



# South Coast Air Quality Management District

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SENT VIA E-MAIL AND USPS:

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## **Draft Environmental Impact Report (DEIR) for the Proposed The Exchange (SCH No. 2018071058)**

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 EIR.

### SCAQMD Staff's Summary of Project Description

The Lead Agency proposes to construct 482 residential units, 229 hotel guest rooms, a gasoline service station with 12 pumps, and 49,000 square feet of retail space on 35.4 acres (Proposed Project). The Proposed Project is located on the northeast corner of Oakley Avenue and North Orange Street. Based on a review of Figure 2-1, *Project Site Location*, in the DEIR and aerial photographs, SCAQMD staff found that the Proposed Project is located within 500 feet of State Route 60 (SR-60) and Interstate 215 (I-215). Construction of the Proposed Project is expected to occur over approximately 21 months and become operational in 2023<sup>1</sup>.

### SCAQMD Staff's Summary of Air Quality and Health Risk Assessment (HRA) Analyses

In the Air Quality Analysis section, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to SCAQMD's recommended regional and localized air quality CEQA significance thresholds. The Lead Agency found that the Proposed Project's construction-related air quality impacts would be less than significant after implementation of mitigation measure (MM) AQ-1 and MM AQ-2. MM AQ-1 requires the use of "super-compliant" low VOC paints ( $\leq 10$  grams/liter), and MM AQ-2 requires all actively graded areas to be watered in two-hour intervals (four times per day)<sup>2</sup>. The Lead Agency also found that operational emissions from NO<sub>x</sub> [183.7 pounds per day (lbs/day)] would exceed SCAQMD's recommended regional air quality CEQA significance threshold of 55 lbs/day for operation, after implementation of MM AQ-3 and MM AQ-4, resulting in significant and unavoidable regional air quality impacts. Additionally, the Lead Agency performed a health risk assessment (HRA) analysis to determine the reasonable maximum exposure of on-site sensitive receptors from mobile sources moving along the adjacent freeways and found that the maximum individual cancer risk would be 8.06 in one million, which would not exceed SCAQMD's significance threshold of 10 in one million for cancer risk<sup>3</sup>.

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<sup>1</sup> DEIR, Section 4.2, *Environmental Impact Analysis: Air Quality*. Page 4.2-10.

<sup>2</sup> *Ibid.* Page 4.2-26.

<sup>3</sup> *Ibid.* Page 4.2-10.

### SCAQMD's 2016 Air Quality Management Plan

On March 3, 2017, SCAQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP)<sup>4</sup>, which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP provides a regional perspective on air quality and the challenges facing the South Coast Air Basin (Basin). The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. Therefore, the Lead agency should use its best efforts to incorporate this NOx reduction goal into the project design in the Final EIR.

### SCAQMD Staff's General Comments

The Lead Agency performed a mobile source HRA analysis and found that the potential cancer risk to future residents living at the Proposed Project would be 8.06 in one million. Based on Appendix E, *Air Toxic and Criteria Pollutant Health Risk Assessment*, for the Proposed Project, it appeared that the Lead Agency used the 2003 Office of Environmental Health Hazard Assessment (OEHHA) Guidance to calculate cancer risks and did not take in account age groups specific modeling parameters. This would likely underestimate the health risks to children living at the Proposed Project. Please see the attachment for more details<sup>5</sup>.

Since the Proposed Project includes residential units in close proximity to SR-60 and I-215, future residents living at the Proposed Project will be exposed to toxic air contaminants (TACs) such as diesel particulate matter (DPM) being emitted from heavy-duty trucks traveling on SR-60 and I-215. While the Lead Agency found that the Proposed Project would not expose future residents to significant cancer risk, SCAQMD staff recommends that the Lead Agency require installation of enhanced filtration at the Proposed Project and make this requirement a project design feature for the Proposed Project in the Final EIR to further reduce the potential health risks for future residents living at the Proposed Project. Please see the attachment for additional details.

As stated above, the Proposed Project would involve, among others, operation of a gasoline service station with 12 pumps. A permit from SCAQMD is required, and SCAQMD is a Responsible Agency for the air permit. Upon a review of the operational air quality analysis for the Proposed Project in the DEIR and the supporting technical appendices, SCAQMD staff found that the Lead Agency did not include operational emissions resulting from the servicing or fueling process (e.g. storage tanks, fueling equipment, etc.), or perform a HRA analysis. Please see the attachment for additional details.

