Attachment A

City Administrator's September 23, 2019 Approval of Air Quality Plan for Operations of the Good Eggs facility at the former Oakland Army Base



INTER OFFICE MEMORANDUM

**TO:** Sabrina B. Landreth City Administrator **FROM:** William Gilchrist Director, Planning & Building

SUBJECT: Air Quality Plan for Operations of the Good Eggs Facility, 2000 Maritime Street, Suite 200 at the former Oakland Army Base DATE: September 10, 2019

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City Administrator	X	Date	0	100		
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#### **RECOMMENDATION**

Approve the operations-related Air Quality Plan ("Air Quality Plan" or "Plan"), version dated August 28, 2019, for the Good Eggs facility to be located at 2000 Maritime Street, Suite 200 in the Southeast Gateway area of the former Oakland Army Base (OAB).

## EXECUTIVE SUMMARY

Prologis Mesquite LLC (Prologis), one of the developers of the Oakland Army Base redevelopment project, in association with its sublessee, Good Eggs, Inc., has prepared an Air Quality Plan to reduce air quality impacts during operation of the Good Eggs facility that will be located at 2000 Maritime Street on the Southeast Gateway parcel of the former Oakland Army Base. The mitigation measures for the Oakland Army Base Project require City Administrator approval of the Air Quality Plan.

#### BACKGROUND

The Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCA/MMRP) identified in the 2012 Initial Study (IS)/Addendum for the OAB Project (Project) contains mitigation measures for reducing the potential environmental impacts of the Project, including requirements for the preparation and implementation of 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 mitigation measures and requires City Administrator approval of these plans.

In 2013, 2016 and 2017 the City Administrator approved plans to comply with air quality mitigation measures for construction of the public infrastructure and for construction of various private improvements at the OAB, including construction of the Good Eggs site. The subject of this memorandum and of the submitted Air Quality Plan is for the Good Eggs operations rather than construction.

The Air Quality Plan for Good Eggs is the third operational plan that has been submitted for the new development at the OAB. In May 2018, the City Administrator approved an air quality plan for operations of the first new warehouse at the OAB, located at 55 Admiral Toney Way, occupied by the company called PODS (personal storage on demand). In December 2018, the City Administrator approved an air quality plan for operations of a shipping container storage/repair facility operated by ConGlobal.

Good Eggs is currently operating a facility in San Francisco and will open a separate facility occupying a portion (116,246 square feet) of a Prologis warehouse referred to as CE-2 at 2000 Maritime Street on the OAB. Good Eggs will operate its Oakland facility in similar fashion to its San Francisco facility. A location map as well as a more detailed description of the operations is included in the Air Quality Plan.

## CONTENT OF THIS AIR QUALITY PLAN AND SUMMARY OF THE PUBLIC INPUT PROCESS

Good Eggs is an online grocery and meal kit delivery service that provides fresh local produce, meal kits, grocery staples and beer, wine and spirits. These products are provided as a same day delivery service. Products are delivered to the Good Eggs facility by local and regional companies using gasoline powered box trucks, vans, cars and some diesel semi-trucks. Approximately 50% of the semi-truck deliveries and 65% of box truck deliveries arrive in vehicles equipped with transport refrigerated units (TRU's). Electrical outlets will be provided at the loading docks located near the refrigerated portion of the facility. Trucks equipped with TRU's that are capable of plugging into electric power can use these electrical outlets to power the TRU while loading and unloading instead of using diesel or gasoline. On site, cold-food products would be stored in refrigerated and freezer space occupying approximately 36,000 square feet of the facility. Good Eggs is installing a state-of-the-art CO2 refrigeration system which does not use high global warming potential refrigerants. The CO2 used in the system is extracted from the atmosphere resulting in 100 percent reduction in greenhouse gases compared to installing typical hydrofluorocarbons (HPC) based systems. On site equipment, like forklifts, will be 100% electric.

On February 15, 2019, Prologis submitted its first draft of this Plan to the City. On February 27, 2019, the City released a 45-day Notice of Preparation of the draft Air Quality Plan to the official stakeholder list per Mitigation Measure PO-1. The intent of this Notice of Preparation is to provide advance notice before the Plan is released for an official 17-day public review period.

On April 1, 2019, the City held a quarterly meeting attended by air quality stakeholders, including community-based organizations, community residents, and interested government air quality agencies. Prologis and Good Eggs made a presentation, including a detailed description of Good Egg's operations, presented the components of the Air Quality Plan (March 8, 2019 draft version) and described how such components were based on the list of emission reduction actions developed by the staff of the Bay Area Air Quality Management District (BAAQMD) to the extent applicable. The specific diesel emission reduction actions contained in the draft Plan were presented and discussed, so as to provide information and input prior to release of the draft Plan for the official 17-day public review period.

Prologis revised the draft Plan following input from the Stakeholder meeting and submitted a revised draft Plan on April 23, 2019 (see *Attachment A*).

On April 30, 2019, the draft Plan shown in Attachment A was released to stakeholders for the official 17-day public review period public as required by Mitigation Measure PO-1. The City received comments from BAAQMD and California Air Resources Board, as well as the comments stated at the Stakeholder meeting (see *Attachment B*). The comments are summarized and discussed in the "Key Issues" section below.

Following the end of the public review period, City staff met with Prologis to discuss enhancements to the draft Plan to address the comments from the air quality agencies and comments stated at the quarterly stakeholder meeting. In response to these comments, Prologis revised the Plan. The latest version of the Air Quality Plan, dated August 28, 2019 is attached (see *Attachment C*) along with City staff responses to the public comments on the previous version of the draft Plan (see *Attachment D*).

#### KEY ISSUES

The purpose of this Air Quality Plan is to reduce diesel emissions during operations of the Good Eggs facility. Emissions during these operations are generated from diesel trucks transporting food and beverage related products to and from the site and from the fork lifts and other off-road equipment used to transport and store these products.

Public comments received on the draft Air Quality Plan focused on the following subjects, which are summarized 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.

- <u>Require City coordination with stakeholders when a change in tenant lease or operations</u> <u>occurs</u>: The City agrees that communication with stakeholders is important. Stakeholder notification is provided in Section 2.3 of the Plan for significant changes, and Section 2.2 of the Plan was revised to add stakeholder notification.
- <u>Require Technology review every two years</u>: Section 4.3 of the Plan requires Good Eggs to review new technology every three years and with equipment turnover, meaning prior to acquisition of, or lease of, new equipment. This standard was required of prior lessees. The City believes this timing cycle is appropriate and it would be impractical to reduce it to every two years, as Section 4.3 of the Plan also states that the technology will be implemented within 12 months, if found to be available, practical, and economically feasible.
- <u>Calculate Operational emissions for ROG, NOx and PM (including emissions from TRUs)</u>: Section 4.6 and Exhibit A of the Plan was revised as requested and includes the estimated annual NOx emissions associated with the Good Eggs operation. The Plan also includes annual estimates of operational emissions ROGs and PM (PM10 and PM2.5), including from TRUs, even though the entire OAB Redevelopment Project was found to be substantially below BAAQMD's 1999 and current annual thresholds of significance for ROGs and PM, as shown on Table 3.3-8 of the 2012 OAB IS/Addendum.
- <u>Calculate diesel PM at OAB Project build-out with and without diesel PM reduction</u> <u>measures</u>: An analysis of diesel PM without the mitigation measures of the AQ Plan is included in the 2012 IS/Addendum for the entire OAB project (in Table 3.3-8); and the results of the emissions with the Plan measures is shown on Exhibit A of the Plan.
- <u>Calculate truck trip distance from farms as a function of diesel emission estimates</u>: Good Eggs suppliers are generally local distributors that change throughout the years and seasons. It is too speculative to identify specific farms or suppliers. Rather, the analysis conforms to the 2012 IS/Addendum in order to provide consistency and comparison.
- Extend stakeholder review and comment period of Air Quality Plan: The 45-day stakeholder review period is intended to give stakeholders advance notice that an Air Quality Plan is being prepared and will be available for public review. At the end of the 45-day notice, or shortly thereafter, the draft Plan is then released for 17-day review and comment period. This 17-day review period is consistent with the required mitigation measure, prior air quality plans for the OAB, and many other public review and comment processes in the City, with City policy to establish the same duration for public review and comment across City departments.

- <u>Good Eggs fleet and zero-emission vehicles</u>: The City agrees, and Good Eggs has committed that the company-owned fleet is non-diesel (see Plan Section 2.1). In addition, Good Eggs has agreed to work to convert its box truck fleet from gasoline to electric when such vehicles can meet their operational needs, currently anticipated for the year 2021 (see Plan Section 2.1). As required in the Plan, Good Eggs must undertake a technology review every three years and implement new feasible technology per Plan Section 4.3.
- Require all trucks to exceed standards for truck diesel emissions from the start of . operations: The statewide Truck/Bus Rule require trucks to meet 2010 diesel emissions standards in January 2020 with a phase-in until 2023. Any diesel trucks serving the Good Eggs facility must comply with this requirement. Further, to the extent Good Eggs receives cargo from the maritime terminals, the Drayage Rule will also apply, which is more stringent that the statewide Truck/Bus rule. Good Eggs' own fleet of out-bound delivery trucks will not be diesel. However other trucks delivering food and supplies to the Good Eggs facility are not owned or operated by Good Eggs. These trucks are owned and operated by independent operators, suppliers or third-party trucking companies. Most of these delivery trucks are also non-diesel (see AQ Plan Section 2.1). Requiring trucks serving this facility to exceed the statewide regulations for this site prior to the date of the statewide regulation is not feasible, which, for the purposes of CEQA, means capable of being accomplished in a successful manner taking into account economic, environmental, legal, social and technological factors, because Good Eggs does not own the in-bound delivery fleet. Also note that per Section 4.1.7 of the Plan, Good Eggs is required to verify compliance with the CARB regulation during any audit per Table 2.
- <u>Require TRU's and electrical plug-ins at the loading dock</u>: The City agrees, and the Plan is revised to require the installation of electrical plug-ins for transport refrigeration units (TRU's) at the 4 loading dock stalls that serve the refrigerated portion of the warehouse. Section 4.1.5 of the Plan has been revised to require Good Eggs to be responsible for ensuring use of electrical outlets during loading and unloading for all refrigerated vehicles that are electric-capable.
- <u>Require zero emission cargo and material handling equipment</u>: The City agrees, and Section 4.1.8 of the Plan requires off-road equipment, such as forklifts, to be zero and near-zero emission equipment, which includes electric, alternative-fueled, propane, Tier 4 or Tier 4 interim diesel equipment. Section 4.2 (Participation in Emission Reduction Demonstration Projects) and Section 4.3 (Technology Review Program) all work together to get the lowest emission equipment in use at this site.
- <u>Require engine idling limits</u>: The City agrees, and per Section 4.1.4 of the Plan, inbound and out-bound delivery vehicles of all sizes are prohibited from idling more than 2 minutes while on site. Also, diesel powered TRU's are prohibited from idling more than 15 minutes while on site.

• <u>Require BART shuttle service</u>: Section 4.5.2 of the Plan requires that Good Eggs prepare an implement a Transportation Demand Management (TDM) Plan per SCA TRANS-1, consistent with the number of onsite employees, with the goal of reducing drive alone commute trips. The TDM Plan is required prior to certificate of occupancy and allows for the use of a combination of services, incentives and facilities to meet the reduction goals; therefore, although the City does not require a specific approach, like a BART shuttle, Good Eggs will need to meet the TDM requirements.

#### 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 City, the public and agencies. Staff 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 prepare an informational presentation to the City Council about the Air Quality Plan.

Please contact Alicia Parker, Environmental Coordinator for the OAB, at (510) 238-6538 if you have any questions.

WILLIAM GILCHRIST Director, Planning and Building Department

Reviewed by: Ed Manasse Deputy Director, Bureau of Planning

Prepared by: Corey Alvin Bureau of Planning

#### Attachments

- A. Draft Air Quality Plan for Operations of the Good Eggs Facility, prepared by Prologis, dated April 23, 2019
- B. Public Comment Letters Received in Response to Draft Air Quality Plan for the Good Eggs Facility (commenting on the version dated April 23, 2019)
- C. Air Quality Plan Operations of the Good Eggs Facility (August 28, 2019)
- D. City response to public comment letters, dated September 9, 2019

# Attachment B

Draft Operational Air Quality Plan for the Good Eggs facility (dated April 23, 2019)



# Prologis Oakland Global Logistics Center

Air Quality Plan for Operations of the Good Eggs Fulfillment Center

Prepared For:

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

#### Prepared By:

# Prologis

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Address: 2000 Maritime St, Suite 200, Oakland, CA 94607 Site Ref: CE-2, Southeast Gateway Parcel

Submitted on:

v.0 - March 8, 2019 v.1 - April 23, 2019





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# **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 will occupy our warehouse buildings at the OAB.

Working towards the goals for improved air quality will require coordination and collaboration from all tenants of these warehouses to plan and implement emission reduction actions that are impactful, practical, and feasible.

# 1.1 Purpose of this Air Quality Plan for Operations of the Good Eggs Facility

The purpose of this Air Quality Plan for Operations of the Good Eggs Facility at CE-2 Warehouse (Plan) is to:

- Provide clear direction for tenant of this warehouse regarding operation air quality and energy conservation requirements for Tenant Improvements (TI) and for on-going operations throughout the duration of their lease.
- Provide a documented path of compliance for the Standard Conditions of Approval/Mitigation Monitoring and Report Program (SCA/MMRP) relating to air quality and public outreach as outlined in Mitigation Measure PO-1, which involves public outreach to Oakland Army Base stakeholders.

The Oakland Army Base Redevelopment project was approved in 2002, and then revised with an Initial Study/Addendum in 2012 (OAB Project). 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 for the Good Eggs facility is to clarify and distill which requirements apply to operations of this particular facility, to clarify any vagueness in the applicable SCA/MMs and to comply with the mitigation measures.

1.1.1: This document applies to the tenant referred to as Good Eggs which will occupy the 116,246 s.f., a portion of the 232,785 s.f. of the Prologis warehouse at the Oakland Global Logistics Center, referred to as CE-2, address: 2000 Maritime Street.

1.1.2: The tenant is required to comply with all applicable state and regional air quality regulations and are required to implement the components of this document.

1.1.3: The tenant will be required to demonstrate how compliance is achieved on the specific user level.

1.1.4: This Plan will become a component of Tenant Lease documents.

1.1.5: The City of Oakland, as the lead agency under the California Environmental Quality Act (CEQA), will determine compliance with the applicable mitigation measures and will determine compliance with this Plan.

# 2. TENANT SUBJECT TO THIS PLAN

2.1 This Plan applies to the tenant referred to as Good Eggs which will occupy a portion 116,246 s.f.) of the Prologis warehouse referred to as CE-2, totaling 232,785 square feet located at 2000 Maritime Street. The shell of the building is anticipated to be completed in March 2019 with tenant improvements being completed by June 2019.

Description of Operations

- Good Eggs is an online grocery and meal kit delivery service that provides absurdly fresh local produce, meal kits for every occasion, grocery staples, and wine, beer, and spirits all delivered same day to Bay Area Homes.
- Receives deliveries by gasoline powered box trucks, vans, cars and some diesel semi-trucks.
- Roughly half the Semi-truck deliveries and 2/3 of the Box Truck deliveries arrive in refrigerated vehicles.
- Electrical outlets at the loading docks are installed so any trucks that are capable of plugging into power can run their refrigeration off of the electricity while loading and unloading.
- Approximately 36,000 square feet of the facility will be refrigerated or freezer space.
- Refrigerated product arrives in vehicles as described above.
- Good Eggs is using a state-of-the-art CO2 refrigeration system, which has 1,500 to 4,000 times less of a detrimental effect on the environment than that of traditional synthetic refrigerant.
- Good Eggs takes these deliveries and repacks them in the warehouse for delivery per customer orders.
- Products in the warehouse are moved by manually-propelled carts, racks, and pallet jacks; or on electric order pickers and fork lifts.

- At peak capacity, Good Eggs expects to send out 120 delivery routes on an average day. with a fleet of up to 40 vehicles. These vehicles will be 40% gasoline powered box trucks and 60% gasoline powered Sprinter / Transit vans. Each vehicle of the fleet will make 2-3 deliveries with the remainder of delivery routes taken in personal vehicles.
- Good Eggs expects to have a fleet of 15 vehicles at launch. There will be one gasoline box truck and the rest will all be gasoline Sprinter / Transit type vans
- Good Eggs hopes to have it's internal fleet fully electric by 2021 but that depends on availability and affordability of appropriate electric vehicles in the marketplace.
- Employee count: Good Eggs will launch with 50 employees for warehouse operations with peak capacity up to 300 employees, not including delivery drivers described above.

Inbound Deliveries by type and frequency (Avg / day) at Launch (2019):

Semi Truck - Diesel	6.85
Box Truck - Non-Diesel	21.74
Van or Car - Non-Diesel	32.43
Third Party Carrier	4.00

Inbound Deliveries by type and frequency (Avg / day) at peak capacity (2022):

Semi Truck - Diesel	10.14
Box Truck - Non-Diesel	25.57
Ice - Non-Diesel	1.00
Van or Car - Non-Diesel	32.43
Third Party Carrier	4.00

2.2. Upon termination of the Good Eggs lease, a different Air Quality Plan or an addendum to this Plan may be required as determined by the City of Oakland.

See Fig. 1 for Site Plan.



Figure 1: Site Plan – Overall Site showing building and Good Eggs' lease area subject to this Plan

2.3: If an amendment or exception to this Plan is requested or determined to be necessary, the City will evaluate the scope of the amendment/exception and shall determine the necessary process for undertaking such an amendment/exception. Stakeholder notification will be provided for amendments or exceptions which the City determines to be substantive.

# **3. SCA/MMRP REQUIREMENTS**

The Oakland Army Base Redevelopment (OARB) project was approved in 2002, and then revised with an Initial Study/Addendum in 2012. The City of Oakland prepared a Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCA/MMRP) for the OAB Redevelopment Project which was approved by the Oakland City Council on July 16, 2013 superseding a previous version dated October 15, 2012.

