

November 14, 2023

Nicole Moore
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Sent via email

Dear Nicole Moore:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Mariposa Industrial Park #2 Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2023030679. The Project proposes the development of "four buildings totaling 1,779,390 square feet of mostly warehouse space with ancillary office space."¹ According to the traffic study provided, the proposed Project would result in an increase of 5,927 daily vehicle trips along local roadways.² The City does not specify the increase in daily heavy-duty truck trips that may result during the operation of the Project in the DEIR. The Project is proposed within the City of Stockton (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

CARB submitted a comment letter, which is attached to this letter, on the Notice of Preparation (NOP) for the DEIR released in March 2023. CARB's comments dated April 28, 2023, highlighted the need to prepare a health risk assessment (HRA) for the Project and encouraged the City 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 disproportionately burdened by multiple sources of pollution, CARB's comments on the NOP expressed concerns with the potential cumulative health risks associated with the construction and operation of the Project.

¹ City of Stockton. Mariposa Industrial Park Project #2 Draft Environmental Impact Report. Page 2-1. Accessible at https://files.ceqanet.opr.ca.gov/286524-5/attachment/RyZ8FzWLafT5wTL_uRx7TfIU2X-XDEMRcDqjNFrs4kajulDJ5V8QVUWByyjFk2RNlwGaT5bHEzriUKf60

² City of Stockton. Mariposa Industrial Park Project #2 Draft Environmental Impact Report. Appendix G. Page 58. Accessible at https://files.ceqanet.opr.ca.gov/286524-5/attachment/RyZ8FzWLafT5wTL_uRx7TfIU2X-XDEMRcDqjNFrs4kajulDJ5V8QVUWByyjFk2RNlwGaT5bHEzriUKf60

Residences are located north and west of the Project site, with the closest residence approximately 200 feet north of the Project's northern boundary. In addition to residences, Hamilton Junior High School and Monroe Elementary School are located within three miles of the Project site. These residences and schools are located near existing toxic diesel PM emission sources, which include many existing industrial facilities, rail traffic along the BNSF rail lines, aircraft operations at the Stockton Metropolitan Airport, and vehicular traffic along State Route 99. Due to the Project's proximity to residences and schools already burdened by multiple sources of air pollution, CARB remains concerned with the potential cumulative health impacts associated with the construction and operation of the Project.

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.³ 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 recommended in this letter.

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

The City underestimated mobile source air pollutant emissions in the DEIR by relying on vehicle trip lengths unsupported by substantial evidence. The Project's operational air pollutant emissions were estimated using the California Emissions Estimator Model (CalEEMod). CARB reviewed the CalEEMod input files provided by the City and found that the City relied on CalEEMod vehicle trip length defaults to estimate the Project's mobile source air pollutant emissions. With the application of these defaults, the DEIR shows that approximately 42% of the total vehicle traffic would travel a distance of 15 miles, 18% of the

³ 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, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance.

total vehicle traffic would travel a distance of 11 miles, and 40% of the total vehicle traffic would travel a distance of 8 miles. These CalEEMod default trip distances were derived using data provided in the 2015 California Statewide Travel Demand Model (CSTDM) and should have been replaced with project-specific trip distances.

The DEIR does not specify the distance workers and truck drivers would need to travel to operate the proposed four industrial buildings. The Project is located within a short distance from the Port of Stockton and other industrial warehouses, which the Project could serve. However, the heavy-duty trucks transporting goods to the proposed industrial buildings could travel further distances than 15 miles, such as Port of Oakland or Port of Point San Pablo. Unless the City includes a mitigation measure or project design feature in the DEIR that restricts trucks from traveling a distance greater than what was analyzed in the DEIR, the City should re-evaluate the Project's mobile source air pollutant emissions by using Project-specific trip distances.

