CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Liane M. Randolph, Chair

March 1, 2022

Jason Cashman
Environmental Manager
Port of Stockton
2201 West Washington Street
Stockton, California 95203
ceqa@stocktonport.com

Dear Jason Cashman:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the T.C. NO CAL. Development Warehousing and Distribution Facility Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2021080499. The Project site is located within the Port of Stockton (Port), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

The Project consists of the issuance of a lease to TC NO. CAL. Development that would allow for the construction of a new 655,200 square foot warehouse building, 293,951 square foot outdoor storage area, and contaminated soil remediation on approximately 60 acres of the Port's West Complex. The Port is expecting the warehouse building to be used by commercial operators for distribution services. Uses may include wholesaling and distribution, warehousing, or light manufacturing. Building products and consumer goods would be received via rail or truck, unloaded, and then stored at the facility before being shipped to local, regional, and state markets by truck and rail. The Project would result in a cargo throughput of 32,287 annual inbound truck calls, 63,211 outbound truck calls and 2,053 inbound rail calls per year.

Industrial facilities, like the facility described in the Project, can result in high volumes of heavy-duty diesel trucks, locomotive operations 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] Governor Gavin Newsom signed Executive Order N-79-20 on September 23, 2020. The executive order states: "It shall be a goal of the State that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. It shall be a further goal of the State that 100 percent of medium and heavy-duty vehicles in the State be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks. It shall be further a goal of the State to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible." The executive order further directs the development of regulations to help meet these goals. To ensure that lead

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.

agencies, like the Port, 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 Port and applicant to construct and operate the Project using the zero-emission technologies recommended in this letter.

CARB submitted a comment letter, which is attached to this letter, on the Notice of Preparation (NOP) for the DEIR released in August 2021. CARB's comments, dated October 1, 2021, highlighted the need for preparing a health risk assessment (HRA) for the Project. The letter also encouraged the Port and applicant to implement all existing and emerging zero-emission technologies to minimize exposure to diesel particulate matter (diesel PM) and nitrogen oxides (NOx) emissions for all neighboring communities, and to minimize the greenhouse gases that contribute to climate change. Since the Project is located near the Stockton community, which has been designated as a disadvantaged community under Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017)[2], CARB's comments on the NOP expressed concerns with the potential cumulative health risks associated with the construction and operation of the Project. CARB reviewed the DEIR and has the following concerns:

The Port Must Implement All Feasible Mitigation Measures to Reduce the Project's Potentially Cumulatively Considerable Impact on Air Quality and Public Health

Chapter 3.2 (Air Quality) of the DEIR concludes that NOx emitted during Project operation would exceed the San Joaquin Valley Air Pollution Control District's (SJVAPCD) significance thresholds. To reduce the Project's impact on air quality, the DEIR included five mitigation measures summarized below.

MM-AQ-1: Require construction contractors to minimize heavy-duty construction equipment idling time to 2 minutes when feasible.

MM-AQ-2: Use construction equipment equipped with Tier 4 engines.

MM-AQ-3: Require all trucks serving the Project to minimize idling duration to 2 minutes.

MM-AQ-4: Encourage customers to utilize 2017 or newer trucks to transport cargo.

MM-AQ-5: Require terminal and yard equipment to be the cleanest available equipment.

After implementing these measures, the Port concluded in the DEIR that the Project's impact on air quality would be reduced to a less than significant level. However, the DEIR

2. Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2.

acknowledges that Project is located near other past, present, and reasonably foreseeable future industrial projects located around the Port. Because of this, the Port concluded in Chapter 4.2.1 (Cumulative Impacts for Affected Environmental Resource Areas) that the operation of the Project in conjunction with these projects would result in a cumulatively significant impact on air quality and public health after mitigation.

Some of the mitigation measures presented in the DEIR, aimed to reduce the Project's air quality impacts, lack enforceability. The operational mitigated air pollutant emissions shown in the DEIR assumes all trucks serving the Project would be model year 2017 or later. However, MM-AQ-4 would not require tenants to use model year 2017 trucks, but rather would encourage tenants to use them. Based on CARB's review of the Project's air quality analysis, unless all trucks were model year 2017 or later, the Project's air quality impacts would likely remain significant even after all mitigation measures are applied. For MM-AQ-4 to be useful, the measure must require, rather than encourage, all customers to utilize 2017 or newer trucks to transport cargo. In addition, this measure must have some method of enforcement. If there is no plan to enforce MM-AQ-4, the Port must re-model the Project's operational mitigated air quality emissions conservatively assuming that MM-AQ-4 will not be fully implemented.

