

Appendix B  
**Health Risk Assessment**

Health Risk Assessment  
2919 South King Road Project  
City of San José, California

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TABLE OF CONTENTS

**1 INTRODUCTION**

1.1 Project Location .....1

1.2 Project Description.....1

**2 ENVIRONMENTAL SETTING**

2.1 Climate .....5

2.2 Toxic Air Contaminants .....5

2.3 Sensitive Receptors .....7

**3 REGULATORY SETTING**

3.1 Federal .....9

3.2 State of California.....10

3.3 Regional.....12

**4 SIGNIFICANCE CRITERIA AND METHODOLOGY**

4.1 Health Risk Analysis Thresholds .....14

4.2 Methodology.....15

**5 POTENTIAL HEALTH RISK IMPACTS**

5.1 Construction Health Risk Analysis .....20

5.2 Operational Health Risk Analysis.....23

**6 REFERENCES**

References.....25

**TABLES**

Table 1: Sensitive Receptors.....7

Table 2: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates .....18

Table 3: Construction Risk .....21

Table 4: Operational Risk.....23

Table 5: Cumulative Operational Health Risk.....24

**FIGURES**

Figure 1: Regional Vicinity .....2

Figure 2: Site Vicinity .....3

Figure 3: Project Site Plan .....4

Figure 4: Sensitive Receptor Locations.....8

**APPENDIX**

Appendix A: Modeling Data

## LIST OF ABBREVIATED TERMS

|                                |   |
|--------------------------------|---|
| A                              | absorption factor from inhalation                         |
| ASF                            | age sensitivity factor                                    |
| AB                             | Assembly Bill   |
| APN                            | Assessor's Parcel Number                                  |
| APS                            | auxiliary power system                                    |
| AT                             | averaging time  |
| ATCM                           | Air Toxic Control Measure                                 |
| BAAQMD                         | Bay Area Air Quality Management District                  |
| CARB                           | California Air Resources Board                            |
| CCAA                           | California Clean Air Act                                  |
| CEQA                           | California Environmental Quality Act                      |
| CPF                            | cancer potency factor                                     |
| $C_{air}$                      | air concentration from model                              |
| $C_i$                          | air concentration of substance                            |
| DBR                            | daily breathing rate                                      |
| DOORS                          | Diesel Off-Road Reporting System                          |
| DPM                            | Diesel Particulate Matter                                 |
| DRRP                           | Diesel Risk Reduction Plan                                |
| Dose-air                       | dose through inhalation                                   |
| EMFAC                          | Emissions Factor Model                                    |
| ED                             | exposure duration   |
| EF                             | exposure frequency  |
| °F                             | Fahrenheit  |
| FCAA                           | Federal Clean Air Act                                     |
| FAH                            | fraction of time spent at home                            |
| GVWR                           | gross vehicle weight rating                               |
| HAP                            | hazardous air pollutant                                   |
| HQ                             | health quotient   |
| HRA                            | health risk assessment                                    |
| kg                             | kilograms   |
| L                              | liter   |
| MICR                           | Maximum Individual Cancer Risk                            |
| mg                             | milligrams  |
| $\mu\text{g}/\text{m}^3$       | micrograms per cubic meter                                |
| MSAT                           | Mobile Source Air Toxic                                   |
| NAAQS                          | National Ambient Air Quality Standards                    |
| NED                            | National Elevation Dataset                                |
| NESHAP                         | National Emissions Standards for Hazardous Air Pollutants |
| $\text{NO}_2$                  | nitrogen dioxide  |
| $\text{NO}_x$                  | nitrogen oxides   |
| $\text{O}_3$                   | ozone   |
| OEHHA                          | Office Environmental Health Hazard Assessment             |
| PM                             | particulate matter  |
| $\text{PM}_{10}$               | particulate matter less than 10 microns in diameter       |
| $\text{PM}_{2.5}$              | particulate matter less than 2.5 microns in diameter      |
| PERP                           | Portable Equipment Registration Program                   |
| REL                            | Reference Exposure Level                                  |
| $\text{REL}_i$                 | Reference Exposure Level of substance                     |
| $\text{Risk}_{\text{inh-res}}$ | residential inhalation cancer risk                        |
| SB                             | Senate Bill   |
| T-BACT                         | toxics best available control technology                  |
| TAC                            | Toxic Air Contaminant                                     |
| U.S. EPA                       | United States Environmental Protection Agency             |
| VMT                            | vehicle miles traveled                                    |

# 1 INTRODUCTION

The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with Toxic Air Contaminants (TAC) including Diesel Particulate Matter (DPM) resulting from the implementation of the proposed 2919 South King Road Project (“project” or “proposed project”) in the City of San José. This HRA was prepared in accordance with the requirements of the Bay Area Air Quality Management District (BAAQMD) and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur from the project. Technical data is included as see [Appendix A: Modeling Data](#).

