



South Coast Air Quality Management District

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SENT VIA E-MAIL:

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**Draft Environmental Impact Report (Draft EIR) for the Proposed
City of Carson 2040 General Plan Update Project (Proposed Project)
(SCH No. 2001091120)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The City of Carson is the Lead Agency under the California Environmental Quality Act (CEQA) for the Proposed Project. The following comments include information from the Community Emissions Reduction Plan (CERP) for the Assembly Bill 617 (AB 617)-designated community of Wilmington, Carson, West Long Beach (WCWLB), recommended revisions to the additional recommended air quality mitigation measures, health risk assessment, and health risk reduction strategies that the Lead Agency should include in the Final EIR.

South Coast AQMD Staff's Summary of Project Information in the Draft EIR

Based on the Draft EIR, the Lead Agency provides a programmatic analysis of the environmental impacts associated with the Proposed Project.¹ The Proposed Project guides future land use decisions in Carson with a long-term vision for the city and indicates how that vision would be achieved through the planning horizon year of 2040.² The Planning Area will include the City of Carson and its unincorporated sphere of influence (SOI).³ The Planning Area consists of approximately 12,120 acres (18.9 square miles), including the entire City of Carson (10,151 acres) and unincorporated land within the City's SOI (1,969 acres).⁴ Within the Planning Area, approximately 47.2 percent is zoned for industrial uses, 25.2 percent for residential uses, 10.3 percent for parks, recreations, public, and community facilities, 5.5 percent for commercial uses, and 11.5 percent for vacant land, rights-of-way, and other uses.⁵ The horizon of the Proposed Project is anticipated to be year 2040.⁶

¹ Draft EIR. Page 2-1.

² *Ibid.*

³ *Ibid.* Page 2-2.

⁴ *Ibid.*

⁵ *Ibid.*

⁶ *Ibid.* Page 2-5.

South Coast AQMD Staff's Comments on the Draft EIR*Information from the WCWLB CERP*

The Proposed Project area includes the AB 617-designated WCWLB community and is heavily impacted by air pollution generated from sources such as port-related activities, refinery-related activities, and railroad activities. As part of the AB 617 process, South Coast AQMD is required to work with a Community Steering Committee (CSC) to develop a CERP that identifies air quality priorities and related actions to reduce air pollution in the community. The South Coast AQMD Governing Board adopted the WCWLB CERP on September 6, 2019.⁷ The Draft EIR for the Proposed Project serves as the first-tier, programmatic level environmental analysis that can provide guidance to subsequent, project-level environmental analyses. South Coast AQMD staff recommends that the Lead Agency review the actions to reduce air pollution in the community included in Chapter 5 of the adopted CERP and work with South Coast AQMD's AB 617 staff to explore whether additional mitigation measures can be identified and implemented through future development projects at the Proposed Project.

Additional Recommended Air Quality Mitigation Measures

According to the Draft EIR, there are no specific projects currently approved or proposed under the Proposed Project and no timing of construction, location, or the exact nature of future projects; therefore, emissions modeling is not feasible, and analysis of construction emissions would be speculative at best.⁸ The Lead Agency concludes that the project-related construction activities could result in significant regional air quality impacts. To reduce the construction emissions, the Lead Agency proposes mitigation measures, including an air quality mitigation measure (MM AQ-1), that construction equipment shall meet the United States Environmental Protection Agency (U.S. EPA) Tier 4 emissions standards for off-road diesel-powered construction equipment that are over 50 horsepower.⁹ With the Proposed Project buildout in the year 2040, it is reasonably foreseeable that Tier 4 might not be the cleanest technology when construction occurs later during the construction duration. In addition, according to the California Air Resource Board (CARB) Strategies for Reducing Emissions from Off-Road Construction Equipment, the implementation of off-road Tier 5 starting in 2027 or 2028 and the Governor's Executive Order in September 2020 requires CARB to develop and propose a full transition to Zero Emissions (ZE) by 2035, wherever feasible.¹⁰ Therefore, South Coast AQMD staff recommends that the Lead Agency revise the MM AQ-1 to commit to using the cleanest technology for construction during the construction period, if available and feasible, and includes the revision in the Final EIR. If the revisions are not included in the Final EIR, the Lead Agency should provide reasons for not having them supported by substantial evidence in the record.

⁷ South Coast AQMD. September 2019. Assembly Bill 617 Wilmington, Carson, West Long Beach Community Emissions Reduction Plan. Accessed at: <https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/cerp/final-cerp-wcwlb.pdf>.

