



South Coast Air Quality Management District

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City of Walnut
21201 La Puente Road
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Draft Mitigated Negative Declaration (DMND) for the Proposed Walnut Specific Plan No. 3 Mixed-Use Development Located North of Valley Boulevard, Bounded by Pierre Road to the West and Suzanne Road to the East

The South Coast Air Quality Management District (SCAQMD) 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 Mitigated Negative Declaration.

The Lead Agency proposes construction of a mixed-use development on the vacant 9.69 acre portion of an existing 11.9 acre parcel. The remaining 1.7-acre portion of the site is occupied by existing commercial and office uses that will remain unchanged. The new development will include approximately 7,000 square feet of retail and commercial uses. The project would also include up to 130 attached and detached residential units including higher density housing unit types and ancillary improvements, e.g., streets, parking, common open space areas, recreation areas, etc. Construction will be phased with the first phase beginning March 2015 and ending in 2018-2020 depending on market conditions. Soil disturbance will be balanced on-site but 33,700 cubic yards of soil export is expected.

The SCAQMD staff has concerns that the mitigation used in the DMND to reduce significant cancer risks to less than significant levels are not enforceable throughout the life time of the proposed project. Significant cancer risks of 50 in one million were estimated in the Health Risk Assessment (HRA), which is greater than the recommended SCAQMD Toxic Air Contaminant Threshold for Maximum Incremental Cancer Risk (greater than or equal to 10 in 1-million). These significant impacts are mostly from the diesel particulate matter emitted from the railroad and truck traffic operating just south of the project site. Since Mitigation Measure Six, described on page 69 in the Air Quality Section, is used in the CEQA document to reduce cancer impacts below levels of significance, this measure should be fully enforceable beyond simply transferring responsibility to future homeowners or tenants by notifications. Disclosing the potential cancer risk does not ensure that the proposed Minimum Efficiency Rating Value (MERV) filters or the Heating, Venting and Air Conditioning (HVAC) systems are properly

serviced or maintained to obtain the control efficiencies assumed in the DMND throughout the life of the project. Without demonstrating that the reduction credits applied will continue throughout the life of the project, the Lead Agency has not demonstrated that project's impacts are less than significant. The SCAQMD staff recommends revising the proposed mitigation to ensure that the proposed filters and HVAC systems will achieve the efficiencies claimed in the DMND over the periods analyzed. Otherwise, project cancer risks would continue to be significant and unavoidable.

Further, the SCAQMD staff has concerns about the assumptions made in the HRA and localized significance threshold analyses. Finally, the SCAQMD staff recommends that all feasible mitigation measures be included in the Final CEQA document and incorporated into the project to reduce significant impacts, as applicable. Further details are included in the appendix.

Please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final CEQA document. The SCAQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, 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

LAC150114-03
Control Number

HRA and Localized Significance Thresholds (LST) Analyses

1. The Health Risk Assessment (HRA) identified sources of toxic air contaminants in the project vicinity, such as the railroad and various facilities. However, the HRA did not include diesel particulate matter (DPM) emissions associated with truck travel along Valley Boulevard as well as truck idling at the various warehouses directly south of the project site. The Lead Agency should revise the HRA analysis to include the DPM emissions from those sources, in order to ensure that health risk impacts have not been under-estimated.
2. For gas stations permitted by SCAQMD, in addition to benzene, the emissions from naphthalene and ethylbenzene are not analyzed and should be analyzed in the Final CEQA document. Furthermore, the emissions from loading, refueling, breathing, and spillage should also be analyzed. SCAQMD staff further recommends that the Lead Agency revise the modeling performed for the Chevron gas station following the most recent SCAQMD guidance for gasoline dispensing facilities.
3. For Source 1, Dreyer's Grand Ice Cream, although the maximum allowable throughput was 4,166 gallons per month, this permit is no longer active. Therefore, the emissions from the gasoline dispensing portion of this source can be excluded. For Source 6, Chevron gas station, the maximum allowable throughput is 280,000 gallons per month, which is higher than the 110,000 gallons per month used in the HRA. Therefore, the Lead Agency should update the HRA with this higher throughput limit to ensure that health risk impacts are not under-estimated.
4. Two different locomotive release heights were used when modeling the locomotive emissions. This approach was first used in the Roseville Yard HRA (Page 40; <http://www.arb.ca.gov/diesel/documents/rstudy/rchra.pdf>) prepared for the California Air Resources Board (CARB). The modeling performed in the Roseville Yard HRA used ISC as the dispersion model and the release heights were adjusted due to the diurnal variations of ambient air temperature. However, in this project, the Lead Agency used AERMOD for the dispersion modeling, which already accounts for the ambient air temperatures within the model. SCAQMD staff recommends that the Lead Agency revise the AERMOD modeling in the HRA to only use one release height or provide further clarification as to why it is appropriate to use two different release heights for daytime and nighttime locomotive emissions.
5. The HRA figures in Appendix B of the HRA show buildings, however, those buildings were not modeled, but instead the stack heights were adjusted to account for downwash. The HRA did not provide any information as to how the stack heights were adjusted or the validity of using the adjustments instead of modeling the buildings within AERMOD. SCAQMD staff recommends that the Lead Agency revise the HRA with the on-site buildings and using BPIP to determine building downwash effects.