## 1.1 Project Location

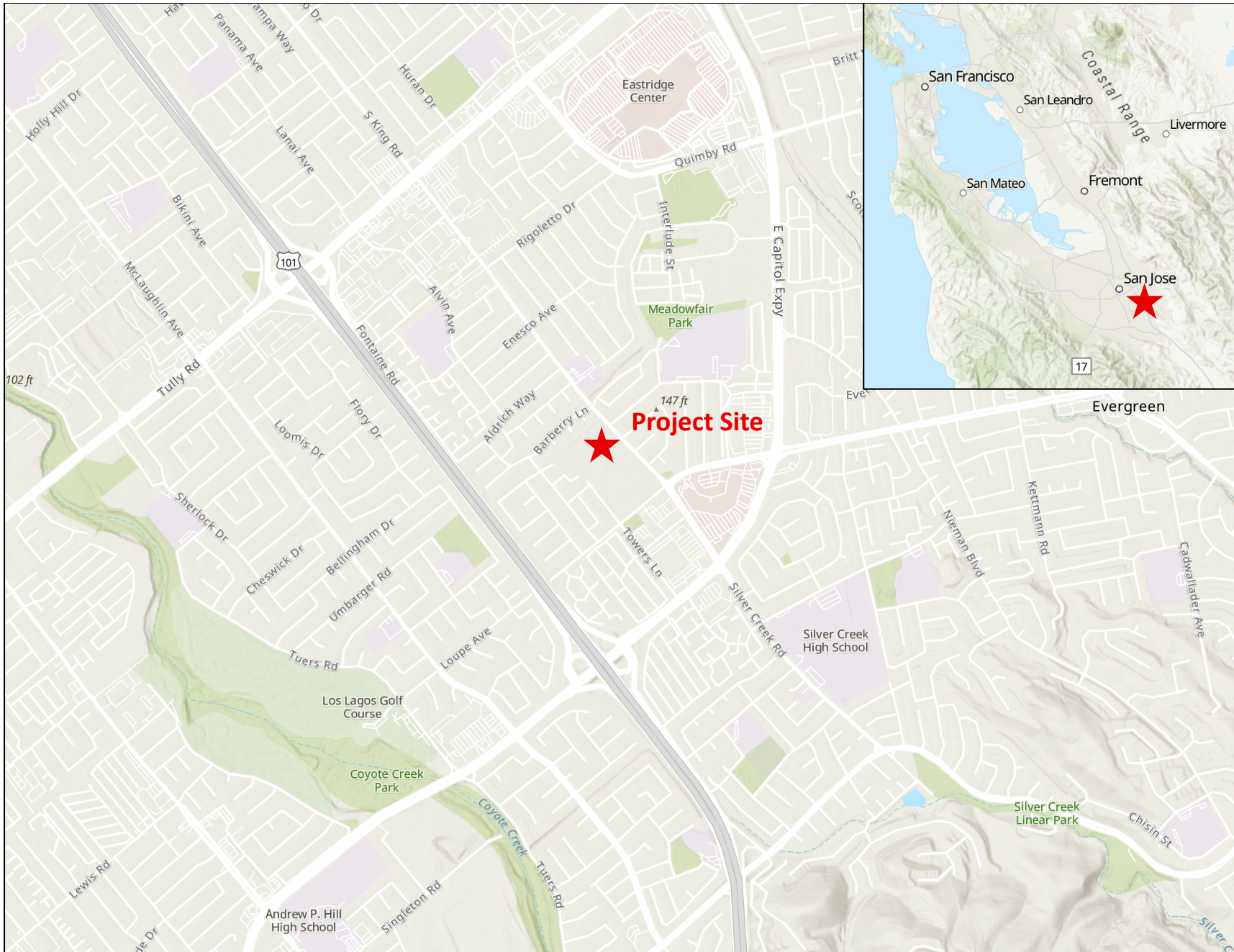
The proposed project is located at 2919 South King Road in San José. [Figure 1: Regional Vicinity](#) and [Figure 2: Site Vicinity](#), depict the project site in a regional and local context. The project site is located in an urban area with a mix of surrounding uses including light industrial, residential, and commercial uses. The project site is immediately surrounded by residential uses to the north and northwest. The proposed project’s existing land use designation is Light Industrial (LI) and existing zoning designation is Light Industrial Planned Development Zoning District LI(PD). Currently, the project site is vacant with some existing vegetation.

## 1.2 Project Description

The project intends to redevelop the property as a modern industrial facility. The proposed project would construct an approximately 103,970 square foot (sf) speculative warehouse building with a loading dock on the north side of the building, refer to [Figure 3: Project Site Plan](#). The new warehouse building would contain approximately 88,970 sf of warehouse space and 10,000 sf of office space on the first floor and 5,000 sf of office space on a mezzanine floor. The warehouse building would include 11 loading dock doors on its northern side. The proposed project also includes surface parking with 86 automobile (passenger vehicle) spaces. Of the 86 automobile spaces provided, 35 would be electric vehicle (EV) capable. In addition, 10 bicycle racks and 4 motorcycle parking spaces would be provided.

Access to the project site would be provided by two driveways off South King Road. A 32-foot wide driveway would be located north of the warehouse building, providing access for trucks and trailers. A 26-foot wide driveway would be located south of the warehouse building, providing access for passenger vehicles. Pedestrian access would be provided via South King Road, by a path located south of the warehouse building.

The proposed project would be constructed over the course of approximately 11 months. Demolition is anticipated to occur in October 2022, followed by a 10-month construction phase between November 2022 and September 2023. The proposed project would require approximately 5,590 cubic yards (cy) of soil import during the grading phases of construction.



