



Technical Memorandum

To: Marwan, Alabassi, Salmanco, LP

From: Eliza Laws, Senior Environmental Analyst
Noemi Avila, Assistant Environmental Analyst

Date: January 7, 2021

Re: Gas Station Health Risk Assessment for Conditional Use Permit No. 200018, the Dockery Lane Project, Riverside County, California

The following health risk assessment was prepared to evaluate whether the gasoline dispensing facility proposed as a part of the Project generates toxic air contaminants (TACs) that would exceed the South Coast Air Quality Management District's (SCAQMD) thresholds. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *Emission Inventory and Risk Assessment Guidelines for Gasoline Dispensing Stations* and *Risk Assessment Procedures for Rules 1401, 1401.1 & 212* prepared by the SCAQMD for quantification of health risk and evaluation of potential impacts.¹

The Conditional Use Permit No. 200018 (CUP200018 or Project) proposes commercial development on a portion of an approximate 16-acre site located within parcel one of Parcel Map No. 37850 west of State Route 74 at Dockery Lane within unincorporated Riverside County, California. The Project site is designated as Mixed-Use and is comprised of retail, restaurant, carwash, and a convenience store/fueling station uses. The proposed convenience store/fueling station includes a carwash, an 16 position fuel canopy and 3 position diesel fuel canopy.

■ Health Risk Assessment

Emissions resulting from gasoline service station operations may include TACs such as benzene, MTBE, toluene, xylene, and hexane and have the potential to contribute to health risk in the Project vicinity that mainly occur during loading, breathing, refueling, spillage, and hose permeation. However, only three (benzene, ethylbenzene, and naphthalene) result in cancer effects and were analyzed for cancer risk. SCAQMD developed cancer risk screening tables for a generic retail gasoline service station for the various meteorological site/Source Receptor Areas (SRA's) locations in SCAQMD's jurisdiction. The Project site is located in SRA 24.

