

May 1, 2024

Kelly Lucia
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Sent via email

Dear Kelly Lucia:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Oak Valley North (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2022120265. The Project is proposed within the City of Calimesa California (City), which is the lead agency for California Environmental Quality Act (CEQA) purposes.

Project Description and Background

The Project proposes the construction and operation of four warehouse buildings totaling 982,232 square feet and approximately 37 acres of truck and trailer storage, and up to 223 residential units on approximately 111 acres. Alternatively, a 1,200-seat church could be constructed within the residential planning area of the Project site. Once fully built out, the proposed Project would result in up to 7,146 daily vehicle trips along local roadways, including 2,251 daily truck trips.¹

CARB submitted a comment letter, which is attached to this letter, on the Notice of Preparation (NOP) for the DEIR released in July 2023. CARB's comments dated August 17, 2023, highlighted the need for preparing a health risk assessment (HRA) for the Project and encouraged the City and applicant to implement all existing and emerging zero-emission technologies to minimize exposure to diesel particulate matter (diesel PM) and oxides of nitrogen (NOx) emissions for all neighboring communities, and to minimize the greenhouse gases that contribute to climate change. Due to the Project's proximity to residences already burdened by multiple sources of pollution, CARB's comments expressed concerns with the potential cumulative health risks associated with the construction and operation of the Project.

¹ City of Calimesa. Oak Valley North Draft Environmental Impact Report. Page 3-65. Table 3-5. Accessible at: https://files.ceqanet.opr.ca.gov/283819-

3/attachment/jMBQ_7fH_wcDVmZVJznFznjWxU244SYPpVTCdchmXqFrozm6B2sZo8e48TGqsalT6b9l4Omvs6uaQVli0

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.

It is Unclear Whether the Proposed Warehouses Uses Include Cold Storage

The air pollutant emissions reported in the DEIR were estimated under the assumption that the proposed industrial development would be used for either high-cube warehouse uses, or high-cube hub warehouse uses. Since the Project description in the DEIR did not explicitly state that none of the proposed 982,232 square feet of warehouse space would include cold storage space, there is a possibility that trucks and trailers visiting the Project site would be equipped with transport refrigeration units (TRU).

As previously mentioned in CARB's letter on the NOP, TRUs on trucks and trailers could 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 schools) located near where these TRUs could be operating would be exposed to diesel emissions that would result in significant cancer risk. CARB urges the applicant and the City to revise the DEIR to clearly define the Project's description, so the public can fully understand the potential environmental effects of the Project on their communities. If the Project will not be used for cold storage, CARB urges the City to include one of the following design measures in the Final Environmental Impact Report (FEIR):

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

- 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.

If the City does allow TRUs within the Project site, CARB urges the City to model air pollutant emissions from on-site TRUs in the FEIR, and to include potential air quality and cancer risk impacts from on-site TRUs in the Project's air quality analysis and HRA, respectively.

The DEIR May Have Used Inappropriate Trip Lengths When Modeling the Project's Air Quality Impacts from Mobile Sources

The City may have underestimated mobile source air pollutant emissions in the DEIR by relying on unrealistic truck trip lengths. The Project's operational air pollutant emissions are presented in Section 4.3 (Air Quality) of the DEIR and modeled in Appendix C (Air Quality Impact Analysis). Based on CARB's review of the Project's air quality analysis, the City assumed a truck trip length of 15.3 miles for light heavy-duty trucks, 14.2 miles for medium heavy-duty trucks, and 39.9 miles for heavy heavy-duty trucks.³ The City states in Appendix C (Air quality Impact Analysis) of the DEIR that these trip distances are consistent with the South Coast Air Quality Management District's (SCAQMD) guidance. SCAQMD derived these trip lengths using information from California Association of Governments (SCAG) Heavy Duty Truck Regional Travel Demand Model. The SCAG's 2016 Regional Transportation Plan includes many short trips in the Los Angeles Region that do not fully reflect the truck trip distances for the Project. Furthermore, the Project is located approximately 92 miles from the Ports of Long Beach and Los Angeles, more than twice the distance used to model Project's mobile emissions in the DEIR. Since trucks serving the Project may originate from the Ports of Long Beach and Los Angeles or other regions further than 39.9 miles, CARB urges the City to use Project-specific truck trip distances in their air quality impact analysis. Unless the City re-evaluates or provides substantiation for the designated truck trip lengths, the Project should include a mitigation measure or project design feature that restricts trucks from traveling a distance greater than what was analyzed in the DEIR.

