

Prologis Oakland Global Logistics Center

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Diesel Emission Reduction and Air Quality Plan for Operations of the ConGlobal Container Depot and Repair Site

Address: 11 Burma Rd, Oakland, CA

Site Ref: CC-1, New Central Gateway Parcel

Submitted on:

v.0 - Jul. 20, 2017 v.1 - Feb. 2, 2018 v.2 - Mar. 7, 2018 v.3 - Mar. 26, 2018





Table of Contents

1. INTRODUCTION	1
1.1 Purpose of this Diesel Emission Reduction and Operational Air Quality Plan for the Operati	
2. PROJECT DESCRIPTION	2
2.1 Description of Operations	3
3. SCA/MMRP REQUIREMENTS	6
4. DIESEL EMISSION REDUCTION AND AIR QUALITY PLAN	7
4.1 Truck and Equipment Diesel Emission Reduction Program	7
4.2 Sustainable Design and Construction	8
4.3 Transportation Control Measures & Parking/Transportation Demand Management	10
4.4 Participation in Emissions Reduction Demonstration Projects	10
5. CONCLUSION	11
Appendix A – BAAQMD Paint Permit	12
Appendix B – Equipment List	13
Appendix C – No Idling Signage	14

1. INTRODUCTION

Prologis is the leading global owner, operator, and developer of logistics real estate. We serve manufacturers, retailers, e-commerce businesses, transportation companies, and logistics providers with the facilities that support local, regional and global trade. Our buildings are located close to transportation infrastructure such as railways, seaports, highways, and airports. We provide our customers with best-in-class facilities and have a long history of industry-leading corporate governance and transparency.

As the ground lessee of 58 acres of the City's former Oakland Army Base site (OAB) property for the next 66 years, we intend to be good stewards of the land, and recognize the concerns of the West Oakland community we and our tenants will operate in. Prologis is also committed to the success of our business and the success of our customer's businesses who occupy our sites. In order to achieve the goals that improve air quality, coordination and collaboration from all stakeholders will be required - to plan and implement initiatives that are impactful, but also practical and feasible.

1.1 Purpose of this Diesel Emission Reduction and Operational Air Quality Plan for the Operations of the ConGlobal Container Depot Site

The purpose of the Operational Air Quality (AQ) Plan is multifaceted:

- To provide clarity and determine applicability of Project Standard Conditions of Approval and Mitigation Measures (SCA/MMs) related to air quality and diesel emission reduction.
- To provide guidelines and set expectations for our Project tenant(s); serve as a road map that tenants must use as programmatic-level design and operations parameters.
- To provide a documented path of compliance for the SCA/MMs relating to air quality and MM PO-1, which involves public outreach to various stakeholders.

The Oakland Army Base Redevelopment (OARB) project was approved in 2002, and then refined with an Initial Study/Addendum in 2012. In both of these documents, the goals and mitigations were very broad, attempting to cast a wide net over a master plan level development that was still in the conceptual stage. One of the objectives of this Diesel Emission Reduction and Operational Air Quality Plan (Plan) is to clarify and distill which requirements apply to this particular Project, and clarify any vagueness in the applicable SCA/MMs.

This document provides programmatic-level requirements, design, and operating parameters for ConGlobal regarding reducing diesel emissions, improving air quality and promoting energy conservation. ConGlobal will be required to demonstrate how compliance is achieved on the specific user level.

Compliance with the Operational AQ Plan will be deemed compliance with the Project SCA/MMRPs. The City of Oakland, as lead agency, will be the approving body determining compliance.

2. PROJECT DESCRIPTION

Prologis' Oakland Global Logistics Center consists of three sites totaling 58 acres within the City's portion of the former Oakland Army Base. The subject of this Diesel Emission Reduction and Operational Air Quality Plan is the 16.5-acre ConGlobal Oakland depot site situated on a portion of the former Oakland Army Base referred to as the **New Central Gateway.** Prologis will sublease 16.5 acres of the New Central Gateway to ConGlobal for the Project described herein. The ConGlobal Project is expected to commence construction in Q1 2018 and be under operation in Q3/Q4 of 2018. See Figure 1 for site plan.