⁸ Draft EIR. Page 3.2-43

⁹ *Ibid.* Page 3.2-45,46.

¹⁰ Presentation can be found at: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/combined-construction-carb-amp-aqmp-presentations-01-27-21.pdf?sfvrsn=8>.

CEQA requires that all feasible mitigation measures beyond what is required by law be utilized to minimize or eliminate significant adverse impacts. The Proposed Project is a blueprint for the City's future development. The Draft EIR for the Proposed Project serves as a planning-level document; however, no specific project, construction schedule, or construction plan is identified. Hence, the emission analysis associated with buildout cannot be specified and will be speculative at this time. According to the Draft EIR, the development comprises industrial, residential, commercial, and other uses, as mentioned in the above South Coast AQMD staff's summary. South Coast AQMD staff recommends that the Lead Agency include the following project-level mitigation measures in the Final EIR to further reduce emissions from on-road mobile sources by future development projects that generate and attract heavy-duty diesel-fueled trucks. These mitigation measures will support the efforts in implementing the control measures and strategies identified in the 2016 Air Quality Management Plan.¹¹

Project-level air quality mitigation measures for construction air quality impacts that the Lead Agency should consider and include in the Final EIR, any subsequent CEQA document, and future development projects may consist of the following:

- Tune and maintain all construction equipment to be in compliance with the manufacturer's recommended maintenance schedule and specifications that optimize emissions without nullifying engine warranties. All maintenance records for each equipment and their construction contractor(s) should be made available for inspection and remain onsite for a period of at least two years from the completion of construction.
- Require the use of electric or alternative-fueled (i.e., non-diesel) construction equipment, if available, including but not limited to concrete/industrial saws, pumps, aerial lifts, material hoists, air compressors, forklifts, excavators, wheel loaders, and soil compactors.
- Provide electric vehicle (EV) charging stations or, at a minimum, provide the electrical infrastructure, including appropriately sized electrical panels. Electrical hookups should be provided for trucks to plug in any onboard auxiliary equipment.
- Provide temporary traffic controls such as a flag person, during all phases of significant construction activity to maintain smooth traffic flow, where necessary.
- Provide dedicated turn lanes for the movement of construction trucks and equipment on- and off-site, where applicable.
- Ensure that vehicle and equipment traffic inside the project site is as far away as feasible from sensitive receptors.
- Provide physical barriers to deter or minimize neighborhood truck and equipment traffic near sensitive receptors (e.g., schools).
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

¹¹ South Coast Air Quality Management District. 2017, March. Final 2016 Air Quality Management Plan. <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.

- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Suspend the use of all construction activities that generate air pollutant emissions during first-stage smog alerts.
- Configure construction parking to minimize traffic interference.
- Require covering of all trucks hauling dirt, sand, soil, or other loose materials.
- Install other control measures such as wheel washers, gravel pad, etc., where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site for each trip.
- Apply non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- Replace ground cover in disturbed areas as quickly as possible to minimize dust.
- Pave road and road shoulders, where applicable.
- Sweep streets at the end of the day with South Coast AQMD Rules 1186 – PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations¹² and 1186.1 – Less-Polluting Sweepers¹³ compliant sweepers if visible soil is carried onto adjacent public paved roads (recommend water sweepers that utilize reclaimed water).

Project-level air quality mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider and include in the Final EIR and any subsequent CEQA document and future development project may consist of the following:

- Require ZE or Near Zero Emissions (NZE) heavy-duty trucks for future development projects during operations, such as trucks with natural gas engines that meet CARB's adopted optional nitrogen oxides (NOx) emission standard of 0.02 grams per brake horsepower-hour (g/bhp-hr), if and when feasible. Given the state's clean truck rules and regulations aiming to accelerate market penetration and the utilization of ZE and NZE trucks, such as the Advanced Clean Trucks Rule¹⁴ and the Heavy-Duty Low NOx Omnibus Regulation,¹⁵ ZE and NZE trucks will become increasingly more available. The Lead Agency can and should require future development projects to have a phase-in schedule to

¹² South Coast AQMD Rule 1186 - PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations. Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1186.pdf>.

¹³ South Coast AQMD Rule 1186.1 – Less-Polluting Sweepers. Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1186-1-less-polluting-sweepers.pdf>.

¹⁴ CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.

