

August 19, 2021

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Governor's Office of Planning & Research

**August 20 2021**

**STATE CLEARINGHOUSE**

Dear Ryan Leonard:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the United States Cold Storage Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2020069036. The Project consists of the construction and operation of two warehouse and distribution centers for frozen and refrigerated foods totaling 1,046,768 square feet. Once in operation, the Project is expected to generate approximately 2,220 daily vehicle trips, including 778 daily heavy-duty truck trips, along local roadways. The Project is proposed within the City of Hesperia (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 June 2020. CARB's comments, dated July 24, 2020, highlighted the need for preparing a health risk assessment (HRA) for the Project and encouraged the City and applicant to implement all existing and emerging zero emission technologies to minimize exposure to diesel particulate matter (diesel PM) and nitrogen oxides (NO<sub>x</sub>) emissions for all neighboring communities, and to minimize the greenhouse gases that contribute to climate change. Due to the Project's proximity to residences already burdened by multiple sources of pollution, CARB's comments expressed concerns with the potential cumulative health risks associated with the construction and operation of the Project.

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

The Project's operational mobile source air pollutant emissions may have been underestimated in the DEIR by using vehicle trip lengths unsupported by substantial evidence. The Project's operational air pollutant emissions were estimated using the California Emissions Estimator Model (CalEEMod). Based on CARB's review of the CalEEMod outputs found in Appendix B (Air Quality & Greenhouse Gas Assessment/Health Risk Assessment) of the DEIR, the City and Applicant relied on CalEEMod vehicle trip length defaults to estimate the Project's mobile source air pollutant emissions. After applying these defaults, the Project's vehicle trip length would consist of 9.5 miles for auto vehicles and 7.3 miles for trucks. Since the vehicle trip length defaults were not adjusted in CalEEMod, it was

concluded in the DEIR that all air pollutant emissions modeled would not exceed the Mojave Desert Air Quality Management District (MDAQMD) significance thresholds.

Chapter 3.0 (Project Description) of the DEIR, states that food products would arrive to the proposed cold storage warehouse from the BNSF Barstow Intermodal Facility and would later be trucked out to multiple food retailers in the Los Angeles, Las Vegas, and Phoenix areas. The distance from the BNSF Barstow Intermodal Facility to the proposed Project site is approximately 40 miles, the trip length from the proposed Project to Los Angeles is approximately 40 miles, and the trip length within California from the proposed Project site along the route to either Las Vegas or Phoenix could be as far as approximately 200 miles. If food products are transport by truck from the Project site to any of the final destinations reported in the DEIR, those trucks would need to travel significantly further than the trip distances assumed in the Project's air quality analysis.

As a result of using CalEEMod default trip distances, CARB is concerned that the City underestimated the Project's mobile sources emissions in the DEIR. CARB urges the City and applicant to remodel the Project's mobile source air pollutant emissions using Project-specific trip lengths supported by substantial evidence and report those findings in the Project's Final Environmental Impact Report (FEIR). Furthermore, the truck traffic proposed in the DEIR would travel outside of the MDAQMD, and will likely traverse through the South Coast Air Quality Management District (SCAQMD), San Diego County Air Pollution Control District (SDCAPCD) and Imperial County Air Pollution Control District (ICAPCD) to reach their final destinations. Since the Project's truck traffic would transverse multiple air districts during its operation, the Project's mobile source air pollutant emissions should be compared to the SCAQMD's, SDCAPCD's, and ICAPCD's respective significance thresholds and reported in the FEIR.

## **The Health Risk Assessment Used Inappropriate Assumptions When Modeling the Project's Health Risk Impacts from On-Site Transport Refrigeration units**

According to Project Description of the DEIR, the purpose of the Project is to "construct and operate a cold storage warehouse for frozen and refrigerated food." Warehouses containing cold storage are serviced by trucks with transport refrigeration units (TRU) to transport refrigerated goods to and from the facility. Based on CARB's research, TRUs on trucks and trailers can emit large quantities of diesel exhaust while operating within a facility. Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and schools) located near the Project would be exposed to diesel exhaust emissions that would result in significant cancer risk. CARB has reviewed the Project's HRA and has concerns regarding the assumptions used to estimate the Project's health impacts.

The HRA assumed all TRUs visiting the Project site would not idle longer than 15 minutes. Data obtained by CARB staff indicates that TRUs can operate for as long as two hours per visit, which is well above the 15-minute duration assumed in the HRA. Unless the applicant

and City restrict TRU idling durations to less than 15 minutes, the Project's HRA should be revised to assume a TRU idling duration legitimized by substantial evidence.

