locations, storm drains and sanitary sewers, railroad tracks, and marine sediments. The RAP has selected a presumptive remedy outlined in the Risk Management Plan (Appendix E of the RAP) for supplementing environmental data and implementing necessary cleanup actions during infrastructure installation or redevelopment.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes RMP Locations 15 and 91. Since the former base property is not being remediated to residential or drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

## **6. RMP Locations 15 and 91:**

On June 6, 2012, the City of Oakland finalized the *Request for Completion, RMP Locations 15 and 91 and Summary of Remediation Activities at RMP Location 98* (Completion Request) documenting the achievement of the remedial action objectives for RMP Locations 15 and 91. The City of Oakland had initially requested completion of RMP Location 98; however, further investigation and cleanup are necessary before RMP Location 98 is ready for completion.

### RMP Location 15

RMP Location 15 is an existing 20 by 100 feet, 4-inch thick concrete pad located adjacent to Building 70. The Army used this concrete pad as a washrack, but the years of washrack operation are unknown. The Army constructed Building 70 in 1951 as a fire station and later used the building as a military police office until base closure in 1999. RMP Location 15 (concrete pad) might be constructed concurrent with Building 70 and be operated until 1999. No cracks or staining indicative of a release of oil or hazardous materials was observed on the concrete pad. RMP Location 15 is currently being used as a truck parking area.

The City of Oakland collected two soil samples from 0 to 1 foot beneath the concrete pad at two boring locations. Soil samples were analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), metals, pesticides, total petroleum hydrocarbons (TPH) in the diesel range (TPH-d), TPH in the motor oil range (TPH-mo), and TPH in the gasoline range (TPH-g). Soil analytical results do not show chemical of concern (COC) concentrations above remediation goals.

In 2002 the Army collected groundwater at four temporary monitoring wells to further delineate the eastern portion of the volatile organic compound (VOC) plume near Building 99. Three of these four wells were located approximately 120 feet south of RMP Location 15. Well IT10S102, approximately 50 feet from

RMP Location 15, had a detection of vinyl chloride at 13.8 micrograms per liter ( $\mu\text{g/L}$ ), which is below the remediation goal of 32  $\mu\text{g/L}$ . No other groundwater analytes had detections above their respective remediation goals

### RMP Location 91

RMP Location 91 is located at former Parcel 4 that was used for processing privately owned vehicles (POVs) for overseas transport. A paved parking lot occupies almost the entire parcel. Facilities that were located on former Parcel 4 included the installation monument, POV loading and unloading docks, latrine, a vehicle wash rack, an oil water separator (OWS-3), a 550-gallon used oil underground storage tank (Tank 21), and a 550-gallon gasoline aboveground storage tank.

The Army installed Tank 21 in 1986 for storing oil removed from the POVs; the Army removed Tank 21 in 1996. Excavation of contaminated soil discovered in Tank 21 removal area was completed in March 1997. Soil samples collected following the excavation contained residual concentrations of lead, PAHs, and petroleum hydrocarbons, which were COCs typically associated with used oil releases. In addition, benzidine was reportedly measured at 48 milligrams per kilogram (mg/kg) in soil sample POV-T beneath the former Tank 21, and at 6.3 mg/kg in stockpiled soil from the excavation pit at 6.5 feet bgs. The Army disposed of the stockpiled soil at an off-site, permitted waste management facility. The quantity of the excavated soil is not available; however, it can be estimated that approximately 10 cubic yards of soil was excavated based on the POV-T sample depth and tank dimension.

In the 1998 remedial investigation (RI) and 2000 supplemental RI, the Army collected soil and groundwater samples from seven locations (ICF04S4 through ICF04S7, ICF04S9, ICF04S10A, and ICF04S11A) to assess the extent of SVOC and metals contamination previously detected. The soil and groundwater samples were analyzed for VOCs, semi volatile organic compounds (SVOCs), TPH-g, TPH-d, oil and grease, and metals. Sample locations ICF04S7, ICF04S10A, and ICF04S11A were used for assessing the extent of benzidine previously detected in sample POV-T. Benzidine was not detected in any of the soil and groundwater samples collected during the RI. The Army concluded that POV-T was considered to be a spurious data point.

In June 2011 the City of Oakland further assessed the presence of benzidine detected in sample POV-T. The City of Oakland installed boring RMP91SL001 approximately 10 feet from the former POV-T location and additional borings RMP91SL002, RMP91SL003, and RMP91SL004 triangulating within 3 to 4 feet from boring RMP91SL001. Soil samples were collected at two depths (i.e., 6 to 7 feet bgs and 7 to 8 feet bgs) from these four borings. The 6 to 7 feet bgs samples from the step-out borings and the 7 to 8 feet samples from all four borings were held pending the analytical results of RMP91SL001 at 6 to 7 feet

bgs. The soil sample from boring RMP91SL001 at 6 to 7 feet bgs was analyzed for PAHs including benzidine, lead, TPH-d, TPH-mo. Benzidine was not detected at a concentration above the method detection limit. Other COCs were detected at concentrations below remediation goals. Based on the results of soil sample RMP91SL001 at 6 to 7 feet bgs, the samples placed on hold were not analyzed. The benzidine-impacted soil was either removed or the analytical results were deemed anomalous as supported by supplemental investigation.

Categorical RMP Locations

The Completion Request does not address Categorical RMP Locations – lead-based paint impacts in shallow soil, storm drains and sanitary sewer lines, and railroad tracks – in the vicinity of RMP Locations 15 and 91. The Categorical RMP Locations in the vicinity of RMP Locations 15 and 91 will be addressed in a later date.

Approval of Completion Request

On June 26, 2012, DTSC approved the Completion Request and concluded that the City of Oakland (a) had adequately assessed, investigated, and remediated RMP Locations 15 and 91, (b) had demonstrated achievement of the remedial action objectives, and (c) had implemented the required institutional control remedy for the subject areas.

All RAP Sites and RMP Locations within the Oakland Gateway Development Area, upon remedy implementation, continue to be parts of the RMP Implementation Area. The August 8, 2003 *Covenant to Restrict Use of Property, Environmental Restriction* requires landowner(s) to follow the risk management protocols set forth in the RMP regarding planning and implementation of earthwork construction, redevelopment, and/or post-development activities.

**7. Type of Site:**

Included in EnviroStor? Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____
Other (i.e., walk-in):	<u>  X  </u>		

**8. Size of Site:**

RMP Locations 15 and 91 encompass approximately 3,000 square feet or 0.07 acre.

Small   X   Medium \_\_\_\_\_ Large \_\_\_\_\_ Extra Large \_\_\_\_\_

**9. Dates of Remedial Action**

The Army and City of Oakland assessed, investigated, and remediated RMP Locations 15 and 91 from 1996 through 2011. On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 15 and 91.

**10. Response Action Taken on Site: (check appropriate action)**

Initial removal or remedial action (site inspection/sampling)

Final remedial action

RCRA enforcement/closure action

No action, further investigation verified that no cleanup action at site was needed

A. Type of Remedial Action:

The RAP selects the following remedies for the RMP Locations:

- For locations where no contamination has been found to date, the area will be inspected and sampled in accordance with the RMP during redevelopment to confirm no contamination exists above remediation goals at these locations;
- For locations requiring additional soil and groundwater characterization, the areas will be inspected and sampled/monitored during redevelopment as outlined in the RMP;
- For locations requiring removal of an existing structure or sites where impacted soil is anticipated, the RMP assumes that an average of about 50 cubic yards of debris and contaminated soil will be removed at each site and disposed as hazardous substances at an off-site permitted facility; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;

- Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
- Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

B. Estimated quantity of remediation waste/hazardous waste associated with the site (i.e., tons/gallons/ cubic yards) was:

1. \_\_\_\_\_ Waste Treated Off-Site    Amount: \_\_\_\_\_
2. \_\_\_\_\_ Untreated (capped sites)    Amount: \_\_\_\_\_
3.   X   Soil Removed                      Amount: 10 cubic yards
4. \_\_\_\_\_ Wastewater Removed    Amount: \_\_\_\_\_
5.   X   Institutional Controls

The institutional controls remedy applies to all Oakland Gateway Development Area property including RMP Locations 15 and 91.

## 11. Cleanup Levels/Standards

A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan or workplan (if cleanup occurred as the result of a removal action workplan or interim remedial measures prior to development of a RAP)?

The RAP specifies risk-based remediation goals for meeting the remedial action objectives based on commercial and industrial reuses. Remediation goals for most chemicals are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each COC that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters (such as potential leachability of a chemical from soil to groundwater) when these values are more stringent than the calculated human health goals.

The RAP, Table 7-11 lists numerical cleanup targets as the soil and groundwater remediation goals that correspond to a  $1 \times 10^{-6}$  incremental lifetime cancer risk for each COC. When more than ten carcinogenic COCs are present at concentrations exceeding remediation goals, the overarching remedial action objective is the cumulative target risk level of

1 x 10<sup>-5</sup> for carcinogenic COCs applicable at each RAP Site and RMP Location.