This Plan will focus on the air quality conditions of approval and mitigation measures (together "MM's") identified in the SCA/MMRP. The entirety of the SCA/MMRP is available on the City of Oakland website.

Table 1 below lists the air quality related MMs applicable to this tenant/building. Under direction from the City of Oakland (City), Prologis bifurcated these MMs related to air quality into construction vs. operational requirements. Prior to receiving the building shell and sitework permits for construction of this building, Prologis prepared (and the City approved) the Construction Management Plan, which addressed the construction related air quality MMs. The table below shows how the applicable air quality MMs are addressed. Additionally, it should be noted that SCA Air-3 applies only to buildings which will contain sensitive receptors (e.g., hospitals, schools, etc.) and MM4.4-3b applies only to maritime uses at the West Gateway. Good Eggs is a warehouse logistics facility, so it is not categorized as containing sensitive receptors and it is located inland, therefore MM Air-3 and MM 4.4-3b do not apply.

SCA/MM #	Description	Response Method
AIR-1	Construction Management Plan	Construction Mgmt Plan/Previously Approved
AIR-2	Construction Related Air Pollution Controls	Construction Mgmt Plan/Previously Approved
TRANS-2	Construction Traffic & Parking	Construction Mgmt Plan/Previously Approved
MM 4.3-13	Traffic Control Plan – Hazmat	Construction Mgmt Plan/Not Applicable
MM 4.4-6	Energy Conserving Fixtures/Design	Air Quality Operational Plan
MM 4.4-4	Truck Diesel Emissions Reduction Plan	Air Quality Operational Plan
MM 4.4-5	Transportation Control Measures	Air Quality Operational Plan
TRANS-1	Parking and Transportation Demand Mgmt	Air Quality Operational Plan
MM 5.4-1	Demonstration Projects	Air Quality Operational Plan

 Table 1: Summary of Air Quality Standard Conditions of Approval and Mitigation Measures, and the Response Method

 which addresses each one

# 4. Elements of this Air Quality Plan for Operations of the Good Eggs Facility

This Plan contains the following components:

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

## 4.1 Truck and Equipment Diesel Emission Reduction

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

## <u>Trucks</u>

**4.1.1) On-Road Trucks** – All diesel trucks with a gross vehicle weight rating over 14,000 pounds entering the site of this warehouse must comply with the Truck and Bus Regulation of CARB which is in effect at the time of operation of the truck(s).

**4.1.2)** Drayage Trucks<sup>1</sup> – Good Eggs is not a maritime operation as it relies on goods locally and sustainably derived. However, should Good Eggs receive cargo from the maritime terminals, an intermodal rail yard, or property of the Port of Oakland, the trucks doing so must comply with the Drayage Truck Regulation (DTR) of the California Air Resources Board (CARB) which is in effect at the time of operation of the truck(s). See California Air Resource Board's Drayage Truck Regulation for more details, including truck engine year requirements and truck registry requirements.

**4.1.4) Trucks with transport refrigeration units (TRUs)** – Roughly half the Semi-truck deliveries and 2/3 of the Box Truck deliveries arrive at the Good Eggs facility in refrigerated vehicles. Electrical outlets have been provided at the loading dock so any trucks that are capable of plugging into power can run refrigeration with electricity while loading and unloading. Good Eggs shall use "good faith" efforts to maximize the number of deliveries with plug-in refrigeration compatible delivery trucks with the goal of 100%. Good Eggs would be responsible for ensuring use of electrical outlets during loading and unloading.

<sup>&</sup>lt;sup>1</sup> 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.

**4.1.3) Idling Rules for all trucks** - All size and types of in-bound and out-bound delivery vehicles shall be prohibited from idling more than 2 minutes when loading and unloading or staging at this site. The idling rules shall be posted in easily-visible locations on-site and shall be enforced by Good Eggs.

**4.1.4) Management of Loading Docks or loading/unloading -** A dock management or loading/unloading system shall be developed specific to Good Eggs for delivery requirements to ensure that truck idling times do not exceed two minutes when the trucks are on site.

**4.1.5) Compliance with Truck Routes and with the West Oakland Truck Management Plan** – All trucks serving the Good Eggs warehouse must use designated truck routes to arrive and depart from this building. Additionally, such trucks shall comply with the West Oakland Truck Management Plan, upon its approval, or with other City-approved truck regulations in effect at the time of operation of the truck serving this tenancy.

#### 4.1.6) CARB Compliance for Trucks –

a. Compliance with applicable air quality regulations for commercial trucks and vans are required including, but not limited to, the CARB Tractor-Trailer Greenhouse Gas Reduction Regulation, Periodic Smoke Inspection Program, Statewide Truck and Bus Regulation or Drayage Regulation.

b. All truck fleets owned by Good Eggs, or under contract with Good Eggs to provide delivery services to/from this warehouse, shall provide proof of compliance through CARB certificates of compliance or copies of annual smoke test results.

## Off-Road Equipment used in the Good Eggs operation 4.1.7) Off-Road Equipment

a. Outdoor off-road equipment over 25 horsepower, including but not limited to yard equipment, exterior forklifts and pallet jacks, shall be zero and near-zero emission equipment. This includesTier 4i or Tier 4 diesel equipment (or equivalent if Tier system is not applicable to a particular piece of

equipment). Such equipment can also be electric, propane, bio-diesel, and alternative-fueled equipment.

b. Indoor off-road equipment including but not limited to interior forklifts, scissor lifts, pallet jacks and "order pickers" shall be electric, propane or alternative-fueled equipment.

c. Good Eggs shall submit an equipment list of all off-road equipment to be used both indoors and outdoors to demonstrate that zero and near-zero emission (including Tier 4 or 4i diesel equipment or equivalent) equipment, or electric, propane, bio-diesel or alternative-fueled equipment will be used during operations.

e. All off-road equipment shall be properly serviced and maintained throughout the life of the equipment.

f. Compliance with all applicable CARB regulations for off-road diesel equipment used at this site is required, including but not limited to the Diesel Off-Road Online Reporting System (DOORS) and the Equipment Identification Number (EIN).

g. Also see the section of this Plan related to the Technology Review Program.

**4.1.80) Idling Rules for off-road equipment** - Diesel off-road equipment shall be prohibited from idling more than 2 minutes when loading and unloading, staging, or when not in active use. See CARB regulation for in-use off-road diesel vehicles for clarification of what is considered idling. The idling rules shall be posted in easily-visible locations on-site.

# 4.2 Participation in Emissions Reduction Demonstration Projects

Good Eggs shall evaluate emission reduction demonstration projects that promote technological advances in improving air quality. Examples of some demonstration projects include but not limited to: CNG/LNG trucks energy generation via alternative systems electricity.

Good Eggs is encouraged to utilize innovative and cleaner technology/equipment from operations in other Good Eggs locations.

Good Eggs will provide contact information to the BAAQMD for receipt of information regarding grants, vouchers and other funding opportunities for demonstration opportunities.

Good Eggs will report on demonstration projects considered per the Technology Review Program below.

## 4.3. Technology Review Program

Good Eggs shall use cleaner technology over time as it becomes more readily available, practical and economically feasible. To accomplish this, Good Eggs shall review new technology every three years and with equipment turnover (prior to acquisition of, or lease of) additional or replacement of Good Eggs fleet trucks. equipment to see if zero or near-zero equipment is economically feasible and practical.

Good Eggs shall investigate and make part of such analysis, any grant, voucher or other type of program that would help offset cost and / or otherwise make such equipment available, practical and economically feasible. Good Eggs shall submit such technology review to the City upon request.

If the technology review demonstrates that new technology/equipment will be effective in substantially reducing emissions, is available, practical and economically feasible as determined by Good Eggs, then Good Eggs shall implement such technology within 12 months.

# 4.4 Sustainable Design and Construction

Sustainable design of tenant improvements has a beneficial impact on long-term emissions reduction, improved air quality and reduced energy consumption. Tenants are required to comply with all applicable state and regional air quality regulations and are required to implement the following:

**4.4.1) LEED Gold** – The core and shell of this building achieved a "Gold" level certification per the United States Green Building Council's (USGBC's) Leadership in Environmental and Environmental Design (LEED) rating system, which surpassed the requirements of the statewide Title 24 building code requirements and the requirements of the SCA/MMRP. As part of the Gold level Core and Shell certification, it is expected that the tenant improvements (TI) will be performed under a separate scope and includes a provision to include the following sustainable design measures in the TI not a part of the shell build-out.

Good Eggs must follow the design guidelines set forth under LEED Gold Core and Shell system. This LEED addenda shall be included by Prologis as an exhibit to the tenant's lease. In 2018, requirements of LEED Gold include items such as:

- Bike storage, changing rooms and showers
- Low flow plumbing fixtures
- Energy efficient lighting, including light emitting diode fixtures (LED)
- Natural ventilation

Good Eggs is also encouraged, but not required, to obtain LEED-CI (Commercial Interiors) certification, preferably also at a Gold level.

**4.4.2) Title 24 Compliance** – Tenant construction and improvements 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 required in order to obtain a building or TI permit from the City of Oakland.

**4.4.3) Renewable Energy** and Infrastructure for charging Electric Trucks and Off-Road Equipment– a. Good Eggs is highly encouraged to provide a renewable energy system or combination of systems (solar/wind/mechanical/tidal/hydrogen) designed to offset 20% of building's annual electrical consumption. Good Eggs and Prologis are currently working on providing solar panels to offset electricity demand with the plan to install once the exact refrigeration and electrical loads are determined.

b. Rooftop solar photovoltaic (PV) power is preferred and is in the planning stages.

c. The shell building roof structure of this warehouse building has been designed to support solar panel load.

d. The electrical room has been sized for additional future solar PV infrastructure.

## 4.5 Transportation Control Measures & Parking/Transportation Demand Management

Transportation Control Measures (TCMs) in MM4.4-5 are intended to provide alternative ways for employees to commute to work at this warehouse. Some of these TCM's could be initiated and implemented by the City and the Port for the OARB project as part of a fair share program.

#### **Transportation Control Measures**

Separate from a fair share program, Good Eggs is required to implement TCMs 9, 11, and 13 per MM 4.4-5:

9 – Provide preferential parking for carpool and vanpool vehicles per City of Oakland and LEED standards.

11 – Secure, weather protected bicycle parking shall be provided on-site, such as through bike lockers.13 – Showers and lockers will be provided part of the tenant improvements.

Additionally, electrical vehicle charging stations for cars will be installed in the parking lot of this warehouse and as well as necessary infrastructure in place for future truck charging stations.

**4.5.1)** Fair Share Participation – The developer of this building is participating in the City's defined "fair share" program and has contributed to it's fair share funded TCM programs, as described in the Fair Share Program. The City shall take lead on implementing the "fair share" program.

**4.5.2)** Parking and Transportation Demand Management – Good Eggs 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.

# 4.6 Quantification of Diesel Emissions

The 2012 Initial Study/Addendum analyzed whether the OAB Project (as defined in Chapter 2 of the Initial Study/Addendum) would result in total OAB Project emissions which exceed Thresholds of Significance as specified in the 2012 Addendum. Such Thresholds are established for reactive organic gases, nitrogen oxides (NOx), particulate matter (PM) 10 and PM2.5; the applicable Threshold for each of these pollutants as clarified on page 132 of the Initial Study/Addendum was 15 tons per year. Table 3.3-8 on page 150 of the Initial Study/Addendum shows that OAB Project emissions of NOx exceed the Threshold of Significance, while also showing that the other pollutants do not exceed the Threshold of Significance.

Operations of the Good Eggs facility shall, as stated in MM 4.4-4, "strive to reduce contributions to West Oakland diesel emissions to less than significant levels", using the thresholds of significance identified in the 2012 Initial Study / Addendum. Reducing diesel emissions will have two benefits: reducing NOx and reducing PM2.5, which is a toxic air contaminant.

**4.6.1:** To determine if the diesel emission reduction actions required by this Plan will reduce emissions associated with operations of the Good Eggs facility to a less than significant level, such emissions shall be quantified, prior to occupancy. Please note that the Good Eggs operations relies mostly on gasoline powered box trucks and vans for incoming deliveries and exclusively with gasoline powered box trucks and vans for outbound deliveries. As such, Good Eggs has approximately 7 daily diesel powered semitrucks per day at launch and approximately 10 diesel powered semitrucks per day at full capacity.

This shall be done by quantifying the emissions from diesel trucks which will serve the Good Eggs facility using the Institute of Transportation Engineers (ITE) Trip Generation 10<sup>th</sup> edition OR actual verifiable data of the Good Eggs daily truck and passenger vehicle trips, and the most recent California Emissions Model (CALEEMod) to quantify emissions per ton per year for their operations.

**RESULTS**: This quantification of emissions was undertaken in March 2019 using data from Good Eggs on the daily truck and passenger vehicle trips and the CALEEMod 2016. This analysis looked at three different points in time: 1) At launch below full capacity (2019); full capacity (2020); and at 2024. The analysis showed that NOx emissions will be: .66 tons per year at launch; 2) 0.84 NOx at full capacity in 2022 and; 3) 0.68 NOx in year 2024 (Exhibit A). This amount is below the Threshold of Significance for NOx which, per the 2012 Initial Study/Addendum, was 15 tons of NOx per year. As stated previously, the 2012 Initial Study / Addendum found that PM2.5 emissions associated with the trucks from this facility fall below the individual project threshold of increased cancer risk: less than 10 cases per million, non-cancer hazard index less than 1.0, and PM2.5 level of less than 0.3ug/m3 annual average.

**4.6.2** As other uses and facilities are constructed at the OAB, the required operational air quality plan for each individual project will quantify its individual emissions and provide a calculation for the cumulative emissions of all permanent projects at the OAB based on the prior operational air quality plans against the Thresholds.

4.6.3 If emissions per tenant exceed the Threshold of Significance when added together with other permanent operations under way at the OAB, then all tenants will meet and discussr with the City of Oakland to evaluate what other feasible measures can be implemented to further reduce emissions from operations. Any measures agreed to by both City and tenants shall be implemented within a reasonable time period agreed upon by the City and the tenant(s).

# **5. PLAN IMPLEMENTATION**

Good Eggs shall submit to the City's Environmental Review Officer documentation of compliance with each element of this Plan per table 2 below. The City will be responsible for reviewing and approving the compliance.

Such compliance shall be subject to audit at City's discretion, not more than one per year, other than the Technology Review which is to be submitted to the City every three years. The City shall give 30daynotice prior to audit. The results of the compliance audit shall be available upon request and posted to the City's website.

ID	Description of Plan Element	Compliance Method/Description	Required Date of Compliance
4.1	T/E Diesel Emission Reduction		
	4.1.1 – Drayage Trucks	[provide truck or truck fleet compliance certificate]	If operations change such that drayage trucks are used.
	4.1.2 – On Road Trucks	[provide truck fleet compliance certificate]	Prior to occupancy and upon audit.
	4.1.4 – Off Road Equipment	[provide off-road equipment fleet info; participate in CARB DOORS program]	Prior to occupancy and upon audit.
	4.1.6 – Idling Rules	[provide idling policy signage]	Prior to occupancy
	4.1.7 – Dock Management	[provide a plan to monitor truck deliveries and potential queuing]	Prior to occupancy
	4.1.8 – CARB Compliance	[provide fleet info]	Continuous
4.2	Sustainable TI Design		
	4.2.1 – LEED Gold Compliance	[reference plan sheets or submittals where LEED Addenda items are shown]	
	4.2.2 – Title 24 Compliance	[provide statement on sheet indicating T24 compliance]	Prior to issuance of building permit for tenant improvements
	4.2.3 – Renewable Energy	[if proposed, describe solar PV or other onsite renewable energy	If proposed.

#### Table 2 – Operational AQ Plan Compliance Summary Table Example

		system – how many kW, expected	
		generation]	
4.3	Transportation Control Measures		
	4.3.1 – Fund Fair Share Programs	[City assessed fair share]	Paid by Prologis
			in full
	4.3.2 – Parking/TDM Program	[provide a plan to reduce	Prior to
		employee single-driver traffic]	occupancy
4.4	Demonstration Projects		
	4.4.1 – Demo Projects Participation	[provide any demonstration	
		projects]	
4.5	Technology Review		
	4.5.1 – Technology Review	[provide periodic updates over	
	Program	time]	
4.6	Quantification of NOx emissions		
	4.6.1: Per tenant		
	4.6.2: compared to portion		
	of CEQA Threshold		
	4.6.3: Tenants and City will meet		
	and discuss other feasible		
	reduction measures to be		
	implemented within an agreed		
	upon time frame.		

Timing to implement most of these plan elements will happen as the tenant improvements are constructed or as operations begin. However, Prologis nor the tenant controls the implementation timing of the fair share program elements. The fair share elements are City led programs.

From time to time, tenant may be required to provide reporting on the progress or maintenance of various plan elements (for example, updating truck fleet as new vehicles are purchased). Any update requests shall be initiated by the City and tenant shall provide the requested information.

# Exhibit A

This is a Summary of the report findings done by Mitchell Air Quality March 2019 report submitted to City of Oakland.

#### Quantification of Diesel Emissions for the Good Eggs facility at CE-1

In order to determine if the diesel emission reduction actions required by the *Air Quality Plan for Operations of the Good Eggs Facility at the CE-2 Warehouse* will reduce NOx emissions below the Thresholds of Significance specified in the Initial Study/Addendum for development at the Oakland Army Base Project, the emissions associated with operations of the Good Eggs facility was quantified. This quantification of NOx emissions was undertaken in March 2019 using data from Good Eggs on the daily truck and passenger vehicle trips and the CALEEMod 2016.

This analysis showed NOx emissions will be 0.68 tons of NOx per year which is well below emissions estimated in 2012 for a transloading warehouse of this size, well below the Threshold of Significance which is 15 tons per year.