Source: USGS, 2021

**Figure 1: Regional Map**

2919 S King Road Project  
Health Risk Assessment



Not to scale

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Source: Google Earth, 2020

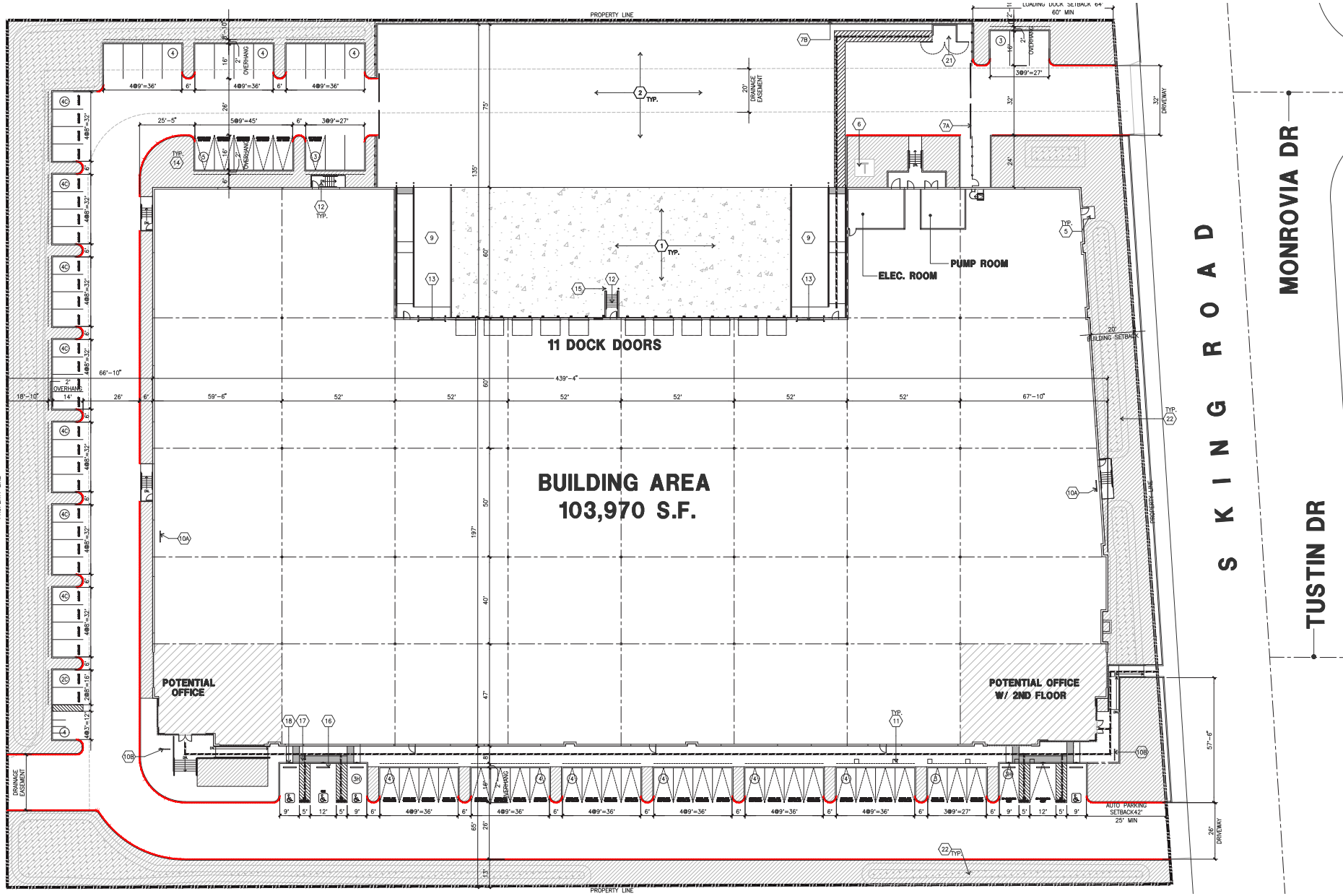
## Figure 2: Project Vicinity Map

2919 S King Road Project  
Health Risk Assessment



Not to scale

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Source: Kier + Wright, 2021

**Figure 3: Site Plan**  
 2919 S King Road Project  
 Health Risk Assessment





## 2 ENVIRONMENTAL SETTING

### 2.1 Climate

The project is within the San Francisco Bay Area Air Basin (SFBAAB), which comprises all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap, Golden Gate, and an eastern coast gap, Carquinez Strait, which allow air to flow in and out of the SFBAAB and the Central Valley.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high-pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential.

### 2.2 Toxic Air Contaminants

Toxic Air Contaminants (TACs) are airborne substances capable of causing short-term (acute) and long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous Air Pollutants (HAP) is a term used by the Federal Clean Air Act (FCAA) that includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), have been singled out through ambient air quality data as being the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. The California Air Resources Board (CARB) provides emission inventories for only the larger air basins.

Industrial facilities and mobile sources are significant sources of TACs. The electronics industry, including semiconductor manufacturing, has the potential to contaminate both air and water due to the highly toxic chlorinated solvents commonly used in semiconductor production processes. In addition to industrial sources, various common urban facilities also produce TAC emissions, such as gasoline stations (benzene), hospitals (ethylene oxide), and dry cleaners (perchloroethylene). Automobile exhaust also contains TACs such as benzene and 1,3-butadiene. Diesel particulate matter (DPM) was identified as a TAC by CARB in 1998. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of

hundreds of substances. BAAQMD research indicates that mobile-source emissions of DPM, benzene, and 1,3-butadiene represent a substantial portion of the ambient background risk from TACs in the SFBAAB.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of the act must prepare and submit toxic emission inventory plans and reports, and periodically update those reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Sources of air toxics go beyond industry, however. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene.

In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total DPM emissions, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about 5 percent of total DPM. CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan (DRRP), the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Reporting System (DOORS). The PERP and DOORS programs allow owners or operators of portable engines and certain other types of equipment to register their units to operate their equipment throughout California without having to obtain individual permits from local air districts.

As stated above, diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children’s lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. California has identified diesel exhaust particles as a carcinogen.

