



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

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



Table of Contents

1. PROJECT OVERVIEW & SITE PLAN.....	1
2. SCA AIR-1: Construction Management Plan	2
2.1 Requirements	2
2.2 CMP Response	2
3. SCA AIR-2: Construction Related Air Pollution Controls	2
3.1 Requirements	2
3.2 Dust Control Mitigation Plan	4
3.3 Emission Control Mitigation Plan.....	6
3.4 Idling Policy	7
3.5 Reporting and Labeling	8
3.6 Restrictions on Adding Vehicles.....	8
3.7 Enforcement	9
Exhibit A – Speed Limit Sign.....	10
Exhibit B – Complaint Sign	11
Exhibit C – Idling Policy Sign	12

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.

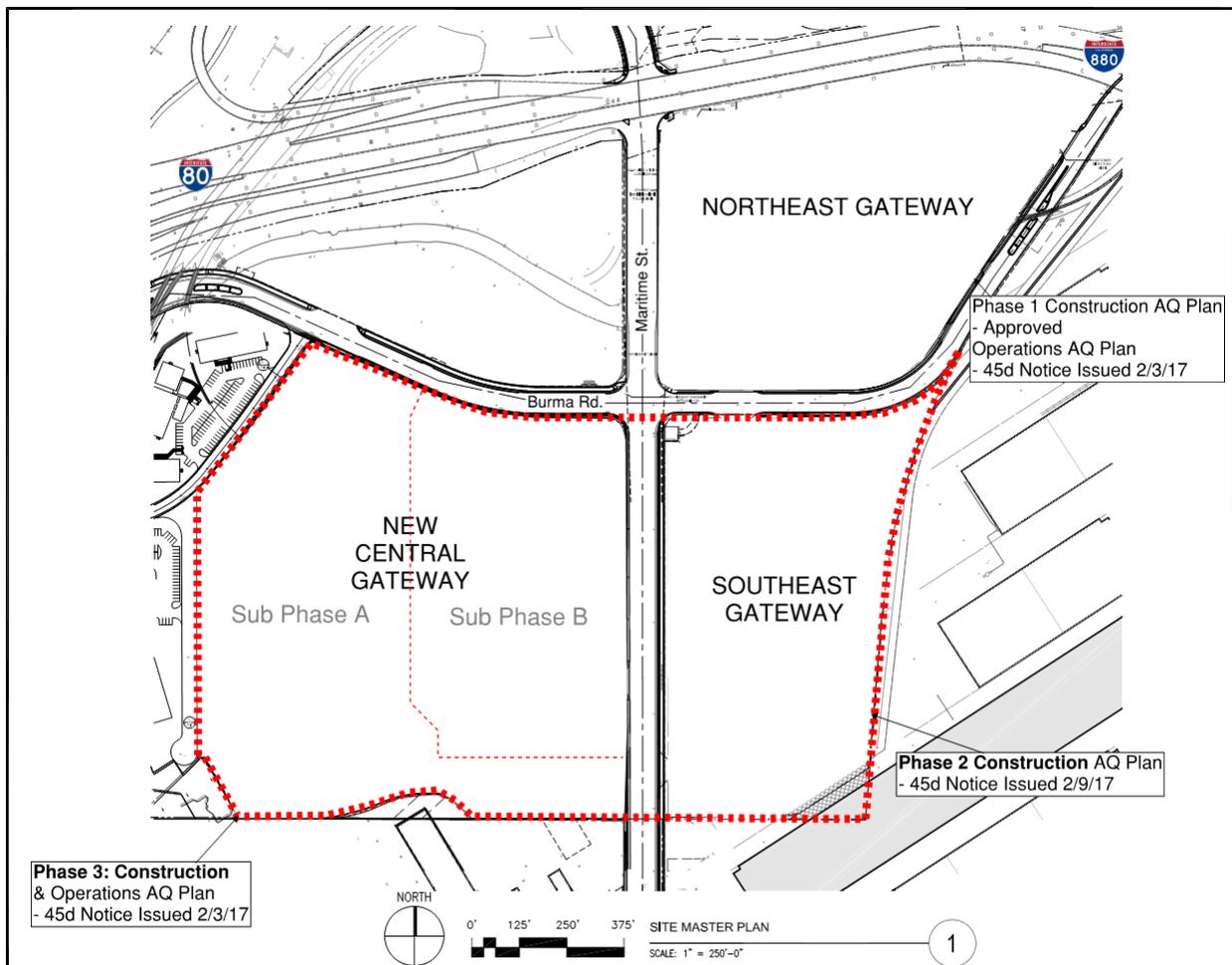


Figure 1 - Prologis Master Site Plan

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