Furthermore, MM-AQ-5 would require terminal and yard equipment to be the cleanest available equipment with a first preference for zero-emission equipment, a second preference for near-zero equipment, and then for the cleanest available equipment if neither zero nor near-zero equipment are available or feasible. The Port does not provide criteria used to determine how zero-emission equipment is available or feasible, leaving this criteria to be determined by the tenants. Zero-emission yard equipment is widely available and can be purchased using incentive funding from CARB's Clean Off-Road Equipment Voucher Incentive Project (CORE).[3]

Since the Project, in conjunction with existing and planned facilities at the Port, would result in cumulatively considerable impacts on air quality and public heath, CARB staff urges the Port and applicant to implement all feasible mitigation measures to reduce the Project's impact on public health. Even where impacts will remain significant and unavoidable after mitigation, CEQA nevertheless requires that all feasible mitigation measures be incorporated (see California Public Resources Code§ 21081; 14 CCR§ 15126.2(b)). To meet this requirement, the Port must add the feasible emission reduction measures listed below in the Final Environmental Impact Report (FEIR) to reduce the Project's significant adverse air quality impacts:

- In construction contracts, include language that requires all heavy-duty trucks entering the construction site, during all construction phases, be model year 2014 or later.

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

- Require all heavy-duty trucks entering or on the Project site to be model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2023. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).[4] Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.[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.
- 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.

The FEIR Should Include a Feasible Mitigation Measure that Ensures the Project Uses the Cleanest Switcher and Line-Haul Locomotives Available

To meet the emission reduction targets established by Executive Order N-79-20, CARB is presently developing regulatory concepts for the In-Use Locomotive Regulation to reduce air pollutant emissions, toxic air contaminants and greenhouse gas emissions from locomotives operating through California. These concepts would require locomotive operators to mitigate diesel PM emissions by paying into an account used by the operators to develop or purchase zero-emission locomotives. The proposed concepts would also prohibit the operation of locomotives with an original engine build date that is 23 years or older starting in 2030, limit locomotive idling durations to 30 minutes, and require operators to register their locomotives with CARB. More information about the proposed In-Use Locomotive Regulation and associated workshops can be obtained from CARB's website: *https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california*.

Based on emerging technologies in batteries and hydrogen fuel cells, zero-emission locomotives are becoming a reality and could be used in the near future to meet the needs of the Project. CARB has sponsored, and continues to sponsor, demonstration projects to accelerate the adoption of clean freight technologies and reduce air pollution caused by the movement of goods throughout the State. CARB's Zero and Near Zero-Emission Freight Facilities Program successfully demonstrated batteries in locomotives that could be

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*

developed further and applied to the Project.[6] Although there are no demonstration projects currently funded by CARB, there are demonstration projects presently underway that focus on battery-electric and hydrogen zero-emission locomotive technologies. An example of these demonstration projects is provided below.

- **Lithium-ion Battery Technology**. "Progress Rail, a Caterpillar company, has reached an agreement with Pacific Harbor Line to supply its new EMD® Joule battery electric locomotive for a demonstration project operating in the POLA and POLB, California. The new, six-axle locomotive will feature the latest lithium-ion battery technology and battery management system, alongside alternating current (AC) traction and state-of-the-art electronics. The locomotive includes battery capacity of 2.4 megawatt hours, for a run time of up to 24 hours, depending upon charging and utilization. It is anticipated for delivery in the second half of 2021."[7]
- **Hydrogen-Powered Locomotive Pilot Project.** In December 2020, Canadian Pacific (CP) has announced plans to develop line-haul hydrogen-powered locomotive technology. The "[h]ydrogen Locomotive Program will retrofit a line-haul locomotive with hydrogen fuel cells and battery technology to drive the locomotive's electric traction motors. Once operational, CP will conduct rail service trials and qualification testing to evaluate the technology's readiness for the freight-rail sector."[8]
- **Ultium Battery and HYDROTEC Hydrogen Fuel Cell Technology.** In June 2021, Wabtec Corporation and General Motors (GM) announced develop and commercialize GM's Ultium battery technology and HYDROTEC hydrogen fuel cell systems.[9]

With the development of locomotive technology presently underway, and the goals set by Executive Order N-79-20, it is reasonable to expect that zero-emission switcher and line-haul locomotives could be available by 2030. To this end, CARB staff urges the Port and applicant to present a mitigation measure in the FEIR that requires all switcher and line-haul locomotives serving the Project to be zero-emission.