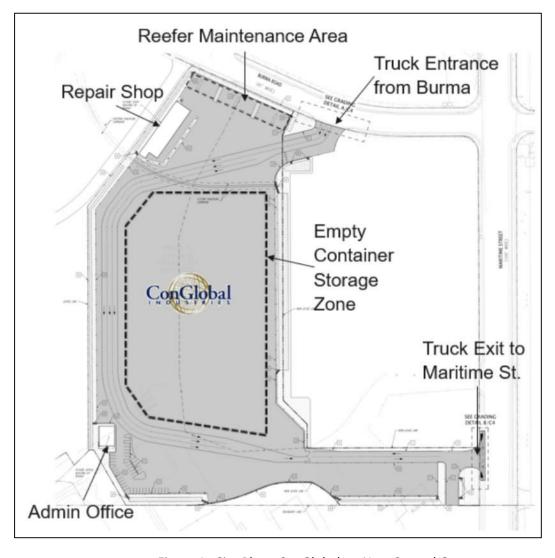


Figure 1: Site Plan - ConGlobal on New Central Gateway

2.1 Description of Operations

ConGlobal - Oakland is a container depot provider serving the shipping, trucking, logistics, and other transport-intermodal related industries. ConGlobal is currently a tenant within the Port of Oakland, located on a 27 acre facility at 555A Maritime St (near 7th St). The Port is downsizing ConGlobal's current lease area and ConGlobal plans to relocate approximately 60% of their operations to Prologis' New Central Gateway site at 11 Burma Rd.

This 16.5-acre site will essentially be a large paved parking lot, and will be used to store empty containers, stacked up to 6-high (approximately 55 feet in total height), as well as undertake minor repairs and touch up painting to containers, as needed. There will be a small administrative office (+/- 2,500 sf) to manage and oversee the container storage operations, and a metal shed-type "shop" building (+/-8,650 sf), where container repair and touch-up painting will be performed. Adjacent to the shop building, containers are washed with potable water from EBMUD in combination with a recycled ("gray") water system that stores and filters the recycled water for re-use.

ConGlobal's day to day operation at this site will primarily consist of accommodating trucks that are dropping off or picking up empty shipping containers. When trucks enter the site from the dual-lane driveway on Burma Rd, they drive to the administrative building, which is placed deep into the site to allow for ample on-site queuing if needed (3 lanes, approximately 700 ft per lane). At the administrative building, with the truck engine turned off and not idling, the driver goes through a 5 minute check-in process where he /she is assigned a specific location on-site to drop off or receive their container load. At the Administrative office, CARB certification is verified by accessing the CARB database. Trucks are not allowed to enter if the database search determines the truck is not certified with CARB or does not meet the Drayage standards at the Port. The site plan shown in Figure 1 has been intentionally designed so that the drop off and pick-up area is located in one portion of the site, which is more efficient than ConGlobal's current operations at their other Port location, where trucks must go to various areas within the site. ConGlobal's cargo handling equipment (CHE) operators then transport the empty container to or from the truck/chassis using side handling equipment. After the empty container is fully secured or removed, the driver then proceeds to exit the site via a driveway onto Maritime Street and the cargo handling equipment is then used to drop or pick the next load.

The following additional activities will be performed inside the maintenance shop building:

- Container repairs and custom modifications.
- Touch up and minor painting of containers. This will be done with rollers and waterborne paint using low VOC products. All paint and painting operations shall be per an active Bay Area Air Quality Management District (BAAQMD) "permit to operate." See Appendix A for an example of ConGlobal's 2017 permit from the BAAQMD.

The following additional activities are performed outdoors on the site:

- Container washing will be performed at the site. ConGlobal uses a system whereby water used in washing is re-used several times until such time as no longer effective in washing containers.
- Maintenance, repair and temperature setting for refrigerated containers (reefers). This will
 occur outdoors, adjacent to the maintenance shop, in the portion of the parking area
 shown on the site plan (See Figure 1)
- Chassis storage, repairs and Federal Motor Carrier Association (FMCSA) service. This will
 occur outdoors.

2.2 Equipment List

ConGlobal will use the following off-road equipment to operate this container storage and maintenance facility:

- four (4) cargo handling equipment (side-pick handlers)
- two (2) forklifts
- one (1) yard hostler

See Figure 2 for photos of the equipment being used at their existing Port of Oakland operations.

The four cargo handlers and two fork lifts will be relocated from their current site at 555A Maritime Street, at the Port of Oakland.

The four cargo handlers are equipped with 2014 to 2016 model year engines —All are Tier 4i or Tier 4 final (this is a rating for off-road diesel engines; tier 4 is the highest current standard).

