



South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:
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**Draft Finding of No Significant Impact (FONSI) and Draft Mitigated Negative
Declaration (Draft MND) for the Proposed Las Terrazas Affordable Housing
Apartments and Childcare Center Project
(Project No. P201500538)**

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document.

According to the project description, the Lead Agency proposes to construct 112 multi-family apartment units, including parking, at the northwest corner of the intersection of North Cypress Avenue and West Valley Boulevard, in the sphere of influence of the City of Colton in San Bernardino County. The project will also include a 2,000-square foot community building and development of a 3,000 square foot child care center to service up to 50 children in the neighborhood. The three parcels are currently vacant as the house that was located on the third parcel has been demolished. The project construction is expected to be completed in one year by 2017.

The SCAQMD staff has concerns that the proposed mitigation included in the Draft MND will not reduce the estimated significant cancer risk from toxic air contaminant sources to below levels of significance. In the Health Risk Assessment (HRA), the Lead Agency estimated cancer risk at 67.9 in one million, which exceeds the SCAQMD recommended threshold of significance of 10 in one million cases¹. The Lead Agency has proposed mitigation to reduce the significant cancer risks but the proposed mitigation would not reduce the risk from toxic air contaminants since the proposed mitigation is designed to reduce impacts from particulate matter created by sources of dust, not toxic gases generated from combustion or other toxic air contaminant sources. Further, the SCAQMD staff reiterates the advisory recommendations from the California Air Resources Board (CARB) that includes a buffer distance between sensitive receptors and different sources of TAC. Further details are included in the attachment.

¹ Maximum Incremental Cancer Risk (MICR).

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Pursuant to Public Resources Code Section 21092.5, SCAQMD staff requests that the Lead Agency provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final FONSI/MND. Further, staff is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Sam Wang, Air Quality Specialist – CEQA Section, at (909) 396-2649, if you have any questions regarding these comments.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

Attachment

JW:GM:SW

SBC160211-08
Control Number

CARB Guidance for Siting Sensitive Receptors Near Freeways

1. In the Draft MND, the proposed sensitive receptors (residences, children at the child care center, etc.) will be sited just north of the I-10 Freeway, a freight line operating on the Union Pacific Rail Road (UPRR) line, and the CalPortland Quarry and cement facility. Based on an aerial map inspection, project residents and the day care center would currently be located less than 500 feet of the truck traffic traveling on the I-10 Freeway and the train traffic operating on the UPRR tracks. The Lead Agency has proposed mitigation (MM AQ-2) that would move the child care center as far north in the project site plan as possible to minimize the freeway and rail impacts but the site plan included in the Draft MND shows the child care center sited in the southern area of the project site, closest to the I-10 Freeway. Because of the close proximity to the existing freeway and rail line, the project sensitive receptors (based on the current site plan in the Draft MND) would be exposed to diesel particulate matter (DPM), which the California Air Resources Board (CARB) has determined to be carcinogenic.

Numerous health studies have demonstrated the potential adverse health effects of living near highly travelled roadways and major rail yards. As a result of these studies, in 2005 the California Air Resources Board (CARB) recommended avoiding siting housing within 500 feet of a freeway in their Land Use Handbook². Additional research has continued to support that the near roadway environment contains elevated levels of many pollutants that adversely affect human health, including some pollutants that are unregulated (e.g., ultrafine particles) and whose potential health effects are still emerging³. While the health science behind recommendations against placing new residences close to freeways is clear, the SCAQMD staff recognizes the many factors lead agencies must consider when siting new housing. Further, many mitigation measures have been included in the CEQA document and proposed for other projects to reduce exposure, including building filtration systems, placing the residential units furthest from the freeway, making any windows facing the freeway inoperable, building sound walls, planting vegetation barriers, etc. However, because of the potential health risks involved, it is critical that any proposed mitigation must be carefully evaluated prior to determining if those health risks would be brought below recognized significance thresholds. Based on the proposed project, the SCAQMD reiterates the CARB advisory recommendations that the final site plan in the Final MND include the 500 foot buffer between sensitive receptors (including the siting of the child care center as mentioned in MM AQ-2) in order to reduce the adverse health impacts from and the above-mentioned sources of Toxic Air Contaminant (TAC).

² California Air Resources Board. April 2005. "Air Quality and Land Use Handbook: A Community Health Perspective." Accessed at: <http://www.arb.ca.gov/ch/landuse.htm>

³ See Chapter 9 of the 2012 AQMP for further information at: [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/chapter-9-final-2012.pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/chapter-9-final-2012.pdf).