	-					
Tenant	Size of	Number of	Number of	NOx	NOx	Threshold of
	lease area	daily truck	daily	emissions	emissions	Significance
		trips	employee	estimated	estimated in	for NOx in
			trips	in 2012 for	in 2024	tons/year <sup>3</sup>
				а	based on	
				transloading	Good Eggs	
				warehouse	use <sup>2</sup>	
				of this size	(tons/year)	
				(tons/year)		
Good Eggs	116,246	20	500	2.91	0.68	15

As stated in Section 4.6 of the *Air Quality Plan for Operations of the Good Eggs facility at the CE-2 Warehouse* other tenants at the OAB Project will be required to quantify the emissions associated with their operations. These estimates will form a calculation for the cumulative emissions for all permanent projects at the OAB to determine if cumulative emissions stay below the Threshold of Significance. See Section 4.6 for more details.

Toxic Air Contaminants

<sup>&</sup>lt;sup>2</sup> Quantification of emissions from diesel trucks serving the PODS facility was done based on data from PODS estimating the daily truck and passenger vehicle trips, and the current California Emissions Model (CALEEMod) 2016.

<sup>&</sup>lt;sup>3</sup> Thresholds of Significance are as specified in the 2012 Initial Study/Addendum, pages 132 and 133.

PM2.5 emissions associated with the trucks serving this facility fall below the individual project threshold of increased cancer rise: less than 10 cases per million, the non-cancer hazard index less than 1.0, and PM2.5 level of less than -.3ug/m3 annual average.



# Attachment C

Public Comment Letters Received in Response to Draft Operational Air Quality Plan for the Good Eggs facility (commenting on the version dated April 23, 2019)



May 20, 2019

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

Dear Ms. McGowan:

Thank you for providing California Air Resources Board (CARB) staff the opportunity to comment on the Air Quality Plan (Plan) for operations of the Good Eggs Fulfillment Center (Project) located within the City of Oakland (City). The Project consists of the operation of a 116,246 square foot warehouse facility located within an area designated as CE-2 in the former Oakland Army Base (OAB). The Plan is required as part of the 2013 approved Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCA/MMRP) prepared for the 2012 OAB Redevelopment Initial Study Addendum (IS/Addendum). The SCA/MMRP was adopted by the City to mitigate the significant health and air quality impacts in the West Oakland community, and the impacts to regional air quality resulting from the redevelopment of the former OAB.

Prologis is the lessee of a 232,785 square foot warehouse located within CE-2 of the OAB. Prologis plans to lease half of the warehouse (116,246 square feet) to Good Eggs, Inc. (Good Eggs). The tenant of the second half of the warehouse has not yet been determined. Good Eggs plans to use the warehouse as a distribution hub for its online grocery delivery service. According to the Plan, all outbound trips (i.e., grocery deliveries) will use gas-powered box trucks, vans, and cars. Inbound trips (i.e., produce deliveries from local farms) will use diesel-powered semi-trucks and gas-powered box trucks, vans, and cars. At full capacity, the Project would result in 240 average daily outbound trips and 146 average daily inbound trips. Of the average daily inbound trips, 44 will be from trucks equipped with transport refrigeration units (TRUs).<sup>1</sup>

The nearest residences within the West Oakland community are located approximately 1,570 feet east of the Project's easternmost boundary. In addition to residences, the Saint Patrick School, Oakland Freedom School, Vincent Academy, and McClymonds High School are located within one mile from the Project site. The residences within the West Oakland community are surrounded by existing toxic diesel particulate matter

<sup>&</sup>lt;sup>1</sup> Transport refrigeration units (TRU) are refrigeration systems powered by integral diesel engines that protect perishable goods during transport in insulated truck and trailer vans, rail cars, and domestic shipping containers.

(PM) emissions sources including industrial uses, rail traffic along the Union Pacific rail line, and vehicular traffic along Interstate 880 (I-880) and Interstate 580 (I-580). According to a health risk assessment (HRA) prepared by CARB staff in 2008, residences in the West Oakland community were exposed to air concentrations of diesel PM that were substantially higher than average background levels in the Bay Area.<sup>2</sup> Due to the Project's proximity to residences and schools already disproportionately burdened by multiple sources of diesel PM, CARB staff is concerned with the potential cumulative health impacts associated with the combined operation of the Project and existing and future projects within the OAB.

The State of California has placed additional emphasis on protecting local communities from the harmful effects of air pollution through the passage of Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017). AB 617 is a significant piece of air guality legislation that highlights the need for further emission reductions in disadvantaged communities with high exposure burdens, like West Oakland where the Project is located. The California Environmental Protection Agency (CalEPA) currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). CalEnviroScreen uses a screening methodology to help identify California communities currently disproportionately burdened by multiple sources of pollution. The census tract containing the Project is within the top 11 percent for Pollution Burden.<sup>3</sup> Diesel PM generated during the operation of the Project would negatively impact the West Oakland community, which is already severely disproportionally impacted by air pollution from existing freight facilities. CARB urges the City to ensure that the Project does not add to the existing burden or erode the anticipated benefits of regulatory requirements.

CARB staff is encouraged that the operation of the proposed warehouse to be occupied by Good Eggs will include emission reduction measures and strategies such as electric plug-ins at all loading docks, CO<sub>2</sub> refrigeration, rooftop solar, and LEED Gold certification. However, more must be done. The City, Prologis, and Good Eggs have a unique opportunity to set a national standard of how zero-emission technologies could be used to substantially reduce or eliminate diesel PM, nitrogen oxides (NO<sub>x</sub>), and greenhouse gases emitted from the Project site. The City has an obligation to protect its residents, and the customers of Good Eggs should know the fresh produce and other products delivered to them did not burden the surrounding community. To achieve this standard, CARB strongly encourages the City, Prologis, and Good Eggs to use the

<sup>&</sup>lt;sup>2</sup> Bay Area Air Quality Management District (BAAQMD), 2014. Improving Air Quality & Health in Bay Area Communities. April 2014. Accessed at: http://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-careprogram/documents <sup>3</sup> Pollution Burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

cleanest commercially-available technology now, and throughout the Project's operation. This important goal may be met by implementing the actions found in Attachment A of this comment letter.

If Prologis and Good Eggs elect not to commit to the implementation of all actions listed in Attachment A, the City should require Prologis and Good Eggs to prepare a HRA. The HRA should evaluate the Project's contribution to the health risk impact of the portion of the 2012 OAB Redevelopment controlled by the City. To do this, the HRA should evaluate health risk impacts under three scenarios: (1) an existing 2012 baseline, (2) future full build-out year baseline where none of the diesel PM reduction measures proposed within the Plan are implemented, and (3) future full build-out year where all of the diesel PM reduction measures proposed within the Plan are implemented. The health risks modeled under both the existing and the future baselines should reflect all applicable federal, state, and local rules and regulations. The results of the HRA should be reported in the Plan and made available for public review.

The HRA should report diesel PM concentrations, and cancer and noncancer risks to residences located within West Oakland and adjacent affected communities. The modeling presented in the HRA should be based on the latest Office of Environmental Health Hazard Assessment (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).<sup>4</sup>

CARB staff have reviewed the Plan for the Project (dated April 23, 2019) and air quality technical memo (dated February 26, 2019) and have the following comments:

- The Plan states that the City will determine whether stakeholders should be notified if an amendment or exception to this Plan is requested or determined to be necessary. In addition, the Plan states that the City will determine whether a different Plan or an addendum to this Plan may be required upon the termination of the Good Eggs lease. CARB staff urges the City to coordinate with all air quality stakeholders, including CARB and BAAQMD, to determine if a change in the tenant lease or Project operations would require a revised Plan for the Project.
- 2. The Plan commits Good Eggs to implement a Technology Review Program. As part of this program, Good Eggs will identify the cleanest commercially-available technologies every three years. If the identified technologies are found to be practical and economically feasible, Good Eggs will implement the technologies within a 12-month period. Given the advancement in technology, the City should

<sup>&</sup>lt;sup>4</sup> Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February 2015. Accessed at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

require that these technology reviews occur every two years and be submitted to the City for evaluation and approval, in consultation with BAAQMD and CARB.

- 3. The IS/Addendum did not compare the 2012 OAB Redevelopment Project operational emissions to the BAAQMD's daily significance thresholds for reactive organic gas (ROG), NOx, and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>). Since the IS/Addendum did not compare the 2012 OAB Redevelopment Project's operational emissions to all of the BAAQMD's operational significance thresholds, it cannot be assumed that the 2012 OAB Redevelopment Project would not result in a significant impact for these criteria pollutants. For this reason, the Plan should be updated to report operational emissions for ROG, NOx, and particulate matter and compare them to the latest daily and annual significance thresholds found in BAAQMD's CEQA Guidance.
- 4. The Plan should include emission rates of diesel PM under two scenarios: (1) future full build-out year of the portion of the 2012 OAB Redevelopment Project controlled by the City where none of the diesel PM reduction measures proposed within the Plan are implemented and (2) future full build-out year of the 2012 OAB Redevelopment Project controlled by the City where all of the diesel PM reduction measures proposed within the Plan are implemented. Conservative assumptions should be made for truck trip rates and TRU engine runtime when information is unavailable. By reporting the diesel PM emission rates during the operation of the entire increase in OAB development, the public will have a complete understanding of the expected diesel PM that would result from the project despite the implementation of all measures found in the Plan.
- 5. According to the Plan, approximately 44 inbound trucks will be equipped with TRUs. However, modeling in support of the Plan did not account for diesel exhaust and idling emissions from the operation of TRUs. CARB staff is concerned that TRUs operating within the Project site and traveling along local roadways in the West Oakland community could result in exposure to diesel exhaust emissions that would result in a significant cancer risk. The air emissions modeling for the Project should be revised to account for emissions emitted by trucks with TRUs.
- 6. The Plan used CalEEMod's 7.3-mile default trip distance for a cold storage warehouse to model the Project's mobile emissions. According to the Plan, inbound deliveries of fresh produce will originate from local farms. The closest farm to the Project site is located in Solano County, approximately 30 linear miles northeast of the Project site. Since the inbound deliveries of produce will be further than 7.3 miles, the air pollutant emissions reported in the Plan should be remodeled using Project-specific trip distances.

CARB staff urges the City to extend the 17-day review and comment period for this and future air quality plans within the OAB to at least 45 days. An extension of the review and comment period will allow stakeholders and members of the community more time to review the Plans submitted by the City. CARB staff appreciates the opportunity to comment on the Plan for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist, at (916) 440-8242 or via email at stanley.armstrong@arb.ca.gov.

Sincerely,

Richard Boyd, Chief Risk Reduction Branch Transportation and Toxics Division

Attachment

cc: See next page.

cc: State Clearinghouse P.O. Box 3044 Sacramento, California 95812

> Morgan Capilla NEPA Reviewer U.S. EPA, Region 9 75 Hawthorne Street San Francisco, California 94105

Miss Margaret Gordon and Brian Beveridge Co-Directors West Oakland Environmental Indicators Project 349 Mandela Parkway Oakland, California 94607

Richard Grow, Lead Environmental Justice Workgroup U.S. EPA, Region 9 75 Hawthorne Street San Francisco, California 94105

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Paul Cort Staff Attorney EarthJustice 50 California Street, Suite 500 San Francisco, California 94111

bcc: (via email)

Board Member John Gioia (via Evan Kersnar)

Richard Corey, EO Edie Chang, EO Veronica Eady, EO Karen Magliano, OCAP Heather Arias, OCAP Karen Buckley, OCAP Anna Scodel, OCAP Aron Livingston, Legal Office Nicholas Rabinowitsh, Legal Office Matthew Christen, Legal Office Jack Kitowski, MSCD Cynthia Marvin, TTD Doug Ito, TTD Cari Anderson, TTD Rich Boyd, TTD Andre Freeman, TTD Greg Harris, TTD Matthew O'Donnell, TTD Mike Sutherland, TTD Stanley Armstrong, TTD Dillon Miner, TTD Michaela Nucal, TTD Ian Peterson, TTD

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RRB#: 051419-3

# ATTACHMENT A

## Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

California Air Resources Board (CARB) staff recommends developers and government planners use all existing and emerging zero to near-zero emission technologies during project construction and operation to minimize public exposure to air pollution. Below are some measures, currently recommend by CARB staff, specific to warehouse and distribution center projects. These recommendations are subject to change as new zero-emission technologies become available.

## **Recommended Construction Measures**

- 1. Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
- Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating onsite. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, onsite vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
- 3. In construction contracts, include language that requires all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.
- 4. In construction contracts, include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers,) used during project construction be battery powered.
- 5. In construction contracts, include language that requires all heavy-duty trucks entering the construction site, during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-NO<sub>x</sub> standard starting in the year 2022.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In 2013, CARB adopted optional low-NO<sub>x</sub> emission standards for on-road heavy-duty engines. CARB staff encourages engine manufacturers to introduce new technologies to reduce NO<sub>x</sub> emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model years 2010 and later. CARB's optional low-NO<sub>x</sub> emission standard is available at https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm.

 In construction contracts, include language that requires all construction equipment and fleets to be in compliance with all current air quality regulations. CARB staff is available to assist in implementing this recommendation.

## **Recommended Operation Measures**

- Include contractual language in tenant lease agreements that requires tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating onsite.
- 2. Include contractual language in tenant lease agreements that requires all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units. This requirement will eliminate the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration and cryogenic transport refrigeration are encouraged and can also be included lease agreements.<sup>2</sup>
- 3. Include contractual language in tenant lease agreements that requires all TRUs entering the project site be plug-in capable.
- 4. Include contractual language in tenant lease agreements that requires future tenants to exclusively use zero-emission light- and medium-duty delivery trucks and vans.
- 5. Include contractual language in tenant lease agreements requiring all TRUs, trucks, and cars entering the Project site be zero emission.
- 6. Include contractual language in tenant lease agreements that requires all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero emission. This equipment is widely available.
- 7. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be model year 2014 or later today, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be model year 2014 or later 2014 or later today, meet CARB's lowest optional low-NOx standard beginning in 2022, and be fully zero-emission beginning in 2030.

<sup>&</sup>lt;del>8.</del>7.

<sup>&</sup>lt;sup>2</sup> CARB's Technology Assessment for Transport Refrigerators provides information on the current and projected development of TRUs, including current and anticipated costs. The assessment is available at https://www.arb.ca.gov/msprog/tech/techreport/tru\_07292015.pdf.
- 9.8. Include contractual language in tenant lease agreements that requires the tenant be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,<sup>3</sup> Periodic Smoke Inspection Program (PSIP),<sup>4</sup> and the Statewide Truck and Bus Regulation.<sup>5</sup>
- <u>10.9.</u> Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than five minutes while onsite.
- 11.10. Include contractual language in tenant lease agreements that limits onsite TRU diesel engine runtime to no longer than 15 minutes. If no cold storage operations are planned, include contractual language and permit conditions that prohibit cold storage operations unless a health risk assessment is conducted and the health impacts fully mitigated.
- 12.11. Include rooftop solar panels for each proposed warehouse to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid.

<sup>&</sup>lt;sup>3</sup> In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at https://www.arb.ca.gov/cc/hdghg/hdghg.htm.

<sup>&</sup>lt;sup>4</sup> The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at https://www.arb.ca.gov/enf/hdvip/hdvip.htm.

<sup>&</sup>lt;sup>5</sup> The regulation requires newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.



BAY AREA Air Quality Management

DISTRICT

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CONTRA COSTA COUNTY John Gioia David Hudson Karen Mitchoff Mark Ross

> MARIN COUNTY Katie Rice (Chair)

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Connect with the Bay Area Air District:



May 20, 2019

Corey Alvin City of Oakland Environmental Coordinator City of Oakland Planning and Building Department 250 Frank H. Ogawa Plaza, Suite 3315 Oakland, CA 94612

RE: Air Quality Plan for the Operations of the Good Eggs Fulfillment Center

Dear Mr. Corey Alvin:

Bay Area Air Quality Management District (Air District) staff has reviewed the Air Quality Plan for Operations (Plan) for the Good Eggs Fulfillment Center (Project). The Project will occupy over 110,000 square feet of the Southeast Gateway warehouse. The Southeast Gateway site is part of the Oakland Army Base (OAB) and therefore subject to Standard Conditions of Approval (SCAs) and Mitigation Measures (MM) adopted by the Oakland City Council (City) and Port of Oakland (Port) to lessen the significant air quality impacts anticipated with buildout of the OAB. The OAB is adjacent to West Oakland, which is one of the most disproportionately impacted communities for Toxic Air Contaminants (TACs) and Particulate Matter (PM) in the Bay Area, and the focus of substantial efforts by the Air District and others to reduce public exposure to these emissions.

Air District staff recognizes that the tenant, Good Eggs, has *voluntarily* committed to the following measures that mitigate Project emissions:

- Limiting idling to two minutes for all in-bound and out-bound delivery vehicles,
- Developing a dock management program,
- Implementing zero and near-zero emission equipment,
- Installing LEED gold features, including bike storage, low-flow plumbing fixtures, energy-efficient lighting, and natural ventilation,
- Using renewable energy, including on-site solar photovoltaic power, and
- *If capable of plugging in,* delivery trucks with transport refrigeration units are expected to do so during loading and unloading at the dock.

While these actions will mitigate Project emissions, many of the other actions cited in the Plan simply require the tenant to comply with existing regulations. Complying with existing regulations, such as the California Air Resources Board Truck and Bus Regulation, Drayage Truck Regulation, Tractor-Trailer Greenhouse Gas Reduction Regulation, and City of Oakland truck routes and other truck regulations, is extremely important. However, simply complying with the law is not a mitigation.

To reduce emissions beyond what is required by law, the Plan should *require*:

- An aggressive schedule to transition the tenant's fleet to zero-emissions vehicles,
- All trucks entering the OAB property to meet 2010 diesel emission standards immediately (i.e., ahead of regulatory deadlines),
- All trucks with transport refrigeration units to be capable of plugging in when at the loading dock, and doing so, and

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• All cargo handling and material handling equipment to be zero-emissions, or at least the lowest emission equipment available at the time of occupancy.