Remediation goals represent the maximum allowable concentrations for the respective COCs and cannot be increased to allocate amongst the residual COCs to meet the overarching cumulative risk of 1 x 10<sup>-5</sup>. However, remediation goals can be adjusted downward, as need, if the cumulative cancer risk level exceeds 1 x 10<sup>-5</sup> or the total hazard index (HI) exceeds 1. Remedial action objectives are achieved when residual COCs in soil and groundwater are no greater than a cumulative HI of 1 or a cumulative carcinogenic risk of 1 x 10<sup>-5</sup> for each potentially exposed population.

The Army and City of Oakland assessed, investigated, and remediated RMP Locations 15 and 91 from 1996 through 2011. COC concentrations in soil and groundwater samples are below remediation goals. The number of samples and types of analyses at the RMP Locations within RMP Locations 15 and 91 are adequate to demonstrate that the remedial action objectives established in the DTSC-approved RAP/RMP have been met. RMP Locations 15 and 91 do not have significant sources of soil and groundwater contamination and no significant data gaps are evident.

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**12. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes  No  Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

Sampling Analysis Procedures Date: \_\_\_\_\_

Health & Safety Protections Date: \_\_\_\_\_

Removal/Disposal Procedures Date: \_\_\_\_\_

Remedial Action Plan Date: September 27, 2002

Removal Action Workplan Date: \_\_\_\_\_

- C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?  
 Yes  No  Name: Bethany P. Flynn, PG 5710
- D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?  
 Yes  No  Name: Gerard Aarons, PG 7430
- E. Did DTSC confirm completion of all remedial action?  
 Yes  No  Date of verification: June 26, 2012
- F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?  
 Yes  No
- G. Was there a community relations plan in place?  
 Yes  No
- H. Was a remedial action plan or removal action workplan developed for this site?  
 Yes  No
- I. Did DTSC hold a public meeting regarding the draft RAW or RAP?  
 Yes  No
- J. Were public comments addressed?  
 Yes  No   
 Date of DTSC analysis and response: September 27, 2002
- K. Are all of the facts cited above adequately documented in the DTSC files?  
 Yes  No   
 If no, identify areas where documentation is lacking.
- 

**13. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
 Yes  No
- B. If yes, did EPA concur with all remedial actions?  
 Yes  No

C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002  
[Tran.Xuan-Mai@epamail.epa.gov](mailto:Tran.Xuan-Mai@epamail.epa.gov)

**14. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input checked="" type="checkbox"/> RWQCB	The Regional Water Quality Control Board staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____
<input type="checkbox"/> Caltrans	_____
<input type="checkbox"/> Other	_____

Name of contact persons and agency:

Adriana Constantinescu, PG  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2379  
[aconstantinescu@waterboards.ca.gov](mailto:aconstantinescu@waterboards.ca.gov)

**15. Post-Closure / Post-Remedy Activities:**

A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes  No

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Alameda County Series Number 2003466371) for the Oakland Gateway Development Area, which includes RMP Locations 15 and 91. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential and drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for RMP Locations 15 and 91. The trigger date for a statutory five-year review was the mobilization date of first remedy implementation for the Oakland Gateway Development Area project (i.e., Building 1 RAP Site on November 28, 2005). The City of Oakland has submitted the draft Five-Year Review Report to DTSC for review. This report is scheduled for completion in July 2012.

B. Have post-closure plans been prepared and approved by DTSC?

Yes \_\_\_\_\_ No X

A post-closure plan is not required or necessary for this site.

C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the Covenant and five-year review requirements shall continue in effect in perpetuity.

D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

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Who is the DTSC contact person?

Henry Wong  
Hazardous Substances Engineer  
Brownfields and Environmental Restoration Program  
(510) 540-3770  
[hwong@dtsc.ca.gov](mailto:hwong@dtsc.ca.gov)

E. Has cost recovery been initiated? Yes  No

Has DTSC received all payments? Yes  No

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties ..."

To date the Army has not provided alternative mechanism for payment of oversight costs to DTSC and RWQCB. Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008. The Army's and DTSC's management teams are working toward a resolution on this issue.

F. Were local planning agencies notified of the cleanup action?

Yes  No  If yes, the name and address of agency:

Mark Arniola, PG  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**16. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement	\$ _____		

- 17. **Problems Encountered Which Caused Major Delays:** None
- 18. **Accomplishment Unique to the Project:** None
- 19. **Final Use of Site:** The City of Oakland plans to develop RMP Locations 15 and 91 and vicinity for industrial land uses.



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

### REMEDIAL ACTION CERTIFICATION

Risk Management Plan Locations 11, 75, 86,  
93, 105, 106, 108, and 109  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong  
Remedial Project Manager

4/5/2010

Date

Dot Lofstrom, P.G.  
Team Leader  
East Bay Urban Infill Team

4-1-10

Date

#### 2. Certification Statement: Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

— DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

— DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

X DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Risk Management Plan (RMP) Locations 11, 75, 86, 93, 105, 106, 108, and 109  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

RMP Locations Identification

- RMP Location 11: Former paint shop located north of Building 99
- RMP Location 75: Hydraulic lift in the eastern courtyard of Building 1
- RMP Location 86: Building 85 used as an engineer's office and photo lab
- RMP Location 93: One former 550-gallon diesel UST (UST-2A)
- RMP Location 105: One former 1,000-gallon diesel UST (UST-1A)
- RMP Location 106: One former 550-gallon diesel UST (UST-2)
- RMP Location 108: One former 1,000-gallon fuel oil UST (UST-1)
- RMP Location 109: One former 2,000-gallon diesel UST (UST-20)

Alternative Names for the Areas

- Central Gateway Area
- Former Oakland Army Base – Economic Development Conveyance Area
- Oakland Army Base
- Base Realignment and Closure (BRAC) Parcels 9 and 10
- Operable Unit 1

B. Address of site if different from above:

Areas around the intersection of Attu and Buna Streets near Buildings 85 and 99. Areas in the northwestern quadrant of Algiers and Baku Streets near Buildings 1, 5, and 6.

C. Assessor's Parcel Number: O000-0507-001-11  
(This number starts with the letter "O" and follows by three zeros.)

D. DTSC Identification Numbers:

RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109  
Site Code: 201537  
EnviroStor ID: 01970016

**4. Responsible Parties:**

**Landowner**

City of Oakland

Contact Person:

Mr. Mark Arniola  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**5. Brief Description and History of the Site:**

RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109 are located in the central portion of the former Oakland Army Base (OARB) near the Building 1, 5, 6, 85, and 99 areas. Prior to 1916, much of the area encompassing OARB was natural tidal marsh or shallow open water. Subsequent land filling activities in the general areas created the land where OARB is situated. The Army began operation at OARB in early 1940s, closed the base in September 1999, and transferred the property to the City of Oakland in July 2003. DTSC has renamed the transferred portion of OARB as the "Oakland Gateway Development Area."

On September 27, 2002, DTSC approved the Remedial Action Plan (RAP) and selected remedies for seven RAP Sites and approximately 150 RMP Locations. RMP Locations include washracks, sumps, oil/water separators, miscellaneous operations, underground storage tanks (USTs), aboveground storage tanks, former industrial and chemical handling locations, historical spills and stains, lead

in soil around buildings, former PCB-transformers and equipment locations, storm drains and sanitary sewers, railroad tracks, and marine sediments. The RAP selects a presumptive remedy outlined in the Risk Management Plan (Appendix E of the RAP) for supplementing environmental data and implementing necessary cleanup actions during infrastructure installation or redevelopment.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109. Since the former base property is not being remediated to residential or drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

- RMP Location 11 (Former Paint Shop): The RMP Location was a paint shop area, approximately 900 square feet (ft<sup>2</sup>), and was formerly located approximately 32 feet north of Building 99. Three soil samples and one groundwater sample were collected at the area. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from the former paint shop.
- RMP Location 75 (Former Hydraulic Lift): The exact location of this former hydraulic lift is not known, but records indicate that it was located in the eastern courtyard of Building 1. The Army demolished Building 1 in December 2002. Remediation activities were performed at the Building 1 RAP site during 2006. Most of the eastern courtyard area of Building 1 was excavated to a depth of up to approximately six feet below ground surface during remedial activities. Although the former hydraulic lift was not encountered during excavation activities conducted in the courtyard area, it is unlikely that the hydraulic lift is still present in the area.
- RMP Location 86 (Building 85): The Army used Building 85 as an engineer's office. The 1960 floor plans show a photograph-processing laboratory in Building 85. The approximate size of Building 85 is 10,000 square feet; and the approximate size of RMP Location 86 is 15,000 ft<sup>2</sup>. Seven soil samples and five groundwater samples were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from RMP Location 86.
- RMP Location 93 (Former UST-2A): UST-2A was a 550 gallon UST formerly used to store diesel fuel. It was located between Building 1 and Building 6, and was connected by piping to Building 6. The tank was a double-walled fiberglass tank; and the tank was reportedly installed in 1990 and removed in the fall of 1999. UST-2A was a replacement tank for the former UST-2, which

was installed in a nearby location. The Regional Water Quality Control Board (RWQCB) issued a no-further-action letter for closure of UST-2A in 2003. RMP Location 93 is approximately 1,000 ft<sup>2</sup>. Seven soil samples and one groundwater sample were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from the RMP Location 93.

