



South Coast Air Quality Management District

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SENT VIA E-MAIL:

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Mitigated Negative Declaration (MND) for Proposed Riverside and Lincoln Commercial Project

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments include recommended revisions to the air quality analysis, air dispersion modeling, and health risk assessment, information on South Coast AQMD's permits, and compliance with South Coast AQMD rules that the Lead Agency should include in the Final MND.

South Coast AQMD Staff's Summary of Project Description

The Lead Agency proposes to construct and operate a gasoline service station with 16 fueling pumps and a 4,291-square-foot fueling canopy on a 6.36-acre portion of 15.38 acres (Proposed Project). The Proposed Project will also include construction and operation of a 4,650-square-foot convenience store, a 3,979-square-foot car wash facility, a 4,456-square-foot restaurant, and a 38,016-square-foot self-storage facility. The Proposed Project is located on the northwest corner of Riverside Drive and Lincoln Street within the City of Lake Elsinore. Construction is anticipated to begin in 2021 and will be completed by 2022¹. Once operational, the Proposed Project's gasoline service station would have a maximum annual throughput of 2,000,000 gallons of gasoline². Based on a review of the MND and aerial photographs, South Coast AQMD staff found that the Proposed Project will be located approximately 230 feet south of existing residential uses and 200 feet east of existing commercial uses³.

South Coast AQMD Staff's Summary of the Air Quality Analysis and Health Risk Assessment

In the Air Quality Analysis Section of the MND, the Lead Agency quantified the Proposed Project's construction and operational emissions and compared those emissions to South Coast AQMD's recommended regional and localized air quality CEQA significance thresholds. The air quality analysis in the MND assumed implementation of an Air Quality Project Design Feature, which requires the use of Tier 4 construction equipment with diesel particulate filters or equivalent emission reduction technology during construction activities⁴. Based on the analysis, the Lead Agency found that the Proposed Project's regional and localized air quality impacts from both construction and operational activities would be less than significant⁵. The Lead

¹ MND. Page 7.

² MND. Appendix 2: Health Risk Assessment. Page 1.

³ MND. Page 47.

⁴ MND. Page 7.

⁵ MND. Pages 43 to 46.

Agency performed a construction health risk assessment (HRA) and an operational HRA for the gasoline service station. For the construction HRA, the Lead Agency modeled construction exhaust emission sources in AERSCREEN to determine pollutant concentrations from mobile sources (i.e. off-road equipment). The Lead Agency found that cancer risk to residential receptors from construction would be 1.77 in a million, which would not exceed South Coast AQMD's CEQA significance threshold of 10 in one million for cancer risk⁶. For the operational HRA, the Lead Agency modeled gasoline dispensing activities in AERMOD to determine pollutant concentrations from the stationary source fuel pumps and gasoline tanks. The Lead Agency found that cancer risk to residential receptors from operation of the gasoline dispensing activities would be 0.29 in a million, which would also not exceed South Coast AQMD's CEQA significance threshold of 10 in one million⁷.

South Coast AQMD Staff's General Comments

Based on a review of the MND and supporting technical appendices, South Coast AQMD staff found that the Lead Agency did not quantify operational reactive organic gas (ROG) emissions generated from storage tanks or gasoline transfer and dispensing activities during operations. This may have likely led to an underestimation of the Proposed Project's operational air quality impacts. The air dispersion modeling performed for the Proposed Project's construction HRA was conducted in AERSCREEN. The Lead Agency should provide additional information to justify the use of AERSCREEN when construction activities would use different types and sizes of off-road construction equipment that represent more than one single-source scenario or multiple emission sources with different emission characteristics. The air dispersion modeling performed for the Proposed Project's operational HRA in AERMOD used the rural dispersion option and a two-year meteorological data set. The Lead Agency should provide additional information to justify these modeling parameters in the Final MND. In the MND, the Lead Agency quantified cancer risk to residential receptors but did not quantify cancer risk to off-site worker receptors that would be located at the existing commercial uses. The Proposed Project includes, among others, operation of a gasoline service station with 16 fueling pumps with a maximum annual throughput of 2,000,000 gallons of gasoline. Gasoline fueling activities require permits from South Coast AQMD and will be required to comply with South Coast AQMD rules. Please see the attachment for more information.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may

⁶ MND. Page 48.

