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Sent via email

Dear Yalini Siva:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Patata Street Industrial Development (Project) Environmental Impact Report (DEIR), State Clearinghouse No. 2021110098. The Project is proposed within the City of South Gate (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

The Project consists of the construction and operation of 451,893 square feet of industrial uses on an approximately 27-acre site. The potential use of the proposed industrial space could include light assembly, manufacturing, direct-to-consumer marketing, warehouse/distribution, and e-commerce. The warehouse portion of the main building would consist of a loading and storage area, a total of 156,400 square feet of refrigerated storage. As part of the Project's final design, the entire building would be equivalent to Leadership in Energy and Environmental Design Certified Silver Core and Shell. The Project also includes the installation of 158 electric vehicle charging stations for electric passenger and delivery vehicles and electrical plug-ins for electric trucks at dock loading doors. Once operational, the Project would add 1,210 daily vehicle trips along local roadways, including 475 daily heavy-duty truck trips.

If approved, the Project will expose nearby communities to elevated levels of air pollution beyond the existing baseline emissions at the Project site. Residences are located directly north of the Project. In addition to residences, Cudahy Pre-School Academy, Park Avenue Elementary School, Bell Gardens Elementary School, Tweedy Elementary School and Heritage Christian High School are located within one mile of the Project. These residences and schools are already exposed to toxic diesel particulate matter (diesel PM) emissions generated by existing industrial buildings, vehicle traffic along Interstate 710 (I-710), and rail traffic along existing rail lines.

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 quality legislation that highlights the need for further emission reductions in communities with high exposure burdens, like those in which the Project is located. Diesel PM emissions generated during the construction and operation of the Project would negatively impact neighboring communities,

which are already impacted by air pollution from existing industrial buildings, vehicle traffic along I-710, and local rail traffic.

Through its authority under Health and Safety Code section 39711, the California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, 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 4.0 (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 one percent for Pollution Burden¹ and is considered a disadvantaged community; therefore, the City must ensure that the Project does not adversely impact neighboring disadvantaged communities.

Industrial facilities, like the facility described in the Project, can result in high volumes of heavy-duty diesel trucks, and operation of on-site equipment (e.g., forklifts and yard tractors) that emit toxic diesel emissions, and contribute to regional air pollution and global climate change.² Governor Gavin Newsom signed Executive Order N-79-20 on September 23, 2020. The executive order states: "It shall be a goal of the State that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. It shall be a further goal of the State that 100 percent of medium and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. It shall be further a goal of the State to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible." The executive order further directs the development of regulations to help meet these goals. To ensure that lead agencies, like the City, stay in step with evolving scientific knowledge to protect public health from adverse air quality and greenhouse gas impacts from the transportation sector, which serves as the basis of the Governor's Executive Order N-79-20, CARB staff urges the City to construct and operate the Project using the zero-emission technologies recommended in this letter.

¹. Pollution Burden represents the potential exposure to pollutants and the adverse environmental conditions caused by pollution.

². With regard to greenhouse gas emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2017, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance.

The City Did Not Evaluate Air Quality or Health Risk Impacts Associated With the Operation of Transport Refrigeration Units

Section 2.3 (Project Description) of the DEIR states that a portion of the warehouse space proposed in the Project would be used for cold storage. Based on the estimates presented in the DEIR, approximately 156,400 square feet of the proposed 451,893 square foot industrial building would be used for cold storage. Although the DEIR clearly states the Project would be used for cold storage, the City did not estimate emissions from trucks and trailers with transport refrigeration units (TRU) in the DEIR. Trucks and trailers with TRUs would result in the exposure of residences near the Project-site to significantly higher levels of toxic diesel PM and nitrogen oxides (NOx), and greenhouse gases than trucks and trailers without TRUs.

Since the Project would include the operation of trucks and trailers with TRUs within the Project site, the City must re-model the Project's air quality and health risk impact analysis to account for potential health impacts from the operation of onsite TRUs. The updated air quality impact and health risk analysis should include the following air pollutant emission reduction measures:

- Include contractual language in tenant lease agreements that requires all loading/unloading docks and trailer spaces to be equipped with electrical hookups for trucks with TRU or auxiliary power units. This requirement will substantially decrease 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 in lease agreements.³
- Include contractual language in tenant lease agreements that requires all TRUs entering the project site to be plug-in capable.

The City Uses Inappropriate Trip Lengths When Modeling the Project's Air Quality Impacts from Mobile Sources

The Project's operational mobile source air pollutant emissions may have been underestimated in the DEIR by using vehicle trip lengths unsupported by substantial evidence. The Project's operational air pollutant emissions were estimated using the California Emissions Estimator Model (CalEEMod). Based on CARB's review of the CalEEMod outputs found in Appendix B (Air Quality Impact Worksheets) of the DEIR, the City relied on CalEEMod vehicle trip length defaults to estimate the Project's mobile source air pollutant emissions. After applying these defaults, 59 percent of the Project's total vehicle trips would

³ 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.

have a travel distance of 16.6 miles, 28 percent of the Project's total vehicle trips would travel 8.4 miles, and 13 percent of the Project's total vehicle trips would travel 6.9 miles.

