CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Mary D. Nichols, Chair

June 3, 2019

Mr. Mathew Evans
Planning Director
March Joint Powers Authority
14205 Meridian Parkway, Suite 140
Riverside, California 92518

Dear Mr. Evans:

Thank you for providing California Air Resources Board (CARB) staff the opportunity to comment on the K4 Warehouse and Cactus Channel Improvements Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2018111036. The Project consists of the construction and operation of a 718,000 square foot warehouse building, which is assumed to be occupied by a high-cube e-commerce/fulfillment center. The Project would also include improvements to the 7-acre Cactus Avenue Channel drainage ditch that runs along the south side of Cactus Avenue. The Project site is located within the March Joint Powers Authority (JPA) jurisdiction in unincorporated Riverside County, California, which is the lead agency for California Environmental Quality Act (CEQA) purposes. Implementation of the Project would require a change to the existing land use designation from Business Park to Industrial.

Residences are located approximately 2,150 feet from the Project's southeastern boundary. In addition to residences, a day care center (Emagine U at Play) is located approximately 945 feet from the Project's northwestern boundary. Schools are located within a mile of the Project, including Pacific View Charter School and SIATech Moreno Valley Independent Study High School. The community is surrounded by existing toxic diesel emission sources, which include existing warehouses, March Air Reserve Base, and a major freeway (I-215). Due to the Project's proximity to residences and a day care center already disproportionately burdened by multiple sources of air pollution, CARB staff is concerned with the potential cumulative health impacts associated with the construction and operation of the Project.

The State of California has placed additional emphasis on protecting local communities from the harmful effects of air pollution through the passage of Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017). AB 617 is a significant piece of air quality legislation that highlights the need for further emission reductions in communities with high exposure burdens, like those in which the Project is located. Diesel emissions generated during the construction and operation of the Project would negatively impact the community, which is already disproportionally impacted by air pollution from existing freight facilities.

Through its authority under Health and Safety Code, section 39711, the California Environmental Protection Agency (CalEPA) is charged with the duty to identify disadvantaged communities. CalEPA bases its identification of these communities on geographic, socioeconomic, public health, and environmental hazard criteria (Health and Safety Code, section 39711, subsection (a)). In this capacity, CalEPA currently defines a disadvantaged community, from an environmental hazard and socioeconomic standpoint, as a community that scores within the top 25 percent of the census tracts, as analyzed by the California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen). CalEnviroScreen uses a screening methodology to help identify California communities currently disproportionately burdened by multiple sources of pollution. The census tract containing the Project is within the top 2 percent for Pollution Burden.[1] Therefore, CARB urges the JPA to ensure that the Project and land use change does not adversely impact neighboring disadvantaged communities.

The health risk assessment (HRA) prepared for the Project indicates that the incremental increase in lifetime cancer risk at the nearest residence would be 1.3 in a million. CARB staff is concerned that the HRA underestimates the cancer risks because it did not account for diesel particulate matter (PM) emissions from transport refrigeration units (TRU).[2]

CARB staff have the following concerns on the DEIR and HRA:

1. Since the Project description in the DEIR did not explicitly state the warehouse proposed under the Project would not include cold storage space, there is a possibility that trucks and trailers visiting the Project site would be equipped with TRUs. Modeling in support of the DEIR did not account for emissions of diesel PM that result from the operation of TRUs. TRUs on trucks and trailers can emit large quantities of diesel PM while operating within the Project site. Residences and other sensitive receptors (e.g., day care facilities, senior care facilities, and schools) located near where these TRUs could be operating would be exposed to diesel PM emissions that would result in significant cancer risk. If trucks and trailers visiting the Project are equipped with TRUs, operational NOx and diesel PM emissions and health risks from TRUs should be quantified and reported in the Final Environmental Impact Report (FEIR).

2. The Project's HRA should be revised to include an existing baseline (current conditions) and future baseline without the Project, and the future conditions with the Project. The health risks modeled under both the existing and the future

---

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

[2] Transport refrigeration units (TRU) are refrigeration systems powered by integral diesel engines that protect perishable goods during transport in insulated truck and trailer vans, rail cars, and domestic shipping containers.

baselines should reflect all applicable federal, state, and local rules and regulations. By evaluating health risks using all baselines, the public and city and county planners will have a complete understanding of the potential health impacts that would result from the Project. These include the impacts from the loss of expected emission reductions as truck fleets turn over to cleaner models.