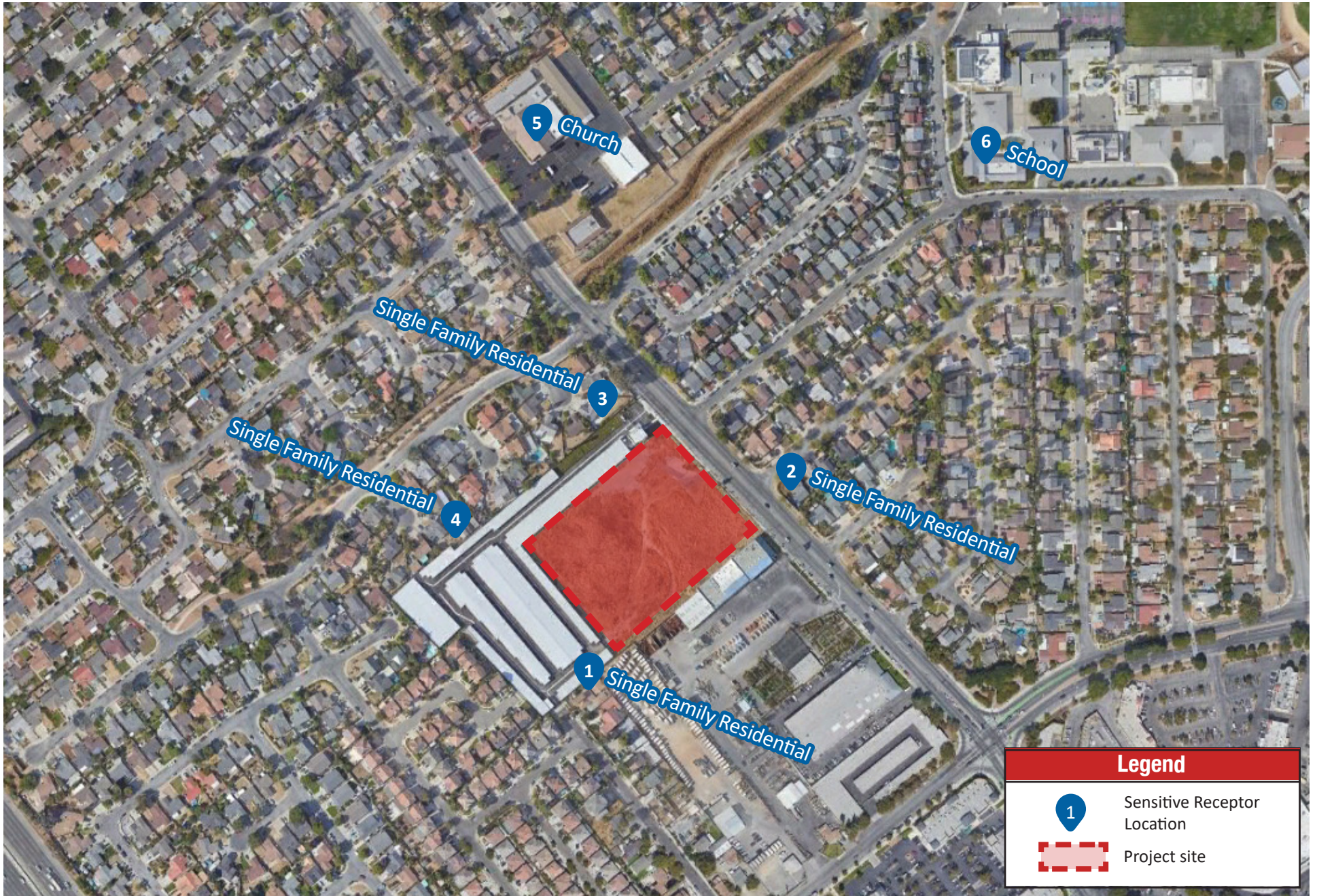
## 2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive receptors in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The project site is located in an urban area in City of San José. The surrounding land uses are commercial and industrial, with residences to the north, east, south, and west. [Table 1: Sensitive Receptors](#), lists the distances and locations of nearby sensitive receptors. [Figure 4: Sensitive Receptor Locations](#) shows the receptors.

**Table 1: Sensitive Receptors**

| Receptor Description                | Distance and Direction from the Project Site |
|-------------------------------------|--|
| Single-family residential community | 85 feet south                                |
| Single-family residential community | 110 feet east                                |
| Single-family residential community | 125 feet north                               |
| Single-family residential community | 130 feet west                                |
| Liberty Baptist Church              | 685 feet north                               |
| George V. LeyVa Middle School       | 1,060 feet northeast                         |



Source: Google Earth, 2020

**Figure 4: Sensitive Receptor Locations**

2919 S King Road Project  
Health Risk Assessment



Not to scale

### 3 REGULATORY SETTING

#### 3.1 Federal

##### Federal Clean Air Act

The FCAA was amended in 1990 to address the numerous air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the United States Environmental Protection Agency (U.S. EPA) issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health: benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the U.S. EPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have National Ambient Air Quality Standards (NAAQS) making evaluation of their impacts less uniform.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric ozone protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

##### Federal Emissions Standards for On-Road Trucks

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the final and cleanest standards with the 2007 Heavy-Duty Highway Rule.<sup>1</sup> The PM emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the NO<sub>x</sub> and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-hr and 0.14 g/hp-hr, respectively,

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<sup>1</sup> United States Environmental Protection Agency (U.S. EPA), *Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*, Final Rule. 40 Code of Federal Regulations, Parts 69, 80, and 86. January 18, 2001.

were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010.

## Emission Standards for Off-Road Diesel Engines

To reduce emissions from off-road diesel equipment, the U.S. EPA established a series of cleaner emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006. Tier 3 standards were phased in from 2006 to 2008. Tier 4 standards, which generally require add-on emission control equipment to attain them, are being phased in from 2008 to 2015.

### 3.2 State of California

#### California Air Resources Board

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions.

CARB also administers the State's mobile source emissions control program and oversees air quality programs established by State statute, such as AB 2588. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the AB 2588 was amended by Senate Bill (SB) 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

#### Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline<sup>2</sup>. CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.<sup>3</sup> The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

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<sup>2</sup> California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

<sup>3</sup> California Air Resources Board, *Overview: Diesel Exhaust & Health*, available at: <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>, accessed on August 11, 2021.

## Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO<sub>x</sub> emissions from existing diesel vehicles operating in California. The regulation requires PM retrofits on all diesel trucks and buses that operate in California (i.e., existing vehicles are required to be upgraded to reduce emissions). Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to most privately-owned and federally-owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks and there are several extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

## Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to diesel particulate matter and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles. The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

## CalEnviroScreen

OEHHA has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, the project site is located within Census Tract 6085503304, which is within the 52<sup>nd</sup> percentile with a pollution burden of 42.<sup>4</sup> It should be noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. Further, as a comparative screening tool, the results do not provide

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<sup>4</sup> California Office of Environmental Health Hazard Assessment, *CalEnviroScreen 4.0 Results (October 2021 Update)*, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>, accessed April 12, 2022.

a basis for determining when differences between scores are significant in relation to public health or the environment.

### CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission “last-mile” delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

### Executive Order N-79-20

Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new zero emission vehicles (ZEVs) “towards the target of 100 percent.” The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

## 3.3 Regional

### Bay Area Air Quality Management District

The BAAQMD is the regional agency tasked with managing air quality in the region and has regulated TACs since the 1980s. The CCAA provides the BAAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the



motor vehicles at an intersection, a mall, and on highways. As a State agency, CARB regulates motor vehicles and fuels for their emissions. The BAAQMD has published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.

Under BAAQMD Regulation 2-1 (General Permit Requirements), Regulation 2-2 (New Source Review), and Regulation 2-5 (New Source Review), all nonexempt sources that possess the potential to emit TACs are required to obtain permits from BAAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. The BAAQMD limits emissions and public exposure to TACs through a number of programs. Section 301 of Regulation 2, Rule 2 requires Best Available Control Technology (BACT) is triggered for any new or modified source with the potential to emit specific levels of pollutants. The BAAQMD prioritizes TAC-emitting stationary sources for regulation based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

### Community Air Risk Evaluation Program

The BAAQMD's Community Air Risk Evaluation (CARE) program estimates and reports both local and regional impacts of TACs in the Bay Area. The objective of the CARE Program is to reduce health impacts linked to local air quality. The goals of the CARE Program are to: (1) identify areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution; (2) apply sound scientific methods and strategies to reduce health impacts in these areas; and (3) engage community groups and other agencies to develop additional actions to reduce local health impacts. Information from the CARE program is used by the BAAQMD to design and focus effective mitigation measures in areas with highest impacts.

## 4 SIGNIFICANCE CRITERIA AND METHODOLOGY

### 4.1 Health Risk Analysis Thresholds

Project health risks are determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. The BAAQMD publishes the California Environmental Quality Act (CEQA) Air Quality Guidelines, which were most recently updated in May 2017. The BAAQMD thresholds for air toxic emissions that are used for this project are shown below:

Individual Projects:

- **Excess Cancer Risk:** Emit contaminants that exceed the maximum individual cancer risk of 10 in one million.
- **Non-Cancer Risk:** Emit contaminants that exceed the maximum hazard quotient of 1.0.
- **Ambient PM<sub>2.5</sub> Concentration:** Incremental increase in average annual PM<sub>2.5</sub> concentration of greater than 0.3 µg/m<sup>3</sup>

Cumulative Thresholds:

- **Excess Cancer Risk:** Emit contaminants that would contribute to cumulative emissions, resulting in an exceedance of the maximum individual cancer risk of 100 in one million.
- **Non-Cancer Risk:** Emit contaminants that that would contribute to cumulative emissions, resulting in an exceedance of the maximum hazard quotient of 10.0.
- **Ambient PM<sub>2.5</sub> Concentration:** Incremental increase in average cumulative annual PM<sub>2.5</sub> concentration of greater than 0.8 µg/m<sup>3</sup>

Cancer risk is expressed in terms of expected incremental incidence per million population. The BAAQMD has established an individual project incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk. This threshold serves to determine if a given project has a potentially significant development-specific impact. The 10 in one million standard is a health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics. To put this risk in perspective, the risk of dying from accidental drowning is 1,000 in one million which is 100 times more than the BAAQMD's threshold of 10 in one million.

The BAAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a hazard index (HI), expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A HI less than 1.0 means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

The 2017 BAAQMD CEQA Air Quality Guidelines recommend assessing impacts within 1,000 feet of the project. The 1,000-foot radius is consistent with findings in CARB's Air Quality and Land Use Handbook

(2005) and the California Health & Safety Code §42301.6 (Notice for Possible Source Near School). The CARB Air Quality and Land Use Handbook found that TAC concentrations are reduced substantially at a distance 1,000 feet downwind from sources such as freeways or large distribution centers.

## 4.2 Methodology

This HRA evaluates potential health risks associated with the emission of diesel particulate matter resulting from the implementation of the proposed project. Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. Operational activities would also include the use of heavy-duty diesel trucks.

### Construction Risk

Construction would generate DPM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site potentially poses a health risk to nearby sensitive receptors. The closest sensitive receptors to the project site are the residences (approximately 85 feet south).

Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be episodic and would occur throughout the project site. Construction activities would limit idling to no more than five minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Furthermore, even during the most intense year of construction, emissions of DPM would be generated from different locations on the project site rather than in a single location because different types of construction activities (e.g., site preparation and building construction) would not occur at the same place at the same time. Construction emissions rates for PM<sub>2.5</sub> (used as a proxy for DPM) were calculated from the CalEEMod construction emissions modeling conducted for the project Air Quality Assessment.

### Operational Sources

The truck traffic from the project could also result in pollutant concentrations at existing sensitive receptors. Average daily trips from truck traffic to the project were obtained from the project Transportation Analysis (April 2022). Total daily trip and truck trip generation is based on Institute of Transportation Engineers (ITE) Warehouse (ITE code 150) rate. This analysis evaluates approximately 20 daily truck trips related to the warehouse use. Emission rates for vehicle running and idling for PM<sub>2.5</sub> (DPM) was calculated using trip data and CARB 2021 Emission FACTor model version 1.0.1 (EMFAC)<sup>5</sup> data for Santa Clara County; refer to [Appendix A](#). The emissions rate was calculated using 2023 emissions factors since project construction would be completed in 2023. This approach is conservative as it assumes no cleaner technology in future years.