The two forklifts will be propone or Tier 4 or Tier 4i diesel. Electric forklifts for this operation are encouraged when economically feasible and practical.

The yard hostler/yard truck is equipped with a 2016 model year engine and is Tier 4. ConGlobal has also applied for a voucher to purchase and locate an all-electric "Orange EV" yard hostler on the 11 Burma Rd site. ConGlobal will deploy this all-electric yard truck onsite as soon as available.

All equipment is and will remain registered with the California Air Resources Board.

See Appendix B for a more detailed information about this Equipment List.

ConGlobal has recently applied for a voucher from BAAQMD for an electric yard hostler, which if granted, would be deployed at this site.



Truck queue



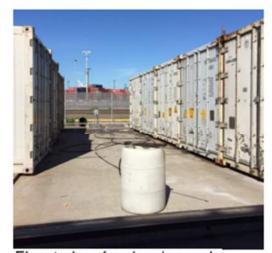
Container pick up/drop off



Reefer plug ins



CHE in operation



Elevated reefer cleaning pads



Chassis storage and movement

Figure 2 - Photos of Existing ConGlobal Operation at 555A Maritime St.

3. SCA/MMRP REQUIREMENTS

The California Environmental Quality Act (CEQA) review process for the OARB project at master plan level resulted in the Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCA/MMRP), which was based on the Initial Study/Addendum (IS/A) prepared for the 2012 OARB Project. The revised and final version of the SCA/MMRP was approved by the City Council on July 16, 2013 and supersedes the previous version (dated October 15, 2012).

This Diesel Emission Reduction and Operational AQ Plan will address conditions of approval and mitigation measures identified to be part of the stakeholder engagement process detailed in mitigation measure public outreach one (MM PO-1). See Appendix A for full text from the applicable pages in the 2013 SCA/MMRP.

Table 1 below lists the air quality related SCA/MMs from MM PO-1. Under direction from the City, Prologis bifurcated these SCA/MMs into construction vs. operational requirements. Prior to approving the sitework and building permits for the Project, the City will approve the Construction Management Plan, which addresses the construction related air quality SCA/MMs. This document focuses on the items below with the response method labeled with "Ops Plan."

Table 1: Summary of Response to MM PO-1 Stakeholder Items

SCA/MM#	Description	Response Method
AIR-1	Construction Management Plan	Construction Mgmt Plan
AIR-2	Construction Related Air Pollution Controls	Construction Mgmt Plan
TRANS-2	Construction Traffic & Parking	Construction Mgmt Plan
MM 4.3-13	Traffic Control Plan – Hazmat	Construction Mgmt Plan
MM 4.4-6	Energy Conserving Fixtures/Design	Ops Plan
MM 4.3-7	Truck Management Plan	Fair Share Plan
MM 4.4-4	Truck Diesel Emissions Reduction Plan	Ops Plan/Fair Share Plan
MM 4.4-5	Transportation Control Measures	Ops Plan/Fair Share Plan
TRANS-1	Parking and Transportation Demand Mgmt	CMP/Ops Plan/Fair Share Plan
MM 5.4-1	Demonstration Projects	Ops Plan
MM 4.4-3b	Maritime/Rail Related Emissions	NOT APPLICABLE*

^{*}MM4.4-3b applies only to West Gateway and Railroad ROW; Prologis is not a party to these areas.

4. DIESEL EMISSION REDUCTION AND AIR QUALITY PLAN

There are five components of the Operational Air Quality Plan where ConGlobal will demonstrate compliance (parenthetical indicates which SCA/MM each element addresses):

- 4.1) Truck and Equipment Diesel Emission Reduction Program (MM 4.4-4)
- 4.2) Sustainable Design and Construction (SCA TRANS-1, MM 4.4-6)
- 4.3) Transportation Control Measures and Parking/Transportation Demand Management (SCA TRANS-1, MM 4.4-5)
- 4.4) Encourage, Lobby, and Participate in Emission Reduction Demonstration Projects (MM 5.4-1)
- 4.5) Technology Review Program

4.1 Truck and Equipment Diesel Emission Reduction Program

The requirements listed below will reduce the diesel emissions including diesel particulate matter and nitrogen oxides produced during the operation of this container depot and repair facility.