Limits to the Effectiveness of Filters as Mitigation

2. In the Health Risk Assessment (HRA), the Lead Agency estimated residential cancer risk at 67.9 in one million, which exceeds the SCAQMD recommended threshold of significance of 10 in one million cases⁴. With mitigation, the Lead Agency has determined that risk from TAC to future residents would be reduced to less than the SCAQMD 10 in one million threshold, but the mitigated risk and supporting documentation is not included in the Draft MND. Because the proposed central heating, ventilation, and air conditioning (HVAC) and Minimum Efficiency Reporting Value (MERV) MERV 16 filters reduce particulate impacts but do not reduce impacts from TAC, the Lead Agency has not provided substantial evidence to support its determination that risk from toxic air contaminants are less than significant. This is particularly important since children and residents that are active outdoors over a period of time will be exposed daily to unmitigated particulates and TAC from nearby particulate and TAC sources. Therefore, risk from the TAC sources remains a significant impact and active, outdoor sensitive receptors are not protected from adverse air quality emission sources.

The SCAQMD staff recognizes that the Lead Agency has proposed mitigation measures to reduce significant cancer risk. MM AQ-2 includes the installation of HVAC systems in buildings that will utilize high efficiency filters for particulates and the relocation of outdoor active-use public recreation areas, the community center and the child care center as far north as possible, which would call for revision to the site plan included in the Draft MND⁵. It is unclear though if HVAC and MERV 16 or higher filters will be installed in the day care center building to help reduce filter particulate impacts considering the amount of time each day and the period of time (number of days per week, month, year, etc.) the children would spend inside the child care center building engaging in different activities. The Lead Agency is reminded that although mitigation has been proposed to address the adverse health impacts from the before-mentioned sources, it limitations of the proposed HVAC systems with the enhanced filtration (high efficiency filters for particulates should be considered on the housing residents or other sensitive receptors. For example, these filters have no ability to filter out any toxic gasses from vehicle exhaust. The presumed effectiveness and feasibility of this mitigation should therefore be evaluated in more detail prior to assuming that it will sufficiently alleviate near roadway and rail exposures. In addition, in a study that SCAQMD conducted to investigate filters⁶ similar to those proposed for this project, costs were expected to range from \$120 to \$240 per year to replace each filter. Next, because the filters would not have any effectiveness unless the HVAC system is running, there may be increased energy costs to the resident. The proposed mitigation assumes that the filters operate 100 percent of the time while residents are indoors.

⁴ Maximum Incremental Cancer Risk (MICR).

⁵ Attachment A: Project Plans and Information, Site Plan Study – Scheme 24b.

⁶ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/aqmdpilotstudyfinalreport.pdf?sfvrsn=0>. This study evaluated filters rated MERV 13+ while the proposed mitigation calls for less effective MERV 12 or better filters.

Health Risk Assessment

3. The AERMOD, HRA, and Hot Spots Analysis and Reporting Program (HARP) HARP-2 modeling input and output files were not included in the appendices. For the Final MND and for future CEQA documents, please send with the draft CEQA document all appendices and or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files).

Without the electronic files, the SCAQMD staff was unable to determine where the receptors were placed in the model, e.g., on the property lines, the middle of the site, etc. Therefore, the risk to the sensitive receptors could not be verified.

4. The Draft MND estimated the cancer risks to the outdoor play areas of the school to be 3.67 in one million. This was based on an assumption of “recreational” exposure of four hours per day and 250 days per year. The SCAQMD staff does not recommend the use of different exposure parameters for recreation. The students at school likely will live in areas near the school and their exposure to TACs is not limited only to those hours. Therefore, the SCAQMD staff recommends revising the HRA to use 30 years, 350 days per year exposure duration to estimate the health risks to residents.

Compliance With SCAQMD Rule 1166

5. Under Existing Condition and Trends on page nine, the Lead Agency cites past uses on the property that included the use of pesticides and insecticides that has led to the preparation of a Draft Remedial Action Workplan (RAW) that will provide removal and proper disposal of the organochlorine pesticides (OCP) and polychlorinated biphenyls (PCB) impacted soils. The Draft RAW will include regulatory oversight by the California Department of Toxic Substances Control (DTSC) to remove the impacted soils from the site.

Should the Lead Agency encounter hydrocarbons during soil disturbance activities, the contaminated sites would be subject to SCAQMD Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil and that compliance should be referenced in the Final MND.