Finally, as described in the 2016 AQMP, to achieve NOx emissions reductions in a timely manner is critical to attaining the National Ambient Air Quality Standard (NAAQS) for ozone before the 2023 and 2031 deadlines. SCAQMD is committed to attain the ozone NAAQS as expeditiously as practicable. The Proposed Project plays an important role in contributing to the Basin's NOx emissions. To further reduce NOx emissions during operation, SCAQMD staff recommends additional mitigation measures that the Lead Agency should consider to incorporate in the Final EIR.

### Conclusion

Pursuant to California Public Resources Code Section 21092.5(a) and CEQA Guidelines Section 15088(b), SCAQMD staff requests that the Lead Agency provide SCAQMD 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

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<sup>4</sup> South Coast Air Quality Management District. March 3, 2017. *2016 Air Quality Management Plan*. Accessed at: <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

<sup>5</sup> DEIR. Appendix E. Pages 21 and 28.

not accepted. There should be good faith, 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.

SCAQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Robert Dalbeck, Assistant Air Quality Specialist, at [RDalbeck@aqmd.gov](mailto:RDalbeck@aqmd.gov) or (909) 396-2139, should you have any questions.

Sincerely,

*Lijin Sun*

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment  
LS:RD  
RVC190115-03  
Control Number

**ATTACHMENT****SCAQMD Staff Comments for the Proposed Project's Residential Component**

The Lead Agency is proposing construction of 482 residential units within 500 feet of SR-60 and I-215. SCAQMD staff found that the freeway interchange located adjacent to the Proposed Project had an annual average daily traffic (AADT) of 140,000 vehicles, including an AADT of 14,700 heavy-duty trucks on Route 60 East at Post Mile 12.212 in 2016<sup>6</sup>. Heavy-duty trucks emit DPM, which has been identified by the California Air Resources Board (CARB) as a toxic air contaminant (TAC) based on its carcinogenic effects<sup>7</sup>. Therefore, SCAQMD staff recommends the Lead Agency consider and implement the following comments and strategies in the Final EIR, such as requiring installation of enhanced air filtration systems with a Minimum Efficiency Reporting Value (MERV) 16 or better.

*Health Risk Assessment from Mobile Sources*

1. The most recent 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) Guidance<sup>8</sup> acknowledges that children are more susceptible to the exposure to air toxics and have revised the way cancer risks are estimated to take this into account. Since the trucks, vehicles, and equipment generally get cleaner with time due to existing regulations and technologies, it would not be appropriate to use a combined exposure factor to streamline age group specific variables which was done in the DEIR. This would likely underestimate the health risks to children who would be exposed to higher emission (DPM) concentrations during the early years of Project operation. Therefore, SCAQMD staff recommends that the DPM emissions for each year of operation be applied to each of the corresponding age bins (i.e. emissions from Year 1 of Project operation (2022) should be used to estimate cancer risks to the third trimester to 0 year age bin; Year 1 and 2 of Project operation should be used to estimate the cancer risks to the 0 to 2 years age bins; and so on).

*Guidance on Siting Sensitive Receptors Near Sources of Air Pollution*

2. SCAQMD 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 SCAQMD to reduce community exposure to source-specific and cumulative air pollution impacts, SCAQMD adopted the *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* in 2005<sup>9</sup>. This Guidance document provides recommended 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. In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: <http://www.arb.ca.gov/ch/handbook.pdf>. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

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<sup>6</sup> California Department of Transportation. Caltrans Traffic Volume Data for 2016. Route 60, Post mile 12.212. Accessed at: <http://www.dot.ca.gov/trafficops/census/>.

<sup>7</sup> California Air Resources Board. August 27, 1998. Resolution 98-35. Accessed at: <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>.

<sup>8</sup> Office of Environmental Health Hazard Assessment. March 6, 2016. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015*. Available at: <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

<sup>9</sup> South Coast Air Quality Management District. May 2005. "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" Accessed at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

*Enhanced Filtration Units*

3. Many strategies are available to reduce exposure, including, but 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. Because of the potential adverse health risks involved with siting sensitive receptors near SR-60 and I-215, it is essential that any proposed strategy must be carefully evaluated before implementation. In the HRA technical report for the Proposed Project, the Lead Agency stated that “the Project applicant has agreed to installing and maintaining air filtration systems with efficiencies equal to or exceeding a Minimum Efficiency Reporting Value (MERV) 16 as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. (1)1 in the proposed apartment complex.<sup>10</sup>” Because residents living at the Proposed Project would be exposed to DPM emissions from nearby heavy-duty trucks (14,700 truck AADT, 140,000 total AADT) traveling on SR-60 and I-215, and to ensure consistency in the recommendation throughout the environmental analysis, SCAQMD staff recommends that the Lead Agency require the installation of MERV 16 filters at the Proposed Project in the Final EIR.