The Trip Generation Rates Used to Evaluate the Project's Mobile Air Pollutant Emissions are Unsubstantiated

CARB is concerned about the inconsistencies between the trip generation rates provided in the CalEEMod input files used to estimate the Project's operational air quality impacts and the Project's traffic study. According to Appendix G (Transportation Impact Study) of the DEIR, the Project would result in a 5,927 daily vehicle trips, which is based on a trip generation rate of 3.42 trips per 1,000 square feet of light industrial building space⁴. However, after reviewing the Project's CalEEMod input files provided to CARB staff, CARB staff found that the Project's mobile source air pollutant emissions were estimated using a CalEEMod default value of 2.12 trips per 1,000 square feet of light industrial use, which equates to 3,772 daily vehicle trips. The daily vehicle trips used in the Project's air quality impact analysis are approximately 2,154 fewer than the value used to analyzed in the Project's traffic study. To this end, CARB is concerned that the City may have underestimate the Project's operational air quality impacts by not using the trip generation rates provided in the Project's traffic study. The City should re-evaluate the Project's mobile source air pollutant emissions by using trip generation rates consistent with those used in the Project's traffic study.

⁴ City of Stockton. Mariposa Industrial Park Project #2 Draft Environmental Impact Report. Appendix G. Page 58. Accessible at https://files.ceqanet.opr.ca.gov/286524-5/attachment/RyZ8FzWLafT5wTl_uRx7TfIU2X-XDEMRcDqjNFrs4kajulDJ5V8QVUWByyjFk2RNIwGaT5bHEzriUKf60

The Vehicle Fleet Mixes Used to Evaluate the Project's Mobile Air Pollutant Emissions are Unsubstantiated

The DEIR underestimated the Project's operational mobile source air pollutant emissions by using fleet mixes unsupported by substantial evidence. The Project's operational air pollutant emissions were estimated using the CalEEMod. Based on CARB's review of the CalEEMod input files, the City relied on CalEEMod fleet mix defaults to estimate the Project's mobile source air pollutant emissions. After applying these defaults, the Project's fleet mix would include approximately 4% light-duty trucks, 1% medium-duty trucks, and 2% heavy-duty trucks. Using the 3,772 average daily trip rates provided in the CalEEMod input files provided by the City, the operational mobile emissions were estimated assuming the Project would result in approximately 260 average daily light-, medium-, and heavy-truck trips. Neither the DEIR nor the traffic report prepared for the Project state the number of heavy-duty truck trips the Project would generate while in operation.

An industrial development the size of the proposed Project would be expected to result in truck traffic higher than 260 daily trips or 7% of the Project's total vehicle trips. For example, the Fontana Truck Trip Generation Study found that 20.4% of the total daily vehicle trips would consist of trucks from a warehouse greater than 100,000 square feet.⁵ This example study is based on traffic counts from warehouses. Without citing substantial evidence to support the fleet mix assumptions used in the air quality analysis, there is currently no basis to support that the Project's mobile source emissions would not result in a significant adverse environmental impact. CARB urges the City to re-evaluate the Project's air pollutant emissions using fleet mixes calculated by a traffic study.

The DEIR Does Not Adequately Analyze the Project's Potential Health Risk Impacts

The DEIR concluded that the Project would not expose nearby sensitive receptors to air pollutant concentrations that would result in a significant impact. The DEIR reached this conclusion by using a prioritization screening tool posted on the San Joaquin Valley Air Pollution Control District (SJVAPCD) CEQA webpage. The screening tool categorizes a facility's health risks based on information provided in the Facility Prioritization Guidelines published by the California Air Pollution Control Officers Association (CAPCOA). According to the DEIR, if a project has a prioritization score of ten or less, then the project is considered to not exceed SJVAPCD's significance threshold for health impacts and, therefore, an HRA is

⁵ City of Fontana. Truck Trip Generation Study. August 2003. Accessible at:
<https://tampabayfreight.com/pdfs/Freight%20Library/Fontana%20Truck%20Generation%20Study.pdf>

not required.⁶ The City asserts that the facility prioritization score for the Project would be less than 10.