- **4.1.1)** Drayage Trucks¹ If a truck entering ConGlobal is transporting a container directly to or from the Port of Oakland or an intermodal rail yard, the trucks doing so must comply with the Drayage Truck Regulation (DTR) administered by the California Air Resources Board (CARB). See California Air Resource Board's Drayage Truck Regulation for more details, including truck engine year requirements and truck registry requirements.
- **4.1.2) On-Road Trucks** Trucks entering the ConGlobal's facility which are not transporting containers directly to or from the Port of Oakland or an intermodal rail yard must comply with the Truck and Bus Regulation administered by CARB.
- **4.1.3) Cargo Handling Equipment** (CHE)- All CHE (eg. side handlers/yard hostlers/exterior forklifts) shall meet Tier 4 or Tier 4i standards, be propose or electric. See attached Appendix B for equipment list. Such equipment is also allowed to be powered by alternative fuels.
- **4.1.4) Material Handling Equipment (MHE)** ConGlobal currently does not plan to operate any MHE at this site. In the event that changes in the future, all MHE (eg. forklifts/reach trucks) shall be electric with capability to charge from building power.
- **4.1.5) Idling Rules** All trucks and cargo handling equipment shall be prohibited from idling more than two (2) minutes when loading and unloading, staging, or when not in active use for extended periods of time. Trucks shall be required to be shut off while any driver is accessing the Administrative Building. Signage similar to Appendix C, No Idling Signage, shall be posted in several locations along the entry drive.

¹ Drayage trucks are defined by CARB as diesel-fueled Class 7 or Class 8 Trucks with gross vehicle weight rating 26,001 lbs. or more that transport cargo, containers, or chassis to or from a port or intermodal rail yard in CA.

- **4.1.6) Truck Appointments** If idling times become longer than two minutes while trucks are waiting to check-in at the Administration Building, then ConGlobal shall create and utilize an appointment system so that queuing and truck idling times are minimized and reduced to two minutes maximum.
- **4.1.7) CARB Compliance** Compliance with applicable air quality regulations is required for all heavy duty-diesel trucks accessing the Site including the California Air Resources Board's (CARB) Tractor-Trailer Greenhouse Gas Reduction Regulation, Period Smoke Inspection Program, Drayage Regulation or Truck and Bus Regulation. Fleets shall provide proof of compliance through CARB certificates of compliance and copies of annual smoke test results.

Additionally, compliance with all applicable CARB regulations for off-road equipment used on the site is required.

4.1.8) Maintenance of off-road equipment All off-road equipment shall be properly serviced such that the Tier 4 or Tier 4i emission standards are maintained throughout the life of the equipment.

4.2 Sustainable Design and Construction

Sustainable design has a beneficial impact on long term emissions and air quality, and is required per Mitigation Measure 4.4-6. ConGlobal will comply with the following:

4.2.1) Title 24 Compliance - New proposed administration building shall meet Title 24 (Building Energy Efficiency Program) of the International Building Code (IBC)/California Code of Regulations (CCR) to satisfy Mitigation Measure 4-4.6. This will be incorporated into the design of the administration building and verified by the City of Oakland as part of the building permit application.

The proposed maintenance shop will be an open-sided structure, with a roof, three walls and an open façade on the east side of the building. Since it is an open structure, per the IBC and CCR, Title 24 is not applicable. Even though Title 24 is not applicable, several energy efficient measures will be undertaken: The roof will be equipped with sky lights to reduce the need for lighting. All lighting that is installed will be LED. Ventilation will be natural, not mechanical, with openings on the west façade to allow natural air flow and ventilation.

See Figures 3 and 4 for "draft conceptual" designs of these structures.



Figure 3 – Proposed Administration Building, approx. 2,500 sf



Figure 4 - Container Maintenance Shop Building, approx. 8,650 sf

- **4.2.2)** Electrical infrastructure for charging electric equipment Ample power is planned for the site to accommodate the future potential for electrical charging of equipment. As ConGlobal is an outdoor equipment user, power is taken to above ground switch gear with enough excess capacity to easily add future equipment charging capabilities.
- **4.2.3)** Electrical Power for Servicing and Repairing Refrigerated Containers In the area of the site where repair and servicing of refrigerated containers will take place, electrical power connections will be installed so that these containers can be plugged into the electrical grid during testing and repair. Since these containers are stored here empty, they only need to be plugged in during service and repair. Adequate plug in locations will be provided. All refrigerated containers or their refrigeration equipment will be plugged into electrical power during servicing; no diesel engines shall be allowed to run.
- **4.2.4) BAAQMD Permit for painting** ConGlobal shall continue to renew their existing BAAQMD permit for their paint operations. All paint will be low VOC and applied with rollers. Existing permit attached as Appendix A.