¹⁵ CARB has recently passed a variety of new regulations that require new, cleaner heavy-duty truck technology to be sold and used in state. For example, on August 27, 2020, CARB approved the Heavy-Duty Low NOx Omnibus Regulation, which will require all trucks to meet the adopted emission standard of 0.05 g/hp-hr starting with engine model year 2024. Accessed at: <https://ww2.arb.ca.gov/rulemaking/2020/hdomnibuslownox>.

incentivize these cleaner operating trucks to reduce any significant adverse air quality impacts. South Coast AQMD staff is available to discuss the availability of current and upcoming truck technologies and incentive programs. At a minimum, require the use of the 2010 model year¹⁶ that meets CARB's 2010 engine emissions standards at 0.01 g/bhp-hr of particulate matter (PM) and 0.20 g/bhp-hr of NOx emissions or newer, cleaner trucks. Require future development projects to include an evaluation of sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the subsequent, project-level environmental analyses, where appropriate. Future development projects can and should also include the requirement in applicable bid documents, purchase orders, and contracts. Owners and operators of future development projects shall maintain records of all trucks associated with project construction to document that each truck meets these emission standards and make the records available for inspection. The Lead Agency should conduct regular inspections of future development projects.

- Limit the daily number of trucks allowed at future development projects to the levels analyzed in the subsequent project-level environmental analyses for these projects. If higher daily truck volumes are anticipated to visit the site, additional analysis should be done through CEQA prior to allowing this higher activity level.
- Require future development projects to provide electrical infrastructure and appropriately sized electrical panels. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

Project-level air quality mitigation measures for operational air quality impacts from other area sources that the Lead Agency should consider and include in the Final EIR for future development projects may consist of the following:

- Maximize the use of solar energy by installing solar energy arrays.
- Use light-colored paving and roofing materials.
- Utilize only Energy Star heating, cooling, and lighting devices and appliances.
- Use of water-based or low volatile organic compound (VOC) cleaning products that go beyond the requirements of South Coast AQMD Rule 1113 – Architectural Coatings.¹⁷

Design considerations for the Proposed Project that the Lead Agency should consider to further reduce air quality and health risk impacts include the following:

¹⁶ CARB adopted the statewide Truck and Bus Regulation in 2010. The Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. 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. More information on the CARB's Truck and Bus Regulation is available at: <https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.

¹⁷ South Coast AQMD Rule 1113 – Architectural Coatings. Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf>.

- Create buffer zones between warehouses and sensitive land uses (e.g., residences, schools, daycare centers, etc.).
- Clearly mark truck routes with trailblazer signs so that trucks will not travel next to or near sensitive land uses.
- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Design the Proposed Project such that any check-in point for trucks is inside the Proposed Project site to ensure that there are no trucks queuing outside.
- Design the Proposed Project such that loading docks are not facing sensitive receptors.
- Design the Proposed Project to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors.
- Install signage that discourages unnecessary idling.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site and orient truck parking inside the Proposed Project site away from sensitive receptors.

On May 7, 2021, South Coast AQMD Governing Board adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program¹⁸ and Rule 316 – Fees for Rule 2305.¹⁹ Rule 2305 is a new rule that will reduce regional and local emissions of NOx and PM, including diesel particulate matter (DPM). These emission reductions will reduce public health impacts from mobile sources associated with warehouse activities for communities located near warehouses. Also, the emissions reductions will help the region attain federal and state ambient air quality standards. Rule 2305 applies to owners and operators of warehouses greater than or equal to 100,000 square feet. Under Rule 2305, operators are subject to an annual WAIRE Points Compliance Obligation that is calculated based on the annual number of truck trips to the warehouse. WAIRE Points can be earned by implementing actions in a prescribed menu in Rule 2305, implementing a site-specific custom plan, or paying a mitigation fee. Warehouse owners are only required to submit limited information reports, but they can opt-in to earn Points on behalf of their tenants if they so choose because certain actions to reduce emissions may be better achieved at the warehouse development phase, for instance, the installation of solar and charging infrastructure. Rule 316 is the companion fee rule for Rule 2305, which allows South Coast AQMD to recover costs associated with Rule 2305 compliance activities. In the event that the Proposed Project consists of the development of warehouses over 100,000 square feet, the Proposed Project’s warehouse owners and operators will be required to

¹⁸ South Coast AQMD Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xxiii/r2305.pdf>.