³ City of Calimesa. Oak Valley North Draft Environmental Impact Report. Appendix C. Page 53. Accessible at: https://files.ceqanet.opr.ca.gov/283819-3/attachment/W6m2sy-AG_EDId0SzxkVVfFfmC1pHAkJblAMOI71wkgjqUJRscBnfLM9cq23d0y8maarj4hJlj-frETf0

⁴ South Coast Air Quality Management District. WAIRE Implementation Guidelines. June 2021. Accessible at: https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/waire-implementation-guidelines.pdf?sfvrsn=12

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

The City concluded in Chapter 4.3 (Air Quality) of the DEIR that the operation of the Project would result in a significant impact on air quality. According to Table 4.3-20 (Summary of Peak Operational Emissions - Scenario 1), Table 4.3-21 (Summary of Peak Operational Emissions - Scenario 2), and Table 4.3-22 (Summary of Peak Operational Land Use - Scenario 3, the operation of the Project would emit organic compounds (VOC) as high as 116 pounds per day, oxides of nitrogen (NOx) as high as 211 pounds per day, carbon monoxide (CO) as high as 573 pounds per day, particulate matter less than 10 microns in size (PM10) as high as 187 pounds per day, and particulate matter less than 2.5 microns in size (PM2.5) as high as 62 pounds per day, which were all found to exceed the SCAQMD'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 eight mitigation measures (MM 4.3-1 through MM 4.3-8), which included requiring renewable energy on-site, installation of 14 truck charging stations and electric vehicle charging stations, all on-site cargo handling equipment to be zero-emission, and all medium heavy-duty and medium heavy-duty trucks serving the Project to be equipped with 2010 or newer engines.

The City should not exclusively rely on existing rules and regulations to mitigate the Project's air quality impacts from the operation of heavy-duty trucks. MM 4.3-8 includes a requirement that all "Facility operators shall maintain records of their fleet equipment and ensure that all diesel fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines." This requirement under MM 4.3-8 is nearly identical to CARB's Truck and Bus Regulation, which requires trucks, by law, to have 2010 or newer model year engines by January 1, 2023. Once the Project is fully operational in the year 2027, trucks with a model year of 2009 or older would already have been required to comply with the regulation. Compliance with laws and regulations does not represent mitigation of the Project's impact on air quality.

To reduce the Project's operational VOC, NOx, CO, PM10, and PM2.5 emissions, CARB urges the City to include a measure that requires all heavy-duty trucks to be zero-emission and to install on-site infrastructure to support those zero-emission trucks. As presented

⁵ City of Calimesa. Oak Valley North Draft Environmental Impact Report. Pages 4.3-62 through 4.3-64. Tables 4.3-20 through 4.3-22. Accessible at: https://files.ceqanet.opr.ca.gov/283819-3/attachment/W6m2sy-AG_EDId0SzxkVVfFfmC1pHAkJblAMOI71wkgjqUJRscBnfLM9cq23d0y8maarj4hJlj-frETf0

⁶ City of Calimesa. Oak Valley North Draft Environmental Impact Report. Pages 4.3-91. Accessible at: jMBQ_7fH_wcDVmZVJznFznjWxU244SYPpVTCdchmXqFrozm6B2sZo8e48TGqsalT6b9l4Omvs6uaQVli0 (ca.gov)

⁷ CARB. Truck and Bus Regulation Compliance Requirement Overview. June 18, 2019. Accessible at https://ww3.arb.ca.gov/msprog/onrdiesel/documents/fsregsum.pdf

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. To support trucks serving the Project that are already complying with the Advanced Clean Fleets regulation, CARB urges the City to require the infrastructure to support on-site zero-emission trucks at the start of Project operations. A list of commercially-available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP). 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 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 zero-emission vehicles (ZEV) 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

⁸ Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: https://californiahvip.org/

- o 100% zero-emission refuse trucks and local buses by 2040
- o 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 development must begin the transition from diesel trucks and vans to zero-emission trucks. To protect the air quality of the residences near the Project site, CARB urges the City to include contractual language in tenant lease agreements requiring future tenants to use zero-emission trucks during their operation in the FEIR.