The HRA prepared for the Project assumed 377 of the Project's 778 daily heavy-duty truck traffic would consist of trucks equipped with TRUs. It is unclear in the HRA how this estimate was derived. Since the purpose of the proposed cold storage warehouses is to store frozen and refrigerated food, it is reasonable to assume that a vast majority of the trucks transporting frozen food to the Project site would need to be equipment with TRUs. CARB is concerned that the number of TRUs visiting the Project site may be underestimated in the HRA. CARB urges the City and applicant to provide substantial evidence to support this assumption. If the City plans to only allow at most 377 trucks with TRUs to access the Project site per day, the City must include a design measured in the FEIR that would require the applicant to include language in contractual tenant lease agreements that restricts the number of trucks with TRUs accessing the Project site to not exceed 377 per day.

## **The DEIR Does Not Analyze Potential Air Pollutant Emissions from the Project's Transport Refrigeration Units**

Although the HRA prepared for the Project evaluated cancer risks from the operation of on-site and off-site TRUs, the City and applicant did not model and report air pollutant emissions from TRUs in the DEIR. The air pollutant emission estimates, found in Table 4.2-9 (Winter Operational Emissions) and Table 4.2-10 (Summer Operational Emissions) of the DEIR, were modeled using CalEEMod. Although CalEEMod can estimate air pollutant emissions from area, energy, and mobile sources, the current version of CalEEMod does not account for air pollutant emissions from TRUs. Since a portion of the Project will be used for cold storage, CARB urges the City and applicant to model and report the Project's air pollution emissions from TRUs using CARB's latest emission factors. As indicated above, the City and applicant should assume that a conservative percentage of the Project's truck fleet is equipped with TRUs, as well as a conservative idling duration for each TRU.

## **The Air Quality Analysis Presented in the DEIR is Inconsistent with the Project's Traffic Impact Analysis**

The Project traffic trip rates presented in the DEIR are not consistent with those presented in the Project's air quality analysis. Table 4.10-1 (Project Trip Generation Summary) of the DEIR indicates that the Project would result in a total of 1,442 daily passenger vehicle trips and 778 daily light, medium, and heavy-duty truck trips. However, according to the Project's CalEEMod outputs, referenced in Appendix B of the DEIR, the Project would result in approximately 1,396 daily vehicle trips and 751 daily light, medium, and heavy-duty truck trips. Since the daily passenger vehicle and truck trips reported in the Project's CalEEMod outputs are below what is presented in the DEIR, CARB is concerned that the mobile source air pollutant emissions reported in the DEIR are underestimated. CARB urges the applicant

and City to remodel the Project's mobile source air pollutant emissions using the vehicle trips presented in Project's traffic impact analysis.

## **The Final DEIR Should Include More Mitigation Measures to Further Reduce the Project's Air Pollution Emissions**

Chapter 4.2 (Air Quality) of the DEIR concluded that the Project's construction and operational air pollution emissions would result in a less than significant. However, to guarantee that VOC emissions emitted during Project construction do not exceed the MDAQMD's significance thresholds, the City include Mitigation Measure AQ-1. This measure would require the applicant to implement a 187-day or less painting schedule during Project construction. To further reduce the Project's air pollutant emissions, CARB urges the City and applicant to implement the applicable emissions reduction measures listed in the attached letter.

### **Conclusion**

CARB is concerned about the potential public health impacts should the City approve the Project. To fully assess the Project's impact on neighboring communities, the City must use Project-specific truck trip distances when modeling the Project's air quality impacts that are not dependent on CalEEMod defaults. The daily trip estimates for trucks with TRUs and their associated on-site idling durations presented in the HRA must be supported by substantial evidence. The City must take into account the operation of on- and off-site trucks with TRUs when evaluating the Project's air pollution emission rates. The City must revised the Project's mobile source air pollutant emissions using passenger and truck daily trip rates that are consistent with the Project's traffic impact analysis. Lastly, to reduce the Project's impact on public health, CARB urges the City to implement the mitigation measures listed in the attached 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 DEIR 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](mailto: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

July 24, 2020

Ryan Leonard  
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Submitted via email: [leonard@cityofhesperia.us](mailto:leonard@cityofhesperia.us)

Dear Ryan Leonard:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Notice of Preparation (NOP) for the United States Cold Storage Hesperia Project (Project) Draft Environmental Impact Report (DEIR), State Clearinghouse No. 2020069036. The Project proposes the construction and operation of 2 cold storage warehouse buildings totaling 1,046,798 square feet. The proposed Project is within the City of Hesperia (City), California, which is the lead agency for California Environmental Quality Act (CEQA) purposes.