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<sup>5</sup> California Air Resources Board, *EMFAC 2021 Web Database*, <https://arb.ca.gov/emfac/emissions-inventory>, accessed February 2022.

## Dispersion Modeling

The air dispersion modeling for the operational risk assessment was performed using U.S. EPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. AERMOD regulatory defaults, the “Urban” modeling option for the County, and “Elevated” terrain were used for this analysis.

The emission sources in the model are line volume sources (comprised of smaller adjacent volume sources) for the loading dock idling area, on-site truck circulation, and off-site routes. The truck loading areas for the site are located on the north side of the building. Heavy duty vehicle emissions were assigned a release height of 12 feet (3.66 meters), a plume height of 20.4 feet (6.22 meters). A release height of 12 feet is the average stack height for trucks and the plume height is based on U.S. EPA guidance for vehicle volume sources.

AERMOD was run to obtain the peak 1-hour, 24-hour, and period (annual average) concentration in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) at the nearby sensitive receptors. The period concentrations were used to calculate the Maximum Individual Cancer Risk (MICR), the maximum chronic HI, and the hourly concentrations were used to calculate the health impact from substances with acute non-cancer health effects. A receptor grid was placed over the project site to cover the zone of impact. Due to the size of the project site, nearby sensitive receptors were modeled with a 35-meter (115-foot) grid spacing. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the project. Surface and upper air meteorological data is provided by CARB. Surface and upper air meteorological data from the Reid-Hillview Airport Monitoring Station was selected as being the most representative for meteorology based on proximity to the project site. The modeling and analysis was prepared in accordance with the BAAQMD Modeling Guidance for AERMOD<sup>6</sup>.

Project construction would occur for over a period of approximately 12 months. However, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 3-year exposure scenario as recommended by the BAAQMD, and thus is conservative.<sup>7</sup> The cancer risk calculations were based on applying age sensitivity weighting factors for each emissions period modeled. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the worst-case location of the proposed project was assessed.

Maximum (worst case)  $\text{PM}_{2.5}$  exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. Risk levels were calculated according to the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, *Air Toxics Hot Spots Program Risk Assessment Guidelines* (February 2015).

<sup>6</sup> Bay Area Air Quality Management District, *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*, December 2016.

<sup>7</sup> The BAAQMD recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less (BAAQMD, *BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines*, December 2016).

Note that the concentration estimate developed using this methodology is conservative and is not a specific prediction of the actual concentrations that would occur at the project site at any given point in time. Actual 1-hour and annual average concentrations are dependent on many variables, including specific distances during time periods of adverse meteorology. A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on these worst-case exposure duration scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual. Only the risk associated with the worst-case location of the project was assessed.

### Risk and Hazard Assessment

**Cancer Risk.** Based on the OEHHA methodology, residential inhalation cancer risk from annual average DPM concentrations are calculated by multiplying the daily inhalation dose, cancer potency factor, age sensitivity factor (ASF), frequency of time spent at home, and exposure duration divided by averaging time, yielding the excess cancer risk. These factors are discussed in more detail below. It is important to note that exposure duration is based on continual heavy truck operations along nearby roadways. Exposure through inhalation (Dose-air) is a function of breathing rate, exposure frequency, and concentration of substance in the air. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\text{Dose-air} = C_{\text{air}} * (\text{BR}/\text{BW}) * A * \text{EF} * 10^{-6}$$

Where:

|                  |   |  |
|------------------|---|--|
| Dose-air         | = | dose through inhalation (mg/kg/day)                                      |
| $C_{\text{air}}$ | = | air concentration ( $\mu\text{g}/\text{m}^3$ ) from air dispersion model |
| (BR/BW)          | = | daily breathing rate normalized to body weight (L/kg bodyweight-day)     |
| A                | = | inhalation absorption factor (unitless)                                  |
| EF               | = | exposure frequency (approximately 350 days per year for residential)     |
| $10^{-6}$        | = | conversion factor (micrograms to milligrams, liters to cubic meters)     |

OEHHA developed ASFs to consider the increased sensitivity to carcinogens during early-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF presented in [Table 2: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates](#). Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the FAH values presented in [Table 2](#).

**Table 2: Default Age Sensitivity Factors, Fraction of Time at Home, and Daily Breathing Rates**

| Age  | Default Age Sensitivity Factor <sup>1</sup> (ASF) | Fraction of Time at Home (FAH) | Daily Breathing Rate (L/kg BW-day <sup>2</sup> ) |
|--|---|--------------------------------|--|
| <b>Resident</b>  |   |                                |  |
| Third trimester  | 10  | 85%                            | 361  |
| 0 to 2 years   | 10  | 85%                            | 1,090  |
| Ages 2 through 15 years  | 3   | 72%                            | 745  |
| Ages 16 and greater  | 1   | 73%                            | 335  |
| <b>Worker (ages 16 and greater)</b>  | 1   | N/A                            | 230  |
| 1. Accounts for potential increased sensitivity to carcinogens during childhood.<br>2. 95 <sup>th</sup> percentile daily breathing rate normalized to body weight (L/kg body weight-day).<br>Source: California Office of Environmental Health Hazard Assessment, <i>Air Toxics Program Guidance Manual for the Preparation of Health Risk Assessments</i> , February 2015 and Bay Area Air Quality Management District, <i>BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines</i> , December 2016. |   |                                |  |