- RMP Location 105 (Former UST-1A): UST-1A was a double-walled fiberglass 1,000 gallon UST formerly used to store diesel fuel. UST-1A was associated with Building 1 and replaced former UST-1, but was installed in a nearby location. This UST was reportedly installed in 1990 and removed in 1999. The City of Oakland, Fire Services Agency, issued a no-further-action letter in April 2001. RMP Location 105 is approximately 800 ft<sup>2</sup>. Five soil samples and one groundwater sample were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from RMP Location 105.
- RMP Location 106 (Former UST-2): UST-1 was a 550 gallon UST formerly used to store diesel. The tank was located between Buildings 1 and 6. This UST was reportedly installed in 1966 and removed in 1990. RWQCB issued a no-further-action letter in 1997 for closure of UST-2. RMP Location 106 is approximately 700 ft<sup>2</sup>. Six soil samples and five groundwater samples were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from RMP Location 106.
- RMP Location 108 (Former UST-1): UST-1 was a 1,000 gallon UST formerly used to store fuel oil. The tank was located beneath the center of Building 1. This UST was reportedly installed in 1942 and removed in 1990. RWQCB issued a no-further-action letter in 1997 for the UST-1 closure. RMP Location 108 is approximately 700 ft<sup>2</sup>. Six soil samples and three groundwater samples were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from the RMP Location 108.
- RMP Location 109 (Former UST-20): UST-20 was a 2,000 gallon UST formerly used to supply diesel fuel to five generators within Building 5. The tank was a double-walled fiberglass tank, reinforced with polyester. This UST was reportedly installed in 1986 and removed in 1999. RWQCB issued a no-further action letter in 2003 for closure of UST-20. RMP Location 108 is approximately 1,600 ft<sup>2</sup>. Six soil samples and one groundwater sample were collected at this location. No analytes were detected at concentrations above remediation goals in these soil and groundwater samples collected from RMP Location 109.

On October 20, 2009, DTSC issued a letter concurring that the City of Oakland (a) has adequately investigated RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109, (b) has demonstrated achievement of the remedial action objectives, and (c) has implemented the required institutional control remedy for the subject RMP Locations.

All RAP Sites and RMP Locations within the Oakland Gateway Development Area, upon remedy implementation, continue to be parts of the RMP Implementation Area. The August 8, 2003 *Covenant to Restrict Use of Property, Environmental Restriction* requires landowner(s) to follow the risk management protocols set forth in the RMP regarding planning and implementation of earthwork construction, redevelopment, and/or post-development activities.

**6. Type of Site:**

Included in EnviroStor? Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____

Other (i.e., walk-in): Please see Section 14.E of this Certification.

**7. Size of Site:**

Eight RMP Locations totaling approximately 0.5 Acres

Small  X  Medium \_\_\_\_\_ Large \_\_\_\_\_ Extra Large \_\_\_\_\_

**8. Dates of Remedial Action**

The Army and the City of Oakland investigated RMP Locations 11, 86, 93, 105, 106, 108, and 109 from 1989 through 2006. The completed environmental investigations at these RMP Locations did not detect chemicals of concern (COCs) in soil or groundwater above remediation goals. On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109.

**9. Response Action Taken on Site: (check appropriate action)**

\_\_\_\_\_ Initial removal or remedial action (site inspection/sampling)

X  Final remedial action

\_\_\_\_\_ RCRA enforcement/closure action

\_\_\_\_\_ No action, further investigation verified that no cleanup action at site was needed

A. Type of Remedial Action:

The RAP selects the following remedies for the RMP Locations:

- For locations where no contamination has been found to date, the area will be inspected and sampled in accordance with the RMP during redevelopment to confirm no contamination exists above the remediation goals at these locations;
- For locations requiring additional soil and groundwater characterization, the areas will be inspected and sampled/monitored during redevelopment as outlined in the RMP;
- For locations requiring removal of an existing structure or sites where impacted soil is anticipated, the RMP assumes that an average of about 50 cubic yards of debris and contaminated soil will be removed at each site and disposed as hazardous substances at an off-site permitted facility;
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) was:

1. \_\_\_\_\_ Waste Treated                      Amount: \_\_\_\_\_
2. \_\_\_\_\_ Untreated (capped sites)      Amount: \_\_\_\_\_
3. \_\_\_\_\_ Soil Removed                      Amount: \_\_\_\_\_

4. \_\_\_\_\_ Wastewater Removed Amount: \_\_\_\_\_

5. \_\_\_\_\_ Institutional Controls

The institutional controls remedy applies to all Oakland Gateway Development Area property including the subject RMP Locations covering approximately 0.5 acres.

## 10. Cleanup Levels/Standards

- A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan (RAP) or workplan (if cleanup occurred as the result of a removal action workplan (RAW) or interim remedial measures (IRM) prior to development of a RAP)?

Risk-based remediation goals developed for the Oakland Gateway Development Area are utilized to meet the remedial action objectives for commercial and industrial reuses. Remediation goals for most chemical are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each COC that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters (such as potential leachability of a chemical from soil to groundwater) when these values are more stringent than the calculated human health goals.

The RAP requires remedial actions implemented at each RAP Site or RMP Location to meet individual remediation goals for soil and groundwater listed in Table 7-11 of the RAP. The individual remediation goals in Table 7-11 represent the maximum allowable concentrations for the respective COCs. These remediation goals will not be increased to allocate amongst the residual COCs to meet the overarching cumulative risk of  $10^{-5}$ . However, these remediation goals can be adjusted downward, as need, if the total cancer risk levels exceeds  $10^{-5}$  or the total hazard index (HI) exceeds 1. Remedial action objectives are achieved when residual COCs in soil and groundwater are no greater than a cumulative HI of 1 or a cumulative carcinogenic risk of  $10^{-5}$  for each potentially exposed population.

The Army and the City of Oakland investigated RMP Locations 11, 86, 93, 105, 106, 108, and 109 from 1989 through 2006. The completed environmental investigations at these RMP Locations did not detect COCs in soil or groundwater above remediation goals. The numbers of samples and types of analyses at these RMP Locations are adequate to demonstrate that the RAOs established in the DTSC-approved RAP/RMP

have been met. These RMP Locations are not significant sources of soil or groundwater contamination and no significant data gaps are evident.

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**11. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes  No  Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

Sampling Analysis Procedures Date: \_\_\_\_\_

Health & Safety Protections Date: \_\_\_\_\_

Removal/Disposal Procedures Date: \_\_\_\_\_

Remedial Action Plan Date: September 27, 2002

Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes  No  Name: Michael Steiger, P.E., C63348

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes  No  Name: Daniel Murphy, P.E., C49465

E. Did DTSC confirm completion of all Remedial Action?

Yes  No  Date of verification: October 20, 2009

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes  No

- G. Was there a community relations plan in place?  
Yes  X  No
- H. Was a remedial action plan or removal action workplan developed for this site?  
Yes  X  No
- I. Did DTSC hold a public meeting regarding the draft RAW or RAP?  
Yes  X  No
- J. Were public comments addressed?  
Yes  X  No       
Date of DTSC analysis and response: September 27, 2002
- K. Are all of the facts cited above adequately documented in the DTSC files?  
Yes  X  No

If no, identify areas where documentation is lacking.

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**12. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
Yes  X  No
- B. If yes, did EPA concur with all remedial actions?  
Yes  X  No
- C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002  
[Tran.Xuan-Mai@epamail.epa.gov](mailto:Tran.Xuan-Mai@epamail.epa.gov)

**13. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:                      Activity:

RWQCB      The Regional Water Quality Control Board staff provided consultative services on this project.  
 ARB      \_\_\_\_\_  
 CHP      \_\_\_\_\_  
 Caltrans      \_\_\_\_\_  
 Other      \_\_\_\_\_

Name of contact persons and agency:

George Leyva  
 Project Manager  
 California Regional Water Quality Control Board  
 1515 Clay Street, Suite 1400  
 Oakland, California 94612  
 (510) 622-2379  
[gleyva@waterboards.ca.gov](mailto:gleyva@waterboards.ca.gov)

**14. Post-Closure / Post-Remedy Activities:**

A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
 Yes  No

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* for the Oakland Gateway Development Area, which includes RMP Locations 11, 75, 86, 93, 105, 106, 108, and 109. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential and drinking water standards, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for RMP Locations 11, 75, 86, 93, 105, 106, 108, and

109. The trigger date for a statutory five-year review was the mobilization date of first remedy implementation for the Oakland Gateway Development Area project (i.e., Building 1 RAP Site on November 28, 2005). Therefore, DTSC should review and approve the first statutory five-year review report on or before November 28, 2010. As a result, DTSC shall receive the first Draft Five-Year Review Report in June 2010.

B. Have post-closure plans been prepared and approved by DTSC?

Yes \_\_\_\_\_ No X

Post-closure plan is not required or necessary for this site.

C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the Covenant and five-year review requirements shall continue in effect in perpetuity.

D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

---

Who is the DTSC contact person?

Henry Wong, (510) 540-3770

Name/Phone Number

E. Has cost recovery been initiated? Yes X No \_\_\_\_\_

Has DTSC received all payments? Yes \_\_\_\_\_ No X

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will

be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..."