3. MM-AQ-6 of the DEIR requires all loading and unloading docks within the Project to accommodate SmartWay[3] trucks and requires the applicant to provide evidence to JPA of compliance prior to issuance of a certificate of occupancy. Many of the recommend fuel consumption reduction measures recommend by SmartWay are already required under the Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Regulation.[4] Since the measure listed under MM-AQ-6 is mostly already require by law in California, MM-AQ-6 should be revised in the FEIR to include truck emission reduction measures that exceed state and federal rules and regulations. CARB staff strongly recommends that MM-AQ-6 include contractual language in tenant lease agreements that require all loading and unloading docks and trailer spaces be equipped with electrical hookups for trucks with TRUs or auxiliary power units (APU). MM-AQ-6 should also require all TRUs entering the Project site be plug-in capable. Other diesel emission reduction measures recommended by CARB staff can be found in Attachment A of this comment letter.

4. Since the proposed warehouse is assumed to be occupied by an e-commerce/fulfillment center, CARB staff strongly encourages the JPA to include a mitigation measure in the FEIR that requires all cars, vans, and box-trucks entering the Project site be zero-emission.

CARB staff is concerned with the modeling assumptions found in the Air Quality section of the DEIR. The emissions and health risks reported in the DEIR were estimated under the assumption that the Project would not be utilized for cold storage. As a result, the DEIR did not account for potential air quality impacts associated with the operation of TRUs. Because the future tenant of the proposed warehouse/industrial buildings are unknown, the air quality impact analysis in the DEIR should have accounted for trucks and trailers with TRUs entering the Project site. In this case, the DEIR does not assess the air quality impacts from the Project adequately. Without proper analysis, it is impossible to understand the magnitude of the Project's air quality impacts and the

---

[3] SmartWay, launched in 2004, is a partnership between the Environmental Protection Agency (EPA) and the freight industry to reduce fuel consumption and air pollution. Companies that carry goods measure their fuel efficiency. When they submit their data information to EPA, they become registered SmartWay Carrier Partners, and performance is ranked against the performance of other companies in their sector.

[4] California Air Resources Board (CARB), 2013. U.S. EPA SmartWay Verified or Designated Equipment. Access at: https://www.arb.ca.gov/cc/hdghg/technologies.htm

resulting health risk to nearby communities. The JPA must adequately account for all sources that may contribute to operational emissions, and clearly articulate the foundation and calculations used to assess the effectiveness of mitigation measures.

In addition to the concerns listed above, CARB staff encourages the JPA and applicant to implement the measures listed in Attachment A of this comment letter to reduce the Project's construction and operational air pollution emissions. CARB staff 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. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist, at (916) 440-8242 or via email at stanley.armstrong@arb.ca.gov.

Sincerely,

Richard Boyd, Chief
Risk Reduction Branch
Transportation and Toxics Division

Attachment

cc: See next page.

cc: State Clearinghouse
P.O. Box 3044
Sacramento, California 95812

Morgan Capilla
NEPA Reviewer
U.S. Environmental Protection Agency
Air Division, Region 9
75 Hawthorne Street
San Francisco, California 94105

Carlo De La Cruz
Sierra Club
2101 Webster Street, Suite 1300
Oakland, California 94612

Lijin Sun
Program Supervisor - CEQA
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Andrea Vidaurre
Center for Community Action and Environmental Justice
P.O. Box 33124
Riverside, California 92519

ATTACHMENT A

Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

California Air Resources Board (CARB) staff 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 recommend by CARB staff, 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 onsite. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, onsite 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 equal 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-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 staff 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 onsite.

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 eliminate 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 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 requiring all TRUs, trucks, and cars entering the Project site be zero-emission.

6. 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.

7. 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

---

[1] In 2013, CARB adopted optional low-NO_x emission standards for on-road heavy-duty engines. CARB staff 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 years 2010 and later. CARB's optional low-NO_x emission standard is available at https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm.

[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.

today, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.

8. Include contractual language in tenant lease agreements that requires the tenant 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,[3] Periodic Smoke Inspection Program (PSIP),[4] and the Statewide Truck and Bus Regulation.[5]

9. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than five minutes while onsite.

10. Include contractual language in tenant lease agreements that limits onsite TRU diesel engine runtime to no longer than 15 minutes. If no cold storage operations are planned, include contractual language and permit conditions that prohibit cold storage operations unless a health risk assessment is conducted and the health impacts fully mitigated.

11. 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.

---

[3] 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://www.arb.ca.gov/cc/hdghg/hdghg.htm.

[4] 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.

[5] The regulation requires newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks 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.