



Technical Memorandum

To: Thomas Chavez, Speedway Development, LLC

From: Eliza Laws, Senior Environmental Analyst

Date: July 31, 2018

Re: Gas Station Health Risk Assessment for the Toscana Village at Temescal Valley Project

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 Project consists of the construction and operation of a commercial development on a 27 gross acre site located north of Indian Truck Trail between Interstate-15 and Temescal Canyon Road in the County of Riverside. The Project will be developed in two phases. Phase 1 involves the construction of a gas station with 16 vehicle fueling positions, two (2) fast food restaurants with drive-thru totaling 6,800 square feet, a 10,500 square foot high turnover restaurant, and 39,900 square feet of retail uses. Phase 2 involves the construction of 42,000 square feet of general office space, 21,000 square feet of retail uses, a 43,000 square foot supermarket, a 3,500 square foot drive-in bank or restaurant, a 9,500 square foot high turnover restaurant, and a 14,000 square foot pharmacy with a drive-thru. The entire Project site will be mass graded during Phase 1.

■ 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 25.

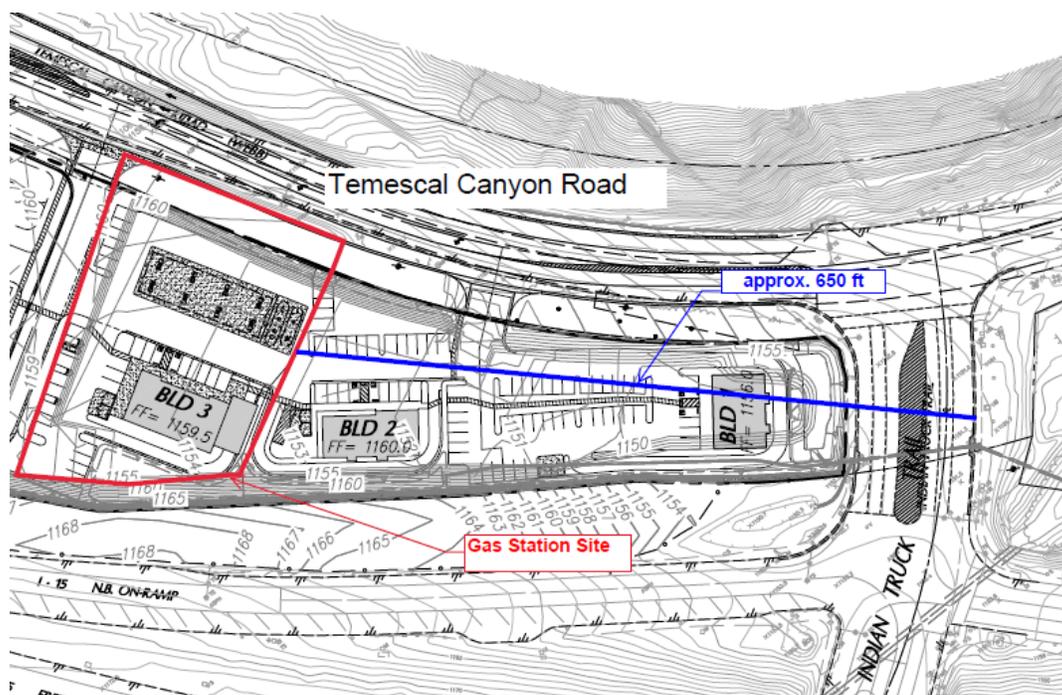
The gasoline station is subject to and required to comply with SCAQMD Rules 461 (Gasoline Transfer and Dispensing) as well as a Permit to Construct and Permit to Operate, Rules 201 and 203, respectively. These required permits identify a maximum annual throughput allowed based on specific fuel storage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

Although a gasoline station operator has yet to be determined, this analysis assumes a maximum annual throughput of 5,400,000 gallons based on preliminary assumptions of 450,000 gallons per month. 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**, attached hereto. 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 existing residences to the west and southwest areas of the Project site and areas designated as Mixed Use Area (MUA) on the southeast corner of Temescal Canyon Road and Indian Truck Trail that could potentially develop with residential uses. As shown on **Figure 1**, the nearest potential future sensitive receptors are located approximately 650 feet (198 meters) across Indian Truck Trail from the proposed gasoline station. Existing off-site worker receptors would include those located in the existing shopping center southwest of the Project site, but the MUA land designated southwest of the gasoline station site 650 feet (198 meters) represents the nearest potential off-site worker location.

Figure 1 – Nearest Receptor Location



Based on the cancer risk screening tables in the *SCAQMD Permit Application Package "N" Version 8.1*² it is estimated that the cancer risk to sensitive and off-site worker receptors from the proposed gasoline dispensing station would be 0.58 in one million and 0.05 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 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.

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

- **Conclusion**

The analysis indicates that operation of the proposed Project's gasoline dispensing station will not expose sensitive or off-site worker 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.