To date the Army has not provided alternative mechanism for payment of oversight costs to DTSC and RWQCB. Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008. DTSC's and the Army's management teams are working toward a resolution on this issue.

F. Were local planning agencies notified of the cleanup action?

Yes  No  If yes, the name and address of agency:

Mark Arniola, P.G.  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**15. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement	\$ _____		

**16. Problems Encountered Which Caused Major Delays:** None

**17. Accomplishment Unique to the Project:** None

**18. Final Use of Site:** The City of Oakland plans to develop the project site for commercial and/or industrial land uses.



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

### REMEDIAL ACTION CERTIFICATION

Building 1 Remedial Action Plan Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong  
Remedial Project Manager

6/18/2009

Date

Dot Lofstrom, P.G.  
Leader  
East Bay Urban Infill Team

6-18-09

Date

Daniel Murphy, P.E.  
DTSC Civil Engineer in Responsible Charge

6/18/09

Date



**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Building 1 Remedial Action Plan (RAP) Site  
(also known as: Former Oil Reclaiming Plant/Building 1 Area)  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

Building 1  
Former Oil Reclaiming Plant/Building 1 Area  
Former Oakland Army Base – Economic Development Conveyance Area  
Oakland Army Base  
Portions of Base Realignment and Closure (BRAC) Parcels 9 and 10  
A portion of Operable Unit 1

B. Address of site if different from above:

Area bordered by Battaan Avenue, Maritime Street, Africa Street, and Alaska Avenue in the City of Oakland, California

C. Assessor's Parcel Number: O000-0507-001-11

D. DTSC Identification Numbers:

Operable Unit:	Building 1
Site Code:	201537
EnviroStor ID:	01970016

**4. Responsible Parties:**

**Landowner**

City of Oakland

**Contact Person**

Mr. Mark Arniola  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**Relationship to Site:** Contact person for responsible party

**5. Brief Description and History of the Site:**

The Building 1 RAP Site is an approximately 2.3-acre site within the former Oakland Army Base (OARB), Oakland, California. Prior to 1916, much of the area encompassing the OARB was natural tidal marsh or shallow open water. Subsequent to 1916, land was created and industrial buildings constructed that predate OARB activities.

As early as 1918, portions of the current OARB were in industrial use. An oil reclaiming plant operated at the Building 1 area from about mid- to late-1920s through 1941. The plant used an acid clay oil refining process, which generated acid sludge and spent clay contaminated with petroleum residuals and metals. For at least some period during which the plant operated, acid sludge, spent clay, and other oily wastes apparently were disposed of near the plant.

When the Army acquired the land in 1941, the waste materials appear to have been covered with approximately three feet of import fill to allow for construction

of Building 1. The Army used Building 1 as the OARB headquarters building for administrative functions until demolition in December 2002. Remedial investigation results indicate that a layer of spongy, black, tarry, organic material and other oily wastes were present in the subsurface under portions of the area formerly occupied by Building 1.

On September 27, 2002, DTSC approved the *Final Remedial Action Plan Oakland Army Base, Oakland, California* (RAP) for the Former Oakland Army Base – Economic Development Conveyance Area, also known as the Oakland Gateway Development Area. The RAP selected the following remedy for the Building 1 RAP Site:

- Excavation, treatment, and off-site disposal of soils and materials containing polycyclic aromatic hydrocarbons (PAH), dioxins, lead, and/or total petroleum hydrocarbons above levels suitable for commercial/industrial land use;
- Remediation to allow for planned land uses (i.e., commercial and industrial) consistent with the Amended Reuse Plan; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without approval by DTSC;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the September 27, 2002 DTSC-approved Risk Management Plan (RMP); and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

On May 19, 2003, the City of Oakland and DTSC entered into a Consent Agreement to bind the City to enter into environmental restrictions for the Oakland Gateway Development Area as necessary to protect human health and the environment, and to require the remediation of the former Base by the City in accordance with the RAP and associated RMP.

On August 6, 2003, Governor Davis approved the early transfer of approximately 363.5 acres of the former Oakland Army Base to the City of Oakland. The Building 1 RAP Site is a portion of the transferred property.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes the Building 1 RAP Site.

On February 14, 2006, DTSC approved the *Remedial Design and Implementation Plan* (RDIP) for the Building 1 RAP Site. The RDIP detailed cleanup procedures for contaminated soil and treatment for the Building 1 remediation waste. The City of Oakland commenced site preparatory activities on November 28, 2005, excavated soils and treated hazardous wastes on-site in 2006, and completed site restoration in early 2007.

**6. Type of Site:**

Included in EnviroStor? Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____

Other (i.e., walk-in): Please see Section 14.E of this Certification.

**7. Size of Site:**

Approximately 2.3 Acres

Small \_\_\_\_\_ Medium X Large \_\_\_\_\_ Extra Large \_\_\_\_\_

**8. Dates of Remedial Action**

Remedial Action Initiated: November 28, 2005  
Remedial Action Completed: May 12, 2009

**9. Response Action Taken on Site: (check appropriate action)**

\_\_\_\_\_ Initial removal or remedial action (site inspection/sampling)

X Final remedial action

\_\_\_\_\_ RCRA enforcement/closure action

\_\_\_\_\_ No action, further investigation verified that no cleanup action at site was needed

A. Type of Remedial Action:

The RAP selected the following remedy for the Building 1 RAP Site:

- Excavation, treatment, and off-site disposal of soils and materials containing polycyclic aromatic hydrocarbons (PAH), dioxins, lead, and/or total petroleum hydrocarbons above levels suitable for commercial/industrial land use;
- Remediation to allow for planned land uses (commercial and industrial) consistent with the Amended Reuse Plan; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without approval by DTSC;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the Risk Management Plan (RMP); and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) was:

- |    |  |                        |
|----|--|------------------------|
| 1. | <u>  X  </u> Waste Treated             | Amount: 11,642 tons    |
| 2. | <u>      </u> Untreated (capped sites) | Amount: _____          |
| 3. | <u>  X  </u> Soil Removed              | Amount: 579 tons       |
| 4. | <u>  X  </u> Wastewater Removed        | Amount: 10,000 gallons |
| 5. | <u>  X  </u> Institutional Controls    | Amount: 2.3 Acres      |

**10. Cleanup Levels/Standards**

A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan (RAP) or workplan (if cleanup occurred as the result of a removal action workplan (RAW) or interim remedial measures (IRM) prior to development of a RAP)?

The cleanup standards established by DTSC consist of risk-based remediation goals developed for OARB to meet the remedial action objectives. These goals were developed and presented in the RAP, including the rationale, calculation, and input parameters used in establishing the remediation goals. Remediation goals for most chemical are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each chemical of concern that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters (such as potential leachability of a chemical from soil to groundwater) when these values are more stringent than the calculated human health goals.

Treatment of Building 1 remediation waste included (a) solidification and stabilization on-site to attain 77% reduction in leachable lead, (b) neutralization of the waste to a pH greater than 4, and (c) reduction in the percent moisture content to less than 50% by weight pursuant to the U.S. Environmental Protection Agency's September 27, 2002 Land Disposal Restriction (LDR) Variance and Amendment 1. The LDR Variance was necessary because soils and materials at Building 1 contained elevated lead concentrations and/or low pH leading to designation of the soil and materials as D008 and/or D002 Resource Conservation and Recovery Act (RCRA) hazardous waste with potential underlying hazardous constituents such as certain PAHs and dioxin-like compounds that would fail the LDR requirements.

The following table lists selected chemicals of concern (COCs) protective of the commercial, industrial, and construction worker exposure scenarios. DTSC adopted the remediation goals for petroleum hydrocarbons in soil and groundwater used for the adjacent former Oakland Army Base. Selected COC remediation goals are as follows:

<u>COC in Soil</u>	<u>Remediation Goal, mg/kg</u>
Arsenic	20
Lead	750
Benzo(a)pyrene	0.8
PCB Aroclor 1260	1.8
Dioxin	0.0001
Motor Oil	58,000
Diesel	8,000

B. Were the specified cleanup standards met? Yes   X   No       

C. If "no", why not:

**11. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes \_\_\_\_\_ No X Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

\_\_\_\_\_ Sampling Analysis Procedures Date: \_\_\_\_\_

\_\_\_\_\_ Health & Safety Protections Date: \_\_\_\_\_

\_\_\_\_\_ Removal/Disposal Procedures Date: \_\_\_\_\_

X Remedial Action Plan Date: September 27, 2002

\_\_\_\_\_ Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes X No \_\_\_\_\_ Name: Susan Gallardo, P.E., C38154

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes X No \_\_\_\_\_ Name: Daniel Murphy, P.E., C49465

E. Did DTSC confirm completion of all Remedial Action?

Yes X No \_\_\_\_\_ Date of verification: May 12, 2009

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes \_\_\_\_\_ No X

G. Was there a community relations plan in place?

Yes X No \_\_\_\_\_

H. Was a remedial action plan or removal action workplan developed for this site?

Yes X No \_\_\_\_\_

- I. Did DTSC hold a public meeting regarding the draft RAW or RAP?  
Yes  No
- J. Were public comments addressed?  
Yes  No   
Date of DTSC analysis and response: September 27, 2002
- K. Are all of the facts cited above adequately documented in the DTSC files?  
Yes  No

If no, identify areas where documentation is lacking.