In addition, Air District staff encourages the tenant to take advantage of the following Air District incentive programs to reduce emissions from vehicles and equipment:

- West Oakland Zero-Emission Grant Program: Grants for new zero-emission vehicles, infrastructure and equipment in and around the West Oakland community (www.baaqmd.gov/WestOaklandZEV),
- **Charge! Program:** Grants for the purchase and installation of publicly accessible electric vehicle charging stations (<u>www.baaqmd.gov/Charge</u>), and
- **Carl Moyer Program:** Grants to upgrade or replace on-road vehicles as well as off-road equipment (www.baaqmd.gov/Moyer).

Since the OAB was approved in 2012, more stringent health based ambient air quality standards have been promulgated by the U.S. EPA. Therefore, the adverse air quality impacts resulting from development at the OAB will be more severe on public health than the impacts identified in the OAB Environmental Impact Report. In addition, AB 617 was approved by the State Legislature in 2017, which established the Community Air Protection Program. The focus of AB 617 is to reduce TACs and PM emissions and exposure in communities most impacted by air pollution. Because of the disproportionate impacts occurring within West Oakland, the community has been selected by the Air District for the first AB 617 Community Health Protection Action Plan in the Bay Area.

Air District staff continues to be willing and ready to work with the City, Port, developers, and tenants to develop an Air Quality Plan for Operations that will do more to protect the health of the West Oakland community. If you have any questions or would like to discuss Air District recommendations further, please contact Alison Kirk, Principal Environmental Planner, at 415-749-5169, or at akirk@baaqmd.gov.

Sincerely,

Greg Nudd Deputy Air Pollution Control Officer

cc: BAAQMD Director John J. Bauters BAAQMD Director Pauline Russo Cutter BAAQMD Director Scott Haggerty BAAQMD Director Nate Miley

## Attachment D

**Final / Approved Air Quality Plan for Operations of the ConGlobal Container Depot and Repair Facility** (final / approved version is dated August 28, 2019)



# 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

# Air Quality Plan for Operations of the Good Eggs Fulfillment Center

Approved by the City Administrator on September 23, 2019

Address: 2000 Maritime St., Suite 200, Oakland, CA 94607 Site Ref: CE-2, Southeast Gateway Parcel

Submitted On: v.0 – March 8, 2019 v.1 – April 23, 2019 v.2 final – August 28, 2019



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#### **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 will occupy our warehouse buildings at the OAB.

Working towards the goals for improved air quality will require coordination and collaboration from all tenants of these warehouses to plan and implement emission reduction actions that are impactful, practical, and feasible.

#### 1.1 Purpose of this Air Quality Plan for Operations of the Good Eggs Facility

The purpose of this Air Quality Plan for Operations of the Good Eggs Facility at CE-2 Warehouse (Plan) is to:

- Provide clear direction for tenant of this warehouse regarding operation air quality and energy conservation requirements for Tenant Improvements (TI) and for on-going operations throughout the duration of their lease.
- Provide a documented path of compliance for the Standard Conditions of Approval/Mitigation Monitoring and Report Program (SCA/MMRP) relating to air quality and public outreach as outlined in Mitigation Measure PO-1, which involves public outreach to Oakland Army Base stakeholders.

The Oakland Army Base Redevelopment project was approved by the City of Oakland (City) in 2002, and then revised with an Initial Study/Addendum in 2012 (OAB Project). 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 for the Good Eggs facility is to clarify and distill which requirements apply to operations of this particular facility, to clarify any vagueness in the applicable SCA/MMs and to comply with the mitigation measures.

1.1.1 : This document applies to the tenant referred to as Good Eggs, which will occupy a 116,246 s.f. portion of the 232,785 s.f. warehouse at the Oakland Global Logistics Center, referred to as CE-2, address: 2000 Maritime Street.

1.1.2 : The tenant is required to comply with all applicable state and regional air quality regulations and is required to implement the components of this document.

1.1.3 : The tenant will be required to demonstrate how compliance is achieved on the

specific user level. 1.1.4: This Plan will become a component of tenant Lease documents.

1.1.5: The City of Oakland, as the lead agency under the California Environmental Quality Act (CEQA), will determine compliance with the applicable mitigation measures and will determine compliance with this Plan.

#### 2. TENANT SUBJECT TO THIS PLAN

2.1 This Plan applies to the tenant referred to as Good Eggs, which will occupy a portion (116,246 s.f.) of the Prologis warehouse referred to as CE-2 located at 2000 Maritime Street. The shell of the building is anticipated to be completed in March 2019, with tenant improvements being completed by June 2019.

Description of Operations

- Good Eggs is an online grocery and meal kit delivery service that provides absurdly fresh local produce, meal kits for every occasion, grocery staples, and wine, beer, and spirits – all delivered same day to Bay Area Homes.
- Receives deliveries by gasoline powered box trucks, vans, cars and some diesel semi-trucks.
- Roughly half the semi-truck deliveries and 2/3 of the box truck deliveries arrive in refrigerated vehicles.
- Refrigerated product arrives in vehicles as described above.
- Electrical outlets at the loading docks at the refrigerated warehouse area are installed so any trucks that are capable of plugging into power can run their refrigeration off of the electricity while loading and unloading.
- Approximately 36,000 square feet of the facility will be refrigerated or freezer space.
- Good Eggs is using a state-of-the-art CO<sub>2</sub> refrigeration system, which has 1,500 to 4,000 times less of a detrimental effect on the environment than that of traditional synthetic refrigerant.
- Good Eggs takes these deliveries and repacks them in the warehouse for delivery per customer orders.

- Products in the warehouse are moved by manually-propelled carts, racks, and pallet jacks; or on electric order pickers and fork lifts.
- At peak capacity, Good Eggs expects to send out 120 delivery routes on an average day, with a fleet of up to 40 vehicles. These vehicles will be 40% gasoline powered box trucks and 60% gasoline powered Sprinter / Transit vans. Each vehicle of the fleet will make 2-3 deliveries with the remainder of delivery routes taken in personal vehicles.
- At launch, Good Eggs expects to have a fleet of 15 vehicles. There will be one gasoline box truck and the rest will all be gasoline Sprinter / Transit type vans.
- All new fleet vehicles equipped with diesel driven TRU's will be electric plug-in capable.
- Employee count: Good Eggs will launch with 50 employees for warehouse operations with peak capacity up to 300 employees, not including delivery drivers described above.

Inbound Deliveries by type and frequency (Avg / day) at launch (2019):

Semi Truck - Diesel	6.85
Box Truck - Non-Diesel	21.74
Van or Car - Non-Diesel	32.43
Third Party Carrier <sup>1</sup>	4.00

Inbound Deliveries by type and frequency (Avg / day) at peak capacity (2022):

Semi Truck - Diesel	10.14
Box Truck - Non-Diesel	25.57
Ice - Non-Diesel	1.00
Van or Car - Non-Diesel	32.43
Third Party Carrier	4.00

<sup>&</sup>lt;sup>1</sup> Third party carrier vehicles were assumed to be Light Heavy Duty (LHD) Trucks with the average percentage of diesel and gasoline engines in CalEEMod as derived from the ARB EMFAC emission model



Figure 1: Site Plan - Overall Site showing building and Good Eggs' lease area subject to this Plan

2.2. Upon termination of the Good Eggs lease, a different Air Quality Plan or an addendum to this Plan may be required as determined by the City. Stakeholder notification will be provided for revisions the City determines to be substantive.

2.3: If an amendment or exception to this Plan is requested or determined to be necessary, the City will evaluate the scope of the amendment/exception and shall determine the necessary process for undertaking such an amendment/exception. Stakeholder notification will be provided for amendments or exceptions which the City determines to be substantive.

#### **3. SCA/MMRP REQUIREMENTS**

The OAB project was approved in 2002, and then revised with an Initial Study/Addendum in 2012. The City of Oakland prepared a SCA/MMRP, which was approved by the Oakland City Council on July 16, 2013, superseding a previous version dated October 15, 2012. This Plan focuses on the air quality conditions of approval and mitigation measures (together "MM's") identified in the SCA/MMRP. The entirety of the SCA/MMRP is available on the

#### City of Oakland website.

Table 1 below lists the air quality-related MMs applicable to this tenant/building. Prior to receiving the building shell and sitework permits for construction of this building, Prologis prepared (and the City approved) the Construction Management Plan, which addressed the construction related air quality MMs. The table below shows how the applicable air quality MMs are addressed. Additionally, it should be noted that SCA Air-3 and MM 4.4-3b do not apply to the Good Eggs operations. SCA Air-3 applies only to buildings which will contain sensitive receptors (e.g., hospitals, schools, etc.) and MM 4.4-3b applies only to maritime uses at the West Gateway bulk marine terminal.

Table 1: Summary of	Air Quality SCA/MMRP	<b>Requirements and tl</b>	he Response Met	hod which addresses
each one				

SCA/MM #	Description	Response Method
AIR-1	Construction Management Plan	Construction Mgmt Plan/Previously Approved
AIR-2	Construction Related Air Pollution Controls	Construction Mgmt Plan/Previously Approved
TRANS-2	Construction Traffic & Parking	Construction Mgmt Plan/Previously Approved
MM 4.3-13	Traffic Control Plan – Hazmat	Construction Mgmt Plan/NA
MM 4.4-6	Energy Conserving Fixtures/Design	Air Quality Operational Plan
MM 4.4-4	Truck Diesel Emissions Reduction Plan	Air Quality Operational Plan
MM 4.4-5	Transportation Control Measures	Air Quality Operational Plan
TRANS-1	Parking and Transportation Demand Mgmt	Air Quality Operational Plan
MM 5.4-1	Demonstration Projects	Air Quality Operational Plan

#### 4. Elements of this Air Quality Plan for Operations of the Good Eggs Facility

This Plan contains the following components:

4.1) Truck and Equipment Diesel Emission Reduction (MM 4.4-4)
4.2) Encourage, Lobby, and Participate in Emission Reduction Demonstration Projects (MM 5.4-1) 4.3) Technology Review Program (MM 4.4-4)
4.4) Sustainable Design and Construction (MM 4.4-6)

4.5) Transportation Control Measures and Parking/Transportation Demand Management (SCA TRANS-1, MM 4.4-5)

4.6) Quantification of Diesel Emissions (4.4-4)

#### 4.1 Truck and Equipment Diesel Emission Reduction

The requirements listed below will reduce the diesel emissions, including diesel particulate matter and nitrogen oxides, produced during the operation of this warehouse.

#### <u>Trucks</u>

**4.1.1) On-Road Trucks** – All diesel trucks with a gross vehicle weight rating over 14,000 pounds entering the site of this warehouse must comply with the Truck and Bus Regulation of CARB which is in effect at the time of operation of the truck(s).

**4.1.2)** Drayage Trucks<sup>1</sup> – Should Good Eggs receive cargo from the maritime terminals, an intermodal rail yard, or property of the Port of Oakland, the trucks doing so must comply with the Drayage Truck Regulation (DTR) of the California Air Resources Board (CARB) which is in effect at the time of operation of the truck(s). See California Air Resource Board's Drayage Truck Regulation for more details, including truck engine year requirements and truck registry requirements.

**4.1.3) Trucks with transport refrigeration units (TRUs)** – Roughly half the semi-truck deliveries and 2/3 of the box truck deliveries arrive at the Good Eggs facility in refrigerated vehicles. Electrical outlets are planned and required to be installed at the loading docks serving the refrigerated portion of the facility so trucks can run refrigeration with electricity while loading and unloading. Good Eggs shall use "good faith" efforts such as posting signs on the loading dock indicating plug-in availability and email notification to vendors encouraging use of plug in capable vehicles at the Good Eggs facility to maximize the number of deliveries with plug-in refrigeration compatible delivery trucks with the goal of 100%. Good Eggs would be responsible for ensuring use of electrical outlets during loading and unloading per Section 4.1.4 below.

<sup>&</sup>lt;sup>1</sup> 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.

**4.1.4)** Idling Rules for all trucks - All size and types of in-bound and out-bound delivery vehicles shall be prohibited from idling more than 2 minutes when loading and unloading or staging at this site. The idling rules shall be posted in easily-visible locations on-site and shall be enforced by Good Eggs.

**4.1.5) Management of Loading Docks or loading/unloading -** A dock management or loading/unloading system shall be developed and implemented by Good Eggs for delivery requirements to ensure that truck idling times do not exceed two minutes when the trucks are on site, and that electric capable TRU's are plugged-in, and that on-site TRU diesel engine runtime be no more than fifteen minutes.

#### 4.1.6) Compliance with Truck Routes and with the West Oakland Truck Management

**Plan** – All trucks serving the Good Eggs warehouse must use designated truck routes to arrive and depart from this building. Additionally, such trucks shall comply with the West Oakland Truck Management Plan (approved by the City and Port on April, 2019), or with other City-approved truck regulations in effect at the time of operation of the truck serving this tenancy.

#### 4.1.7) CARB Compliance for Trucks -

a. Compliance with applicable air quality regulations for commercial trucks and vans are required including, but not limited to, the CARB Tractor-Trailer Greenhouse Gas Reduction Regulation, Periodic Smoke Inspection Program, Statewide Truck and Bus Regulation or Drayage Regulation.

b. All truck fleets owned by Good Eggs, or under contract with Good Eggs to provide delivery services to/from this warehouse, shall provide proof of compliance through CARB certificates of compliance or copies of annual smoke test results.

#### Off-Road Equipment used in the Good Eggs operation 4.1.8) Off-Road Equipment

a. Outdoor off-road equipment over 25 horsepower, including but not limited to yard equipment, exterior forklifts and pallet jacks, shall be zero and near-zero emission equipment. This includes Tier 4i or Tier 4 diesel equipment (or equivalent if Tier system is not applicable to a particular piece of equipment). Such equipment can also be electric, propane, bio-diesel, and alternative-fueled equipment.

b. Indoor off-road equipment including but not limited to interior forklifts, scissor lifts, pallet jacks and "order pickers" shall be electric, propane or alternative-fueled equipment.

c. Good Eggs shall submit an equipment list of all off-road equipment to be used both indoors and outdoors to demonstrate that zero and near-zero emission (including Tier 4 or 4i diesel equipment or equivalent) equipment, or electric, propane, bio-diesel or alternative-fueled equipment will be used during operations.

d. All off-road equipment shall be properly serviced and maintained throughout the life of the equipment.

e. Compliance with all applicable CARB regulations for off-road diesel equipment used at this site is required, including but not limited to the Diesel Off-Road Online Reporting System (DOORS) and the Equipment Identification Number (EIN).

f. Also see Section 4.3 of this Plan related to the Technology Review Program.

**4.1.9) Idling Rules for off-road equipment** - Diesel off-road equipment shall be prohibited from idling more than 2 minutes when loading and unloading, staging, or when not in active use. See CARB regulation for in-use off-road diesel vehicles for clarification of what is considered idling. The idling rules shall be posted in easily-visible locations on-site.

#### 4.2 Participation in Emissions Reduction Demonstration Projects

Good Eggs shall evaluate emission reduction demonstration projects that promote technological advances in improving air quality. Examples of some demonstration projects include but not limited to: CNG/LNG trucks energy generation via alternative systems electricity.

Good Eggs is encouraged to utilize innovative and cleaner technology/equipment from operations in other Good Eggs locations.

Good Eggs will provide contact information to the BAAQMD for receipt of information regarding grants, vouchers and other funding opportunities for demonstration opportunities.

Good Eggs will report on demonstration projects considered per the Technology Review Program below.

#### 4.3. Technology Review Program

Good Eggs shall use cleaner technology over time as it becomes more readily available, practical and economically feasible. To accomplish this, Good Eggs shall review new technology every three years and with equipment turnover (prior to acquisition of, or lease of) additional or replacement of Good Eggs fleet trucks or on-site equipment to see

if zero or near-zero equipment is economically feasible and practical.

Good Eggs shall investigate and make part of such analysis, any grant, voucher or other type of program that would help offset cost and / or otherwise make such equipment available, practical and economically feasible. Good Eggs shall submit such technology review to the City upon request.

If the technology review demonstrates that new technology/equipment will be effective in substantially reducing emissions, is available, practical and economically feasible as determined by Good Eggs, then Good Eggs shall implement such technology within 12 months.

#### 4.4 Sustainable Design and Construction

Sustainable design of tenant improvements has a beneficial impact on long-term emissions reduction, improved air quality and reduced energy consumption. Tenants are required to comply with all applicable state and regional air quality regulations and are required to implement the following:

**4.4.1) LEED Gold** – The core and shell of this building achieved a "Gold" level certification per the United States Green Building Council's (USGBC's) Leadership in Environmental and Environmental Design (LEED) rating system, which surpassed the requirements of the statewide Title 24 building code requirements and the requirements of the SCA/MMRP. As part of the Gold level Core and Shell certification, it is expected that the tenant improvements (TI) will be performed under a separate scope and includes a provision to include the following sustainable design measures in the TI not a part of the shell build-out.

Good Eggs must follow the design guidelines set forth under LEED Gold Core and Shell system. This LEED addenda shall be included by Prologis as an exhibit to the tenant's lease. In 2018, requirements of LEED Gold include items such as:

- Bike storage, changing rooms and showers
- Low flow plumbing fixtures
- Energy efficient lighting, including light emitting diode fixtures (LED)
- Natural ventilation

Good Eggs is also encouraged, but not required, to obtain LEED-CI (Commercial Interiors) certification, preferably also at a Gold level.

**4.4.2) Title 24 Compliance** – Tenant construction and improvements 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 required in order to obtain a building or TI permit from the City of Oakland.

#### 4.4.3) Renewable Energy and Infrastructure for charging Electric Trucks and Off-Road Equipment-

a. The City encourages use of a renewable energy system or combination of systems (solar/wind/mechanical/tidal/hydrogen) designed to offset 20% of building's annual electrical consumption. Good Eggs and Prologis are currently working on providing solar panels to offset electricity demand with the plan to install once the exact refrigeration and electrical loads are determined.

b. Rooftop solar photovoltaic (PV) power is preferred and is in the planning stages.
c. The shell building roof structure of this warehouse building has been designed to support solar panel load.

d. The electrical room has been sized for additional future solar PV infrastructure.

