



South Coast Air Quality Management District

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Notice of Preparation of a Draft Subsequent Program Environmental Impact Report for the Chino Hills General Plan Update and Zoning Map Amendment Project

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Subsequent Program Environmental Impact Report (SPEIR). Please send a copy of the Draft SPEIR upon its completion and public release directly to South Coast AQMD as copies of the Draft SPEIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

CEQA Air Quality Analysis

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website¹ as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod² land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds³ and localized significance thresholds (LSTs)⁴ to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality

¹ South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

² CalEEMod is available free of charge at: www.caleemod.com.

³ South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

⁴ South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment⁵.

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants and include schools, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. If the Proposed Project will include residential units which are located in close proximity to freeways or other sources of air pollution like railroad tracks, and to facilitate the purpose of the Draft SPEIR as an informational document, it is recommended that the Lead Agency perform a mobile source health risk assessment⁵ to disclose the potential health risks⁶.

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft SPEIR. The assumptions in the air quality analysis in the Draft SPEIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

The South Coast AQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*⁷ includes suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. It is recommended that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions.

South Coast AQMD staff is concerned about potential public health impacts of siting potential warehouses within close proximity of sensitive land uses, especially in communities that are already heavily affected by the existing warehouse and truck activities. The South Coast AQMD's Multiple Air Toxics Exposure Study (MATES V), completed in August 2021, concluded that the largest contributor to cancer risk from air pollution is diesel particulate matter (DPM) emissions⁸. According to the MATES V Carcinogenic Risk interactive Map, the area surrounding the Proposed Project has an estimated cancer risk over 397 in one million⁹. Operation of warehouses generates and attracts heavy-duty diesel-fueled trucks that emit DPM. When the health impacts from the Proposed Project are added to those existing

⁵ South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

⁶ *Ibid.*

⁷ South Coast AQMD. 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. Available at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁸ South Coast AQMD. August 2021. *Multiple Air Toxics Exposure Study in the South Coast Air Basin V*. Available at: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>.

⁹ South Coast AQMD. MATES V Data Visualization Tool. Accessed at: [MATES Data Visualization \(arcgis.com\)](https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v).

impacts, residents living in the communities surrounding the Proposed Project will possibly face an even greater exposure to air pollution and bear a disproportionate burden of increasing health risks.

Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook,¹⁰ South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2022 Air Quality Management Plan,¹¹ and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.¹²

Mitigation measures for operational air quality impacts from mobile sources that the Lead Agency should consider in the Draft SPEIR may include the following:

- Require zero-emissions (ZE) or near-zero emission (NZE) on-road haul trucks such as heavy-duty trucks with natural gas engines that meet the CARB's adopted optional NOx emissions standard at 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 the utilization and market penetration of ZE and NZE trucks such as the Advanced Clean Trucks Rule¹³ and the Heavy-Duty Low NOx Omnibus Regulation¹⁴, ZE and NZE trucks will become increasingly more available to use. The Lead Agency should require a phase-in schedule to incentive the use of 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 with the Lead Agency. At a minimum, require the use of 2010 model year¹⁵ that meet 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. Include environmental analyses to evaluate and identify sufficient electricity and supportive infrastructures in the Energy and Utilities and Service Systems Sections in the CEQA document, where appropriate. Include the requirement in applicable bid documents, purchase orders, and contracts. Operators shall maintain records of all trucks associated with project construction to document that each truck used meets these emission standards, and make the records available for inspection. The Lead Agency should conduct regular inspections to the maximum extent feasible to ensure compliance.

¹⁰ <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>

¹¹ South Coast AQMD's 2022 Air Quality Management Plan can be found at: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan> (Chapter 4 - Control Strategy and Implementation).

¹² Southern California Association of Governments' 2020-2045 RTP/SCS can be found at:

https://www.connectsocal.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf.

¹³ CARB. June 25, 2020. *Advanced Clean Trucks Rule*. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>.

¹⁴ 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>.

¹⁵ 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>.

- Limit the daily number of trucks allowed at the Proposed Project to levels analyzed in the Final CEQA document. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Proposed Project through CEQA prior to allowing this higher activity level.
- Provide electric vehicle (EV) charging stations or at a minimum, provide the electrical infrastructure and electrical panels should be appropriately sized. Electrical hookups should be provided for truckers to plug in any onboard auxiliary equipment.

Mitigation measures for operational air quality impacts from other area sources that the Lead Agency should consider in the Draft SPEIR may include the following:

- Maximize 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 VOC cleaning products that go beyond the requirements of South Coast AQMD Rule 1113.

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

- Clearly mark truck routes with trailblazer signs, so that trucks will not travel next to or near sensitive land uses (e.g., residences, schools, day care centers, etc.).
- 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 to ensure that truck traffic inside the Proposed Project site is as far away as feasible from sensitive receptors.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site.

On May 7, 2021, South Coast AQMD's Governing Board adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and Rule 316 – Fees for Rule 2305. Rules 2305 and 316 are new rules that will reduce regional and local emissions of nitrogen oxides (NOx) and particulate matter (PM), including diesel PM. These emission reductions will reduce public health impacts for communities located near warehouses from mobile sources that are associated with warehouse activities. Also, the emission 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 a companion fee rule for Rule 2305 to allow South Coast AQMD to recover costs associated with Rule 2305 compliance activities. If the Proposed Project has warehouse element, the Proposed Project's warehouse owners and operators will be required to 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 obligation¹⁶. 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 webpage¹⁷.

Many strategies are available to reduce exposures, including, but are not limited to, building filtration systems with MERV 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping screening, etc. 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 filters¹⁸, 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 an HVAC system needs to be installed and if standalone filter units are required. Installation costs may vary and include 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 have any effectiveness unless the HVAC system is running, there may be increased energy consumption that the Lead Agency should evaluate in the Draft SPEIR. 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. These filters have no ability to filter out any toxic gases. Furthermore, when used filters are replaced, replacement has the potential to result in emissions from the transportation of used filters at disposal sites and generate solid waste that the Lead Agency should evaluate in the Draft SPEIR. Therefore, the presumed effectiveness and feasibility of any filtration units should be carefully evaluated in more detail prior to assuming that they will sufficiently alleviate exposures to diesel particulate matter emissions.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at swang1@aqmd.gov.

Sincerely,

Sam Wang

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Control Number

¹⁶ 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>.

¹⁷ South Coast AQMD WAIRE Program. Accessed at: <http://www.aqmd.gov/waire>.

¹⁸ This study evaluated filters rated MERV 13 or better. Accessed at: <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>.