---

**12. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
Yes  No
- B. If yes, did EPA concur with all remedial actions?  
Yes  No
- C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002

**13. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input type="checkbox"/> RWQCB	The Regional Water Quality Control Board (RWQCB) staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____

\_\_\_\_\_ CHP \_\_\_\_\_  
\_\_\_\_\_ Caltrans \_\_\_\_\_  
\_\_\_\_\_ Other \_\_\_\_\_

Name of contact persons and agency:

Devender Narala  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2309

**14. Post-Closure / Post-Remedy Activities:**

- A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes  X  No \_\_\_\_\_

If yes, describe:

Pursuant to the May 19, 2003 Consent Agreement and the September 2008 DTSC-approved Operation and Maintenance Plan, DTSC requires groundwater monitoring at the Building 1 RAP Site quarterly for five years to ensure that no chemicals of concern are present at concentrations above the cleanup goals. With DTSC's approval, the City of Oakland may modify the monitoring frequency and duration based upon the review of the groundwater data.

The City of Oakland and DTSC executed the *Covenant to Restrict Use of Property, Environmental Restriction* on August 8, 2003, which:

- o Prohibits sensitive land uses;
- o Restricts construction of groundwater wells and extraction of groundwater without approval by DTSC;
- o Prevents disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the Risk Management Plan (RMP); and
- o Requires compliance with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for this site. The trigger date for a statutory five-year review was the mobilization date of the Building 1 remedy implementation, November 28, 2005. Therefore, DTSC should review and approve the first statutory five-year review report on or before November 28, 2010. As a result, DTSC shall receive the first Draft Five-Year Review Report in May 2010.

B. Have post-closure plans been prepared and approved by DTSC?

Yes \_\_\_\_\_ No X

Post-closure plan is not required or necessary for this site.

C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the covenant and five-year review requirements shall continue in effect in perpetuity.

D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

---

Who is the DTSC contact person?

Henry Wong, (510) 540-3770

Name/Phone Number

E. Has cost recovery been initiated? Yes X No \_\_\_\_\_

Has DTSC received all payments? Yes \_\_\_\_\_ No X

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..."

To date the Army has provided no alternative mechanism for oversight costs to DTSC and RWQCB. DTSC and RWQCB have not been paid for oversight costs since July 2008.

F. Were local planning agencies notified of the cleanup action?

Yes  No  If yes, the name and address of agency:

Mark Arniola, P.G.  
 Environmental Program Specialist  
 Public Works Agency  
 Environmental Services Division  
 City of Oakland  
 250 Frank H. Ogawa Plaza, Suite 5301  
 Oakland, California 94612-2034  
 (510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**15. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____ HWCA	\$ _____	_____ HSA	\$ _____
_____ HSCF	\$ _____	_____ RCRA	\$ _____
_____ RP	\$ _____	_____ Other	\$ _____
_____ Federal Cooperative Agreement	\$ _____		

**16. Problems Encountered Which Caused Major Delays:** None.

**17. Accomplishment Unique to the Project:** None.

18. **Final Use of Site:** The City of Oakland plans to develop the site for commercial and/or industrial land uses.



Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

### REMEDIAL ACTION CERTIFICATION

Building 99 Groundwater Remedial Action Plan Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong  
Remedial Project Manager

6/24/2009

Date

Dot Lofstrom, P.G.  
Team Leader  
East Bay Urban Infill Team

6-24-09

Date

Daniel Murphy, P.E.  
DTSC Civil Engineer in Responsible Charge

6/25/2009

Date



**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Building 99 Groundwater Remedial Action Plan (RAP) Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

BLDG 99 GW  
VOCs in Groundwater Near Building 99  
Former Oakland Army Base – Economic Development Conveyance Area  
Oakland Army Base  
Base Realignment and Closure (BRAC) Parcel 10 within Operable Unit 1

B. Address of site if different from above:

Area bordered by Attu Street, Corregidor Avenue, Chung King Street, and Buna Street, in the City of Oakland, California

C. Assessor's Parcel Number: O000-0507-001-11

D. DTSC Identification Numbers:

Operable Unit: BLDG 99 GW  
Site Code: 201537  
EnviroStor ID: 01970016

**4. Responsible Parties:**

**Landowners**

Port of Oakland  
City of Oakland

**Contact Persons**

Ms. Dawn Crater  
Port Environmental Scientist  
Port of Oakland  
Engineering Division  
Environmental Planning & Permitting Department  
530 Water Street, 2<sup>nd</sup> Floor  
Oakland, California 94607  
(510) 627-1185  
[dcrater@portoakland.com](mailto:dcrater@portoakland.com)

Mr. Mark Arniola  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**Relationship to Site:** Contact persons for responsible parties

**5. Brief Description and History of the Site:**

The Building 99 Groundwater RAP Site is a 4-acre site within the former Oakland Army Base, Oakland, California. The area was originally open water and was filled with dredged materials in the early 1900s. Building 99 was originally built around 1918 and was used as a ship factory, blacksmith/machine shop, tool room, and office until the Army took over in 1941. From 1941 until 2000, the Army used Building primarily for vehicle and electrical maintenance, as well as other operations including welding, metal plating, painting, steam cleaning, and woodworking activities.

During remedial investigation, the Army found volatile organic compounds (VOC) in the shallow water-bearing zone near Building 99. The predominant VOCs detected in groundwater are vinyl chloride and cis-1,2-dichloroethene (DCE). No significant soil contamination has been identified and the source of the VOCs is unknown. Possible sources include Building 99 which is identified as a RAP site, and storm drains and sanitary sewers which is identified as a Risk Management (RMP) Location.

Prior to DTSC's approval of the Remedial Action Plan on July 27, 2002, vinyl chloride and cis-1,2-DCE were detected at maximum concentrations of 29 microgram per liter ( $\mu\text{g/L}$ ) and 41  $\mu\text{g/L}$ , respectively. The impact of vinyl chloride and cis-1,2-DCE to shallow groundwater in this area has been delineated laterally and vertically. VOCs in shallow groundwater near Building 99 appear to be in steady state and are not migrating beyond the defined study area, which is approximately four acres. VOC-containing groundwater near Building 99 is considered a RAP Site because of the potential vapor intrusion threat posed by residual VOCs in groundwater.

Given the historical uses at Building 99 and nearby areas, additional groundwater monitoring at the Building 99 vicinity was warranted. The RAP selected (a) in-situ bioremediation with oxygen releasing compounds to remove or significantly reduce remaining VOC concentrations and (b) groundwater monitoring for five years, if necessary.

On May 19, 2003, the City of Oakland and DTSC entered into a Consent Agreement to bind the City to enter into environmental restrictions for the Oakland Gateway Development Area as necessary to protect human health and the environment, and to require the remediation of the former base by the City in accordance with the RAP and associated RMP. The RMP is Appendix E to the RAP.

On August 6, 2003, Governor Davis approved the early transfer of approximately 363.5 acres of the former Oakland Army Base to the City of Oakland. The Building 99 Groundwater RAP Site is a portion of the transferred property.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes the Building 99 Groundwater RAP Site. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential or drinking water standards to allow for unrestricted reuse, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

On March 30, 2005, DTSC approved the *Pre-Design Investigation Memorandum* (PDIM) for the Building 99 Groundwater RAP Site to further evaluate the soil and groundwater VOC impacts at selected locations to supplement previous data. In 2005, the Port installed five new groundwater monitoring wells and monitored these new wells, along with six existing wells, for four quarters. The Port of Oakland collected soil samples at 1.0 and 3.5 ft bgs from five new well locations, and did not detect VOC in soil above normal reporting limit.

During the four quarters of groundwater monitoring in 2005, vinyl chloride and cis-1,2-DCE concentrations in groundwater were generally decreasing over time in all 11 wells. Vinyl chloride was detected up to 10 µg/L (remediation goal is 32 µg/L) and cis-1,2-DCE was detected at up to 15 µg/L (remediation goal is 180,000 µg/L).

Based on the pre-design investigation results, the Port of Oakland prepared the Completion Report in July 2007. On July 16, 2007, DTSC approved the Completion Report for the Building 99 Groundwater RAP Site.

On March 20, 2009, DTSC issued the “Risk Management Plan Modification” letter specifying new language for RMP, Section 6.2 regarding vapor intrusion mitigation measures. This RMP Modification requires additional evaluation and consultation with DTSC if new buildings are to be constructed at the Building 99 Groundwater RAP Site and vicinity areas.

**6. Type of Site:**

Included in EnviroStor?    Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____

Other (i.e., walk-in):            Please see Section 14.E of this Certification.

**7. Size of Site:**

Approximately 4 acres

Small \_\_\_\_\_    Medium   X      Large \_\_\_\_\_    Extra Large \_\_\_\_\_

**8. Dates of Remedial Action**

The Port of Oakland conducted supplemental groundwater monitoring pursuant to the DTSC-approved PDIM in 2005.