---

6. California Air Resources Board (CARB), 2020. CARB's Zero and Near Zero-emission Freight Facility Program. Accessible at *https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation#:~:text=The%20goal%20of%20CARB's%20Zero,commercialization%20of%20these%20technologies%20statewide*

7. Progress Rail, 2020. Progress Rail and Pacific Harbor Line Sign Agreement. Accessible at *https://www.progressrail.com/en/Company/News/PressReleases/ProgressRailAndPacificHarborLineSignAgreementForBatteryLocomotive.html*

8. Canadian Pacific, 2020. CP announces hydrogen-powered locomotive pilot project. Accessible at *https://www.cpr.ca/en/media/cp-announces-hydrogen-powered-locomotive-pilot-project*

9. General Motors, 2021. Wabtec and GM to Develop Advanced Ultium Battery and HYDROTEC Hydrogen Fuel Cell Solutions for Rail Industry. Accessible at *https://plants.gm.com/media/us/en/gm/home.detail.html/content/Pages/news/us/en/2021/jun/0615-wabtec.html*

The DEIR Does Not Specify if the Project Would be Used for Cold Storage

In Chapter 2 (Project Description) of the DEIR, the Port does not specify if the Project would include the operation of on-site cold storage uses. Consequently, air pollutant emissions associated with cold storage operation were not included in the DEIR. Should the Project later include cold storage uses, residences in the Stockton community near the Project-site could be exposed to significantly higher levels of toxic diesel PM and nitrogen oxides (NOx), and greenhouse gases when compared trucks, trailers, and rail cars without Transport Refrigeration Units (TRUs). To ensure TRUs will not operate within the Project site without first quantifying and mitigating their potential impacts, the Port must include one of the following design features in the FEIR:

- 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.

If the Port and applicant later chooses to allow TRUs to operate within the Project site, the Port must re-model the Project's air quality impact analysis and HRA to account for potential health risk impacts. The updated air quality impact analysis and HRA should include the following air pollutant emission reduction measures:

- Include contractual language in tenant lease agreements that requires all loading/unloading docks and trailer or container spaces to be equipped with electrical hookups for trucks with TRU or auxiliary power units. This requirement will substantially decrease the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the Project-site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration are encouraged and can also be included in lease agreements.[10]
- Include contractual language in tenant lease agreements that requires all TRUs entering the project site to be plug-in capable.

10. 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*.

The Port Uses Modeling Assumptions Unsupported by Substantial Evidence

The Project's operational mobile source air pollutant emissions may have been underestimated in the DEIR by using trip lengths and operational durations unsupported by substantial evidence. Chapter 3.2 (Air Quality) of the DEIR shows that the Project operational emissions of NOx would exceed the SJVAPCD significance thresholds and would be reduced to a less than significant level after the implementation of MM-AQ-1 through MM-AQ-5. The Project's operational air pollutant emissions were estimated under the assumption that the Project would not operate more than 313 days out of the year (see Table 21 in Appendix D of the DEIR). However, this conflicts with the operating assumptions presented in Chapter 2.7 (Proposed Project Operations) of the DEIR, which assumes the Project would operate 365 days out of the year. The Port should revise the assumptions used to estimate the Project's operational emissions to be consistent with those used in the Project's description and present the updated unmitigated and mitigated air pollutant emissions in the FEIR.

The Port estimated the Project's operational air pollutant emissions using the assumption that the heavy-duty trucks and trains serving the Project would travel a distance of 22 and 25 miles, respectively. There is a concern that these trip distances could be underestimated as Project-related heavy-duty trucks and trains transporting goods could travel greater distances, such as to the Port of Oakland or Port of Point San Pablo. Unless the Port restricts the Project's truck and train trip distances to those specified in the Project's air quality analysis, the Port must remodel the Project's air quality impacts assuming a trip distance supported by substantial evidence.