⁷ MND. *Ibid.*

arise from this comment letter. Please contact Alina Mullins, Air Quality Specialist, at amullins@aqmd.gov, should you have any questions or wish to discuss these comments.

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

Attachment

LS:AM

RVC210202-02

Control Number

ATTACHMENT

1. **CEQA Air Quality Analysis – Operational ROG Emissions from Storage Tanks or Gasoline Transfer and Dispensing Activities**

In the Air Quality Analysis in the MND and Appendix 1: *Air Quality Assessment*, the Lead Agency did not quantify operational ROG emissions generated from storage tanks or gasoline transfer and dispensing activities during operations. This may have likely led to an underestimation of the Proposed Project's operational emissions. Although South Coast AQMD Rule 461 – Gasoline Transfer and Dispensing requires the use of California Air Resources Board certified Phase I and Phase II enhanced vapor recovery systems with minimum volumetric efficiencies of 98% and 95%, respectively⁸, ROG emissions are not entirely eliminated and should be taken into consideration when analyzing the Proposed Project's operational air quality impacts. As an informational document, the Final MND should, at a minimum, include a discussion on potential operational air quality impacts from storage tanks and gasoline transfer and dispensing activities, and the Lead Agency should use its best efforts to quantify and disclose associated ROG emissions in the Final MND. If there is substantial evidence to support that a quantitative analysis of ROG emissions from storage tanks and gasoline transfer and dispensing activities is not needed, the Lead Agency should disclose the reasons supported by factual information in the Final MND. It is also important to note that while CalEEMod⁹ quantifies 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 from the storage tanks and fueling equipment.

2. **Air Dispersion Modeling**

Construction

According to the MND, the Proposed Project's construction will include operation of 12 different types of off-road construction equipment such as rubber-tired dozers, tractors/loader/backhoes, excavators, graders, pavers, paving equipment, rollers, cranes, forklifts, generator sets, welders, and air compressors¹⁰. In total, 29 separate pieces of off-road construction equipment would operate throughout the entire construction period. In the MND, the Lead Agency performed project-specific air dispersion modeling and used AERSCREEN to model emissions from different types of off-road construction equipment by treating them as a single area source with one area source emission rate¹¹.

⁸ South Coast AQMD. Rule 461 – Gasoline Transfer and Dispensing. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-461.pdf>.

⁹ 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.

¹⁰ MND. Appendix 1 Air Quality Assessment. Attachment A. CalEEMod 2016.3.2.

¹¹ *Ibid.* Attachment B – AERSCREEN – Tier IV with DPF Equivalent. PDF Pages 123 to 127.

AERSCREEN is a U.S. Environmental Protection Agency-approved screening model of AERMOD and is designed to model single-source scenarios¹² or multiple emission sources with the same emission characteristics. The Proposed Project includes operation of 12 different types of off-road construction equipment for a total of 29 different equipment pieces to be used throughout the entire construction period. The variety of off-road construction equipment that would be used during construction at the Proposed Project may have different emission characteristics that may be more appropriately modeled as separate emission sources instead of a single area source. Therefore, South Coast AQMD staff recommends that the Lead Agency use the most recent version of AERMOD (version 19191) to model the Proposed Project's construction source emissions and identify the maximum concentration for the construction HRA in the Final MND, or provide reasons as substantial evidence in the record to support that it is more appropriate to use AERSCREEN to model pollutant concentrations from construction.

Operation

Based on a review of the MND and Appendix A2 *Health Risk Assessment*, South Coast AQMD staff found that the rural dispersion modeling option and two years of meteorological data beginning in 2011 and ending in 2012 were used in AERMOD¹³. These may have led to an underestimation of the Proposed Project's operational concentrations, which were used to calculate the Proposed Project's maximum cancer risk to residential receptors during operations. South Coast AQMD staff recommends that the Lead Agency use the urban modeling option in AERMOD. The urban modeling option in AERMOD will account for the urban heat island effect, which may affect the modeled air dispersion. Additionally, South Coast AQMD staff recommends that a full five-year meteorological data set is used in AERMOD. A five-year meteorological data set will ensure the worst-case meteorological conditions are accounted. Meteorological data sets processed for use in AERMOD applications are available for download on the South Coast AQMD's website¹⁴. The concentrations from the revised air dispersion modeling should be used to recalculate the Proposed Project's operational cancer risk in the Final MND.