#### 4.5 Transportation Control Measures & Parking/Transportation Demand

**Management** Transportation Control Measures (TCMs) in MM4.4-5 are intended to provide alternative ways for employees to commute to work at this warehouse.

#### **Transportation Control Measures**

In addition to the fair share program implemented by the City and the Port for the OAB project, Good Eggs is required to implement TCMs 9, 11, and 13 per MM 4.4-5:

9 – Provide preferential parking for carpool and vanpool vehicles per City of Oakland and LEED standards.

11 – Secure, weather protected bicycle parking shall be provided on-site, such as through bike lockers. 13 – Showers and lockers will be provided part of the tenant improvements.

Additionally, electrical vehicle charging stations for cars will be installed in the parking lot of this warehouse and as well as necessary infrastructure in place for future truck charging stations.

**4.5.1)** Fair Share Participation – The developer of this building is participating in the City's defined "fair share" program and has contributed to it's fair share funded TCM programs, as described in the Fair Share Program. The City shall take lead on implementing the fair share program.

**4.5.2)** Parking and Transportation Demand Management – Good Eggs 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 trafficperiods.

#### 4.6 Quantification of Diesel Emissions

The 2012 Initial Study/Addendum analyzed whether the OAB Project (as defined in

Chapter 2 of the Initial Study/Addendum) would result in total OAB Project emissions which exceed 1999 BAAQMD Significance Thresholds as specified in the 2012 Addendum. Such Thresholds are established for reactive organic gases, nitrogen oxides (NOx), particulate matter (PM) 10 and PM2.5; the applicable Threshold for each of these pollutants as clarified on page 132 of the Initial Study/Addendum was 15 tons per year. Table 3.3-8 on page 150 of the Initial Study/Addendum shows that OAB Project emissions of NOx exceed the Threshold of Significance, while also showing that the other pollutants do not exceed the Threshold of Significance.

Operations of the Good Eggs facility shall, as stated in MM 4.4-4, "strive to reduce contributions to West Oakland diesel emissions to less than significant levels", using the thresholds of significance identified in the 2012 Initial Study/Addendum. Reducing diesel emissions will have two benefits: reducing NOx and reducing PM2.5, which is a toxic air contaminant.

To determine if the diesel emission reduction actions required by this Plan will reduce emissions associated with operations of the Good Eggs facility to a less than significant level, such emissions are quantified below.

This was done by quantifying the emissions from diesel trucks which will serve the Good Eggs facility using the Institute of Transportation Engineers (ITE) Trip Generation 10<sup>th</sup> edition OR actual verifiable data of the Good Eggs daily truck and passenger vehicle trips, and the most recent California Emissions Model (CALEEMod) to quantify emissions per ton per year for their operations.

**RESULTS**: This quantification of emissions was undertaken in August 2019 using data from Good Eggs on the daily truck and passenger vehicle trips and the CalEEMod 2016.3.2 model. This analysis looked at three different points in time: 1) At launch below full capacity (2019); full capacity (2022); and at 2024. The analysis showed that NOx emissions will be: 1) 0.66 tons per year at launch; 2) 0.84 NOx at full capacity in 2022 and; 3) 0.68 NOx in year 2024 (Exhibit A). A separate analysis was prepared to quantify the TRU emissions associated with the project while idling and while traveling through the local community. The TRU NOx emissions will be: 0.27 tons per year in 2019 and 0.46 tons per year in 2022 and 2024. The total NOx emissions including vehicles and TRUs will be: 0.92 ton per year in 2019, 1.30 tons per year in 2022, and 1.14 tons per year in 2024. This amount is below the Threshold of Significance for NOx which, per the 2012 Initial Study/Addendum, was 15 tons of NOx per year. As stated previously, the 2012 Initial Study / Addendum found that PM2.5 emissions associated with the trucks from this facility fall below the individual project threshold of increased cancer risk: less than 10 cases per million, non-cancer hazard index less than 1.0, and PM2.5 level of less than 0.3 ug/m<sup>3</sup> annual average.

**4.6.1** As other uses and facilities are constructed at the OAB, the required operational air quality plan for each individual project will quantify its individual emissions and provide a calculation for the cumulative emissions of all permanent projects at the OAB based on the prior operational air quality plans against the Thresholds.

**4.6.2** If emissions per tenant exceed the Threshold of Significance when added together with other permanent operations under way at the OAB, then all tenants will meet and discuss with the City what other feasible measures can be implemented to further reduce emissions from operations. Any measures agreed to by both City and tenants shall be implemented within a reasonable time period agreed upon by the City and the tenant(s).

#### 5. PLAN IMPLEMENTATION

Good Eggs shall submit to the City's Environmental Review Officer documentation of compliance with each element of this Plan per table 2 below. The City will be responsible for reviewing and approving the compliance.

Such compliance shall be subject to audit at City's discretion, not more than one per year, other than the Technology Review which is to be submitted to the City every three years. The City shall give 30daynotice prior to audit. The results of the compliance audit shall be available upon request and posted to the City's website.

Table 2 - Operational AQ Plan Co	mpliance Summary Table Example
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ID	Description of Plan Element	Compliance Method/Description	Required Date of Compliance
4.1	T/E Diesel Emission Reduction		
	4.1.1 – Drayage Trucks	[provide truck or truck fleet compliance certificate]	If operations change such that drayage trucks are used; upon audit.
	4.1.2 – On Road Trucks	[provide truck fleet compliance certificate]	Prior to occupancy and upon audit.
	4.1.4 – Off Road Equipment	[provide off-road equipment fleet info; participate in CARB DOORS program]	Prior to occupancy and upon audit.
	4.1.6 – Idling Rules	[provide idling policy signage]	Prior to occupancy

	4.1.7 – Dock Management	[provide a plan to monitor truck deliveries and potential queuing]	Prior to occupancy
	4.1.8 – CARB Compliance	[provide fleet info]	Continuous; upon audit
4.2	Sustainable TI Design		
	4.2.1 – LEED Gold Compliance	[reference plan sheets or submittals where LEED Addenda items are shown]	Prior to occupancy
	4.2.2 – Title 24 Compliance	[provide statement on sheet indicating T24 compliance]	Prior to issuance of building permit for TI
	4.2.3 – Renewable Energy	[describe solar PV or other onsite renewable energy system — KW generation]	If proposed, prior to occupancy or per Technology Review
4.3	Transportation Control Measures		
	4.3.1 – Fund Fair Share Programs	[City assessed fair share]	Paid by Prologis in full
	4.3.2 – Parking/TDM Program	[provide a plan to reduce employee single-driver traffic]	Prior to occupancy
4.4	Demonstration Projects		
	4.4.1 – Demo Projects Participation	[provide any demonstration projects]	Continuous
4.5	Technology Review		
	4.5.1 – Technology Review Program	[provide periodic updates over time]	Continuous
4.6	Quantification of NOx emissions If cumulative threshold exceeded, Tenants and City will meet and discuss other feasible reduction measures to be implemented within an agreed upon time frame.		As needed

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Timing to implement most of these plan elements will happen as the tenant improvements are constructed or as operations begin. However, Prologis nor the tenant controls the implementation timing of the fair share program elements. The fair share elements are City-led programs.

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From time to time, tenant may be required to provide reporting on the progress or maintenance of various plan elements (for example, updating truck fleet as new vehicles are purchased). Any update requests shall be initiated by the City and tenant shall provide the requested information.

#### Exhibit A

This is a Summary of the report done by Mitchell Air Quality August 2019 submitted to the City and is included in this plan as Exhibit B.

#### Quantification of Diesel Emissions for the Good Eggs facility at CE-1

In order to determine if the diesel emission reduction actions required by the Air Quality Plan for Operations of the Good Eggs Facility at the CE-2 Warehouse will reduce NOx emissions below the Thresholds of Significance specified in the Initial Study/Addendum for development at the Oakland Army Base Project, the emissions associated with operations of the Good Eggs facility was quantified. This quantification of NOx emissions was undertaken in March 2019 using data from Good Eggs on the daily truck and passenger vehicle trips and the CalEEMod 2016.3.2 model and updated in August 2019 to include emissions from Transportation Refrigeration Units (TRU). Specifically, the Good Eggs operations relies mostly on gasoline powered box trucks and vans for incoming deliveries and exclusively with gasoline powered box trucks and vans for outbound deliveries. As such, Good Eggs has approximately 7 daily diesel powered semi- trucks per day at launch (14 two-way trips per day) and approximately 10 diesel powered semitrucks per day at full capacity (20 two-way trips per day). The project is expected to generate 543 two-way trips per day including all trucks, vans, and cars used for incoming and outgoing deliveries and 500 employee trips per day at full operation.

This analysis showed NOx emissions will be 1.14 tons of NOx per year which is well below emissions estimated in 2012 for a transloading warehouse of this size (2.91 tons per year), well below the Threshold of Significance which is 15 tons per year.

Tenant	Size of lease area	Number of daily truck/van/ car delivery trips	Number of daily employee trips	NOx emissions estimated in 2012 for a transloading warehouse of this size (tons/year)	NOx emissions estimated in in 2024 based on Good Eggs use <sup>2</sup> (tons/year)	Threshold of Significance for NOx in tons/year <sup>3</sup>
Good Eggs	116,246	543	500	2.91	1.14	15

As stated in Section 4.6 of the *Air Quality Plan for Operations of the Good Eggs facility at the CE-2 Warehouse* other tenants at the OAB Project will be required to quantify the emissions associated with their operations. These estimates will form a calculation for the cumulative emissions for all permanent projects at the OAB to determine if cumulative emissions stay below the Threshold of Significance. See Section 4.6 for more details.

**Toxic Air Contaminants** 

PM2.5 emissions associated with the trucks serving this facility fall below the individual project threshold of increased cancer rise: less than 10 cases per million, the non-cancer hazard index less than 1.0, and PM2.5 level of less than - 0.3ug/m<sup>3</sup> annual average. As shown in the following table, PM2.5 emissions from the Good Eggs facility in 2022 would not exceed the 1999 BAAQMD threshold.

Tenant	Size of lease area	Motor Vehicle Emissions (tons/year )	TRU Emissions (tons/year)	Total Emissions (tons/year)	Threshold of Significance for PM2.5 in tons/year <sup>3</sup>
Good Eggs	116,246	0.29	0.002	0.29	15

The Air Quality Plan includes two measures to reduce PM2.5 emissions from the project from on site trucks. The first measure requires the loading docks to be electrified so that trucks with TRUs with plug in capability can run their refrigeration systems on electricity instead of using diesel power. TRU PM2.5 emissions are zero when operating on electricity. The loading dock electrification measure would provide a PM emission reduction from TRU use of 0.10 pounds per year in 2022. The second measure provides a commitment to prohibit idling for more than 2 minutes when the trucks are onsite. This provides a 60 percent reduction in idling emissions when compared with compliance with the ARB's idling regulation which limits idling to 5 minutes. This measure would reduce PM2.5 emissions by 0.012 pounds per year. Although the reductions appear small, they provide substantial benefits for people working on or near the loading docks and parked trucks.

<sup>&</sup>lt;sup>2</sup> Quantification of emissions from diesel trucks serving the Good Eggs facility was done based on data from Good Eggs estimating the daily truck and passenger vehicle trips, and the current California Emissions Model (CalEEMod) 2016.3.2.

<sup>&</sup>lt;sup>3</sup> Thresholds of Significance are as specified in the 2012 Initial Study/Addendum, pages 132 and 133.

### Exhibit B

Quantification of Diesel Emissions for the Good Eggs Facility at Building 2 Warehouse in Oakland, California

#### Mitchell Air Quality Consulting

August 1, 2019

Patricia McGowen, Environmental Coordinator City of Oakland, Bureau of Planning 250 Frank H. Ogawa, Suite 3315 Oakland, CA 94612

# Subject: Quantification of Diesel Emissions for the Good Eggs Facility at Building 2 Warehouse in Oakland, California

Dear Ms. McGowen:

Mitchell Air Quality Consulting (MAQC) prepared a revised assessment to determine the truck and passenger vehicle emissions associated with the Good Eggs Facility in Building 2 including transportation refrigeration units (TRU). The purpose of the assessment is to determine if the diesel emission reduction actions required by the *Air Quality Plan for Operations of the Good Eggs Facility at the Building 2 Warehouse* will reduce NOx emissions below the Thresholds of Significance specified in the Initial Study/Addendum for development at the Oakland Army Base Project. The analysis focuses on oxides of nitrogen (NOx) which exceeded the Bay Area Air Quality Management (BAAQMD) threshold of significance in the 2002 EIR and 2012 IS/Addendum studies. The assessment also quantified PM<sub>2.5</sub> which is used as a surrogate for diesel particulate matter (DPM). PM<sub>10</sub> was also provided in the analysis for information only.

#### **Analysis Results**

The analysis assessed emissions at three points in time. Good Eggs provided operations estimates for the first year of operation in 2019 reflecting conditions at less than capacity and for 2022 reflecting full capacity. A third model run was prepared for 2024 to match analyses prepared for other Oakland Army Base projects. The analysis showed NOx emissions will be 0.66 tons of NOx per year for the Good Eggs portion of Building 2 in 2019 and 0.84 ton of NOx per year at buildout in 2022. Emissions in 2024 are predicted to decline to 0.68 tons of NOx per year. The project emissions are well below emissions estimated in 2012 for a transloading warehouse of this size, which is 2.91 tons, and well below the Threshold of Significance which is 15 tons per year. The analysis also found that exhaust PM10 emissions including TRUs at maximum operations in 2022 will be 0.017 tons/year, which fall well below the threshold of Significance for PM10 of 15 tons/year, and PM25 emissions will be 0.016 tons/year (there was not a Threshold of PM25, it should be noted that emissions for PM25 will not exceed the BAAQMD 2011 PM25 Threshold of Significance which is 10 tons per year.

The analysis used CalEEMod 2016.3.2 to estimate project emissions with trip generation rates based on information provided by the tenant for daily delivery van and truck trips and numbers of employees that will work at the project site in the first year and at full operations. Good Eggs indicated that at full operation they will generate 10 incoming and 10 outgoing truck semi trips per day, 78 incoming and 78 outgoing trips using gasoline fueled box trucks, and 83 incoming and 83 outgoing trips using gasoline fueled delivery vans. An additional 22 incoming and 22 outgoing trips will be generated from deliveries using passenger cars and

light trucks. The facility is expected to employ a peak of 300 people at full operation which would generate 250 incoming and 250 outgoing trips per day during their commute to work and home assuming an average vehicle ridership of 1.2 people per vehicle. The analysis uses EMFAC 2017 emission factors for the truck emissions using the composite vehicle age distribution and composite speed.

The project will include trucks equipped with transportation refrigeration units (TRU) powered by diesel engines. Good Eggs estimates that half of the semi-trucks and two thirds of the box trucks will be equipped with TRUs. There are a wide variety of TRU designs installed on refrigerated trucks. The most common are powered by a small diesel engine (average is about 34 horsepower (HP) and they operate when the vehicle is parked and when moving. Some configurations use a diesel generator that runs the cooling system with electricity. Some of these systems can plug in at loading docks using grid power to operate the cooling system or they can operate on power from the diesel engine when no plug in is available. The Good Eggs loading docks will have plug in capability, so those trucks and vans) are powered by the truck engine and do not use an auxiliary diesel TRU engines. Those trucks produce no TRU emissions while driving between destinations. The ARB estimates that approximately 60 percent of semi-trucks are plug-in capable. The analysis assumed that all TRUs would be diesel powered and 60 percent of the semi-trucks would be plugged in at the loading docks. The onsite semi-truck TRU emissions would be reduced by 30 percent based on these assumptions. Over time, more and more TRUs are expected to include plug in capability to take advantage of fuel savings and to comply with regulations.

A TRU emission analysis was prepared for the project for NOx and PM emissions. The analysis uses ARB emission factors for TRUs. The ARB Airborne Toxic Control Measure for in-use Diesel Fueled TRU and TRU Generator Sets, and Facilities Where TRUs Operate requires the retrofit or replacement of all TRUs with units meeting Ultra-Low Emission standards by 2019 (0.02 g/bhp-hr) to reduce diesel particulate matter. This means that all trucks with TRUs accessing the site will meet this standard in 2022. The TRU NOx emission factor used in the analysis is 4.74 g/bhp-hr based on ARB composite offroad emission factors. TRUs for the 2019 model year have an emission factor of 2.72 g/bhp-hr, showing that emissions will decline as newer TRUs replace older higher emitting models. The TRUs are assumed to run 50 percent of the time to maintain the appropriate temperature. The on-road operating time was based on the time to travel the average trip length within the community (CalEEMod default 7.3 miles at 30 mph). The time of TRU operation onsite was estimated at 1 hour per day per TRU based on assumptions use for other projects. A summary of the analysis results for full operation in 2022 is provided in Table 1. The annual NOx emissions for TRU operation were added to the truck emissions shown in Table 2.

The loading dock electrification measure would provide a PM emission reduction from TRU use of 0.06 pounds per year in 2019 and 0.10 pounds per year in 2022. NOx reductions from this measure are 14.65 pounds per year in 2019 and 24.12 pounds per year in 2022.

The project's Air Quality Plan includes a commitment to prohibit idling for more than 2 minutes when the trucks are onsite. This provides a 60 percent reduction in idling emissions when compared with compliance with the ARB's idling regulation which limits idling to 5 minutes. This measure would reduce NOx emissions by 10.18 pounds per year and PM emissions 0.012 pounds per year.

Source	PM lbs/year	PM (tons/year)	NOx lbs/year	NOx (tons/year)
On Road Use Semis	0.658	0.000	156.6	0.078
On Road Use Box Trucks	1.723	0.001	410.1	0.205
Total On Road TRU Operation	2.381	0.001	566.7	0.283
On Site Use Semis	0.338	0.000	80.4	0.040
On Site Use Box Trucks	1.179	0.001	280.6	0.140
Total On Site TRU Operation	1.517	0.001	361.0	0.181
Total On Road and On Site 2022	3.898	0.002	927.7	0.464

#### Table 1: Building 2 (Good Eggs Portion) Project TRU Emissions 2022

Good Eggs project emissions based on project specific information and the emissions allocated to this building in the 2012 Addendum are shown in the following Table. It is important to note that Good Eggs hopes to transition it internal fleet to electric delivery vehicles by 2021 depending on availability and affordability of appropriate electric vehicles in the marketplace. The reductions in TRU emissions from use of electric plug ins is included in the results.