6. The modeling in the HRA indicates that variable adjustments for the time of day were used in the analysis. While this is an acceptable approach for facilities with set schedules, care must be taken to ensure that the emission rates match up with the scenario modeled and that the correct hours are modeled. For example, for the emergency diesel fire pump, which is tested weekly for 20 minutes, the Lead Agency modeled this as a variable emission rate of 0.33 in the AERMOD input file, being tested every Monday at 11am. Justification needs to be provided as to why 11am on Mondays is appropriate (e.g. facility logs, etc). It is possible that by selecting the wrong hour, the impacts to the project might have been under-estimated. Alternatively, the emissions could be modeled without the variable emission rate and averaging out the annual emissions from testing over the entire year. SCAQMD staff recommends that the Lead Agency revise or update the HRA to include more specific information as to how the variable hours were selected and example calculations to show that the emission rates used adequately address the impacts to the project.
7. In the HRA, the trucks at the Dreyer's Grand Ice Cream facility were assumed to idle for 10 minutes. Although state regulations only allow five minutes of idling at any one time, trucks may idle for five minute periods several times on-site, e.g., five minutes entering, five minutes on-site and five minutes exiting, etc., SCAQMD staff therefore recommends that 15 minutes of idling be used in the HRA analysis.
8. The method used to calculate cancer risk is not well documented. Although the HRA specifically states that the analysis used recent guidance from OEHHA, the breathing rates used do not correspond to OEHHA's new guidance using the different age groups. The cancer risk was also calculated using one ASF value, which is not consistent with OEHHA's calculation recommendation for the different age groups. It appears that the Lead Agency used a hybrid of both current and recent revised OEHHA guidance equations and factors in calculating the cancer risk and this was not well documented. SCAQMD staff recommends that the Lead Agency update the HRA with detailed explanation of the methods used to calculate the health risks as well as better define the factors used and how they were derived. Where applicable, the relevant SCAQMD references should be included.
9. The mitigated cancer risks assume only 1 hour per day outdoors. It is not clear how the Lead Agency determined this to be an appropriate assumption or specifically, how people would be limited to a specified time outdoors.

Significant Health Risk Assessment (HRA) Impacts to Potential Residents

10. The Lead Agency has determined in its HRA that project impacts are significant, as high as 50 in 1-million,¹ which is substantially above the recommended SCAQMD threshold of significance for the Toxic Air Contaminant Threshold for Maximum Incremental Cancer Risk (greater than or equal to 10 in 1-million). These results are due to the proposed residential use being located close to trains using railroad tracks operated by the Union Pacific Railroad and trucks operating at light-industrial and

¹DMND, Air Quality Section, page 67.

warehouse uses. The northern boundary of the project site is approximately 585 feet at its furthest point and approximately 150 feet at its closest point from the rail road tracks and light industrial/warehouse truck activities across Valley Boulevard. Based on the HRA, most of the exposure to future project residents comes from the train emissions and these train emissions, in particular, would expose sensitive receptors to significant levels of Toxic Air Contaminants (TAC) from DPM) which has been determined by CARB as a carcinogenic. The estimated daily train activity is approximately 38 trains² that have an average of 2-3 diesel-fueled locomotive engines per train operating on those tracks. Based on the estimated significant project impacts, the final project and CEQA document should include enforceable mitigation that demonstrates that exposure to residents will be reduced below significant threshold levels during the life of the project (see discussion below in comment #11).

Mitigation During Operations (MERV Filters and HVAC Systems)

11. Starting on page 67, the Lead Agency discusses Health Risk results concluding that during occupancy, both of these existing sources would expose sensitive receptors to significant levels of TAC pollutants due to existing ambient air pollution in the vicinity. The SCAQMD staff recognizes the many factors lead agencies must consider when siting new housing. On page 69, the Lead Agency is proposing mitigation to reduce the proposed project's significant health impacts. Further, many mitigation measures have been included in the DMND and proposed for other projects to reduce exposure, including building filtration systems, placing the residential units furthest from the train tracks, making any windows facing the tracks and industrial sites inoperable, building sound walls, planting vegetation barriers, etc. However, because of the potentially significant 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.

Limits to Enhanced Filtration Units

The Lead Agency should consider the limitations of the proposed enhanced filtration mitigation (Mitigation Measures five and six on page 69) for this project on the housing residents. For example, in a study that SCAQMD conducted to investigate filters³ similar to those proposed for this project, costs were expected to range from

² Dept. of Transportation (DOT) Crossing Inventory Information website: <http://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/XingLocResults.aspx?state=06&countycity=037&railroad=&reportinglevel=ALL&radionm=County&street=Lemon%20Rd&xingtype=%&xingstat us=%&xingpos=%> . These railroad tracks show daily train activity of approximately 38 trains that have an average of 2-3 diesel-fueled locomotive engines per train operating crossing Lemon Road in Walnut.

³ <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. See also CARB link for the "Status of Research on Potential Mitigation Concepts to Reduce Exposure to Nearby Traffic Pollution" (August 23, 2012): http://www.arb.ca.gov/db/search/search_result.htm?q=Potential+Mitigation+Concepts+to+Reduce+Exposure+to+Nearby+Traffic+Pollution&which=arb_google&cx=006180681887686055858%3AbewIc4wl8hc&srch_words=&cof=FORID%3A11 .

\$120 to \$240 per year to replace each filter. In addition, 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 also assumes that the filters operate 100 percent of the time while residents are indoors. It should be noted that these filters have no ability to filter out any toxic gasses from vehicle exhaust and would not reduce exposure when residents are outside of the residences, e.g. children playing outdoors, residents working in their yard, cleaning a vehicle, relaxing outside, etc. The presumed effectiveness and feasibility of this mitigation should therefore be evaluated in more detail prior to assuming that it will sufficiently alleviate near railway and truck exhaust exposures.

Localized Significance Thresholds (LST) Analysis - Operations

12. On page 65 in the Air Quality Section, the Lead Agency speculates that localized operational impacts are less than significant without quantifying the potential impacts from traffic generated by retail/commercial and residents, area sources, etc. These impacts should be quantified and compared with the localized significance thresholds to determine if these impacts are less than significant. Otherwise, the Lead Agency has not demonstrated that these impacts are less than significant.
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