SCAQMD staff also recommends that the Lead Agency consider the limitations of the enhanced filtration. For example, in a study that SCAQMD conducted to investigate filters<sup>11</sup>, 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. Moreover, 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 DPM emissions.

*Enforceability of Enhanced Filtration Units*

4. If enhanced filtration units are required for the Proposed Project, and to ensure that they are enforceable throughout the lifetime of the Proposed Project and effective in reducing exposures to DPM emissions, SCAQMD staff recommends that the Lead Agency make the installation of enhanced filtration units a project design feature and provide additional details regarding the ongoing, regular maintenance, and monitoring of filters in the Final EIR. To facilitate a good-faith effort at full disclosure and provide useful information to future residents at the Proposed Project, at a minimum, the Final EIR should include the following information:
  - a) Disclose the potential health impacts to prospective residents from living in a close proximity to sources of air pollution [e.g., heavy-duty trucks traveling on nearby freeways and the gasoline service station (see Comment No. 6 below)] and the reduced effectiveness of the air filtration system when windows are open and/or when residents are outdoors (e.g., in the common usable open space areas);
  - b) Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are installed on-site at the Proposed Project before a permit of occupancy is issued;

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<sup>10</sup> DEIR, Appendix E, *Air Toxic and Criteria Pollutant Health Risk Assessment*, Page 5.

<sup>11</sup> 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 SCAQMD: <https://onlinelibrary.wiley.com/doi/10.1111/ina.12013>.

- c) Identify the responsible implementing and enforcement agency such as the Lead Agency to ensure that enhanced filtration units are inspected and maintained regularly;
- d) Disclose the potential increase in energy costs for running the HVAC system to prospective residents;
- e) Provide information to residents on where the MERV filters can be purchased;
- f) Provide recommended schedules (e.g., every year or every six months) for replacing the enhanced filtration units;
- g) Identify the responsible entity such as the residents themselves, Homeowner's Association, or property management for ensuring enhanced filtration units are replaced on time, if appropriate and feasible (if residents should be responsible for the periodic and regular purchase and replacement of the enhanced filtration units, the Lead Agency should include this information in the disclosure form);
- h) Identify, provide, and disclose ongoing cost sharing strategies, if any, for replacing the enhanced filtration units;
- i) Set City-wide or Proposed Project-specific criteria for assessing progress in installing and replacing the enhanced filtration units; and
- j) Develop a City-wide or Proposed Project-specific process for evaluating the effectiveness of the enhanced filtration units.

#### **SCAQMD Staff's Comments for the Commercial Component of Gasoline Service Station**

As stated above, the Lead Agency proposes to construct a gasoline service station with 12 pumps as part of the Proposed Project. SCAQMD staff's comments on the air quality and HRA analyses for the gasoline service station are provided below that the Lead Agency should incorporate in the Final EIR.

##### *Operational Emissions from the Fueling Process*

5. The Lead Agency quantified the Proposed Project's operational emissions in CalEEMod. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operation from a variety of land use projects<sup>12</sup>. For air quality modeling purposes, in the "land use" field in CalEEMod, the Lead Agency modeled emissions for a convenience store with 16 gas pumps<sup>13,14</sup>. It is important to note that while CalEEMod quantifies energy, water, and mobile source emissions (e.g., trip visits by patrons) associated with operating a gasoline service station, CalEEMod does not quantify the operational stationary source emissions (e.g. storage tanks and fueling equipment). Therefore, SCAQMD staff recommends that the Lead Agency clarify if the Proposed Project's operational ROG emissions from storage tanks and the fueling process have been included in the Air Quality Analysis, or use its best efforts to quantify and disclose the operational emissions from the fueling process in the Final EIR

##### *Health Risk Assessment from the Gasoline Servicing and Fueling Process*

6. Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include schools, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. As stated above, the Proposed Project includes,

<sup>12</sup> CalEEMod incorporates 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 is available free of charge at: [www.caleemod.com](http://www.caleemod.com).

<sup>13</sup> DEIR, Appendix B, *Air Quality Impact Analysis*, Page 63.