Conclusion

CARB is concerned about the potential public health impacts should the City approve the Project. To fully assess the Project's impact on neighboring communities, the City must specify whether or not the proposed Project would be used for cold storage and use Project-specific truck trip distances when modeling the Project's air quality impacts. Lastly, CARB urges the City to include a mitigation measure or project design measure that requires trucks serving the Project 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

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receive the FEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at *stanley.armstrong@arb.ca.gov*.

Sincerely,

Matthew O'Donnell, Chief, Risk Reduction Branch

Attachment

cc: State Clearinghouse state.clearinghouse@opr.ca.gov

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Stanley Armstrong, Air Pollution Specialist, Risk Reduction Branch



August 17, 2023

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Dear Kelly Lucia:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Notice of Preparation (NOP) for the Oak Valley North Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2022120265. The Project proposes to establish a Specific Plan for the property and apply two land use designations: Business Park (BP) and Residential High (RH) on an approximately 110.2-acre project site. Specific Plan area would be divided into two planning areas for planning purposes. Planning Area 1 would be 95.5 acres and accommodate up to 982,232 square feet of BP building space. Planning Area 2 would be 11.2 acres and allow up to 223 residential units at a density of up to 20 dwelling units per acre. It is also anticipated that a conditionally-permitted use in the Specific Plan's residential zone would allow for a 1,200-seat church facility within the Project site. The Project site is located within the City of Calimesa (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

Industrial development, such as the Project, can result in high daily volumes of heavy-duty diesel truck traffic and operation of on-site equipment (e.g., forklifts and yard tractors) that emit toxic diesel particulate matter, and contribute to regional air pollution and global climate change. The Project will expose nearby communities and future residences of the 223 high density residential units, proposed under the Project, to elevated levels of air pollution. Existing residences are located north and south of the Project with the closest residence located within 50 feet from the Project's southern boundary. In addition to residences, the Early Learning Academy, Monty's Montessori Academy, and Summerwind Trails Middle School are all located with a half mile from the Project. Due to the Project's proximity to existing residences and schools and future residences of the proposed 223 high density residential units, CARB is concerned with the potential health impacts associated with the construction and operation of the Project.

¹ 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 DEIR Should Quantify and Discuss the Potential Cancer Risks from Project Operation

Since the Project is near existing residences and schools, and the future residential development proposed within the Project site, CARB urges the City to prepare a health risk assessment (HRA) for the Project. The HRA should account for all potential operational health risks from Project-related diesel particulate matter (diesel PM) emission sources, including, but not limited to, back-up generators, on-site diesel-powered equipment, and heavy-duty trucks. 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. To reduce diesel PM exposure and associated cancer risks, CARB urges the City to include all the air pollution reduction measures listed in Attachment A.

Since the Project description provided in the NOP does not explicitly state that the proposed industrial land uses would not be used for cold storage, there is a possibility that trucks and trailers visiting the Project-site would be equipped with TRUs.² 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 schools) located near where these TRUs could be operating, would be exposed to diesel exhaust emissions that would result in a significant cancer risk impact to the nearby community. If the Project would be used for cold storage, CARB urges the City to model air pollutant emissions from on-site TRUs in the DEIR, as well as include potential cancer risks from on-site TRUs in the Project's HRA. If the Project will not be used for cold storage, 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 TRUs within the Project-site; or
- A condition requiring a restrictive covenant over the parcel that prohibits the applicant's use of TRUs on the property unless the applicant seeks and receives an amendment to its conditional use permit allowing such use.