CARB has concerns about how the prioritization screening tool was used to determine the Project's prioritization score. The prioritization screening tool spreadsheet shown in Appendix B (Air Quality Modeling Results) of the DEIR does not match the prioritization screening tool spreadsheet posted on the SJVAPCD's webpage.^{7,8} The prioritization screening tool spreadsheet is based on the CalEEMod outputs, provided in Appendix B (Air Quality Modeling Results) of the DEIR, which contain several flaws detailed in this letter and does not account for diesel PM emissions from transport refrigeration units (TRUs) operating within the Project site during its operation. Since the proposed four industrial buildings could be used for cold storage, trucks and trailers visiting the Project site could be equipped with TRUs⁹. TRUs on trucks and trailers can emit large quantities of diesel PM emissions while operating within the Project site, which were not accounted for in the Project's air quality impact analysis.

The Project is located within 200 feet of an existing residence and there are many other residences adjacent to Mariposa Road that would be exposed to diesel PM from heavy-duty trucks serving the proposed Project during its operation. Since the Project is located near residences already disproportionately burdened by multiple sources of air pollution, CARB urges the City to prepare an HRA for the Project. The HRA prepared in support of the Project 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).

⁶ "Prioritization score" means a facility's numerical score for cancer health effects or noncancer health effects, as determined by the district pursuant to Section 44360 in a manner consistent with facility prioritization guidelines prepared by CAPCOA and approved by the state board.

⁷ City of Stockton. Mariposa Industrial Park Project #2 Draft Environmental Impact Report. Appendix B. Page 2. Accessible at https://files.ceqanet.opr.ca.gov/286524-5/attachment/RyZ8FzWLafT5wTI_uRx7TfIU2X-XDEMrCdqjNFrs4kajuIDJ5V8QVUWByyjFk2RNlwGaT5bHEzriUKf60

⁸ San Joaquin Valley Air Pollution Control District. California Environmental Quality Act. Accessible at <https://ww2.valleyair.org/permitting/ceqa/>. Last Accessed November 7, 2023.

⁹ 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

The City Should Include a Mitigation Measure Requiring the use of Zero-Emission Trucks

In Chapter 3.5 (Applicant-Proposed Mitigation Measures) of the DEIR, the City provides a list of Additional Air quality Mitigation Measures (AIR-1 through AIR-28) that will be implemented during the construction and operation of the Project. These mitigation measures include, but are not limited to, compliance with SJVAPCD's existing rules and regulations, installation of solar panels, a requirement that property owners/tenants/lessees ensure all heavy-duty trucks (Class 7 and 8) domiciled on the Project site are model year 2014 or later from the start of operation, transition to zero-emission vehicles by December 31, 2025 or when commercially available, installation of infrastructure to support onsite zero-emission vehicles, and a requirement to install electric TRU plug-in units at every dock door.

CARB commends the City for including measures that promote the use of zero-emission technologies in the DEIR, however, more should be done to reduce the Project's impact on air quality. To this end, the City should revise mitigation measure AIR-13 to require all heavy-duty trucks serving the Project to be zero-emissions at the start of operations. As presented below, CARB has many regulations that promote and eventually require the use of zero-emission trucks at freight facilities. 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).¹⁰ 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 zero-emission trucks that can meet the freight 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 that 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.

¹⁰ Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: <https://californiahvip.org/>

- **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 electric 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 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-emissions 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 and vans. To protect the quality of air that nearby residents and school children breathe, CARB urges the City to include contractual language in tenant lease agreements specifying that future tenants must use zero-emission trucks during their operation.

In addition to requiring all trucks serving the Project site to be zero-emission at the start of operations, the City should add the air pollutant emission reduction measures provided below to the Additional Air Quality Mitigation Measures listed in the DEIR.

