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Sent via email

Brenda Magana:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Palmdale Logistics Center Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2023090551. The Project would develop two warehouses, each totaling 1,500,856 square feet on two parcels. The DEIR assumes 90% of the proposed development would be dedicated to warehouse uses and the remaining 10% would be dedicated to manufacturing uses. The proposed warehouse uses do not include cold storage. Once fully built, the proposed Project would result in up to 5,209 daily vehicle trips along local roadways, including 1,433 daily truck trips.[1] The Project is proposed within the City of Palmdale (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

CARB is concerned that the Project will expose nearby residential communities to elevated levels of air pollution beyond the existing baseline emissions at the Project site. Residences are located to the north and east of the Project site, with the closest residence located approximately 4,000 feet east of the Project site. These residences are located near existing toxic diesel particulate matter (diesel PM) emission sources, which include existing aircraft traffic from the Palmdale Regional Airport, rail traffic along existing rail lines, and vehicular traffic along State Route 14.

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

[1] City of Palmdale. Palmdale Logistics Center Draft Environmental Impact Report. Appendix B. Page 4. Accessible at *https://ceqanet.opr.ca.gov/2023090551/4/Attachment/lUbrln*

the construction and operation of the Project would negatively impact neighboring communities.

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% 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. Residents near the Project site are located in census tracts within the top 15% for Pollution Burden. The City must ensure that the Project does not adversely impact neighboring disadvantaged communities.

Industrial facilities, like the facilities described in the Project, can result in high volumes of heavy-duty diesel truck traffic, 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] To better address regional air pollution and global climate change, 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% 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% 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% 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 plan for the use of zero-emission technologies within the Project area as described in this letter.

[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 2022, explains that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance. CARB's 2022 Scoping Plan for Achieving Carbon Neutrality, published November 16, 2022, is available at *https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf*

The City Used Inappropriate Assumptions When Modeling the Project's Health Risk Impacts

The Health Risk Analysis (HRA) prepared for the Project and presented in Section 5.3 (Air Quality) of the DEIR concluded that residences near the Project site would be exposed to diesel PM emissions that would result in cancer risks of 0.21 chances per million during Project operations. Since the Project's cancer risks were below the Antelope Valley Air Quality Management District's (AVAQMD) significance threshold of 10 chances per million, the DEIR concluded that the Project would have a less than significant impact on public health.

The City may have underestimated the Project's health risk impacts by assuming an idling duration for onsite heavy-duty trucks that is not supported by substantial evidence. The City assumed an idling duration of 15 minutes for onsite heavy-duty trucks when evaluating the Project's health risk impacts. CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (ATCM) restricts trucks from idling longer than five minutes. However, the ATCM has an exemption for trucks equipped with a diesel engine meeting the optional nitrogen oxides (NOx) idling emissions standard when operating outside of 100 feet of a restricted area (e.g., residences, schools).[3] Because trucks starting with model year 2008+ are clean-idle certified, many of the trucks operating within the Project site could idle longer than five minutes. According to Table 4.4.2-5 of the EMFAC2021 Volume III Technical Document, heavy-duty trucks can idle for as long as approximately five hours in any one location.[4] To fully evaluate the Project's potential health risk impacts, the City must either add a project design feature in the DEIR restricting heavy-duty truck idling within the Project site to less than 15 minutes or revise the Project's HRA to assume a heavy-duty truck idling duration supported by substantial evidence.

Although only Tier 4 Emissions are Modelled, the DEIR Does Not Include a Project Design Feature Requiring All Off-Road Construction Equipment to use Tier 4 Engines

Section 5.3 (Air Quality) concluded that the construction of the Project would result in emissions of 27.9 pounds per day of nitrogen oxides (NOx), 24.3 pounds per day of particulate matter less than 10 micrometers (PM10), and 6.1 pounds per day of particulate matter less than 2.5 micrometers (PM2.5), which were all found to be substantially below the AVAQMD's significance thresholds. The low construction air pollutant emissions reported in the DEIR were primarily attributed to the City's assumption that all off-road equipment used during Project construction would be equipped with Tier 4 engines. Off-road equipment

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[3] CARB. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Accessible at *https://ww2.arb.ca.gov/sites/default/files/2022-06/13_CCR_2485_OAL_06222022-2_ADA_06272022_0.pdf*

[4] CARB. EMFAC2021 Volume III Technical Document. Page 161. Table 4.4.2-5. Accessible at *https://ww2.arb.ca.gov/sites/default/files/2021-03/emfac2021_volume_3_technical_document.pdf*

with Tier 4 engines creates lower air pollutant emissions than those equipped with lower-tiered engines. For example, a Tier 0 offroad engine has up to 80 times higher emissions per hour than a Tier 4 engine.

The DEIR does include a project design feature (PDF AQ-1) requiring all off-road equipment used during Project construction to have Tier 4 engines. However, the project design feature allows off-road equipment to be powered with Tier 3 engines in the event Teir 4 engines are not available. Based on CARB's review of the California Emissions Estimator Model (CalEEMod) outputs presented in Appendix B (Air Quality, Health Risk, Greenhouse Gas, and energy Impact Report), the City assumed all off-road equipment used during Project construction would have Tier 4 engines. Consequently, the air quality impact analysis does not account for the possible use of off-road equipment with Teir 3 engines during Project construction allowed under PDF AQ-1. To fully understand the Project's construction air quality impact, the City must modify the Project's air quality impact analysis to conservatively assume all construction would be equipped with Teir 3 engines.

