



South Coast Air Quality Management District

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SENT VIA USPS AND E-MAIL:

February 11, 2020

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Notice of Preparation of a Draft Environmental Impact Report for the Proposed Century Villages at Cabrillo Specific Plan

The South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the Draft EIR upon its completion and public release. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the Draft EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files¹. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on South Coast AQMD's website at: [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

South Coast AQMD has also developed both regional and localized significance thresholds. South Coast AQMD staff requests that the Lead Agency quantify criteria pollutant emissions and compare the results

¹ Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

to South Coast AQMD's CEQA regional pollutant emissions significance thresholds to determine air quality impacts. South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found here: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>. In addition to analyzing regional air quality impacts, South Coast AQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by South Coast AQMD staff or performing dispersion modeling as necessary. 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>.

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 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). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), 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.

Mobile Source Health Risk Assessment

Notwithstanding the court rulings, South Coast AQMD staff recognizes that the Lead Agencies that approve CEQA documents retain the authority to include any additional information they deem relevant to assessing and mitigating the environmental impacts of a project. Because of South Coast AQMD staff's concern about the potential public health impacts of siting sensitive populations within close proximity of freeways and other sources of air pollution such as railroads, South Coast AQMD staff recommends that, prior to approving the project, Lead Agencies consider the impacts of air pollutants on people who will live in a new project and provide mitigation where necessary.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse health risk impacts using its best efforts to find out and a good-faith effort at full disclosure in the CEQA document. Based on a review of aerial photographs and Figure 3, *Aerial Photograph*, in the Notice of Preparation, South Coast AQMD staff found that the Proposed Project will be located immediately west of State Route 103 and Union Pacific railroad tracks. Because of the proximity to the potential source of air pollution, residents at the Proposed Project² would be exposed to diesel particulate matter (DPM) emitted from vehicles and locomotives. Diesel particulate matter has been classified by the state as a toxic air contaminant and a carcinogen. Since future residences at the Proposed Project would be exposed to toxic emissions from the nearby sources of air pollution, South Coast AQMD staff recommends that the Lead Agency conduct a health risk assessment (HRA)³ to disclose the potential health risks in the Draft EIR⁴.

²According to the Project Description in the Notice of Preparation, the Proposed Project would include, among others, construction of 750 residential uses on 27 acres.

³ South Coast AQMD. "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis." Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

⁴ South Coast AQMD has developed the CEQA significance threshold of 10 in one million for cancer risk. When South Coast AQMD acts as the Lead Agency, South Coast AQMD staff conducts a HRA, compares the maximum cancer risk to the threshold

Guidance Regarding Residences Sited Near a High-Volume Freeway or Other Sources of Air Pollution

South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and the South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, the South Coast AQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning⁵ in 2005. This Guidance Document provides 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. South Coast AQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources such as railroad tracks) can be found in the California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. Guidance⁶ on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

Mitigation Measures

If the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project, including:

- Chapter 11 of South Coast AQMD's CEQA Air Quality Handbook
- South Coast AQMD's CEQA web pages available here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies>
- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- South Coast AQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf>
- California Air Pollution Control Officers Association (CAPCOA)'s *Quantifying Greenhouse Gas Mitigation Measures* available here: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

Health Risk Reduction Strategies

As stated above, the Proposed Project is located in proximity to State Route 103 and railroad tracks. Many strategies are available to reduce exposure, including, but are not limited to, building filtration systems with Minimum Efficiency Reporting Value (MERV) 13 or better, or in some cases, MERV 15 or better is recommended; building design, orientation, location; vegetation barriers or landscaping

of 10 in one million to determine the level of significance for health risk impacts, and identifies mitigation measures if the risk is found to be significant.

⁵ South Coast AQMD. Accessed at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>

⁶ In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: <https://www.arb.ca.gov/ch/landuse.htm>.

screening, etc. Enhanced filtration units are capable of reducing exposures. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.

Enhanced filtration systems have limitations. South Coast AQMD staff recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that South Coast AQMD conducted to investigate filters⁷, a cost burden is expected to be within the range of \$120 to \$240 per year to replace each filter. The initial start-up cost could substantially increase if an HVAC system needs to be installed. In addition, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the residents. 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. Furthermore, these filters have no ability to filter out any toxic gases from vehicle exhaust. 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 toxic emissions.

Because of the limitations, to ensure that enhanced filters are enforceable throughout the lifetime of the Proposed Project as well as effective in reducing exposures to DPM emissions, South Coast AQMD staff recommends that the Lead Agency provide additional details regarding the ongoing, regular maintenance and monitoring of filters in the Draft EIR. To facilitate a good faith effort at full disclosure and provide useful information to future sensitive receptors who will live and/or work in proximity to State Route 103 and railroad tracks, the Lead Agency should include the following information in the Draft EIR, at a minimum:

- Disclosure on potential health impacts to prospective residents from living and/or working in proximity to freeways and railroad tracks, and the reduced effectiveness of air filtration system when windows are open and when tenants are outdoor;
- Identification of the responsible implementing and enforcement agency such as the Lead Agency for ensuring that enhanced filters are installed on-site at the Proposed Project before a permit of occupancy is issued;
- Identification of the responsible implementing and enforcement agency such as the Lead Agency's building and safety inspection unit to provide periodic, regular inspection on filters;
- Provide information and guidance to the Project developer or proponent on the importance of filter installation and ongoing monitoring and maintenance;
- Provide information to residents about where the MERV filters can be purchased;
- Disclosure on increased costs for purchasing enhanced filtration systems to prospective residents;
- Disclosure on increased energy costs for running the HVAC system with MERV filters to prospective residents;
- Disclosure on recommended schedules (e.g., once a year or every six months) for replacing the enhanced filtration units to prospective residents;
- Identification of the responsible entity such as residents, tenants, Homeowner's Association (HOA) or property management to ensure filters are replaced on time, if appropriate and feasible;
- Develop ongoing cost sharing strategies between the HOA and residents/tenants, if available, for replacing the enhanced filtration units;
- Set up criteria for assessing progress in installing, replacing, and maintaining the enhanced filtration units; and

⁷ 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: <http://d7.iqair.com/sites/default/files/pdf/Polidori-et-al-2012.pdf>.

- Set up process for evaluating the effectiveness of the enhanced filtration units at the Proposed Project.

Alternatives

If the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a “no project” alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a responsible agency for the Proposed Project. For more information on permits, please visit South Coast AQMD webpage at: <http://www.aqmd.gov/home/permits>. Questions on permits can be directed to South Coast AQMD’s Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling South Coast AQMD’s Public Information Center at (909) 396-2001. Much of the information available through the Public Information Center is also available at South Coast AQMD’s webpage at: <http://www.aqmd.gov>.

South Coast AQMD staff is available to work with the Lead Agency to ensure that project air quality impacts are accurately evaluated, and any significant impacts are mitigated where feasible. If you have any questions regarding this letter, please contact me at lsun@aqmd.gov.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

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LAC200204-01

Control Number