The DEIR does not specify the distance workers and truck drivers would need to travel to operate the proposed industrial building. The Project is located within a short distance from the Ports of Los Angeles and Long Beach, and other industrial warehouses, which the Project could serve. However, the heavy-duty trucks transporting goods to the proposed industrial building could travel greater distances. Unless the City restricts the Project's truck trip distances to those specified in the Project's air quality analysis, the City must remodel the Project's air quality impacts assuming a truck trip distance supported by substantial evidence.

The City Used Inappropriate Vehicle Fleet Mixes to Evaluate the Project's Air Quality Impacts from Mobile Sources.

The Project's operational mobile source air pollutant emissions may have been underestimated in the DEIR by using non-project specific vehicle fleet mixes. The Project's operational air pollutant emissions were estimated assuming 5 percent of the Project's total daily vehicle trips would consist of heavy-duty trucks. The City obtained this fleet mix using CalEEMod default assumptions. Furthermore, the average daily trips used to model the Project's air quality impacts are inconsistent with the Project's traffic report. Based on the Project's CalEEMod outputs in Appendix B (Air Quality Impact Worksheets) of the DEIR, the City assumed the Project would result in an average daily trip rate of 1,732 on a weekday, 2,830 daily trip rate on a Saturday and an average trip rate of 2,243 on a Sunday; which are all well above the 1,210 daily vehicle trips presented in the DEIR. After applying the 5 percent truck trip to the default 2,830 average daily trip rate, the Project would result in approximately 144 daily heavy-duty truck trips, well below the 475 daily heavy-duty truck trips referenced in the DEIR. To fully understand the Project's impact on public health, the City should reevaluate the Project's air quality impacts using the average daily vehicle trips and fleet mixes provided in the Project's traffic report.

The DEIR Did Not Account for Air Pollutant Emissions from Heavy Duty Trucks During On-Site Grading

The DEIR did not account for mobile source air pollutant emissions from grading operations during the Project's construction phase. According to Section 2.4 (Project Construction) of the DEIR, a total of 28,660 cubic yards of contaminated soil would be removed from the site, and approximately 100,000 cubic yards of import would be used to replace the contaminated soil. The average number of round trips planned per day will be a total of three round trips for 20 trucks per day for a total of 60 trips per day. The material will be transported to Azusa Special Waste Services, which is approximately a 25 mile drive from the Project site. However, based on CARB's review of the CalEEMod outputs, found in Appendix B (Air Quality Impact Worksheets) of the DEIR, the City assumed that no heavy-duty truck trips would be required to import or export soil during the on-site mass grading and excavation.

The City should remodel the Project's construction air pollutant emissions using the grading haul trips presented in Section 2.4 (Project Construction) of the DEIR. Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and schools) located near construction haul routes could be exposed to diesel exhaust emissions that were not evaluated in the DEIR.

The DEIR Did Not Include a Health Risk Assessment

The City concluded in the DEIR that the Project would not expose nearby sensitive receptors to air pollutant concentrations that would result in a significant impact. The City reached this conclusion in the air quality section by stating that the Project would employ either clean diesel or electric vehicle technology to reduce diesel PM, and comply with Federal, State and local rules and regulations. However, the Project's description does not include a design measure or lease measure that would require future tenants to exclusively use clean diesel or electric trucks within the Project site. Furthermore, the City should not use Federal, State and local rules and regulations aimed at reducing diesel PM emissions from heavy-duty trucks as an excuse to not evaluate their project's potential health impacts.

Since the Project is near residences and schools, the City and applicant must prepare a HRA for the Project. The HRA should account for all potential operational health risks from Project-related diesel PM emission sources, including, but not limited to, back-up generators, on-site diesel-powered equipment, heavy-duty trucks and TRUs. The HRA should also determine if the operation of the Project in conjunction with past, present, and reasonably foreseeable future projects or activities would result in a cumulative cancer risk impact on nearby residences.

The HRA prepared in support of the Project should be based on the latest Office of Environmental Health Hazard Assessment's (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments),⁴ and CARB's Hot Spots Analysis and Reporting Program (HARP2 model). The Project's mobile diesel PM emissions used to estimate the Project's cancer risk impacts should be based on CARB's latest 2021 Emission Factors model (EMFAC2021). Mobile emission factors can be easily obtained by running the EMFAC2021 Web Database: <https://arb.ca.gov/emfac/>.

In addition to the health risks associated with operational diesel PM emissions, health risks associated with construction diesel PM emissions should also be included in the air quality section of the DEIR and the Project's HRA. Construction of the Project would result in short-term diesel PM emissions from the use of both on-road and off-road diesel equipment. The OEHHA guidance recommends assessing cancer risks for construction projects lasting longer than two months. Since construction would very likely occur over a period lasting

⁴. 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/cnr/2015guidancemanual.pdf>.

longer than two months, the HRA prepared for the Project should include health risks for existing residences near the Project-site during construction. The HRA should account for all diesel PM emission sources related to Project construction, including, but not limited to, off-road mobile equipment, diesel generators, and on-road heavy-duty trucks.