The City Must Provide More Meaningful Mitigation Measures to Reduce the Project's Significant and Unavoidable Impact on Air Quality

The City concluded in Section 5.3 (Air Quality) of the DEIR that the operation of the Project would result in a significant impact on air quality. According to Table 5.3-7 (Project Operational Emissions Without Mitigation) of the DEIR, the operation of the Project would emit as much as 149.2 pounds per day of NOx and 107.3 pounds per day of PM10, which was found to exceed the AVAQMD's significance threshold and would result in a significant impact on air quality. To mitigate the Project's operational air quality impacts, the DEIR included 13 mitigation measures (MM AQ-1 through MM AQ-13). These mitigation measures would require installation of electric vehicle and truck charging stations, prohibit cold storage within the Project site, and require tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans when economically feasible. After the implementation of these mitigation measures, the City concluded in the DEIR that the Project's air quality impact would remain significant, resulting in a significant and unavoidable impact under CEQA.

MM AQ-12 prohibits the proposed warehouse uses from including cold storage equipment. This mitigation measure would ultimately discourage trucks and trailers equipped with Transport Refrigeration units (TRU) from visiting the Project site.[5] TRUs on trucks and trailers can emit large quantities of diesel exhaust while operating within the Project site. Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and

[5] TRUs are refrigeration systems, these systems may be powered by integral diesel engines; TRUs protect perishable goods during transport in an insulated truck and trailer vans, rail cars, and domestic shipping containers.

schools) located near where these TRUs could be operating, would be exposed to diesel exhaust emissions that would result in a significant air quality impact. To fully mitigate the potential health risk impacts associated with the operation of trucks and trailers with TRUs, CARB urges the City to include one of the following design measures in the DEIR:

- A Project design measure requiring contractual language in tenant lease agreements that prohibits tenants from operating diesel-powered TRUs within the Project site; or
- A condition requiring a restrictive covenant over the parcel that prohibits the applicant's use of diesel-powered TRUs on the property unless the applicant seeks and receives an amendment to its conditional use permit allowing such use.

To fully mitigate the Project's air quality impacts, CARB urges the City to include a Project design feature or mitigation measure in the FEIR that would require all heavy-duty trucks serving the Project to be zero-emission. As presented below, CARB has many regulations that promote and eventually require the use of zero-emission trucks at freight facilities, such as the proposed Project. Specifically, the Advanced Clean Fleet Regulation would require all drayage trucks in California to be zero-emission by 2035.

A list of commercially-available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).[6] The HVIP is a part of California Climate Investments to incentivize the purchase of zero-emission trucks. Based on CARB's review of the zero-emission trucks listed in the HVIP, there are commercially available electric trucks that can meet the cargo transportation needs of individual industrial uses proposed in the City today. CARB has implemented or is developing regulations that will require the use of zero-emission trucks.

The list below details the CARB regulations that will result in the reduction of diesel PM and NOx emissions from trucks within California:

- **Drayage Truck Regulation:** The existing Drayage Truck Regulation requires all drayage trucks to operate with an engine that is a 2007 model year or newer.
- **Truck and Bus Regulation:** The Truck and Bus Regulation requires all trucks, including drayage, to have 2010 or newer model year engines by January 1, 2023.
- **Heavy-Duty Low-NOx Omnibus Rule:** The Heavy-Duty Low-NOx Omnibus Rule requires truck emission standards to be reduced from 0.20 to 0.05 grams per brake horsepower-hour (g/bhp-hr) from 2024 to 2026, and to 0.02 g/bhp-hr in 2027.
- **Advanced Clean Trucks Regulation:** The Advanced Clean Trucks Regulation, approved by CARB on June 25, 2020, 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 zero-emission trucks in California by the end of

[6] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*

2030 and about 300,000 by 2035. The Advanced Clean Trucks regulation is part of CARB's overall approach to accelerate a large-scale transition to zero-emission medium-and heavy-duty vehicles. CARB approved amendments to the Advanced Clean Trucks regulation in March 2021; the amendments help ensure that more zero-emission vehicles are brought to market. CARB directed staff to ensure that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California purchase and operate ZEVs to achieve a smooth transition to ZEV fleets by 2045 everywhere feasible, and specifically to reach:

  - 100% zero-emission drayage trucks, last mile delivery, and government fleets by 2035
  - 100% zero-emission refuse trucks and local buses by 2040
  - 100% zero-emission capable utility fleets by 2040

- **Advanced Clean Fleets Regulation:** The Advanced Clean Fleets Regulation is part of CARB's overall strategy to accelerate a large-scale transition to zero-emission medium- and heavy-duty vehicles. This regulation works in conjunction with the Advanced Clean Trucks regulation. The regulation applies to trucks performing drayage operations at seaports and railyards, fleets owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are those entities that own, operate, or direct at least one vehicle in California, and that have either $50 million or more in gross annual revenue, or that own, operate, or have common ownership or control of a total of 50 or more vehicles. The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. All drayage trucks entering seaports and intermodal railyards would be required to be zero-emission by 2035.

With the implementation of the regulations listed above, specifically the Advanced Clean Trucks Regulation, tenants at the proposed industrial/warehouse development must begin the transition from diesel trucks and vans to zero-emission trucks. To help mitigate the Project's impact on air quality and public health, CARB urges the City to include contractual language in tenant lease agreements requiring future tenants to use zero-emission trucks in the FEIR.

Conclusion

CARB is concerned about the Project's air quality impacts. To fully assess the Project's impact on neighboring communities, the City must provide substantial evidence for the assumed 15-minute idling duration used to estimate the Project's operational health risk impacts. To be consistent with the requirements of PDF AQ-1 of the DEIR, the City must modify the Project's air quality analysis to conservatively assume all off-road construction equipment used during Project construction have Tier 3 engines. Lastly, CARB urges the

City to include a project design or mitigation measure in the FEIR requiring all heavy-duty trucks serving the Project site to be zero-emission.

CARB appreciates the opportunity to comment on the DEIR for the Project. 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 staff can provide assistance with 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,

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