- 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 cleaner than a Tier 4 engine.
- 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 (NOx) standard starting in the year 2022.¹¹
- In tenant lease agreements, include language that requires all TRUs entering the project-site be zero-emission or capable of plugging in to electric infrastructure for zero-emission operation while on the property.
- In tenant lease agreements, include language that prohibits trucks and support equipment from idling longer than two minutes while on site.

Conclusion

To reduce the exposure of toxic diesel PM emissions in disadvantaged communities already disproportionately impacted by air pollution, the final design of the Project should include all existing and emerging zero-emission technologies to minimize diesel PM emissions, NOx emissions, and greenhouse gas emissions. CARB also urges the City to revise the Project's air quality analysis to reflect trip lengths, trip rates, and fleet mixes supported by substantial evidence. The City should also prepare an HRA for the Project that evaluates the potential health risk impacts that may result from the construction and operation of 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.

¹¹In 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>

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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,



Matthew O'Donnell, Branch Chief, Risk Reduction Branch

Attachment

cc: State Clearinghouse
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Stanley Armstrong, Air Pollution Specialist, Risk Reduction Branch

April 28, 2023

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Dear Nicole Moore:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Notice of Preparation (NOP) for the Mariposa Industrial Park #2 Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2023030679. The Project would allow for the development of 1.8 million square feet of light industrial land uses on approximately 112 acres of land. The Project site is located within the City of Stockton (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

Industrial development, such as the proposed 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 emissions, and contribute to regional air pollution and global climate change.¹ The Project will expose nearby communities to elevated levels of air pollution. Residences are located north and west of the Project with the closest residence located approximately 50 feet from the Project's northern boundary. These communities are surrounded by existing toxic diesel PM emission sources, which include heavy-duty truck traffic serving existing industrial buildings, vehicular traffic along State Route 99 (SR-99) and Mariposa Road, and rail traffic along existing rail lines. According to the California Communities Environmental Health Screening Tool Version 4.0 (CalEnviroScreen),² these communities are located in census tracts that score within the top 6 percent of State's most impacted from air pollution from an environmental hazard and socioeconomic standpoint. Based on this CalEnviroScreen score, the area surrounding the Project is home to some of the most vulnerable neighborhoods in the State. Due to the Project's proximity to residences already burdened by multiple sources of air pollution, CARB is concerned with the potential cumulative 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.

² "CalEnviroScreen 4.0." Oehha.ca.gov, California Office of Environmental Health Hazard Assessment, October 2021, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

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

Since the Project is near a community that is already burdened by multiple air pollution sources, CARB urges the City and applicant 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, locomotives, 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 and applicant 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.³ 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 Assessments),⁴ 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

³ 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.

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>.

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

To reduce the exposure of toxic diesel PM emissions in disadvantaged communities already impacted by air pollution, 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. 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,



Robert Krieger, Branch Chief, Risk Reduction Branch

Attachment

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Stanley Armstrong, Air Pollution Specialist, Risk Reduction Branch

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 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 2022.⁵

⁵ 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. The low-NO_x emission standard is available at: <https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards>

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 (TRUs) 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.⁶
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).⁷
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 from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).⁸ Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.⁹
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

⁶ 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

⁷ Clean Off-Road Equipment Voucher Incentive Project. Accessible at: <https://californiacore.org/how-to-participate/>

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

⁹ Carl Moyer Program and Voucher Incentive Program. <https://ww2.arb.ca.gov/carl-moyer-program-apply>

including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,¹⁰ Advanced Clean Trucks Regulation,¹¹ Periodic Smoke Inspection Program (PSIP),¹² and the Statewide Truck and Bus Regulation.¹³

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 walls¹⁴ 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 vehicle charging, and bicycle parking, and achieve a certification of compliance with LEED green building standards.

¹⁰ 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>

¹¹ 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>

¹² 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>

¹³ 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>

¹⁴ 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>