

August 15, 2019

Mark Gibbs
Director of Aviation
San Bernardino International Airport Authority
1601 East Third Street, Suite 100
San Bernardino, California 92408

Dear Mark Gibbs:

The California Air Resources Board (CARB) staff thanks the San Bernardino International Airport Authority (SBIAA) for the opportunity to comment on the Eastgate Air Cargo Facility (Project) Draft Environmental Assessment (EA). The Project consists of the development and operation of various facilities and supporting infrastructure on an approximately 101.5-acre site on the northern side of the San Bernardino International Airport (Airport). Development includes the construction of a 658,500 square-foot sort, distribution and office building, two separate 25,000 square-foot maintenance buildings, road modifications, and new taxi lanes and an aircraft parking apron. CARB staff is concerned with the potential health risk impacts to residences near the Project site as a result of the increase in cargo aircraft, ground support equipment, and heavy truck traffic proposed under the Project.

Existing residences are located approximately 150 feet from the Project's northern boundary. In addition to residences, the Indian Springs High School is located within one mile of the Project. The community is surrounded by existing toxic diesel emission sources, which include existing warehouses and the existing airport. Due to the Project's proximity to residences and a school already disproportionately burdened by multiple sources of 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 disproportionately 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 5 percent for Pollution Burden.¹ Therefore, CARB urges the SBIAA to ensure that the Project does not adversely impact neighboring disadvantaged communities.

CARB staff is concerned by the high air pollutant emission estimates presented in the Air Quality section of the EA, particularly diesel particulate matter (PM) and oxides of nitrogen (NO_x) from the increase in on-road heavy trucks and aircraft operating at the Airport as a result of the Project. According to the EA, the Project would result in a net increase of approximately 185 tons per year of NO_x, 12 tons per year of particulate matter 10 microns in diameter (PM₁₀) and 3.8 tons per year of particulate matter 2.5 microns in diameter (PM_{2.5}) during the operational year 2024. Although the Project's operation emissions of PM₁₀ and PM_{2.5}, would not exceed their respective General Conformity Rule *de minimis* thresholds, CARB staff is concerned that the Project's high annual emission rate of diesel PM and NO_x could result in a significant health risk impact.

Although the EA includes mitigation measures to reduce the Project's operational emissions such as striving for an all-electric ground support fleet and building efficiencies that exceed those required under 2016 Title 24 Standards, more should be done to reduce the exposure of neighboring disadvantaged residences to NO_x and diesel PM emissions that could pose a significant health risk impact.

CARB staff urges the SBIAA to implement best practices and strategies to reduce air pollutant emissions during onsite aircraft operations. These practices and strategies could include: (1) minimizing aircraft engine use, particularly in inefficient, low-power modes during taxi and landing; (2) restricting the amount of time an aircraft must run its engines to achieve thermal stability before takeoff and cool down after landing to what is minimally required; (3) restrict aircraft engines to be set to full power during takeoff, unless absolutely necessary due to hot weather or with a heavily loaded plan or for safety concerns; and, (4) installing electrified gates so that aircraft, auxiliary power units and ground support equipment can plug into electrical power. Implementation of these

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

practices/strategies will further reduce the exposure of residence near the Project to air pollutant concentrations that could result in a significant health risk impact.

CARB staff is also concerned that disadvantaged communities located immediately adjacent to Project-related haul routes could be exposed diesel PM and NO_x emissions that could pose a significant health risk. According to the EA, the SBIAA will require trucks to use the truck route that was analyzed in the air quality analysis. As shown in Figure 4-2 of the EA, the air quality analysis assumed trucks would travel along Third Street or Victoria Avenue. Since the residences located adjacent to these haul routes are already currently disproportionately burdened by multiple sources of pollution, CARB staff urges the SBIAA to consider alternative haul routes that would limit travel near residences.

Lastly, it is unclear whether the heavy trucks or trailers serving the Project would be equipped with transport refrigeration units (TRU). TRUs on trucks and trailers can emit large quantities of diesel exhaust while operating within the Project site. If the Project were to include the operation of TRUs, 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 significant health risk impact.

CARB staff urges the SBIAA to implement the emission reduction measures found in Appendix A, as appropriate, during the construction and operation of the proposed warehouse/distribution building. The emission reduction measures recommended in Appendix A are CARB staff recommendations for developers and government planners on how to reduce construction and operation-related air pollutant emissions specific to warehouse/distribution and cold storage projects.

CARB staff appreciates the opportunity to comment on the EA 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,



Doug Ito
Assistant Division Chief
Transportation and Toxics Division

Attachment

cc: See next page.

Mark Gibbs
August 15, 2019
Page 4

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
714 West Olympic Boulevard, Suite 1000
Los Angeles, California 90015

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

Adrian Martinez
Staff Attorney
50 California Street, Suite 500
San Francisco, California 90401

Stanley Armstrong
Air Pollution Specialist
Exposure Reduction Section
Transportation and Toxics Division

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.

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.

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 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/hdvp/hdvp.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>.