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 Assessments³), and CARB's Hot Spots Analysis and Reporting Program (HARP2 model). The Project's mobile PM emissions used to estimate the Project's cancer risk impacts should be based on CARB's latest 2021

² TRUs are refrigeration systems powered by integral diesel engines that protect perishable goods during transport in an insulated truck and trailer vans, rail cars, and domestic shipping containers.

³ 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/2015quidancemanual.pdf.

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Emission Factors model (EMFAC2021). Mobile emission factors can be easily obtained by running the EMFAC2021 Web Database: https://arb.ca.gov/emfac/.

The HRA should evaluate and present the existing baseline (current conditions), future baseline (full build-out year, without the Project), and future year with the Project. The health risks modeled under both the existing and the future baselines should reflect all applicable federal, state, and local rules and regulations. By evaluating health risks using both baselines, the public and planners will have a complete understanding of the potential health impacts that would result from the Project.

The DEIR Should Quantify and Discuss the Potential Cancer Risks from Project Construction

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 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. As previously stated in Section I of this letter, the cancer risks evaluated in the construction HRA should be based on the latest OEHHA guidance, and CARB's HARP2 model. The cancer risks reported in the HRA should be calculated using the latest emission factors obtained from CARB's latest EMFAC (currently EMFAC 2021) and off-road models.

Conclusion

CARB is concerned about the City's plan to construct 223 high density residential units adjacent to the proposed 982,232 square feet of BP building space. These future residences will undoubtedly be expose to high air pollutant emissions during the Project's construction and operation. To reduce the exposure of existing residents and schools, and the proposed future residential development to toxic diesel PM emissions, the final design of the Project should include all existing and emerging zero-emission technologies to minimize diesel PM and NO_x emissions, as well as the greenhouse gases that contribute to climate change. CARB encourages the City and applicant to implement the applicable measures listed in Attachment A of 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.

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

Sincerely,

Matthew O'Donnell, Branch Chief, Risk Reduction Branch

Attachment

cc: State Clearinghouse

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

The California Air Resources Board (CARB) 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 recommended by CARB, 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.
- 2. Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site 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 are equal to 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

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- 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 2022.¹
- 6. In construction contracts, include language that requires all construction equipment and fleets to be in compliance with all current air quality regulations. CARB is available to assist in implementing this recommendation.

Recommended Operation Measures

- 1. 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 on site.
- 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 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.²
- 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 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 and can be purchased using incentive funding from CARB's Clean Off-Road Equipment Voucher Incentive Project (CORE).³
- 6. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be zero-emission vehicles, and be fully zero-emission. A list of commercially available zero-emission trucks can be obtained

¹ In 2013, CARB adopted optional low-NOx emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NOx emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model-year 2010 and later. CARB's optional low-NOx emission standard is available at: https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards

² 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

³ Clean Off-Road Equipment Voucher Incentive Project. Accessible at: https://californiacore.org/how-to-participate/

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- from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).⁴ Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.⁵
- 7. 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,⁶ Advanced Clean Trucks Regulation,⁷ Periodic Smoke Inspection Program (PSIP),⁸ and the Statewide Truck and Bus Regulation.⁹
- 8. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than two minutes while on site.
- 9. 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.
- 10. Include contractual language in tenant lease agreements, requiring the installing of vegetative walls¹⁰ or other effective barriers that separate loading docks and people living or working nearby.
- 11. Include contractual language in tenant lease agreements, requiring all emergency generators to be powered by a non-diesel fuel.
- 12. The project should be constructed to meet CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric

⁴ Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: https://californiahvip.org/

⁵ Carl Moyer Program and Voucher Incentive Program. https://ww2.arb.ca.gov/carl-moyer-program-apply

⁶ 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

⁷ 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

⁸ 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

⁹ 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
¹⁰ Effectiveness of Sound Wall-Vegetation Combination Barriers as Near-Roadway Pollutant Mitigation Strategies (2017) is available at: https://www.arb.ca.gov/sites/default/files/classic//research/apr/past/13-306.pdf

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vehicle charging, and bicycle parking, and achieve a certification of compliance with LEED green building standards.