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\text{Risk}_{\text{inh-res}} = (\text{Dose}_{\text{air}} * \text{CPF} * \text{ASF} * (\text{ED}/\text{AT}) * \text{FAH})$$

Where:

|                         |   |  |
|-------------------------|---|--|
| Risk <sub>inh-res</sub> | = | residential inhalation cancer risk (potential chances per million) |
| Dose <sub>air</sub>     | = | daily dose through inhalation (mg/kg-day)                          |
| CPF                     | = | inhalation cancer potency factor (mg/kg-day <sup>-1</sup> )        |
| ASF                     | = | age sensitivity factor for a specified age group (unitless)        |
| ED                      | = | exposure duration (in years) for a specified age group             |
| AT                      | = | averaging time of lifetime cancer risk (years)                     |
| FAH                     | = | Fraction of time spent at home (unitless)                          |

**Chronic Non-Cancer Hazard.** Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

$$\text{Hazard Quotient} = C_i / \text{REL}_i$$

Where:

|                  |   |  |
|------------------|---|--|
| C <sub>i</sub>   | = | Concentration in the air of substance i (annual average concentration in µg/m <sup>3</sup> ) |
| REL <sub>i</sub> | = | Chronic noncancer Reference Exposure Level for substance i (µg/m <sup>3</sup> )              |

**Acute Non-Cancer Hazard.** The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. The equation is as follows:

$$\text{Acute HQ} = \text{Maximum Hourly Air Concentration (µg/m}^3\text{)} / \text{Acute REL (µg/m}^3\text{)}$$

### Health Risk Computation

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 30-year exposure scenario for residents and a 25-year exposure for workers using CARB's Risk Assessment Stand Alone Tool (RAST). Health risk were analyzed at the point of maximum impact and are a conservative estimate. The pollutant concentrations are then used to estimate the long-term cancer health risk to an individual as well as the non-cancer chronic health index.

The off-site impacts would occur from the diesel trucks accessing the proposed project. The cancer and chronic health risks are based on the annual average concentration of PM<sub>2.5</sub>. As DPM does not have short-term toxicity values, acute risks were conservatively evaluated using hourly PM<sub>2.5</sub> concentrations and the REL for acrolein. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the U.S. EPA *Human Health Evaluation Manual* (1991) and the OEHHA *Guidance Manual* (2015).

## 5 POTENTIAL HEALTH RISK IMPACTS

CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate – both contribute to the risk. The gas phase is composed of many of the urban TACs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the project includes construction near sensitive receptors and proposes heavy-duty trucks near within the BAAQMD 1,000-foot zone of influence an analysis of health risk impacts from TACs was performed for both construction and operations.

### 5.1 Construction Health Risk Analysis

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known toxic air contaminant (TAC). Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors. The closest sensitive receptors to the project site at the residences (approximately 85 feet south). BAAQMD provides guidance for evaluating impacts from TACs in its CEQA Air Quality Guidelines document. As noted therein, an incremental cancer risk of greater than 10 cases per million at the Maximally Exposed Individual (MEI) will result in a significant impact. The BAAQMD considers exposure to annual  $PM_{2.5}$  concentrations that exceed  $0.3 \mu\text{g}/\text{m}^3$  from a single source to be significant. The BAAQMD significance threshold for non-cancer hazards is 1.0.

Project construction would generate DPM emissions from the use of off-road diesel equipment required for grading and excavation, paving, and other construction activities. For construction activity, DPM is the primary toxic air contaminant of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors.

The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. However, haul routes on South King Road were modeled. Construction is temporary and would be transient throughout the site (i.e. move from location to location) and would not generate emissions in a fixed location for extended periods of time.

Construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the project site



(i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited.

PM<sub>2.5</sub> construction emissions rates in grams per second were calculated from the total annual on- and off-site exhaust emissions reported in CalEEMod during construction. Annual emissions were converted to grams per second and these emissions rates were input into AERMOD. Although project construction would occur for over a period of one year, the health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 3-year exposure scenario as recommended by the BAAQMD, and thus is conservative.<sup>8</sup>

As noted above, maximum (worst case) PM<sub>2.5</sub> exhaust construction emissions over the entire construction period were used in AERMOD to approximate construction DPM emissions. Risk levels were calculated with the CARB Hotspots Analysis and Reporting Program (HARP) Risk Assessment Standalone Tool (RAST) based on the California Office of Environmental Health Hazard Assessment (OEHHA) guidance document, Air Toxics Hot Spots Program Risk Assessment Guidelines (February 2015) and BAAQMD Health Risk Assessment Guidelines (December 2016). Results of this assessment are summarized in [Table 3: Construction Risk](#).

**Table 3: Construction Risk**

| Emissions Sources  | Pollutant Concentration (µg/m <sup>3</sup> ) | Cancer Risk (per Million) | Chronic Hazard | Acute Hazard |
|--|--|---------------------------|----------------|--------------|
| <b>Unmitigated</b>   |  |                           |                |              |
| Construction   | 0.064  | 20.28                     | 0.013          | 1.27         |
| <i>BAAQMD Threshold</i>  | <i>0.3</i>                                   | <i>10</i>                 | <i>1.0</i>     | <i>1.0</i>   |
| <b>Threshold Exceeded?</b>   | <b>No</b>                                    | <b>Yes</b>                | <b>No</b>      | <b>Yes</b>   |
| <b>Mitigated</b>   |  |                           |                |              |
| Construction   | 0.010  | 3.07                      | 0.002          | 0.191        |
| <i>BAAQMD Threshold</i>  | <i>0.3</i>                                   | <i>10</i>                 | <i>1.0</i>     | <i>1.0</i>   |
| <b>Threshold Exceeded?</b>   | <b>No</b>                                    | <b>No</b>                 | <b>No</b>      | <b>No</b>    |
| 1. Mitigation Measure AQ-1 requires heavy-duty off-road construction equipment to meet CARB Tier 4 Final emissions standards. Refer to <a href="#">Appendix A: Modeling Data</a> . |  |                           |                |              |

Maximum unmitigated concentration of PM<sub>2.5</sub> during construction would be 0.06 µg/m<sup>3</sup>, which would not exceed the BAAQMD threshold of 0.3 µg/m<sup>3</sup>. The highest calculated unmitigated carcinogenic risk from project construction would be 20.28 per million, which would exceed the BAAQMD threshold of 10 in one million. The maximally exposed individuals (MEI) during construction are the residences located approximately 140 feet west of the project site.