Conclusion

CARB is concerned about the potential air quality impacts should the Port approve the Project and the assumptions used to evaluate those impacts in the DEIR. The Project is located within proximity to residences within the Stockton community, which has been designated as a disadvantaged community under AB 617. The DEIR evaluates Project air quality impacts assuming that unenforceable mitigation measures will be implemented once the Project is operational. The DEIR does not include any mitigation measures to reduce the air pollutant emissions generated by the switcher and line-haul locomotives serving the Project. The DEIR may not have accounted for diesel PM emissions from trucks with TRUs or accounted for TRUs on rail cars when evaluating the Project’s cancer risk impacts. Lastly, the Port evaluated air quality using unsubstantiated truck and trail trip distances and inconsistent annual operating days.

Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and greenhouse gas impacts, coupled with CARB’s limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. CARB’s deliberate decision to substantively comment on some issues does not constitute an

admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not substantively submit comments.

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

Sincerely,

Robert Krieger, Branch Chief, Risk Reduction Branch

Attachment

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

Dillon Delvo, Executive Director, Little Manila Rising
dillon@littlemanila.org

Matt Holmes, Environmental Justice Director, Little Manila Rising
matt@littlemanila.org

Patia Siong, Supervising Air Quality Specialist, San Joaquin Valley Air Pollution Control District
patia.siong@valleyair.org

Eric McLaughlin, Air Quality Specialist, San Joaquin Valley Air Pollution Control District
eric.mclaughlin@valleyair.org

Jonathan Pruitt, Environmental Justice Program Coordinator, Catholic Charities of the Diocese of Stockton
jpruitt@ccstockton.org

Mary Elizabeth, Conservation Chair, Delta-Sierra Group,
mebeth@outlook.com

Mariah Looney, Campaign Coordinator, Restore the Delta
mariah@restorethedelta.org

Morgan Capilla, NEPA Reviewer, U.S. Environmental Protection Agency, Air Division, Region 9
capilla.morgan@epa.gov

Stanley Armstrong, Air Pollution Specialist, Risk Reduction Branch

October 1, 2021

Jason Cashman
Environmental and Regulatory Affairs Manager
Port of Stockton
2201 West Washington Street
Stockton, California 95203
ceqa@stocktonport.com

Dear Jason Cashman:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Notice of Preparation (NOP) for the TC NO. CAL. Development Warehousing and Distribution Facility Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2021080499. The Project site is located within the Port of Stockton (Port), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

The Project consists of the issuance of a lease to TC NO. CAL. Development that would allow for the construction of a new 655,200 square foot warehouse building, 293,951 square foot outdoor storage area, and contaminated soil remediation on approximately 60 acres of the Port's West Complex. The warehouse building is expected to be used by a commercial operator for distribution services, which may include wholesaling and distribution, warehousing, or light manufacturing. Building products and consumer goods would be received via rail or truck, unloaded, and then stored at the facility before being shipped to local, regional, and state markets by truck and rail. According to the NOP, the Project would result in a cargo throughput of 32,287 annual inbound truck calls, 63,211 outbound truck calls and 2,053 inbound rail calls per year.

Industrial development, such as the Project, can result in high daily volumes of heavy-duty diesel truck and rail 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 proposed warehouse building will be located approximately a half a mile from the Stockton community. This community has been designated as a disadvantaged community under Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017)[2] and

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 Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2.

therefore, CARB is concerned about localized air pollutant exposure at the neighborhood level, as well as the Project's regional air quality impacts.

The Project Would Increase Exposure to Air Pollution in Disadvantaged Communities

The Project, in conjunction with the operation of the other industrial development within the Port of Stockton, will expose the nearby Stockton community to increased levels of air pollution. Addressing the disproportionate impacts that air pollution has on disadvantaged communities is a pressing concern across the State, as evidenced by statutory requirements compelling California's public agencies to target these communities for clean air investment, pollution mitigation, and environmental regulation. The following three pieces of legislation need to be considered and included in the DEIR when developing a project like this near a disadvantaged community:

Senate Bill 535 (De León, 2012)

Senate Bill 535 (De León, Chapter 830, 2012)[3] recognizes the potential vulnerability of low-income and disadvantaged communities to poor air quality and requires funds to be spent to benefit disadvantaged communities. The California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen).[4] This Project is located with the boundary of the Stockton community. The maximum CalEnviroScreen score for the Stockton community is in the top 1 percent, indicating that the area is home to some of the most vulnerable neighborhoods in the State. The air pollution levels in the Stockton community routinely exceed state and federal air quality standards. CARB urges the Port to ensure that the Project does not adversely impact neighboring disadvantaged communities.