¹⁹ South Coast AQMD Rule 316 – Fees for Rule 2305. Access at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-iii/r316.pdf>.

comply with Rule 2305 once the warehouse is occupied. Therefore, South Coast AQMD staff recommends that the Lead Agency review South Coast AQMD Rule 2305 to determine the potential WAIRE Points Compliance Obligation for future operators and explore whether additional project requirements and CEQA mitigation measures can be identified and implemented at the Proposed Project that may help future warehouse operators meet their compliance obligation. South Coast AQMD staff is available to answer questions concerning Rule 2305 implementation and compliance by phone or email at (909) 396-3140 or waire-program@aqmd.gov. For implementation guidance documents and compliance and reporting tools, please visit South Coast AQMD's WAIRE Program webpage.²⁰

Health Risk Assessment (HRA) and Health Risk Reduction Strategies

Notwithstanding the court rulings, South Coast AQMD staff recognizes that the Lead Agency that approves CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. South Coast AQMD staff is concerned about the potential public health impacts of siting sensitive populations within proximity of sources of air pollution. Therefore, it is recommended that, prior to approving future development projects, the Lead Agency consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary. Additionally, South Coast AQMD staff suggests that the Lead Agency review the CARB Air Quality Land Use and Handbook: A Community Health Perspective²¹ as it is a reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process with additional guidance on strategies to reduce air pollution exposure near high-volume roadways available in CARB's technical advisory.²²

HRA Analysis

Implementing the Proposed Project would result in the new development of sensitive land uses within 1,000 feet of pollution sources (e.g., train stations, freeways, warehouses, etc.). South Coast AQMD staff recommends that the Lead Agency include a mobile source HRA analysis discussion in the Final EIR to provide guidance for subsequent project-level environmental analyses. This discussion will demonstrate that the Lead Agency has adequately considered the potential health risk impacts of implementing the Proposed Project and that a subsequent, project-level HRA analysis will be completed to disclose health risk impacts at a later stage. Furthermore, the Lead Agency should include the following health risk reduction strategies in the Final EIR as guidance for future sensitive land use development projects that will be sited near sources of air pollution such as freeways, warehouses, etc.

Health Risk Reduction Strategies

Many strategies are available to reduce exposures, including, but not limited to, building filtration systems with Minimum Efficiency Reporting Values (MERV) 13 or better, or in some cases, MERV 15 or better is recommended, building design, orientation, location, vegetation barriers or

²⁰ South Coast AQMD WAIRE Program. Accessed at: <http://www.aqmd.gov/waire>.

²¹ California Air Resources Board (CARB) Air Quality Land Use and Handbook: A Community Health Perspective. Access at: <https://www.arb.ca.gov/ch/handbook.pdf>.

²² CARB's technical advisory can be found at: <https://www.arb.ca.gov/ch/landuse.htm>

landscaping screening. Enhanced filtration units are capable of reducing exposures. However, enhanced filtration systems have limitations. For example, in a study that South Coast AQMD conducted to investigate filters,²³ a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter panel. The initial start-up cost could substantially increase if a Heating, Ventilation, and Air Conditioning (HVAC) system need to be installed and if standalone filter units are required. Installation costs may vary, including costs for conducting site assessments and obtaining permits and approvals before filters can be installed. Other costs may include filter life monitoring, annual maintenance, and training for conducting maintenance and reporting. In addition, because the filters would not be effective unless the HVAC system is running, there may be increased energy consumption. It is typically assumed that the filters operate 100 percent of the time while residents are indoors, and the environmental analysis does not generally account for the times when the residents have their windows or doors open or are in common space areas of the project. Additionally, these filters have no ability to filter out any toxic gases. Furthermore, when used filters are replaced, the replacement has the potential to result in emissions from the transportation of used filters at disposal sites and generate solid waste. Therefore, any filtration unit's presumed effectiveness and feasibility should be carefully evaluated in more detail before assuming they will sufficiently alleviate exposure to DPM emissions.

Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), South Coast AQMD staff requests that the Lead Agency provide South Coast AQMD staff with written responses to all comments contained herein prior to the certification of the Final EIR. In addition, issues raised in the comments should be addressed in detail, giving reasons why specific comments and suggestions are not accepted. There should be good faith and reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice (CEQA Guidelines Section 15088(c)). Conclusory statements do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision-makers and to the public who are interested in the Proposed Project.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Danica Nguyen, Air Quality Specialist, at dnguyen1@aqmd.gov should you have any questions.

Sincerely,

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²³ South Coast AQMD, Pilot Study of High Performance Air Filtration for Classrooms Applications, Draft Report: October 2009, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf>. Also see 2012 Peer Review Journal article by South Coast AQMD: <https://onlinelibrary.wiley.com/doi/10.1111/ina.12013>.