Freight facilities, such as cold storage warehouses, 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.<sup>1</sup> CARB has reviewed the NOP and is concerned about the air pollution and health risk impacts that would result should the City approve the Project.

### **I. The Project Would Increase Exposure to Air Pollution in Disadvantaged Communities**

The Project, if approved, will expose nearby communities to elevated air pollution. Residences are located northwest and southeast of the Project site, with the closest residences situated approximately 780 feet from the Project's northwest boundary. In addition to residences, 2 schools (Canyon Ridge High School and Mission Crest Elementary School) are located within 2 miles of the Project. The communities near the Project are exposed to existing toxic diesel particulate matter (diesel PM) emissions from vehicular traffic along Interstate 15 (I-15). Due to the Project's proximity to residences and schools already burdened by air pollution, CARB is concerned with the potential cumulative health impacts associated with the construction and operation of the Project.

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<sup>1</sup> With regard to greenhouse gas emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2017, makes clear that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing greenhouse gases below levels of significance.

The 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 PM emissions generated during the construction and operation of the Project would negatively impact the community, which is already disproportionately impacted by air pollution from traffic on I-15.

## **II. The DEIR Should Quantify and Discuss the Potential Cancer Risks from On-site Transport Refrigeration Units**

Although the Project description in the NOP does not specify the final use of the proposed warehouse facilities, the title of the Project implies that they would be used for cold storage. Therefore, it seems likely that trucks and trailers visiting the Project site would be equipped with transport refrigeration units (TRU).<sup>2</sup> 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.

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 health risk assessment (HRA). The HRA prepared for the Project should account for all potential health risks from Project-related diesel PM emission sources such as backup generators, TRUs, and heavy-duty truck traffic, and include all the air pollutant reduction measures listed in Attachment A of this comment letter.

In addition to the health risks associated with operational emissions, health risks associated with construction 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 emissions from the use of both on-road and off-road diesel equipment. The Office of Environmental Health Hazard Assessment's (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 prepared in support of the Project should be based on the latest OEHHA guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments)<sup>3</sup> The HRA should evaluate and present the existing baseline

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<sup>2</sup> 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.

<sup>3</sup> 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/cmr/2015guidancemanual.pdf>.



(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 City planners will have a complete understanding of the potential health impacts that would result from the Project.

### **III. 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 and oxides of nitrogen (NO<sub>x</sub>) emissions, as well as the greenhouse gases that contribute to climate change. CARB encourages the City 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.

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](mailto:stanley.armstrong@arb.ca.gov).

Sincerely,



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Attachment

cc: See next page.

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July 24, 2020  
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## ATTACHMENT A

### Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

The California Air Resources Board (CARB) recommends developers and government planners use all existing and emerging zero to near-zero emission technologies during project construction and operation to minimize public exposure to air pollution. Below are some measures, currently recommended by CARB, specific to warehouse and distribution center projects. These recommendations are subject to change as new zero-emission technologies become available.

#### Recommended Construction Measures

1. Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
2. Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
3. In construction contracts, include language that requires all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved 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-oxides of nitrogen (NO<sub>x</sub>) standard starting in the year 2022.<sup>1</sup>

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<sup>1</sup> In 2013, CARB adopted optional low-NO<sub>x</sub> emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NO<sub>x</sub> emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model year 2010 and later. CARB's optional low-NO<sub>x</sub> emission standard is available at: <https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm>.

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.<sup>2</sup>
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, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.

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<sup>2</sup> 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](https://www.arb.ca.gov/msprog/tech/techreport/tru_07292015.pdf).

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,<sup>3</sup> Periodic Smoke Inspection Program (PSIP),<sup>4</sup> and the Statewide Truck and Bus Regulation.<sup>5</sup>
9. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than 5 minutes while on site.
10. Include contractual language in tenant lease agreements that limits on-site 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.
12. Including language in tenant lease agreements, requiring the installing of vegetative walls<sup>6</sup> or other effective barriers that separate loading docks and people living or working nearby.

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<sup>3</sup> 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>.

<sup>4</sup> 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>.

<sup>5</sup> 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>.

<sup>6</sup> 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>.