Senate Bill 1000 (Leyva, 2016)

Senate Bill 1000 (SB 1000) (Leyva, Chapter 587, Statutes of 2016)[5] amended California's Planning and Zoning Law. SB 1000 requires local governments that have identified

---

3 Senate Bill 535, De León, K., Chapter 800, Statutes of 2012, modified the California Health and Safety Code, adding § 39711, § 39713, § 39715, § 39721and § 39723.

4 "CalEnviroScreen 3.0." Oehha.ca.gov, California Office of Environmental Health Hazard Assessment, June 2018, *https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30*

5 Senate Bill 1000, Leyva, S., Chapter 587, Statutes of 2016, amended the California Health and Safety Code, § 65302.

disadvantaged communities to incorporate the addition of an environmental justice element into their general plans upon the adoption or next revision of two or more elements concurrently on or after January 1, 2018. SB 1000 requires environmental justice elements to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities. Generally, environmental justice elements will include policies to reduce the community's exposure to pollution through air quality improvement. SB 1000 affirms the need to integrate environmental justice principles into the planning process to prioritize improvements and programs that address the needs of disadvantaged communities.

Assembly Bill 617 (Garcia, 2017)

The State of California has emphasized protecting local communities from the harmful effects of air pollution through the passage of AB 617. AB 617 requires CARB to develop the process that creates new community-focused and community-driven action to reduce air pollution and improve public health in communities that experience disproportionate burdens from exposure to air pollutants. In response to AB 617, CARB established the Community Air Protection Program with the goal of reducing exposure in communities heavily impacted by air pollution. As part of its role in implementing AB 617, CARB must annually consider the selection of communities for development and implementation of community air monitoring plans and/or community emission reduction programs for those communities affected by a high cumulative exposure burden. The Stockton community is one of 15 communities statewide chosen thus far for inclusion in the Community Air Protection Program.

The Stockton community was selected for the development of both a Community Air Monitoring Plan and a Community Emissions Reduction Program (CERP) due to its high cumulative exposure burden, the presence of a significant number of sensitive populations (children, elderly, and individuals with pre-existing conditions), and the socioeconomic challenges experienced by its residents. CARB approved the Stockton CERP in July 2021, which describes strategies to achieve emissions and exposure reductions throughout this community, including significantly reducing or eliminating emissions from heavy-duty mobile sources and industrial stationary sources.

Health-harming emissions, including particulate matter (PM), toxic air contaminants, and diesel PM generated from the proposed increase in warehouse development in the Project area will negatively impact the community, which is already disproportionately impacted by air pollution from existing freight operations as well as stationary sources of air pollution. Part of the AB 617 process required CARB and the San Joaquin Valley Air Pollution Control District (SJVAPCD) to create a highly resolved inventory of air pollution sources within this community.

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 Port 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 Port 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.[6] 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 Port 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 Port 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),[7] 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

6. 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.
7. Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February 2015. Accessed at: *https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf*.

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 first section 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 Port and applicant to implement the measures listed in Attachment A.

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

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

Dillon Delvo, Executive Director, Little Manila Rising
dillon@littlemanila.org

Patia Siong, Supervising Air Quality Specialist, San Joaquin Valley Air Pollution Control District
patia.siong@valleyair.org

Jonathan Pruitt, Environmental Justice Program Coordinator, Catholic Charities of the Diocese of Stockton
jpruitt@ccstockton.org

Mariah Looney, Campaign Coordinator, Restore the Delta
mariah@restorethedelta.org

Morgan Capilla, NEPA Reviewer, U.S. Environmental Protection Agency, Air Division, Region 9
capilla.morgan@epa.gov

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.[1]

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

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 model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2023. A list of commercially available zero-emission trucks can be obtained from the the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).[4] Additional insentive 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

---

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/*

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*

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 walls[10] 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.

---

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://ww2.arb.ca.gov/sites/default/files/classic//research/apr/past/13-306.pdf*