**9. Response Action Taken on Site: (check appropriate action)**

Initial removal or remedial action (site inspection/sampling)

Final remedial action

RCRA enforcement/closure action

No action, further investigation verified that no cleanup action at site was needed

**A. Type of Remedial Action:**

The RAP selected the following remedy for the Building 99 Groundwater RAP Site:

- In-situ bioremediation with oxygen releasing compounds to remove or significantly reduce remaining VOC concentrations and groundwater monitoring for five years;
- Remediation to allow for planned land uses (i.e., commercial and industrial) consistent with the Amended Reuse Plan; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

**B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) was:**

1.  Waste Treated                      Amount:

2.  Untreated (capped sites)      Amount:

3.  Soil Removed                              Amount:

4. \_\_\_\_\_ Wastewater Removed Amount: \_\_\_\_\_
5. \_\_\_\_\_ Institutional Controls Amount: 4 Acres

**10. Cleanup Levels/Standards**

- A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan (RAP) or workplan (if cleanup occurred as the result of a removal action workplan (RAW) or interim remedial measures (IRM) prior to development of a RAP)?

Risk-based remediation goals developed for the Oakland Army Base were utilized to meet the remedial action objectives. These goals were developed and presented in the RAP, including the rationale, calculation, and input parameters used in establishing the remediation goals and are based on a commercial use scenario. Remediation goals for most chemicals are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each chemical of concern that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters when these values are more stringent than the calculated human health goals. An example of a more stringent goal is the potential leachability of a chemical from soil to groundwater.

Maximum Contaminant Levels were not applicable because the groundwater is not a potential drinking water source due to high total dissolved solids (TDS) concentrations. In a study performed between 1997 and 1999, the Army measured TDS concentrations in 43 monitoring wells completed into the shallow water-bearing zone at the former Oakland Army Base. The TDS concentrations in these wells ranged from 343 to 21,200 milligram per liter (mg/L), with the mean TDS concentration calculated to be 4,600 mg/L for all wells measured during this study.

The most recent four quarters of groundwater monitoring data collected in 2005 were evaluated with respect to the applicable remedial action objectives (RAO) established in the RAP for the former Oakland Army Base. The following table summarizes the achievement of RAO:

Groundwater RAO	Building 99 Groundwater RAP Site	
Concentrations of VOCs in Groundwater should not exceed remediation goals (RGs)	<u>Vinyl chloride</u>	
	Maximum detected for all monitoring data:	29 µg/L
	Maximum detected in four 2005 quarters: (RG = 32 µg/L)	10 µg/L
	<u>cis-1,2-DCE</u>	
	Maximum detected for all monitoring data:	41 µg/L
	Maximum detected in four 2005 quarters:	15 µg/L

	(RG = 180,000 µg/L) All other VOCs were non-detect with normal report limits.
Cumulative health risk for the RAP Site should not be greater than a hazard index (HI) of 1.0 or an excess cancer risk of $1 \times 10^{-5}$	Using the maximum detected concentrations for vinyl chloride (10 µg/L), cis-1,2-DCE (15 µg/L), and 1/2 of maximum reporting limits for non-detected VOCs in 2005 monitoring results, the cumulative risk and HI are as follows: Risk: $3.2 \times 10^{-7}$ → Risk less than $1 \times 10^{-5}$ HI: $3.4 \times 10^{-4}$ → HI less than 1

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**11. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes  No  Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

Sampling Analysis Procedures Date: \_\_\_\_\_

Health & Safety Protections Date: \_\_\_\_\_

Removal/Disposal Procedures Date: \_\_\_\_\_

Remedial Action Plan Date: September 27, 2002

Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes  No  Name: Lydia Huang, P.E., C43995

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes  No  Name: Daniel Murphy, P.E., C49465

E. Did DTSC confirm completion of all Remedial Action?

Yes  No  Date of verification: July 16, 2007

F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?

Yes  No

G. Was there a community relations plan in place?

Yes  No

H. Was a remedial action plan or removal action workplan developed for this site?

Yes  No

I. Did DTSC hold a public meeting regarding the draft RAW or RAP?

Yes  No

J. Were public comments addressed?

Yes  No

Date of DTSC analysis and response: September 27, 2002

K. Are all of the facts cited above adequately documented in the DTSC files?

Yes  No

If no, identify areas where documentation is lacking.

---

**12. EPA Involvement in the Remedial Action:**

A. Was the EPA involved in the site cleanup?

Yes  No

B. If yes, did EPA concur with all remedial actions?

Yes  No

C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch  
75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105

(415) 972-3002

**13. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input type="checkbox"/> RWQCB	The Regional Water Quality Control Board (RWQCB) staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____
<input type="checkbox"/> Caltrans	_____
<input type="checkbox"/> Other	_____

Name of contact persons and agency:

Devender Narala  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2309

**14. Post-Closure / Post-Remedy Activities:**

- A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes  No

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes the Building 99 Groundwater RAP Site. Since the former base property is not being remediated to residential and drinking water standards to allow for unrestricted reuse, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The City of Oakland and DTSC executed the *Covenant to Restrict Use of Property, Environmental Restriction* on August 8, 2003, which:

- o Prohibits sensitive land uses;
- o Restricts construction of groundwater wells and extraction of groundwater without DTSC's approval;
- o Prevents disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
- o Complies with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for the Building 99 Groundwater RAP Site. The trigger date for a statutory five-year review was the mobilization date of first remedy implementation for the Oakland Gateway Development Area project (i.e., Building 1 RAP Site on November 28, 2005). Therefore, DTSC should review and approve the first statutory five-year review report on or before November 28, 2010. As a result, DTSC shall receive the first draft Five-Year Review Report in May 2010.

B. Have post-closure plans been prepared and approved by DTSC?  
Yes \_\_\_\_\_ No X  
Post-closure plan is not required or necessary for this site.

C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the covenant and five-year review requirements shall continue in effect in perpetuity.

D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

---

Who is the DTSC contact person?

Henry Wong, (510) 540-3770

Name/Phone Number

E. Has cost recovery been initiated? Yes X No \_\_\_\_\_

Has DTSC received all payments? Yes \_\_\_\_\_ No X

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..."

To date the Army has provided no alternative mechanism for payment of oversight costs to DTSC and RWQCB. Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008.

F. Were local planning agencies notified of the cleanup action?

Yes X No \_\_\_\_\_ If yes, the name and address of agency:

Mark Arniola, P.G.  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**15. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

\_\_\_\_\_ HWCA \$ \_\_\_\_\_ HSA \$ \_\_\_\_\_





Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

### REMEDIAL ACTION CERTIFICATION

Building 99 Soil Remedial Action Plan Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

Henry Wong  
Remedial Project Manager

6/24/2009

Date

Dot Lofstrom, P.G.  
Team Leader  
East Bay Urban Infill Team

6-24-09

Date

Daniel Murphy, P.E.  
DTSC Civil Engineer in Responsible Charge

6/25/2009

Date





Linda S. Adams  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Maziar Movassaghi  
Acting Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



Arnold Schwarzenegger  
Governor

### REMEDIAL ACTION CERTIFICATION

Building 99 Soil Remedial Action Plan Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

#### 1. Certification of Remedial Action:

I hereby certify that the foregoing information is true and correct to the best of my knowledge.

\_\_\_\_\_  
Henry Wong  
Remedial Project Manager

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dot Lofstrom, P.G.  
Team Leader  
East Bay Urban Infill Team

\_\_\_\_\_  
Date

\_\_\_\_\_  
Daniel Murphy, P.E.  
DTSC Civil Engineer in Responsible Charge

\_\_\_\_\_  
Date

**2. Certification Statement:** Based upon the information which is currently and actually known to the Department of Toxic Substances Control (DTSC),

DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary.

DTSC has determined, based upon a remedial investigation or site characterization that the site poses no significant threat to public health, welfare or the environment and therefore implementation of removal/remedial measures is not necessary.

DTSC has determined that all appropriate removal/remedial actions have been completed and that all acceptable engineering practices were implemented; however, the site requires ongoing operation and maintenance (O&M) and monitoring efforts. The site will be deleted from the "active" site list following (1) a trial operation and maintenance period and (2) execution of a formal written settlement between the Department and the responsible parties, if appropriate. However, the site will be placed on the Department's list of sites undergoing O&M to ensure proper monitoring of long-term clean-up efforts.

**3. Site Name and Location:**

Building 99 Soil Remedial Action Plan (RAP) Site  
Oakland Gateway Development Area  
700 Murmansk Street, Suite 3  
Oakland, California 94607

A. List of any other names that have been used to identify the site:

BLDG 99 SOIL  
Former Oakland Army Base – Economic Development Conveyance Area  
Oakland Army Base  
Base Realignment and Closure (BRAC) Parcel 10 within Operable Unit 1

B. Address of site if different from above:

Area bordered by Attu Street, Corregidor Avenue, Chung King Street, and Buna Street, in the City of Oakland, California

C. Assessor's Parcel Number: O000-0507-001-11

D. DTSC Identification Numbers:

Operable Unit: BLDG 99 SOIL  
Site Code: 201537  
EnviroStor ID: 01970016

**4. Responsible Parties:**

**Landowner**

Port of Oakland

**Contact Person**

Ms. Dawn Crater  
Port Environmental Scientist  
Port of Oakland  
Engineering Division  
Environmental Planning & Permitting Department  
530 Water Street, 2<sup>nd</sup> Floor  
Oakland, California 94607  
(510) 627-1185  
[dcrater@portoakland.com](mailto:dcrater@portoakland.com)

**Relationship to Site:** Contact person for responsible party

**5. Brief Description and History of the Site:**

The Building 99 Soil RAP Site is a 1.4-acre site within the former Oakland Army Base, Oakland, California. The area was originally open water and was filled with dredged materials in the early 1900s. Building 99 was originally built around 1918 and was used as a ship factory, blacksmith/machine shop, tool room, and office until the Army took over in 1941. From 1941 until 2000, the Army used Building primarily for vehicle and electrical maintenance, as well as other operations including welding, metal plating, painting, steam cleaning, and woodworking activities.