The project reactive organic gas (ROG) emissions in the 2012 Addendum did not exceed the BAAQMD 1999 threshold (15 tons per year); therefore, the impact was less than significant and no mitigation measures were required to reduce ROG. Modeling results for the Good Eggs project at maximum operations levels in 2022 show that ROG emissions would amount to 0.27 tons per year which is only 1.8 percent of the 1999 threshold.

	Dany nuck		Emissions (tons/year)		
ease ea (sf)	and Delivery Van Trips	Daily Employee/ Other Trips	NO <sub>x</sub> (2012 EIR Transload Warehouse	NO <sub>x</sub> (2022 Based on Good Eggs Data)	BAAQMD 1999 NOx Threshold
5,052	343	543	2.91	1.29	15 <sup>1</sup>
ei ei	ase a (sf) 052	ase Delivery a (sf) Van Trips 052 343	ase Delivery Employee/ a (sf) Van Trips Other Trips 052 343 543	ase Delivery Employee/ Transload a (sf) Van Trips Other Trips Warehouse 052 343 543 2.91	ase Delivery Employee/ Transload on Good Eggs a (sf) Van Trips Other Trips Warehouse Data) 052 343 543 2.91 1.29

#### Table 2: Building 2 (Good Eggs Portion) Project NOx Emissions

<sup>2</sup> Quantification of emissions from diesel trucks serving the facility uses information provided by Good Eggs including: estimated number of daily truck and passenger vehicle trips, and truck fleet mix for the types of trucks used by the facility. Emissions were calculated using CalEEMod 2016.3.2.

#### **Toxic Air Contaminants**

MAQC reviewed the air quality discussion contained in the 2012 IS/Addendum (for the OAB Project) and the 2002 EIR (which analyzed a larger redevelopment project, see Project Description in the 2002 EIR). The health risk discussion in the 2012 IS/Addendum referring to the results of the 2002 EIR assessment indicated that increased cancer risk from emissions for the entire OAB project were 10 in a million at receptor locations in West Oakland and 62 in a million at the property line. The BAAQMD project level threshold of 10 in a million increase in cancer risk applies to the most impacted offsite receptor. The current project no longer includes day care facilities or schools within the project site. The 2012 EIR did not include a receptor location map or an impact contour map to show the location of receptors used to determine the impact. However, the 2012 project is assumed to have included onsite receptors at day care facilities within the Research and Development/Office component that is no longer part of the project. A recreational receptor was also included for people fishing at the waterfront areas, but that receptor is located upwind of the Gateway and City of Oakland Port project area and would receive most of its impacts from ships and trucks loaded at the port. Therefore, the most impacted receptor for the current project would be located in West Oakland approximately 1,500 feet from the project boundary. DPM emissions have dropped substantially since 2002 and the health risk impacts would be proportionally lower with the reduction in DPM emissions. The analysis includes onsite and off-site DPM emissions from trucks equipped with TRUs. The TRUs add about 3.9 pounds per year of DPM at full project operation in 2022. The project onsite emissions are estimated at 1.5 pounds per year, which at 1,500 feet from the receptor would not add significantly to cancer risk in the community because of the effects of dispersion on the pollutant concentrations. The on-road emissions from the project are estimated at 2.4 pounds per day. The on-road emissions would occur along the 7.3 miles traveled for each trip in the community. Therefore, the emissions at any given point along the route would be a small fraction of the total emissions along the travel routes used by the trucks. In addition, except for incoming semi-truck deliveries to the facility, all delivery vans and trucks are gasoline powered and generate no DPM emissions. Therefore, the impacts associated with toxic air contaminants for the Good Eggs use at Building 2 (CE-2) would also fall below the thresholds of significance for toxic air contaminants.

#### **Summary and Conclusion**

Project emissions are well below all BAAQMD thresholds of significance for these pollutants. Toxic emissions at the most impacted receptor location is now expected to be less than significant. The project's emissions will continue to decline as fleets serving the project comply with new regulations and adopt new technologies. The project will achieve additional reductions from implementation of onsite measures included in the facility's Air Quality Plan to reduce idling beyond ARB regulation from 5 minutes to 2 minutes and to install electric plug-ins at loading docks to reduce TRU use. The reduced idling measure provides a 60 percent reduction in idling emissions. The loading dock electrification measure reduces semi-truck TRU use by 30 percent.

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

Sincerely,

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David M. Mitchell

David M. Mitchell, Owner Mitchell Air Quality Consulting 1164 E. Decatur Avenue Fresno, CA 93720 APPENDIX A: Modeling Assumptions and Results

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Mitchell Air Quality Consulting

APPENDIX A: Modeling Assumptions and Results

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Mitchell Air Quality Consulting

# Good Eggs Warehouse Facility Oakland

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2019 Daily Deliveries												
Avg Daily Pos	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly	ADD	ADT lee	t Fraction	
Semi	9	80	80	00		8 7	'n	8	6.86	13.71	0.105 HHD	
Box Truck	15	21	30	29	m	0 20	7	152	21.71	43,43	0.333 LHD1	
Van or Car	32	35	39	40	4	6 23	13	228	32.57	65.14	0.500 LDA/LDT/MDT	One third each
Third Party Carrier	7	1	5	7		6 1	1	28	4.00	8.00	0.061 LHD1	
Exnected 2022 Maritime Deliveries								456	65.14	130.29	1	
Ave Daily Dec	Mandan	Transfore	10 feedback	Thursday								
	Applina	i uesaay	weamesaay	inursday	Friday	Saturday	Sunday	Weekly	ADD	ADT lee	t Fraction	
	ית	12	12	12	н	1 11	4	71	10.14	20.29	0.139 HHD	
<u>ce</u>	T	-	1	1		1 1	1	7	1.00	2.00	0.014 LHD2	
Box Truck	17	25	35	35	m	5 24	80	179	25.57	51.14	0.350 LHD1	
Van or Car	32	35	39	40	4	5 23	13	227	32.43	64.86	0.443 LDA/LDT/MDT	One third each
Third Party Carrier	7	1	5	7		6 1	1	28	4.00	8.00	0.055 LHD1	UPS FedEx
								512	73.14	146.29	1.000	
Half of Semis and 2/3 of Box Trucks are Refri	igerated											
All Box trucks are gasoline fueled												
Vans will be gasoline Transit or Sprint Model Honing to transition floot to all clockie ku and	sis 100											
יוסטוווע נס נומווזונוסוו ווכבר נס מון כוכרנוור חל כח	170											
Employee Count Start	50											
Peak Empl Count	300											
Shinning Trins												
	Vane	Box Trucke	Total									
2019	14	1	15									
2022	24	16	40									
Full Operations in 2022				ō	oerations in	2019						
Shipping	Outbound	Return	ADT		Outbound	Return	ADT					
Delivery Routes	120	120	240		4	5 45	06					
Vans (60%)	72	72	144		2	7 27	7	MDT				
Box Trucks (40%)	48	48	96		1	8 18	36	LHD1				
			480				180					
Vane and trucks make 2 runs nor dour												

Vans and trucks make 3 runs per day

Employee Trips								
	Employees	AVR	ADT					
2022 Employees	300	1.2	500					
Good Eggs Bldg	112,501							
Office	2600							
Elec Pump Rest Rooms	951							
Good Eggs Portion	116,052							
Total Bldg SF	232,463							
Truck Trips/Day	146.29							
Employee Trips/Day	500							
Route Trips	240							
Total Trips/Day	886.29							
Trips per KSF	7.64				2022			
					Truck Fleet Mix	for CalEEMod	Run	1
HHD Trucks	20.29		20.29		NDV	LHD1	LHD2	
LHD2 Trucks	2.00		2.00		0.108244	0.016023	0.005202	o
LHD1 Trucks	155.14		155.14		165.60	155.14	2.00	
MDT (Vans)	165.60		165.60		0.482754743	0.45227725	0.00583046	
Passenger Cars and Lt Trucks	543.23	<b>Fruck Total</b>	343.03		Passenger Vehic	cle Fleet Mix		
	886.26				LDA	LDT1	LDT2	
					0.560371	0.039285	0.190378	Ö
Project Size	116.052				385.3156342	27.0126839	130.905453	
					0.709299853	0.04972571	0.24097444	
Fleet Mix for Single CalEEMod Run								
	2022	LDA	LDT1	LDT2	NDN	LHD1	LHD2	
Default Fleet Mix	Refrigerated W	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	o
Fleet Fraction Actual Estimated Trips		0.43476602 385.32	0.03047942 27.01	0.147705512 130.91	0.186849763 165.60	0.17505348 155.14	0.00225667 2.00	
		LDA	LDT1	0 100720	TODOL O			
		1/500C.U	28265U.U	8/506T'0	0./90034			
		70'000	10.12	TG:05T	545.23			
2012 Addendum Nox Emissions								
	Miles/Trip	Trips/day	Miles	G/Mi	g/day	g/lb	lbs/day	F
Trucks	7.8	1438	11216.4	7.66	85917.624	453.592	189.416092	2
	lhc/dav	189.4						

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MCY SBUS MH 0.005524 0.000326 0.000721 MHD HHD OBUS UBUS 0.023981 0.0452 0.002184 0.002561 0.022889 20.29 
 MHD
 HHD
 Trips/KSF

 0.023981
 0.0452
 0.19865
 343.03

 0
 20.29
 343.03
 2.955796
 4.680951 0.790034 543.23 **1 fon/year** 24.62409 7.66 85910.3248 11215.4471 1438 7.79933734 lbs/day g/day mi/day Trips mi/trip

						<b>10 (g/hr)</b> 0.0436	PM iissions is/year 0.020 0.008 0.01	0.60
				220.29		<b>VOX (g/hr) PM</b> 36.9141	PM Emissions En G/Year It 9.10 3.64	
				HHD 13.71 0.062256809		esel 1	ox Emissions Lbs/Year 16.97 6.79 10.18	0.60
		Trips/KSF	1.898163877	O O CHW	0.789278 66.6666667 1	liing Fu	Vox Emissios N (g/yr) 7,699.22 3,080.97	
		<b>Totals</b> 119.14 87.43	0 13.71 <b>220.29</b>	Run LHD2 0 0	LDT2 0.190895 16.12401883 0.241860282	<b>/ehicle Type Ic</b> 7 Tractor	r Idling Hrs/Yr 208.57 83.46	
<b>Trips/Ksf</b> 0.57445513	Chimine	ADT 54 36	00	for CalEEMod LHD1 87.43 0.39688716	cle Fleet Mix LDT1 0.041967 3.54475863 0.05317138		Idling Min/Truck 5	
40 66.6666667		Incoming ADT 65.14 51.43	0 13.71 <b>130.29</b>	Truck Fleet Mix MDV 119.14 0.540856031	Passenger Vehi LDA 0.556416 0.704968338	<b>2020 Annual</b> 0.25	Trucks/Day 6.86 6.86	0.00220462
2019 Model Run Assumptions Employees Daily Emp Trips (1.2 AVR)	Truck Trips	MDT (Vans) LHD1	LHD2 HHD Total Truck Trips	Truck ADT Fleet Fraction for CalEEMod	Default Leet Mix Employee Trips Fleet Fraction	Idling Emissions 77 Trucks Idling Emissions Grams/Hour Idling per vehicle per day (hours)	Compliance with ARB Idling Reg Good Eg AQ. Plan Measure Emlssion Reduction	Reduction Fraction convert grams to pounds

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# Good Egg Modeling Results

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	Trucks	Employee	Total
2019 Ops Nox	0.635	0.0226	0.6576
2019 Ops PM10	0.2747	0.0716	0.3463
2019 Ops PM2.5	0.0805	0.0193	0.0998
2022 Ops Nox	0.7067	0.137	0.8437
2022 Ops PM10	0.4302	0.6254	1.0556
2022 Ops PM2.5	0.1259	0.1688	0.2947
2022 Ops ROG	0.1889	0.0823	0.2712
2024 Ops Nox	0.5642	0.1113	0.6755
2024 Ops PM10	0.4289	0.6253	1.0542
2024 Ops PM2.5	0.1246	0.1687	0.2933
2024 Ops ROG	0.1682	0.0823	0.2505

Note: PM2.5 and PM10 results inlcude fugitive dust

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tions	36 50% 046	ompliance 0.02 g/bhp-hr 10 2019 4.76 g/bhp-hr	7.3 miles 30 MPH 9 0.243	13.71 20.29	43.43 53.14	Ma Ma
Diesel Semi Truck TRU Assump	Average HP Average On Time Load Factor (ARB Offroad TRU)	ARB PM Standard with ATCM C ARB Nox Emission Factor for TF	CalEEMod Default Trip Length Average Speed over Travel Dist Time required for 7.3 miles (hr:	ADT for HHDT 2019 ADT for HHDT 2022	ADT for Box Trucks 2019 ADT for Box Trucks 2022	

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	PM	PM		M
On Road PM	(grams/day	(Ibs/day)	PM Ibs/year	(tons/year)
Semi TRU PM Emissions 2019	0.553	0.001	0.445	0.000
Semi TRU PM Emissions 2022	0.817	0.002	0.658	0.000
Box Truck Tru PM Emissions 2019	1.750	0.004	1.408	0.001
Box Truck Tru PM Emissions 2022	2.141	0.005	1.723	0.001

PM Emission Calc Formula = HP\*% Time Running\*load factor\*emission factor\*hours/trip\*avg daily Trips

	NOX	NOX		NOX
On Road Nox	(grams/day	(Ibs/day)	NOX Ibs/year	(tons/year)
Semi TRU Nox Emissions 2019	131.526	0.290	105.837	0.053
Semi TRU NOx Emissions 2022	194.549	0.429	156.551	0.078
	NOX	NOX		NOK
	(grams/day	(lbs/day)	NOX lbs/year	(tons/year)
3ox Truck TRU Nox Emissions 2019	416.499	0.918	335.151	0.168
3ox Truck TRU NOx Emissions 2022	509.664	1.124	410.119	0.205

TRU Onsite Emissions					
20 HDT Trucks Per Day Box Trucks	<b>19 Trucks</b> 6.16 21.71	Trucks w/TRU 3.08 14.45886	TRU Op Time Per Load (hours) 0.5 0.5	Truck Time at Loading Dock (hours/day) 1 1	Total TRU Op Time (hrs/day 1.5
20 HDT Trucks Per Day Box Trucks and Ice Truck	<b>12 Trucks</b> 10.14 26.57	Trucks w/TRU 5.07 17.70	TRU Op Time Per Load (hours) 0.5 0.5	Truck Time at Loading Dock (hours/day) 1	Total TRU Op Time (hrs/day) 2.54 8.85
Half of HDT trucks have TRUs 2/3 of Box Trucks have TRUs One hour parked at loading dock per tru 50% TRU Operating Time	ð				
On Site PM Serni TRU PM Emission 2019 Box Truck TRU PM Emissions 2019	PM (grams/day 0.255 1.197	PM (lbs/day) 0.001 0.003	PM lbs/year 0.205 0.963	PM (tons/year) 0.000 0.000	
convert grams to pounds PM Emission Calc Formula = HP*% Time	0.00220462 Running*load fact	or*emission f	actor*hours/trip	*ave dailv Trips	
On Site PM Semi TRU PM Emissions 2022 Box Truck TRU PM Emission Calculation	PM (grams/day 0.420 1.465	PM (lbs/day) 0.001 0.003	PM lbs/year 0.338 1.179	PM (tons/year) 0.000 0.001	
convert grams to pounds	0.00220462				
<b>On Site Nox</b> Semi TRU PM Emissions 2019 Box Truck TRU PM Emissions 2019	NOx (grams/day 60.696 284.932	NOx (lbs/day) 0.134 0.628	NOx Ibs/year 48.841 229.281	NOx (tons/year) 0.024 0.115	
On Site Nox Semi TRU PM Emissions 2022 Box Truck TRU PM Emissions 2022	NOx (grams/day 99.911 348.717	NOX (lbs/day) 0.220 0.769	NOx lbs/year 80.397 280.608	NOx (tons/year) 0.040 0.140	

0.140

280.608

348.717
Phase in schedule for TRUs meeting the ARB TRU ATCM

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Table 8.3: 2.25 kB TRU and TRU Gen Set Engines Proposed In-Use Compliance Dates for in-Use Standards

Singine					~	In Use	Com	Dilance	Tear o					
M	10	80.	60.	DL.	11.	-42	51	71	15	91.	18.	81.	61.	R
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ARB Initial Statement of Reasons for TRU ATCM 2010 U = Ultralow Emissions Standard of 0.02 g/bhp-hr

TRU Emissions Summary

		PM		NOX
2019 Emissions	PM lbs/year	(tons/year)	NOx Ibs/year	(tons/year)
On Road Use Semis	0.445	0.000	105.8	0.053
On Road Use Box Trucks	1.408	0.001	156.6	0.078
Total Onroad	1.853	0.001	262.4	0.131
On Site Use Semis	0.205	0.000	48.8	0.024
On Site Use Box Trucks	0.963	0.000	229.3	0.115
Total On Site	1.169	0.001	278.1	0.139
Total On Road and On Site 2019	3.021	0.002	540.5	0.270
		PM	NOX	NOX
2022 Emissions	PM (lbs/year)	(tons/year)	(Ibs/year)	(tons/year)
On Road Use Semis	0.658	0.000	156.6	0.078
On Road Use Box Trucks	1.723	0.001	410.1	0.205
Total Onroad	2.381	0.001	566.7	0.283
On Site Use Semis	0.338	0.000	80.4	0.040
On Site Use Box Trucks	1.179	0.001	280.6	0.140
Total On Site	1.517	0.001	361.0	0.181
Total On Road and On Site 2022	3.898	0.002	927.7	0.464

2022	0% 60%	0% 50%	16 10.14	.08 5.07	48 3.042	30% 30%
20	Semi TRUs with Plug-In Capability 60	Semi Trucks with TRUs 50	Semi Trucks per Day 2019/2022 6.	Semi Trucks with TRUs 3.	Semi Trucks with Plug In TRUs 1.8	Percent Reduction from Plug In 30

# **Onsite TRU Emission Reductions**

2019 Semi Trucks Emission Reduction

2022 Semi Trucks Emission Reduction

Nox tons/year Mitigated	0.0171	0.0073	0.0281	0.0121
NOx Ibs/year Mitigated	34.19	14.65	56.28	24.12
NOx Ibs/year Unmitigated	48.8		80.4	
PM tons/year Mitigated	0.0001	0.0000	0.0001	0.0001
PM lbs/year Mitigated	0.14	0.06	0.24	0.10
PM lbs/year Unmitigated	0.205		0.338	

4



Thermo King has a Direct Drive unit to meet the needs of your specific application—fresh or frozen!