3. Health Risk Assessment (HRA)

As stated above, the Proposed Project includes, among others, operation of a gasoline service station with 16 fueling pumps. Operation of a gasoline service station has the potential to expose nearby sensitive receptors, including off-site workers at nearby commercial uses to toxic air contaminants (TACs) such as benzene. In the MND, the Lead Agency calculated cancer risk to nearby residential receptors from operation of a gasoline service station¹⁵. However, the Lead Agency did not calculate cancer risk to off-site workers at the nearby commercial uses. Therefore, South Coast AQMD staff recommends that the Lead Agency revise the operational HRA to calculate cancer risk to nearby commercial receptors from

¹² United States Environmental Protection Agency (U.S. EPA). "Revisions to the Guideline on Air Quality Models: Enhancements to the AERMOD Dispersion Modeling System and Incorporation of Approaches to Address Ozone and Fine Particulate Matter". 82 Fed Reg. 5209 (January 2017).

¹³ MND. Appendix 2 *Health Risk Assessment*. PDF pages 13 to 31.

¹⁴ South Coast AQMD. Data for AERMOD. Accessed at: <http://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod>.

¹⁵ MND. Page 46 to 49.

operation of a gasoline service station and compare the cancer risk to South Coast AQMD's CEQA significance threshold for cancer risk to determine the level of significance in the Final MND as substantial evidence to support the conclusion that the Proposed Project's air quality impacts to sensitive receptors from exposure to TACs would be less than significant.

4. South Coast AQMD Permits and Rules

Since the Proposed Project includes operation of a gasoline service station with 16 fueling pumps, South Coast AQMD permits will be required. As such, the Lead Agency identified South Coast AQMD as a Responsible Agency under CEQA for the Proposed Project in the MND¹⁶. However, at the time of the release of the MND, South Coast AQMD has not received permit applications for the gasoline service station component of the Proposed Project. It is important that impacts from the permits be fully and adequately evaluated and disclosed as required under CEQA Guidelines Section 15096(b). The assumptions used in the air quality analysis and HRA in the Final MND will be used as the basis for evaluating the permits under CEQA and imposing permit conditions and limits. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) methodology¹⁷ is being used by South Coast AQMD for determining operational health impacts for permitting applications and also for all CEQA projects where South Coast AQMD is the Lead Agency. Should there be any questions on permits, please contact South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage¹⁸.

In the MND, the Lead Agency included a discussion of South Coast AQMD Rule 1401 – New Source Review of Toxic Air Containments¹⁹. Operation of the gasoline service station component of the Proposed Project will be required to comply with other applicable South Coast AQMD Rules, including, but not limited to, Rule 201 – Permit to Construct²⁰, Rule 203 – Permit to Operate²¹, Rule 431.2 – Sulfur Content of Liquid Fuels²², and Rule 461 – Gasoline Transfer and Dispensing²³ that the Lead Agency should discuss in the Final MND.

¹⁶ MND. Page 19.

¹⁷ Office of Environmental Health Hazard Assessment. "Notice of Adoption of Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015". Accessed at: <https://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

¹⁸ South Coast AQMD. Accessed at: <http://www.aqmd.gov/home/permits>.

¹⁹ South Coast AQMD. 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>.

²⁰ South Coast AQMD. Rule 201 – Permit to Construct. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-201.pdf>.

²¹ South Coast AQMD. Rule 203 – Permit to Operate. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/rule-203.pdf>.

²² South Coast AQMD. Rule 431.2 – Sulfur Content of Liquid Fuels. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf>.

²³ South Coast AQMD. Rule 461 – Gasoline Transfer and Dispensing. Accessed at: <https://www.aqmd.gov/docs/default-source/compliance/Gas-Dispensing/rule-461.pdf>.