<sup>14</sup> The Proposed Project description includes a 12-pump gasoline service station. The Lead agency estimated emissions in CalEEMod resulting from a 16-pump gasoline service station in each run.



among others, the operation of a gasoline service station. Therefore, the Proposed Project has the potential to expose nearby residents to TACs, such as benzene, which is a known carcinogen. SCAQMD staff has concerns about the potential health impacts to sensitive receptors (e.g., future residents living at the Proposed Project) from the exposure to TACs during the operation of the gasoline service station. Therefore, the Lead Agency should prepare a HRA analysis to disclose the health impacts in the Final EIR. Guidance for performing a gasoline dispensing station health risk assessment can be found in the SCAQMD's *Emission Inventory and Risk Assessment Guidelines for Gasoline Dispensing Stations*<sup>15</sup>.

#### *Permits and Compliance with SCAQMD Rules*

7. Since the Proposed Project includes operation of a gasoline service station with 12 pumps, a permit from the SCAQMD would be required. SCAQMD should be identified as a Responsible Agency under CEQA for the Proposed Project in the Air Quality Section of the Final EIR. The Final EIR should also include a discussion of compliance with applicable SCAQMD Rules, including, but not limited to, Rule 201 – Permit to Construct<sup>16</sup>, Rule 203 – Permit to Operate<sup>17</sup>, Rule 461 – Gasoline Transfer and Dispensing<sup>18</sup>, and Rule 1401 – New Source Review of Toxic Air Containments<sup>19</sup>.

It should be noted that any assumptions used in the Air Quality and HRA analyses in the Final EIR will be used as the basis for permit conditions and limits. For example, in the Air Quality Section of the DEIR, the Lead Agency assumed that the Proposed Project would be considered a typical gasoline facility with less than 3.6 million gallons per year throughput<sup>20</sup>. It should be also noted that the 2015 revised OEHHA HRA methodology is being used by SCAQMD for determining operational health impacts for permitting applications and also for all CEQA projects where SCAQMD is the Lead Agency. Should there be any questions on permits and applicable SCAQMD rules, please contact the SCAQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit SCAQMD's webpage at: <http://www.aqmd.gov/home/permits>.

#### **Additional Recommended Mitigation Measures**

8. CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse environmental impacts. The Proposed Project would result in significant and unavoidable air quality impacts from regional NOx emissions. Therefore, SCAQMD staff recommends that the Lead Agency incorporate the following mitigation measures in the Final EIR to further reduce NOx emissions and promote the use of cleaner vehicles during operation. Additional information on potential mitigation measures as guidance to the Lead Agency is available on the SCAQMD CEQA Air Quality Handbook website<sup>21</sup>.
  - a) Provide electric vehicle (EV) charging stations at the residential and commercial components. Vehicles that can operate at least partially on electricity have the ability to substantially reduce

<sup>15</sup> South Coast Air Quality Management District. *Emission Inventory and Risk Assessment Guidelines for Gasoline Dispensing Stations*. Accessed at: <http://www.aqmd.gov/home/permits/risk-assessment>.

<sup>16</sup> South Coast Air Quality Management District. Rule 201 – Permit to Construct. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf>.

<sup>17</sup> South Coast Air Quality Management District. Rule 203 – Permit to Operate. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf>.

<sup>18</sup> South Coast Air Quality Management District. Rule 461 – Gasoline Transfer and Dispensing. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-461.pdf>.

<sup>19</sup> South Coast Air Quality Management District. Rule 1401 – New Source Review of Toxic Air Contaminants. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1401.pdf>.

<sup>20</sup> DEIR. Section 4.2. Page 4.2-25.

<sup>21</sup> South Coast Air Quality Management District. Accessed at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.

the significant NOx impacts from this project. It is important to make this electrical infrastructure available when the Proposed Project is built so that it is ready when this technology becomes commercially available.

- b) For the commercial component of the Proposed Project, implement an anti-idling program. Vendors should be instructed to advise drivers that trucks and other equipment shall not be left idling for more than five minutes. Signs informing truck drivers of the anti-idling policy should be posted in the loading docks of the Project.
- c) For the commercial component of the Proposed Project, establish a purchasing policy to purchase electric vehicles for use.
- d) For the commercial component of the Proposed Project, establish a policy to select and use vendors that use clean vehicles and trucks to service and deliver materials to the 229-room hotel. Include this policy in the vendor contracts and business agreement.
- e) Maximize the planting of trees in landscaping and parking lots.
- f) Require use of electric or alternatively fueled street-sweepers with HEPA filters.
- g) Require use of electric lawn mowers and leaf blowers.