## R-134a Refrigerant for Fresh Applications

- Lower pressure refrigerant means a longer unit lifespan
- More reliable with better temp management for fresh loads

## R-404A Refrigerant for Frozen Applications

Greater cooling capacity Better temp management for frozen loads

#### **Unit Features**

- Engine-driven compressor
- Modular design system
- SmartPower<sup>™</sup> electric standby option
- DSR controller
- Jet Lube compressor lubrication
- · Jet Cool compressor injection cooling
- · Automatic hot gas defrost
- Optional heating package
- Installation kit

#### **Engine Mounted Compressor**

V-520 RT units use a swash plate compressor and it is available with the following belt configurations:

- Double A groove
- Poly V groove



### System Performance

V-520 RT Refrigeration Capacity (System net cooling capacity at 100°F ambient and 2,400 RPM engine operation)

	35°F	0°F
Engine Power Swash Plate (BTU/hr)	12,200	5,000
Engine Power Recip. Comp. (BTU/hr)	13,700	5,410
Smart Power Electric Standby (BTU/hr)	10,000	3,500
Refrigerant		R-134a
Charge		3.5 lbs
Ozone Depletion Potential		Zero
Chlorine		Zero

#### V-520 RT MAX and V-520 RT SPECTRUM™ **Refrigeration Capacity**

(System net cooling capacity at 100°F ambient and 2,400 RPM engine operation)

	35°F	0°F	
Engine Power Swash Plate (BTU/hr)	15,500	8,200	5,000
Engine Power Recip. Comp. (BTU/hr)	16,600	8,700	5,300
Smart Power Electric Standby (BTU/hr)	10,400	6,600	3,500
Refrigerant		F	R-404A
Charge			3.5 lbs

#### V-520 RT and V-520 RT MAX System Specifications

Evaporator Airflow Capacity	1.20
ES500 (Single Temp)	1,415 cfm
ES300 (Multi Temp)	765 cfm
Electric Standby Option Total Current Co	nsumption
230V/1 Phase/60 Hz	12.7A
230V/3 Phase/60 Hz	14.1A
Hot Gas Heat Option (MAX Only)	
BTU/HR	14,000
System Weight	
V-520 RT Condensing Unit (w/o SmartPower)	101 lbs
V-520 RT Condensing Unit (w/SmartPower)	190 lbs
ES500 Evaporator (Single Temp)	60 lbs
ES300 Evaporator (SPECTRUM Multi Temp [2 req'd	]) 40 lbs
Swashplate Compressor	16 lbs
Install Kit	10 lbs
Hose Kit	16 lbs

All Thermo King equipment is backed by the Thermo King dealer service network, with over 200 locations across North America.







Attachment E

City response to public comment letters



#### Comments in Red and Italic are City of Oakland responses to comments regarding the Air Quality Plan for Operations of the Good Eggs facility at 2000 Maritime Street. (September 9, 2019)

May 20, 2019

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

Dear Ms. McGowan:

Thank you for providing California Air Resources Board (CARB) staff the opportunity to comment on the Air Quality Plan (Plan) for operations of the Good Eggs Fulfillment Center (Project) located within the City of Oakland (City). The Project consists of the operation of a 116,246 square foot warehouse facility located within an area designated as CE-2 in the former Oakland Army Base (OAB). The Plan is required as part of the 2013 approved Standard Conditions of Approval/Mitigation Monitoring and Reporting Program (SCA/MMRP) prepared for the 2012 OAB Redevelopment Initial Study Addendum (IS/Addendum). The SCA/MMRP was adopted by the City to mitigate the significant health and air quality impacts in the West Oakland community, and the impacts to regional air quality resulting from the redevelopment of the former OAB.

Prologis is the lessee of a 232,785 square foot warehouse located within CE-2 of the OAB. Prologis plans to lease half of the warehouse (116,246 square feet) to Good Eggs, Inc. (Good Eggs). The tenant of the second half of the warehouse has not yet been determined. Good Eggs plans to use the warehouse as a distribution hub for its online grocery delivery service. According to the Plan, all outbound trips (i.e., grocery deliveries) will use gas-powered box trucks, vans, and cars. Inbound trips (i.e., produce deliveries from local farms) will use diesel-powered semi-trucks and gas-powered box trucks, vans, and cars. At full capacity, the Project would result in 240 average daily outbound trips and 146 average daily inbound trips. Of the average daily inbound trips, 44 will be from trucks equipped with transport refrigeration units (TRUs).<sup>1</sup>

The nearest residences within the West Oakland community are located approximately 1,570 feet east of the Project's easternmost boundary. In addition to residences, the Saint Patrick School, Oakland Freedom School, Vincent Academy, and McClymonds High School are located within one mile from the Project site. The residences within the West Oakland community are surrounded by existing toxic diesel particulate matter

<sup>&</sup>lt;sup>1</sup>Transport refrigeration units (TRU) are refrigeration systems powered by integral diesel engines that protect perishable goods during transport in insulated truck and trailer vans, rail cars, and domestic shipping containers.

(PM) emissions sources including industrial uses, rail traffic along the Union Pacific rail line, and vehicular traffic along Interstate 880 (I-880) and Interstate 580 (I-580). According to a health risk assessment (HRA) prepared by CARB staff in 2008, residences in the West Oakland community were exposed to air concentrations of diesel PM that were substantially higher than average background levels in the Bay Area.<sup>2</sup> Due to the Project's proximity to residences and schools already disproportionately burdened by multiple sources of diesel PM, CARB staff is concerned with the potential cumulative health impacts associated with the combined operation of the Project and existing and future projects within the OAB.

The State of California has placed additional emphasis on protecting local communities from the harmful effects of air pollution through the passage of Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017). AB 617 is a significant piece of air guality legislation that highlights the need for further emission reductions in disadvantaged communities with high exposure burdens, like West Oakland where the Project is located. The California Environmental Protection Agency (CalEPA) currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). CalEnviroScreen uses a screening methodology to help identify California communities currently disproportionately burdened by multiple sources of pollution. The census tract containing the Project is within the top 11 percent for Pollution Burden.<sup>3</sup> Diesel PM generated during the operation of the Project would negatively impact the West Oakland community, which is already severely disproportionally impacted by air pollution from existing freight facilities. CARB urges the City to ensure that the Project does not add to the existing burden or erode the anticipated benefits of regulatory requirements.

CARB staff is encouraged that the operation of the proposed warehouse to be occupied by Good Eggs will include emission reduction measures and strategies such as electric plug-ins at all loading docks, CO<sub>2</sub> refrigeration, rooftop solar, and LEED Gold certification. However, more must be done. The City, Prologis, and Good Eggs have a unique opportunity to set a national standard of how zero-emission technologies could be used to substantially reduce or eliminate diesel PM, nitrogen oxides (NOx), and greenhouse gases emitted from the Project site. The City has an obligation to protect its residents, and the customers of Good Eggs should know the fresh produce and other products delivered to them did not burden the surrounding community. To achieve this standard, CARB strongly encourages the City, Prologis, and Good Eggs to use the

<sup>&</sup>lt;sup>2</sup> Bay Area Air Quality Management District (BAAQMD), 2014. Improving Air Quality & Health in Bay Area Communities. April 2014. Accessed at: http://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-careprogram/documents <sup>3</sup> Pollution Burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

cleanest commercially-available technology now, and throughout the Project's operation. This important goal may be met by implementing the actions found in Attachment A of this comment letter.

If Prologis and Good Eggs elect not to commit to the implementation of all actions listed in Attachment A, the City should require Prologis and Good Eggs to prepare a HRA. The HRA should evaluate the Project's contribution to the health risk impact of the portion of the 2012 OAB Redevelopment controlled by the City. To do this, the HRA should evaluate health risk impacts under three scenarios: (1) an existing 2012 baseline, (2) future full build-out year baseline where none of the diesel PM reduction measures proposed within the Plan are implemented, and (3) future full build-out year where all of the diesel PM reduction measures proposed within the Plan are implemented. The health risks modeled under both the existing and the future baselines should reflect all applicable federal, state, and local rules and regulations. The results of the HRA should be reported in the Plan and made available for public review.

The HRA should report diesel PM concentrations, and cancer and noncancer risks to residences located within West Oakland and adjacent affected communities. The modeling presented in the HRA should be based on the latest Office of Environmental Health Hazard Assessment (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).<sup>4</sup>

CARB staff have reviewed the Plan for the Project (dated April 23, 2019) and air quality technical memo (dated February 26, 2019) and have the following comments:

 The Plan states that the City will determine whether stakeholders should be notified if an amendment or exception to this Plan is requested or determined to be necessary. In addition, the Plan states that the City will determine whether a different Plan or an addendum to this Plan may be required upon the termination of the Good Eggs lease. CARB staff urges the City to coordinate with all air quality stakeholders, including CARB and BAAQMD, to determine if a change in the tenant lease or Project operations would require a revised Plan for the Project.

The City agrees that communication with OAB stakeholders is important. While the City will make the process determination, stakeholder notification is provided in Section 2.3 for significant changes. The AQ Plan is revised to add stakeholder notification to Section 2.2.

<sup>&</sup>lt;sup>4</sup> Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February 2015. Accessed at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

2. The Plan commits Good Eggs to implement a Technology Review Program. As part of this program, Good Eggs will identify the cleanest commercially-available technologies every three years. If the identified technologies are found to be practical and economically feasible, Good Eggs will implement the technologies within a 12-month period. Given the advancement in technology, the City should require that these technology reviews occur every two years and be submitted to the City for evaluation and approval, in consultation with BAAQMD and CARB.

Section 4.3 of the AQ Plan requires Good Eggs to review new technology every three years and with equipment turnover, meaning prior to acquisition of, or lease of, new equipment. This standard was required of prior lessees and we believe this is appropriate and does not need to be reduced to every two years. Section 4.3 of the AQ Plan also states that the technology will be implemented within 12 months, if found to be available, practical, and economically feasible. Additionally, Section 4.2 of the AQ Plan requires Good Eggs to provide its contact information to BAAQMD so that it may directly receive, evaluate and participate in, as feasible, demonstration projects including applying for grants, vouchers and other funding to offset the cost increase of electric and alternative-fuel equipment, in consultation with BAAQMD.

3. The IS/Addendum did not compare the 2012 OAB Redevelopment Project operational emissions to the BAAQMD's daily significance thresholds for reactive organic gas (ROG), NOx, and particulate matter (including PM<sub>10</sub> and PM<sub>2.5</sub>). Since the IS/Addendum did not compare the 2012 OAB Redevelopment Project's operational emissions to all of the BAAQMD's operational significance thresholds, it cannot be assumed that the 2012 OAB Redevelopment Project would not result in a significant impact for these criteria pollutants. For this reason, the Plan should be updated to report operational emissions for ROG, NOx, and particulate matter and compare them to the latest daily and annual significance thresholds found in BAAQMD's CEQA Guidance.

Section 4.6 and Exhibit A of the AQ Plan include the estimated annual NOx emissions associated with the Good Eggs operation. These emissions were found to be far below the NOx emissions reflected in the 2012 IS/Addendum and far below the BAAQMD's 1999 and BAAQMD's current annual significance thresholds which are unchanged since 2011. The AQ Plan also includes annual estimates of operational emissions for reactive organic gases and particulate matter (PM10 and PM2.5) even though the entire OAB Redevelopment Project was found to be substantially below BAAQMD's 1999 and current annual thresholds of significance for reactive organic gases and particulate matter, as shown on Table 3.3-8 of the 2012 OAB IS/Addendum.

4. The Plan should include emission rates of diesel PM under two scenarios: (1) future full build-out year of the portion of the 2012 OAB Redevelopment Project controlled by the City where none of the diesel PM reduction measures proposed within the Plan are implemented and (2) future full build-out year of the 2012 OAB Redevelopment Project controlled by the City where all of the diesel PM reduction

> measures proposed within the Plan are implemented. Conservative assumptions should be made for truck trip rates and TRU engine runtime when information is unavailable. By reporting the diesel PM emission rates during the operation of the entire increase in OAB development, the public will have a complete understanding of the expected diesel PM that would result from the project despite the implementation of all measures found in the Plan.

Consistent with your request, the AQ Plan is updated to include emission estimates of diesel particulate matter (PM) under two scenarios: with and without the emission reduction measures of the AQ Plan. An analysis of diesel PM without the mitigation measures of the AQ Plan is included in the 2012 IS/Addendum for the entire OAB project. The results shown on Table 3.3-8 of the IS/Addendum show that PM10 would be 0.8 tons/year and PM2.5 would be 0.7 tons/year. Both of these are for the entire OAB Project and both are well below the thresholds of 15 tons/year and 10 ton/year respectively.

5. According to the Plan, approximately 44 inbound trucks will be equipped with TRUs. However, modeling in support of the Plan did not account for diesel exhaust and idling emissions from the operation of TRUs. CARB staff is concerned that TRUs operating within the Project site and traveling along local roadways in the West Oakland community could result in exposure to diesel exhaust emissions that would result in a significant cancer risk. The air emissions modeling for the Project should be revised to account for emissions emitted by trucks with TRUs.

As requested, the AQ Plan has been updated to revise the emission estimate for operations of the Good Eggs facility to include diesel emission estimates from the expected number of TRU-equipped trucks and vans. See Exhibit A. That analysis estimates that the NOx emission from the TRU's is 0.464 tons per year. The TRU emissions added to the truck emissions as combined NOx emissions for operation of this site are estimated to be 1.30 tons per year. (See Quantification of Diesel Emissions for the Good Eggs Facility at Building 2 Warehouse in Oakland California, Mitchell Air Quality Consulting, July 23, 2019.) The 2012 IS/Addendum estimated NOx emissions for operations of a warehouse of this size to be 2.91 tons of NOx per year. Therefore, when the NOx emissions from TRU's are added to NOx emissions from the trucks serving this warehouse, the estimated emissions of 1.30 tons per year are well below the CEQA threshold of 15 tons per year as used in the 2012 OAB IS/Addendum (see Table 3.3-8).

6. The Plan used CalEEMod's 7.3-mile default trip distance for a cold storage warehouse to model the Project's mobile emissions. According to the Plan, inbound deliveries of fresh produce will originate from local farms. The closest farm to the Project site is located in Solano County, approximately 30 linear miles northeast of the Project site. Since the inbound deliveries of produce will be further than 7.3 miles, the air pollutant emissions reported in the Plan should be remodeled using Project-specific trip distances.

The location of Good Eggs suppliers is generally local distributors and changes throughout the years and seasons. It is too speculative to identify specific farms or suppliers. Further, the 2012 IS/Addendum estimated emissions for trucks and cars is based on an on-site trip duration of 30-minutes, at an average speed of 15 mph. This equates to a trip distance of 7.5 miles. Also, the 2012 IS/Addendum provides mitigation measures designed to reduce OAB Project impacts from diesel emissions on-site and within the nearby West Oakland community. Mitigation Measure 4.4-4 requires a truck diesel emission program which strives to reduce redevelopment related contributions to the West Oakland diesel emissions particularly, to less than significant levels. The 2012 IS/Addendum is written to imply a local focus regarding truck diesel reduction analysis rather than a regional focus. Trip distances, of approximately 7.5 miles, used in the diesel emission analysis which formed the basis of the AQ Plan, are consistent with what the 2012 IS/Addendum identifies as the geographic study area for this analysis. Subsequent emission analysis for the OAB Project has and will use the same or very similar trip distance so that comparisons to the 2012 IS/Addendum can be made. To estimate the emissions for the Good Eggs operations, the CalEEMod 2016.3.2 default distance was used by the air quality consultant as the trip distance because it is similar to the distance used in the 2012 IS/Addendum and because it is the standard default distance used when running this emissions model.

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CARB staff urges the City to extend the 17-day review and comment period for this and future air quality plans within the OAB to at least 45 days. An extension of the review and comment period will allow stakeholders and members of the community more time to review the Plans submitted by the City.

Staff agrees that the stakeholders need adequate time to review and comment on the air quality plans. The City Council anticipated this when adopting Mitigation Measure Public Outreach (MM PO-1 of the OAB SCA/MMRP). This mitigation measure requires that a 45-day notification period occurs prior to the release of the draft AQ Plans. This is intended to give stakeholders advance notice that an AQ Plan is being prepared and will be available for public review. At the end of the 45-day notice, or shortly thereafter, the draft AQ Plan is then released for 17-day review and comment period. This 17-day review period is consistent with many other public review and comment processes in the City, and with City policy to establish the same duration for public review and comment across City departments.

CARB staff appreciates the opportunity to comment on the Plan for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist, at (916) 440-8242 or via email at <u>stanley.armstrong@arb.ca.gov</u>.