The City Should Include More Mitigation Measures to Minimize the Project's Impact on Air Quality and Public Health

The City concluded in Chapter 4.3 (Air Quality) of the DEIR that the construction and operation of the Project would result in the emissions of air pollutants that would not exceed the South Coast Air Quality Management District's (SCAQMD) significances thresholds. Consequently, the City concluded in the DEIR that the Project would have a less than significant impact on air quality.

CARB is concerned about the City's air quality impact conclusions in the DEIR. Based on the air pollution emission estimates presented in Table 3-4 (Estimated Operational Emissions) of the DEIR, the operation of the Project would result in air pollutant emission rates far below what would be expected for a project the size of the proposed Project. For example, the Prologis Vermont and Redondo Project Draft Environmental Impact Report, prepared by the City of Los Angeles, estimated the operational nitrogen oxide (NO_x) emission rate, for a 340,298 square foot light industrial building, to be 183 pounds per day, which is 2,699 percent higher than the 6.78 pounds per day operational NO_x emission rate presented in the DEIR.⁵ The low air pollution emission rates shown in the DEIR are likely a result of the over-reliance of CalEEMod defaults and other technical deficiencies discussed in this letter. To make the public and discussion makers fully aware of the proposed Project's potential impacts, the City should reevaluate the Project's air quality and public health impacts. Should the Project's air quality and public health impacts are found to exceed the SCAQMD's significance thresholds, the City should add the air pollutant emission reduction measures listed below in the Final Environmental Impact Report (FEIR).

- 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 are equal to or exceed that of a Tier 4 engine.
- 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 City of Los Angeles. Prologis Vermont and Redondo Project. SCH: 2017121007. August 2021.

- 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-oxides of nitrogen (NO_x) standard starting in the year 2022.⁶
- Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be fully zero-emission beginning in 2023. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).⁷ Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.⁸
- Include contractual language in tenant lease agreements that requires the tenant to 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,⁹ Advanced Clean Trucks Regulation,¹⁰ Periodic Smoke Inspection Program (PSIP),¹¹ and the Statewide Truck and Bus Regulation.¹²
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than two minutes while on site.

⁶. In 2013, CARB adopted optional low-NO_x emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NO_x emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model-year 2010 and later. CARB's optional low-NO_x emission standard is available at: <https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards> .

⁷ Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: <https://californiahvip.org/>

⁸ Carl Moyer Program and Voucher Incentive Program. <https://ww2.arb.ca.gov/carl-moyer-program-apply>

⁹. 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://ww2.arb.ca.gov/our-work/programs/ttghg>

¹⁰ On June 25, 2020, CARB approved the Advanced Clean Trucks Regulation. The regulation requires manufacturers to start the transition from diesel trucks and vans to zero-emission trucks beginning in 2024. The rule is expected to result in about 100,000 electric trucks in California by the end of 2030 and about 300,000 by 2035. CARB is expected to consider a fleet regulation in 2021 that would be compatible with the Advanced Clean Trucks regulation, requiring fleets to purchase a certain percentage of zero-emission trucks and vans for their fleet operations. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

¹¹. 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/hdvp/hdvp.htm>

¹². The regulation requires that newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be 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>

- Include contractual language in tenant lease agreements, requiring the installing of vegetative walls¹³ or other effective barriers that separate loading docks and people living or working nearby.

Conclusion

CARB is concerned with the air quality impact conclusions provided in the DEIR. Although the proposed industrial uses will be partially used for cold storage, the City did not account for air pollutant emissions from TRUs within the Project site or along local roadways. The City did not prepare an HRA for the Project to quantify the potential health risk impacts on nearby residences that are already disproportionately burdened by multiple sources of pollution. The City underestimated the Project air pollutant emission rates by using CalEEMod default trip lengths and vehicle fleet mixes, and heavy-duty truck trips during onsite grading. Lastly, to reduce the Project's impact on public health, CARB urges the City to implement all the mitigation measures listed in this letter.

Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and greenhouse gas impacts, coupled with CARB's limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. CARB's deliberate decision to substantively comment on some issues does not constitute an admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not substantively submit comments.

CARB appreciates the opportunity to comment on the DEIR for the Project and can provide assistance on zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the FEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at stanley.armstrong@arb.ca.gov.

Sincerely,



Robert Krieger, Branch Chief, Risk Reduction Branch

cc: State Clearinghouse
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¹³. Effectiveness of Sound Wall-Vegetation Combination Barriers as Near-Roadway Pollutant Mitigation Strategies (2017) is available at: <https://ww2.arb.ca.gov/sites/default/files/classic/research/apr/past/13-306.pdf>

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