4.3 Transportation Control Measures & Parking/Transportation Demand Management

BAAQMD has identified Transportation Control Measures (TCMs) in MM 4.4-5 that could be initiated and implemented by the City and the Port for the OARB project as part of a fair share program with the Port and other developers.

4.3.1) Transportation Control Measures

Separate from a fair share program, the Project will implement BAAQMD TCMs 9, 11, and 13 per MM 4.4-5:

- 9 Preferential parking for carpool and vanpool vehicles are provided.
- 11 Secure, weather protected bicycle parking is provided via bike lockers.
- 13 Showers and lockers will be part of the Administration building per the LEED Addendum detailed in Appendix B.
- **4.3.2)** Fair Share Participation In addition, ConGlobal may be required to contribute to fair share funded TCM programs, as described in MM 4.4-5. City shall take lead on establishing Fair Share Plan, and implementing a fair and equitable allocation amongst projects.
- **4.3.3) Parking and Transportation Demand Management** ConGlobal shall prepare and implement a Parking and Transportation Demand Management Plan per SCA TRANS-1, consistent with the number of onsite employees, with the goal of reducing drive-alone commute trips during the peak traffic periods. Approximately 25 employees will work at this site during a typical workday shift.

4.4 Participation in Emissions Reduction Demonstration Projects

In order to prioritize the potential for further emissions reductions resulting from operations, ConGlobal shall demonstrate active involvement in evaluating newer technologies and participation in demonstration projects.

ConGlobal shall consider, evaluate, and potentially participate in emission reduction demonstration projects that promote technological advances in improving air quality. Examples of some demonstration projects include: hybrid electric yard hostlers, biodiesel powered yard equipment, CNG/LNG technology implementation, energy generation via mechanical systems using truck weight to generate electricity.

ConGlobal is encouraged to suggest innovative and cleaner technology from operations in other locations where ConGlobal may work in.

ConGlobal has recently applied for and has been approved for a voucher from State of California for an electric yard hostler to be deployed at this site. The purchase is awaiting final Internal Board Approval at ConGlobal. The infrastructure necessary to support this electric equipment is planned and approved to be installed as part of the improvements done per permits approved by City of Oakland.

4.5 Technology Review Program

ConGlobal shall use cleaner technologies over time as it becomes available, practical and economically feasible. To accomplish this, ConGlobal shall review new technology every three years and with equipment turnover (prior to the lease or acquisition of additional or replacement off-road equipment) for zero or near-zero equipment that is economically feasible and practical. If the technology review demonstrates that new technology/equipment will be effective in substantially reducing emissions and ConGlobal determines that use of this technology or equipment is feasible, then ConGlobal shall implement such technology.

5. CONCLUSION

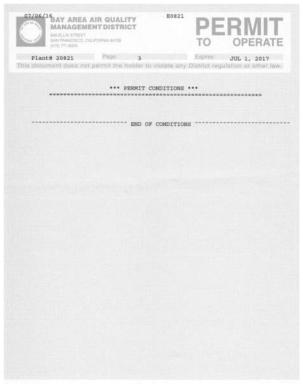
This Operational Air Quality Plan accomplishes goals consistent with the BAAQMD guidance of:

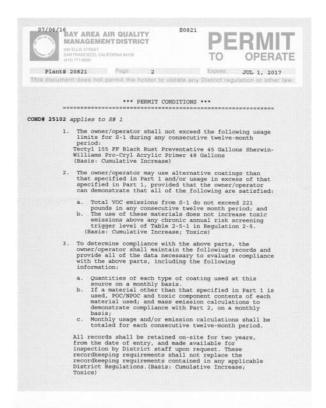
- Meeting the spirit and letter of the mitigation program
- · Providing measurable, quantifiable, results
- Protecting health of nearby workers and residents

Prologis and ConGlobal look forward to working with the City and other stakeholders to meet the Project compliance and mitigation goals.

Appendix A - BAAQMD Paint Permit







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N:/EnvPlan/Air quality/2017 Emissions Inventory/CHE Survey

Please submit survey information to Diane Heinze

Note: Equipment shown in boxes will be brought over to the OAB New Central Gateway site. No tier 3 equipment shall be brought over.

Appendix C – No Idling Signage