Sincerely,

Richard Boyd, Chief Risk Reduction Branch Transportation and Toxics Division

Attachment

cc: See next page.

cc: State Clearinghouse P.O. Box 3044 Sacramento, California 95812

> Morgan Capilla NEPA Reviewer U.S. EPA, Region 9 75 Hawthorne Street San Francisco, California 94105

Miss Margaret Gordon and Brian Beveridge Co-Directors West Oakland Environmental Indicators Project 349 Mandela Parkway Oakland, California 94607

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Paul Cort Staff Attorney EarthJustice 50 California Street, Suite 500 San Francisco, California 94111 bcc: (via email)

Board Member John Gioia (via Evan Kersnar)

Richard Corey, EO Edie Chang, EO Veronica Eady, EO Karen Magliano, OCAP Heather Arias, OCAP Karen Buckley, OCAP Anna Scodel, OCAP Aron Livingston, Legal Office Nicholas Rabinowitsh, Legal Office Matthew Christen, Legal Office Jack Kitowski, MSCD Cynthia Marvin, TTD Doug Ito, TTD Cari Anderson, TTD Rich Boyd, TTD Andre Freeman, TTD Greg Harris, TTD Matthew O'Donnell, TTD Mike Sutherland, TTD Stanley Armstrong, TTD Dillon Miner, TTD Michaela Nucal, TTD Ian Peterson, TTD

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RRB#: 051419-3

#### ATTACHMENT A Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

California Air Resources Board (CARB) staff recommends developers and government planners use all existing and emerging zero to near-zero emission technologies during project construction and operation to minimize public exposure to air pollution. Below are some measures, currently recommend by CARB staff, specific to warehouse and distribution center projects. These recommendations are subject to change as new zero-emission technologies become available.

#### **Recommended Construction Measures**

Comments in Red are City of Oakland responses to comments regarding the Air Quality Plan for Operations of the Good Eggs facility at 2000 Maritime Street. The construction air quality plan for this site responded to the construction-related comments below, incorporated best practices based on those comments, was approved by the City Administrator, and is being implemented during the construction of the warehouse. See Construction Management Plan for Construction of CE-2 and CC-1 dated Oct. 23, 2017, approved by the City Administrator on Nov. 30, 2017.

- 1. Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
- Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating onsite. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, onsite vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
- 3. In construction contracts, include language that requires all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.
- 4. In construction contracts, include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers,) used during project construction be battery powered.
- 5. In construction contracts, include language that requires all heavy-duty trucks entering the construction site, during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-NO<sub>x</sub> standard starting in the year 2022.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In 2013, CARB adopted optional low-NO<sub>x</sub> emission standards for on-road heavy-duty engines. CARB staff encourages engine manufacturers to introduce new technologies to reduce NO<sub>x</sub> emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model years 2010 and later. CARB's optional low-NO<sub>x</sub> emission standard is available at https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm.

6. In construction contracts, include language that requires all construction equipment and fleets to be in compliance with all current air quality regulations. CARB staff is available to assist in implementing this recommendation.

#### **Recommended Operation Measures**

## Comments in Red and Italic are City of Oakland responses to comments regarding the Air Quality Plan for Operations of the Good Eggs facility at 2000 Maritime Street.

 Include contractual language in tenant lease agreements that requires tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating onsite.

Comments throughout this section recommend that contractual language be included in tenant lease agreements requiring these operational measures. We agree; Section 1.1.4 of the AQ Plan states that "This Plan (meaning the AQ Plan) will become a component of tenant lease documents."

Additionally, we agree that the plan will include the requirement to use of the cleanest technologies available for off-road equipment stating that such equipment shall be zero or near-zero emission equipment. (See AQ Plan Section 4.1.8). This means that electric, propane, bio-diesel and alternative-fueled equipment can be used, and that if diesel equipment is used it must be Tier 4 or Tier 4 interim equipment. This requirement is more restrictive than the CARB statewide regulations for such equipment. Also, electrical charging stations for cars are being installed in the parking lot and the approved construction drawings for the building include the necessary infrastructure for future truck charging stations.

2. Include contractual language in tenant lease agreements that requires all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units. This requirement will eliminate the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration and cryogenic transport refrigeration are encouraged and can also be included lease agreements.<sup>2</sup>

Section 2.1 of the AQ Plan is revised to include TRU electrical hookups at the four loading docks which will serve the refrigerated portion of the building. Good Eggs analyzed the refrigerated deliveries they receive at their current warehouse in San Francisco and estimate that at peak operating capacity at the OAB facility, approximately five refrigerated semi-trucks and 17 refrigerated box trucks are expected to enter the site per day. Industry data and information from Good Eggs indicates that the light and medium box trucks and vans use vehicle driven motors to operate and are not diesel powered. According to CARB representatives, 60% of trucks with TRU's in California are plug-in capable. Based on this, it can be reasonably assumed that approximately 13 trucks with TRU's that are plug-in capable would enter the site per day. It can then also be reasonably assumed that no more than four trucks with TRU's that are plug-in capable would be on site at any one time. Therefore, queuing lines of

<sup>&</sup>lt;sup>2</sup> CARB's Technology Assessment for Transport Refrigerators provides information on the current and projected development of TRUs, including current and anticipated costs. The assessment is available at https://www.arb.ca.gov/msprog/tech/techreport/tru\_07292015.pdf.

trucks with TRU's not connected to an electric plug-in is not expected to occur. Further the AQ Plan is revised to require Good Eggs to email a notification to each of its vendors encouraging the use of plug-in capable vehicles at its facility. The AQ Plan also is revised to include that the dock management system will ensure use of electrical outlets during loading and unloading (See AQ Plan Section 4.1.3 and 4.1.5).

3. Include contractual language in tenant lease agreements that requires all TRUs entering the project site be plug-in capable.

Section 2.1 of the AQ Plan requires that Good Eggs' fleet, if it includes vehicles with TRUs, will be plug in capable. Good Eggs will provide information to its vendors regarding best available technology for clean TRUs.

4. Include contractual language in tenant lease agreements that requires future tenants to exclusively use zero-emission light- and medium-duty delivery trucks and vans.

Good Eggs does not utilize diesel trucks in its fleet. Consistent with the Technology Review requirement, Good Eggs has committed to evaluate transitioning its outbound gasoline powered truck fleet to an electric powered truck fleet by 2021 (See AQ Plan Section 2.1).

5. Include contractual language in tenant lease agreements requiring all TRUs, trucks, and cars entering the Project site be zero emission.

See responses to comments 3 and 4 above. Requiring all cars and trucks that enter this site be electric is beyond the reach of the adopted mitigation measures for the OAB Project.

6. Include contractual language in tenant lease agreements that requires all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero emission. This equipment is widely available.

This is included. See Section 4.1.8 of the Plan: Off-road equipment used in the Good Eggs operation.

 Include contractual language in tenant lease agreements that requires all heavyduty trucks entering or on the project site to be model year 2014 or later today, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.

The statewide Drayage and Truck/Bus Rules require trucks to meet 2010 diesel emissions standards in January 2020 with a phase-in until 2023, at which time all trucks serving the Good Eggs facility must comply with that requirement. Requiring trucks serving this facility to exceed the statewide regulations for this site prior to the date of the statewide regulation is not feasible which, for the purposes of CEQA, means capable of being accomplished in a successful manner taking into account economic, environmental, legal, social and technological factors because Good Eggs does not own the in-bound delivery fleet. Also note that per Section 4.1.7 of the AQ Plan verifying compliance with the CARB regulation is included and required of Good Eggs. Also see response to comment 4 regarding transition to zero-emission vehicles.

8. Include contractual language in tenant lease agreements that requires the tenant be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,<sup>3</sup> Periodic Smoke Inspection Program (PSIP),<sup>4</sup> and the Statewide Truck and Bus Regulation.<sup>5</sup>

Agreed, Section 4.1.7 of the Plan, which requires this for all trucks owned by Good Eggs and under delivery contracts with Good Eggs for this warehouse. Also see Section 1.1.4 of the Plan which states that the AQ Plan will be a component of the tenant lease documents.

9. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than five minutes while onsite.

Agreed, with an even shorter idle time than five minutes required per Section 4.1.3 of the Plan. Additionally, Section 4.1.4 of the Plan states that Good Eggs is responsible for managing the operation to ensure compliance with a maximum idling time of two minutes.

10. Include contractual language in tenant lease agreements that limits onsite TRU diesel engine runtime to no longer than 15 minutes. If no cold storage operations are planned, include contractual language and permit conditions that prohibit cold storage operations unless a health risk assessment is conducted and the health impacts fully mitigated.

Agreed, the Plan will be revised to include an onsite TRU diesel engine runtime to no longer than 15 minutes.

11. Include rooftop solar panels for each proposed warehouse to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid.

Agreed, per Section 4.4.3 of the AQ Plan, Prologis and Good Eggs are installing solar panels onsite to offset the building's electrical demand.

<sup>&</sup>lt;sup>3</sup> In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at https://www.arb.ca.gov/cc/hdghg/hdghg.htm.

<sup>&</sup>lt;sup>4</sup> The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at https://www.arb.ca.gov/enf/hdvip/hdvip.htm.

<sup>&</sup>lt;sup>5</sup>The regulation requires newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.



#### City of Oakland Response to BAAQMD comments about the Air Quality Plan for Operations of the Good Eggs Facility at 2000 Maritime Street

September 9, 2019

## BAY AREA Air Quality Management

DISTRICT

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Jack P. Broadbent EXECUTIVE OFFICER/APCO

Connect with the Bay Area Air District: Corey Alvin City of Oakland Environmental Coordinator City of Oakland Planning and Building Department 250 Frank H. Ogawa Plaza, Suite 3315 Oakland, CA 94612

RE: Air Quality Plan for the Operations of the Good Eggs Fulfillment Center

Dear Mr. Corey Alvin:

May 20, 2019

Bay Area Air Quality Management District (Air District) staff has reviewed the Air Quality Plan for Operations (Plan) for the Good Eggs Fulfillment Center (Project). The Project will occupy over 110,000 square feet of the Southeast Gateway warehouse. The Southeast Gateway site is part of the Oakland Army Base (OAB) and therefore subject to Standard Conditions of Approval (SCAs) and Mitigation Measures (MM) adopted by the Oakland City Council (City) and Port of Oakland (Port) to lessen the significant air quality impacts anticipated with buildout of the OAB. The OAB is adjacent to West Oakland, which is one of the most disproportionately impacted communities for Toxic Air Contaminants (TACs) and Particulate Matter (PM) in the Bay Area, and the focus of substantial efforts by the Air District and others to reduce public exposure to these emissions.

Air District staff recognizes that the tenant, Good Eggs, has *voluntarily* committed to the following measures that mitigate Project emissions:

- Limiting idling to two minutes for all in-bound and out-bound delivery vehicles,
- Developing a dock management program,
- Implementing zero and near-zero emission equipment,
- Installing LEED gold features, including bike storage, low-flow plumbing fixtures, energy-efficient lighting, and natural ventilation,
- Using renewable energy, including on-site solar photovoltaic power, and
- *If capable of plugging in,* delivery trucks with transport refrigeration units are expected to do so during loading and unloading at the dock.

While these actions will mitigate Project emissions, many of the other actions cited in the Plan simply require the tenant to comply with existing regulations. Complying with existing regulations, such as the California Air Resources Board Truck and Bus Regulation, Drayage Truck Regulation, Tractor-Trailer Greenhouse Gas Reduction Regulation, and City of Oakland truck routes and other truck regulations, is extremely important. However, simply complying with the law is not a mitigation. To reduce emissions beyond what is required by law, the Plan should *require*:

• An aggressive schedule to transition the tenant's fleet to zero-emissions vehicles,

Good Eggs has stated in Section 2.1 of the Air Quality (AQ) Plan they hope to have their delivery fleet fully electric by 2021. Good Eggs is actively engaged with BAAQMD staff regarding zero-emission grant funding. The Good Eggs fleet intended for use at this location is comprised of eight non-diesel gasoline-powered sprint vans. Approximately eight more new gasoline powered sprint vans or box trucks are needed and planned for purchase. Good Eggs is not currently intending to purchase zero-emission vehicles at this time due to very limited availability of electric sprint vans of the size and operational features needed for their business and its need to expedite its launch date with a vehicle fleet of sufficient size and operability. Good Eggs will continue to pursue zero-emission trucks in an effort to meet the intent stated in Section 2.1 of the AQ Plan.

All trucks entering the OAB property to meet 2010 diesel emission standards immediately (i.e., ahead of regulatory deadlines),

The statewide Truck/Bus Rule require trucks to meet 2010 diesel emissions standards in January 2020 with a phase-in until 2023. Any diesel trucks serving the Good Eggs facility must comply with this requirement<sup>1</sup>. Inbound trucks delivering food and supplies to the Good Eggs facility are not owned or operated by Good Eggs. These trucks are owned and operated by independent operators, farmers, local food suppliers or third-party trucking companies and per Section 2.1 of the AQ Plan approximately 75% of the delivery trucks are non-diesel. Requiring trucks serving this facility to exceed the statewide regulations for this site prior to the date of the statewide regulation is not feasible which, for the purposes of CEQA, means capable of being accomplished in a successful manner taking into account economic, environmental, legal, social and technological factors because Good Eggs does not own the in-bound delivery fleet. Also note that per Section 4.1.6 of the Plan, verifying compliance with the CARB regulation is included in the AQ Plan and required of Good Eggs.

• All trucks with transport refrigeration units to be capable of plugging in when at the loading dock, and doing so, and

Electrical plugins for transport refrigeration units (TRU) are currently being installed for four of the 12 loading dock stalls. These four loading docks are directly adjacent to and serve the refrigerated portion of the warehouse and all refrigerated delivery trucks will be directed to these specific loading docks. When at the electrified docks, all TRU's that are electric-capable will be required to plug into the electric power and turn off gasoline or diesel engine powering the TRU. This will be specified in the dock management system to be prepared and implemented by Good Eggs; Section 4.1.4 of the AQ Plan has been revised to specify this requirement as part of the dock management system.

Per Section 2.1 of the AQ Plan, at peak operating capacity Good Eggs estimates that

<sup>&</sup>lt;sup>1</sup> Per Section 4.1.2 of the AQ Plan, Good Eggs is not a maritime operation and does not receive goods via drayage trucks. However, should Good Eggs receive cargo from the maritime terminals, the Drayage Rule of CARB would apply.

approximately five refrigerated semi-trucks and 17 refrigerated box trucks<sup>2</sup> are expected to enter the site per day, and will be staggered throughout the day. According to CARB, 60% of trucks with TRU's in California are plug-in capable. While semi-trucks require more time than box trucks to unload, box trucks typically take no more than 15 minutes to unload, according to Good Eggs. Also, according to Good Eggs, no queuing of trucks waiting to unload currently occurs at the San Francisco facility, largely due to the quantity of goods delivered by small and medium sized trucks which unload quickly based on their size.

Based on the CARB statistic and the Good Eggs estimate of number of refrigerated trucks per day, it can be reasonably assumed that approximately 13 trucks with TRU's that are plug-in capable would enter the site per day. It can then also be reasonably assumed that no more than four trucks with TRU's that are plug-in capable would be on site at any one time because a total of 23 trucks refrigerated trucks will be staggered throughout the day. Therefore, queuing lines of trucks with TRU's not connected to an electric plug-in is not expected to occur.

According to Section 4.1.3 of the AQ Plan, "good faith" efforts shall be used to maximize the number of deliveries with plug-in refrigeration compatible delivery trucks, including requiring Good Eggs to email a notification to each of its vendors encouraging the use of plug in capable vehicles at its facilities. As stated above, Section 4.1.4 of the Plan has been revised to require Good Eggs be responsible for ensuring use of electrical outlets during loading and unloading for all refrigerated vehicles that are electriccapable.

• All cargo handling and material handling equipment to be zero-emissions, or at least the lowest emission equipment available at the time of occupancy.

Agreed. Section 4.1.7 of the AQ Plan requires off-road equipment such as forklifts to be zero and near-zero emission equipment which includes electric, alternative-fueled, propane, Tier 4 or Tier 4 interim diesel equipment. Section 4.2 (Participation in Emission Reduction Demonstration Projects) and Section 4.3 (Technology Review Program) all work together to get the lowest emission equipment in use at this site.

In addition, Air District staff encourages the tenant to take advantage of the following Air District incentive programs to reduce emissions from vehicles and equipment:

- West Oakland Zero-Emission Grant Program: Grants for new zero-emission vehicles, infrastructure and equipment in and around the West Oakland community (www.baaqmd.gov/WestOaklandZEV),
- **Charge! Program:** Grants for the purchase and installation of publicly accessible electric vehicle charging stations (<u>www.baaqmd.gov/Charge</u>), and
- **Carl Moyer Program:** Grants to upgrade or replace on-road vehicles as well as off-road equipment (<u>www.baaqmd.gov/Moyer</u>).

Agreed. Per Section 4.2 of the AQ Plan, Good Eggs will provide contact information to

<sup>&</sup>lt;sup>2</sup> Industry data indicates that most light and medium box trucks and vans use vehicle driven motors to operate and are not diesel powered.

## the BAAQMD for receipt of information regarding grants, vouchers and other funding opportunities for demonstration opportunities.

Since the OAB was approved in 2012, more stringent health based ambient air quality standards have been promulgated by the U.S. EPA. Therefore, the adverse air quality impacts resulting from development at the OAB will be more severe on public health than the impacts identified in the OAB Environmental Impact Report. In addition, AB 617 was approved by the State Legislature in 2017, which established the Community Air Protection Program. The focus of AB 617 is to reduce TACs and PM emissions and exposure in communities most impacted by air pollution. Because of the disproportionate impacts occurring within West Oakland, the community has been selected by the Air District for the first AB 617 Community Health Protection Action Plan in the Bay Area.

Air District staff continues to be willing and ready to work with the City, Port, developers, and tenants to develop an Air Quality Plan for Operations that will do more to protect the health of the West Oakland community. If you have any questions or would like to discuss Air District recommendations further, please contact Alison Kirk, Principal Environmental Planner, at 415-749-5169, or at akirk@baaqmd.gov.

Sincerely,

Greg Nudd Deputy Air Pollution Control Officer

cc: BAAQMD Director John J. Bauters BAAQMD Director Pauline Russo Cutter BAAQMD Director Scott Haggerty BAAQMD Director Nate Miley