Analytical results of available soil samples during remedial investigation/feasibility study did not suggest significant releases of volatile organic compounds, polynuclear aromatic hydrocarbons, total petroleum hydrocarbon, or metals have occurred. However, given the historical uses at Building 99 and the limited nature of the investigations, additional sampling at Building 99 was warranted. Hence, the September 27, 2002 Remedial Action Plan (RAP) identified Building 99 Soil as a RAP Site. Required remedial actions, if any, are likely to consist of excavating soil with chemicals of concern (COCs) greater than site-specific remediation goals based on commercial and industrial land use scenarios.

On May 19, 2003, the City of Oakland and DTSC entered into a Consent Agreement to bind the City to enter into environmental restrictions for the Oakland Gateway Development Area as necessary to protect human health and the environment, and to require the remediation of the former base by the City in accordance with the RAP and associated Risk Management Plan (RMP). The RMP is Appendix E to the RAP.

On August 6, 2003, Governor Davis approved the early transfer of approximately 363.5 acres of the former Oakland Army Base to the City of Oakland. The Building 99 Soil RAP Site is a portion of the transferred property.

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction (Covenant)* for the Oakland Gateway Development Area, which includes the Building 99 Soil RAP Site. The City of Oakland implemented the institutional control remedy by recording the Covenant with the Alameda County Assessor's Office. Since the former base property is not being remediated to residential or drinking water standards to allow for unrestricted reuse, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management.

On April 27, 2005, DTSC approved the *Pre-Design Investigation Memorandum (PDIM)* for the Building 99 soil and the following four RMP Locations associated with Building 99:

- Potential lead-based paint impacted soils outside of Building 99 (NAD83 Northing and Easting Coordinates: 2125825, 6039940),
- Hydraulic lift cylinders inside Building 99 (NAD83 Northing and Easting Coordinates: 2125712, 6039884),
- Former oil-water separator (OWS-4) outside the southeastern corner of Building 99 (NAD83 Northing and Easting Coordinates: 2125570, 6039966), and
- Decommissioned washrack (Facility 98) outside the southeastern corner of Building 99 (NAD83 Northing and Easting Coordinates: 2125642, 6039973).

The purpose of the PDIM was to evaluate all available information about the Building 99 Soil RAP Site and four associated RMP Locations and present a workplan to collect additional data needed to support the preparation of a Remedial Design and Implementation Plan.

The Port reviewed historical documents to identify the land uses in Building 99 which may have caused possible hazardous materials releases to the subsurface. These documents identified historical operations in various parts of the building and suspect features where hazardous materials may have been used. In addition, the Port conducted a thorough inspection of the building to

locate suspect features where chemical releases may have occurred. Based on this information, the Port conducted a pre-design investigation to evaluate the shallow soil quality under Building 99.

The pre-design investigation also included (a) removal of the inner casings and hydraulic oil from two recently discovered hydraulic lift cylinders and subsequent confirmation sampling, (b) sampling of the near-surface soils underneath the asphalt outside of Building 99 for possible lead-based paint impacts, (c) sampling of a former oily-water separator (OWS-4) and decommissioned washrack (Facility 98) outside the southeastern corner of Building 99.

The Port found concentrations of the COCs in soil below the remedial action objectives except for one location at boring B99SL005. The soil at boring B99SL005 contains 1,000 milligram per kilogram (mg/kg) of lead at two feet below ground surface. Since the Port has leased this location and soil excavation was not feasible at the time, the Port created a new RMP Location for boring B99SL005 (also known as Building 99, Quadrant D) to be addressed during future demolition/redevelopment activities.

Based on the pre-design investigation results, the Port prepared the Completion Report in July 2007. On July 16, 2007, DTSC approved the Completion Report for the Building 99 Soil RAP Site and four RMP Locations mentioned above. DTSC also acknowledged the creation of a new RMP Location: *Building 99, Quadrant D - lead-impacted soil and possible subsurface structure near boring B99SL005 (NAD83 Northing and Easting Coordinates: 2125889, 6039975).*

**6. Type of Site:**

Included in EnviroStor?    Yes

RCRA Permitted Facility	_____	Bond Funded	_____
RCRA Facility Closure	_____	RP Funded	_____
NPL	_____	Federal Facility	_____

Other (i.e., walk-in):    Please see Section 14.E of this Certification.

**7. Size of Site:**

Approximately 1.4 acres

Small \_\_\_\_\_    Medium   X      Large \_\_\_\_\_    Extra Large \_\_\_\_\_

**8. Dates of Remedial Action**

The Port conducted supplemental soil investigation pursuant to the DTSC-approved PDIM in several stages during the period between March and July 2005.

**9. Response Action Taken on Site: (check appropriate action)**

Initial removal or remedial action (site inspection/sampling)

Final remedial action

RCRA enforcement/closure action

No action, further investigation verified that no cleanup action at site was needed

**A. Type of Remedial Action:**

The RAP selected the following remedy for the Building 99 Soil RAP Site:

- Excavating of soil with chemicals of concern greater than the remediation goals;
- Remediation to allow for planned land uses (i.e., commercial and industrial) consistent with the Amended Reuse Plan; and
- Implementation of institutional controls to:
  - Prohibit sensitive land uses;
  - Restrict construction of groundwater wells and extraction of groundwater without DTSC's approval;
  - Prevent disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
  - Comply with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

**B. Estimated quantity of waste associated with the site (i.e., tons/gallons/cubic yards) was:**

1.  Waste Treated Amount: \_\_\_\_\_

2.  Untreated (capped sites) Amount: \_\_\_\_\_

3. \_\_\_\_\_ Soil Removed Amount: \_\_\_\_\_
4. \_\_\_\_\_ Wastewater Removed Amount: \_\_\_\_\_
5. \_\_\_\_\_ Institutional Controls Amount: 1.4 Acres

**10. Cleanup Levels/Standards**

- A. What were the cleanup standards established by DTSC pursuant to the final remedial action plan (RAP) or workplan (if cleanup occurred as the result of a removal action workplan (RAW) or interim remedial measures (IRM) prior to development of a RAP)?

Risk-based remediation goals developed for Oakland Army Base were utilized to meet the remedial action objectives. These goals were developed and presented in the RAP, including the rationale, calculation, and input parameters used in establishing the remediation goals and are based on a commercial use scenario. Remediation goals for most chemical are risk-based and represent the lowest calculated values of the non-carcinogenic or carcinogenic risk goal for each chemical of concern that are protective of all potentially exposed populations. However, some remediation goals are based on other chemical-specific parameters when these values are more stringent than the calculated human health goals. An example is the potential leachability of a chemical from soil to groundwater.

The soil quality data collected for the Building 99 Soil RAP Site were evaluated with respect to the applicable remedial action objective (RAO) established in the RAP for the former Oakland Army Base. The two numerical standards established to measure compliance with the RAO and the results of the evaluation with the standards are summarized in the following table.

Soil RAO	Building 99 Soil RAP Site
Concentrations of COCs in soil remaining in-place should not exceed remediation goals (RGs)	<p>All COCs in soil were below the respective RGs with the following exceptions:</p> <ul style="list-style-type: none"> <li>• Lead was present at concentrations around 1,000 mg/kg in several shallow soil samples in the vicinity of boring B99SL005. The RG of for lead in soil at the site is 750 mg/kg. Location B99SL005 is being identified as a new RMP Location.</li> <li>• Lead was present at 2,000 mg/kg, above the RG, in one shallow sample collected from boring B99SL010; however, supplemental sampling, including one co-located sample,</li> </ul>

	<p>indicates that the initial elevated concentration was anomalous.</p> <ul style="list-style-type: none"> <li>• Lead was present at 760 mg/kg, slightly above the RG, in one shallow sample collected from boring B99SL013.</li> <li>• The 95 percent upper confidence level (UCL) for lead for the RAP Site (excluding the B99SL005 area) was 378 mg/kg, below the RG of 750 mg/kg.</li> <li>• Benzo(a)pyrene was present at 1.1 mg/kg, slightly above the RG of 0.8 mg/kg, in a shallow samples from boring B99SL007. The 95 percent UCL for benzo(a)pyrene calculated using the results from all 43 samples was 0.55 mg/kg.</li> </ul>
<p>Cumulative health risk for the RAP Site should not be greater than a hazard index (HI) of 1.0 or an excess cancer risk of <math>1 \times 10^{-5}</math></p>	<p>The cumulative health risk calculated for the four potential receptors were:</p> <p>Earthwork construction worker: HI = 0.42 Risk = <math>3.6 \times 10^{-6}</math></p> <p>Indoor commercial worker: HI = 0.0016 Risk = <math>1.2 \times 10^{-7}</math></p> <p>Outdoor industrial worker: HI = 0.0022 Risk = <math>1.3 \times 10^{-8}</math></p> <p>Maintenance worker: HI = 0.015 Risk = <math>1.7 \times 10^{-6}</math></p>

With the exception of the soil near boring B99SL005, the Port concluded that the soil associated with the Building 99 Soil RAP Site meets the RAO. Future investigation and/or remediation are not needed unless contamination is discovered during demolition or redevelopment. The shallow soils near boring B99SL005 appear to have been impacted with lead, and this location is being identified as a new RMP Location for which measures will need to be implemented in accordance with the RMP during future demolition/redevelopment activities at Building 99.