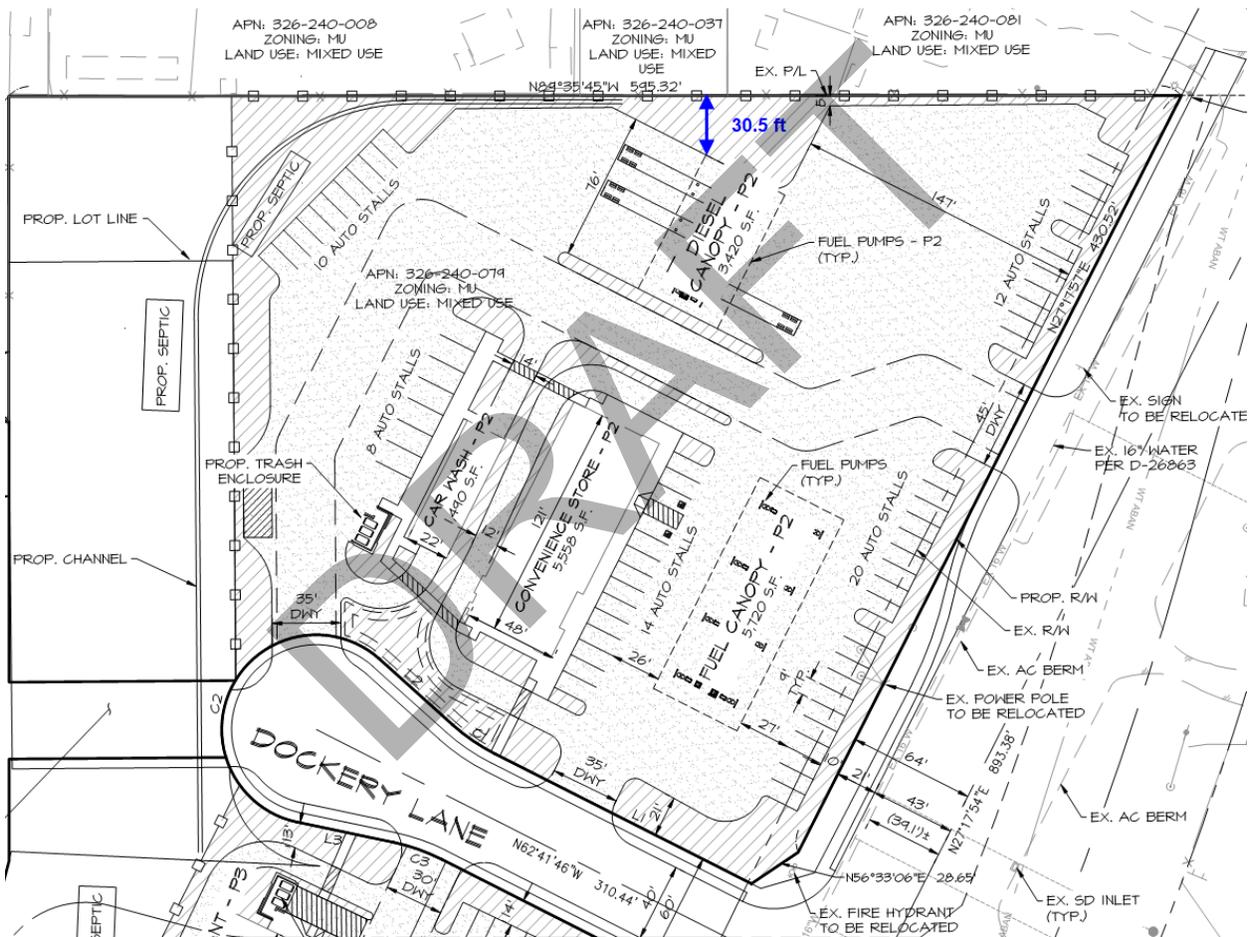
The gasoline station is subject to and required to comply with SCAQMD Rules 461 (Gasoline Transfer and Dispensing) as well as a Permit to Construct and Permit to Operate, Rules 201 and 203, respectively. These required permits identify a maximum annual throughput allowed based on specific fuel storage and dispensing equipment that is proposed by the operator.

¹ <http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf?sfvrsn=12>

The Project applicant has identified an annual throughput of 2,400,000 gallons. However, ultimate fuel throughput limitations would be established by SCAQMD through the gasoline station permitting processes noted above.

The nearest sensitive receptors to the proposed gasoline station are shown in **Figure 1**, below. Sensitive receptors, as identified by SCAQMD, may include residences, schools, playgrounds, athletic facilities, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors in the Project vicinity primarily include rural. As shown on **Figure 1**, the nearest sensitive receptors are the residential properties located approximately 30.5 feet (9 meters) north the proposed diesel canopy. Existing commercial receptors include a local fast food restaurant north of the Project site at the intersection of SR-74 and Seventh Street, approximately 770 feet (235 meters).

Figure 1 – Nearest Sensitive Receptor Location



Based on the SCAQMD Risk Tool version 1.103 that implements the *SCAQMD Risk Assessment Procedures for Rule 1401, 1401.1, and Rule 212 and Permit Application Package "N" Version 8.1*² it is estimated that the cancer risk to sensitive and commercial receptors from the proposed gasoline dispensing station would be 8.4 in one million and 0.02 in one million, respectively.

As stated in the *Risk Assessment Procedures for Rules 1401, 1401.1 & 212*, although gasoline vapors and its TAC constituents (for example, benzene, toluene, and xylene) have non-cancer impacts, the risks

² <http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf?sfvrsn=4>

from retail gasoline dispensing facilities are dominated by cancer risk. Therefore, the chronic and acute non-cancer health risk do not need to be calculated.

- **Conclusion**

The analysis indicates that operation of the proposed Project's gasoline dispensing station will not expose sensitive or commercial receptors to cancer risk greater than the SCAQMD threshold of 10 in one million. Thus, no mitigation is required.

Should you have any questions, please contact me at (951) 686-1070.

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