The Port also presented data for four RMP Locations associated with Building 99 which have been sufficiently mitigated and investigated according to the RMP. A summary of these RMP Locations is provided below.

RMP Location	Status
Potential Soil Impacted by Lead-based Paint Outside of Building 99	Soil samples underneath the asphalt were collected adjacent to the outside of Building 99 at five locations during the pre-design investigation. The lead concentrations in the five samples were all below the RGs.
Hydraulic Lift Cylinders inside Building 99	The two cylinders were drained, flushed, and abandoned in-place during the pre-design investigation. Confirmation soil

	and grab groundwater samples indicate that COCs were not present at concentrations exceeding the RGs.
Former Oily-Water Separator (OWS-4)	The Army removed the oily-water separator in 2000, plugged the pipes, and collected confirmation samples from the excavation. The Army installed one boring and collected soil samples near the excavation. None of the samples contained constituents above RGs.
Washrack (Facility 98)	The Army decommissioned and cleaned the washrack, including plugging the central drain, in 2000. The Army installed two borings and collected soil samples near the washrack. None of the samples contained constituents above RGs.

B. Were the specified cleanup standards met? Yes  No

C. If "no", why not:

**11. DTSC Involvement in the Remedial Action:**

A. Did DTSC order the Removal Action?

Yes  No  Date of Order \_\_\_\_\_

B. Did DTSC review and approve (check appropriate action and indicate date of review/approval if done):

Sampling Analysis Procedures Date: \_\_\_\_\_

Health & Safety Protections Date: \_\_\_\_\_

Removal/Disposal Procedures Date: \_\_\_\_\_

Remedial Action Plan Date: September 27, 2002

Removal Action Workplan Date: \_\_\_\_\_

C. If site was abated by a responsible party, did DTSC receive a signed statement from a licensed professional on all Remedial Action?

Yes  No  Name: Lydia Huang, P.E., C43995

D. Did a registered engineer or geologist verify that acceptable engineering practices were implemented?

Yes  No  Name: Daniel Murphy, P.E., C49465

- E. Did DTSC confirm completion of all Remedial Action?  
Yes  No  Date of verification: July 16, 2007
- F. Did DTSC (directly or through a contractor) actually perform the Remedial Action?  
Yes  No
- G. Was there a community relations plan in place?  
Yes  No
- H. Was a remedial action plan or removal action workplan developed for this site?  
Yes  No
- I. Did DTSC hold a public meeting regarding the draft RAW or RAP?  
Yes  No
- J. Were public comments addressed?  
Yes  No   
Date of DTSC analysis and response: September 27, 2002
- K. Are all of the facts cited above adequately documented in the DTSC files?  
Yes  No   
  
If no, identify areas where documentation is lacking.  

---

**12. EPA Involvement in the Remedial Action:**

- A. Was the EPA involved in the site cleanup?  
Yes  No
- B. If yes, did EPA concur with all remedial actions?  
Yes  No
- C. EPA comments: EPA staff provided consultative services on this project.

EPA staff involved in cleanup:

Xuan-Mai Tran  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region IX  
Federal Facilities Cleanup Branch

75 Hawthorne Street, (SFD-8-2)  
San Francisco, California 94105  
(415) 972-3002

**13. Other Regulatory Agency Involvement in the Cleanup Action:**

Agency:	Activity:
<input type="checkbox"/> RWQCB	The Regional Water Quality Control Board (RWQCB) staff provided consultative services on this project.
<input type="checkbox"/> ARB	_____
<input type="checkbox"/> CHP	_____
<input type="checkbox"/> Caltrans	_____
<input type="checkbox"/> Other	_____

Name of contact persons and agency:

Devender Narala  
Project Manager  
California Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, California 94612  
(510) 622-2309

**14. Post-Closure / Post-Remedy Activities:**

A. Will there be post-closure / post-remedy activities at this site? (e.g., Operation and Maintenance)  
Yes  No

If yes, describe:

On August 8, 2003, the City of Oakland and DTSC executed and recorded the *Covenant to Restrict Use of Property, Environmental Restriction* (Covenant) for the Oakland Gateway Development Area, which includes the Building 99 Soil RAP Site. Since the former base property is not being remediated to residential and drinking water standards to allow for unrestricted reuse, the Covenant requires land and groundwater use restrictions and compliance with the RMP for proper soil and groundwater management. The RMP is Appendix E to the September 27, 2002 DTSC-approved RAP.

The City of Oakland and DTSC executed the *Covenant to Restrict Use of Property, Environmental Restriction* on August 8, 2003, which:

- o Prohibits sensitive land uses;
- o Restricts construction of groundwater wells and extraction of groundwater without DTSC's approval;
- o Prevents disturbance of surface soil, subsurface soil, and groundwater monitoring wells, except as conducted pursuant to the RMP; and
- o Complies with the RMP for soil and groundwater management, maintenance of ground covers, mitigation during earthwork, management of below grade structures, and construction dewatering.

The remedial action objectives were based on commercial and industrial land uses. Since residual chemicals in soil and groundwater at the site render the property not suitable for unrestricted use, five-year statutory reviews are required for the Building 99 Soil RAP Site. The trigger date for a statutory five-year review was the mobilization date of first remedy implementation for the Oakland Gateway Development Area project (i.e., Building 1 RAP Site on November 28, 2005). Therefore, DTSC should review and approve the first statutory five-year review report on or before November 28, 2010. As a result, DTSC shall receive the first draft Five-Year Review Report in May 2010.

B. Have post-closure plans been prepared and approved by DTSC?  
Yes \_\_\_\_\_ No X  
Post-closure plan is not required or necessary for this site.

C. What is the estimated duration of post-closure (including operations and maintenance activities) activities?

Unless ended in accordance with the *Covenant to Restriction Use of Property, Environmental Restriction*, by law, or by DTSC in the exercise of its discretion, the covenant and five-year review requirements shall continue in effect in perpetuity.

D. Are deed restrictions proposed or in place? Yes X No \_\_\_\_\_

If yes, have deed restrictions been recorded with the County recorder?

Yes X No \_\_\_\_\_ Date: August 8, 2003

If no, who is responsible for assuring that the deed restrictions are recorded?

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Who is the DTSC contact person?

Henry Wong, (510) 540-3770

Name/Phone Number

E. Has cost recovery been initiated? Yes X No \_\_\_\_\_

Has DTSC received all payments? Yes \_\_\_\_\_ No X

If yes, amount received \$ \_\_\_\_\_; \_\_\_\_\_% of DTSC costs billed.

On November 13, 2008, DTSC determined that the Army has failed to meet certain obligations of the Memorandum of Agreement (MOA) entered into between the Army, DTSC, RWQCB in April 2003. Specifically, the Army has failed to provide funds for DTSC and RWQCB oversight under Section 27.1 of the MOA. Section 27.1 requires that oversight funds will be "... provided through the Defense/State Memorandum of Agreement (DSMOA), executed August 21, 1992 ... or some other appropriate mechanism as agreed upon by the parties..."

To date the Army has provided no alternative mechanism for payment of oversight costs to DTSC and RWQCB. Accordingly, DTSC and RWQCB have not been paid for oversight costs since July 2008.

F. Were local planning agencies notified of the cleanup action?

Yes X No \_\_\_\_\_ If yes, the name and address of agency:

Mark Arniola, P.G.  
Environmental Program Specialist  
Public Works Agency  
Environmental Services Division  
City of Oakland  
250 Frank H. Ogawa Plaza, Suite 5301  
Oakland, California 94612-2034  
(510) 238-7371  
[marniola@oaklandnet.com](mailto:marniola@oaklandnet.com)

**15. Expenditure of Funds and Source:**

(Information to be supplied by Accounting Unit)

Funding Source and Amount Expended:

_____	HWCA	\$ _____	_____	HSA	\$ _____
_____	HSCF	\$ _____	_____	RCRA	\$ _____
_____	RP	\$ _____	_____	Other	\$ _____
_____	Federal Cooperative Agreement \$ _____				

- 16. Problems Encountered Which Caused Major Delays:** None.
- 17. Accomplishment Unique to the Project:** None.
- 18. Final Use of Site:** The Port of Oakland plans to develop the site for commercial and/or industrial land uses.