Mitigation Measure AQ-1 from the previous ISMND requires the use of construction equipment that would meet CARB Tier 4 Final emissions standards in order to reduce diesel exhaust construction emissions. Mitigation Measure AQ-1 would reduce the project PM<sub>2.5</sub> concentration to 0.01 µg/m<sup>3</sup> and would reduce the Project's maximum cancer risk to 3.07 per million, which would be below the BAAQMD

<sup>8</sup> The BAAQMD recommends that the cancer risk be evaluated assuming that the average daily dose for short-term exposure lasts a minimum of three years for projects lasting three years or less (BAAQMD, *BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines*, December 2016).

thresholds of  $0.3 \mu\text{g}/\text{m}^3$  and 10 in one million, respectively. Non-cancer hazards for DPM would be below BAAQMD threshold for chronic hazard index computed at 0.013 without mitigation and 0.002 with mitigation. The acute hazard index would be 1.27 without mitigation which exceeds BAAQMD threshold but would be reduced to 0.191 with mitigation. Acute and chronic hazards would be below the BAAQMD significance threshold of 1.0 with Mitigation Measure AQ-1. Construction risk levels would be below the BAAQMD's thresholds with Mitigation Measure AQ-1.

**Mitigation Measures:**

**AQ-1** The project applicant shall select equipment during construction to minimize emissions. A construction management plan shall be submitted by the project applicant for review and approval by the Supervising Planner of the Planning, Building, and Code Enforcement Department prior to issuance of any grading and building permits. The construction management plan shall demonstrate that the off-road equipment used on-site to construct the project would achieve a fleet-wide average 85% reduction in  $\text{PM}_{2.5}$  exhaust emissions or more. Options to achieve this reduction could include, but are not limited to, the following:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.
- Use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters or alternatively fueled equipment (i.e., non-diesel).
- Use of added exhaust devices.

**Level of Significance:** Less than significant with mitigation incorporated.

## 5.2 Operational Health Risk Analysis

Vehicle DPM emissions were estimated using emission factors for coarse particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) generated with the EMFAC developed by CARB. EMFAC is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. EMFAC, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled (VMT) by speed, and number of starts per day. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

For this project, annual average PM<sub>2.5</sub> emission factors were generated by running EMFAC for vehicles in the BAAQMD within the Santa Clara County. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity. The model was run for heavy-duty diesel vehicles traveling along South King Road, as well as circulating the project site and idling at proposed loading areas. The model also included one backup generator.

Based on the AERMOD outputs, the highest expected annual average diesel PM<sub>2.5</sub> emission concentrations from diesel truck traffic and the backup generator near sensitive receptors would be 0.0004 µg/m<sup>3</sup>. The calculations conservatively assume no cleaner technology with lower emissions in future years. [Table 4: Operational Risk](#) shows the highest calculated carcinogenic risk resulting from the project is 0.25 in one million for the residences which is below the BAAQMD threshold of 10 per million. Acute and chronic hazards also would be below the BAAQMD significance threshold of 1.0.

**Table 4: Operational Risk**

| Exposure Scenario  | Pollutant Concentration (µg/m <sup>3</sup> ) | Maximum Cancer Risk (per Million) | Chronic Noncancer Hazard | Acute Noncancer Hazard |
|--|--|-----------------------------------|--------------------------|------------------------|
| Project  | 0.0004                                       | 0.25                              | 0.0001                   | 0.0044                 |
| <i>Threshold</i>   | <i>NA</i>                                    | <i>10 in one million</i>          | <i>1.0</i>               | <i>1.0</i>             |
| <b>Exceed Threshold?</b>   | <b>No</b>                                    | <b>No</b>                         | <b>No</b>                | <b>No</b>              |
| 1. The maximum cancer would be experienced at the residences located north of the project site based on worst-case exposure durations for the project, 95 <sup>th</sup> percentile breathing rates, age sensitivity factors, third trimester start age, and 30-year exposure duration. |  |                                   |                          |                        |
| Refer to <a href="#">Appendix A: Modeling Data</a> .   |  |                                   |                          |                        |

The maximally exposed individual resident (MEIR) during operation is the sensitive receptor located 140 feet to the north (see sensitive receptors in [Figure 4](#)).

### Cumulative Health Impacts

Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Worst-case PM<sub>2.5</sub> concentrations and chronic hazard levels for the project would be well below the BAAQMD's thresholds. CEQA Guidelines 15065(a)(3) states "... 'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

In addition to mobile sources, BAAQMD's Stationary Source GIS Maps were reviewed to identify stationary sources within a 1,000-foot-radius of the project site. BAAQMD's Stationary Source data indicated that there is one stationary sources within 1,000 feet of the project site. [Table 5: Cumulative Operational Health Risk](#) shows the cumulative health risk values for the proposed project.

**Table 5: Cumulative Operational Health Risk**

| Emissions Sources   | PM <sub>2.5</sub> (µg/m <sup>3</sup> ) | Cancer Risk (per million) | Hazard      |
|---|--|---------------------------|-------------|
| <b>Project Mobile Emissions</b>   | 0.0004                                 | 0.25                      | 0.0001      |
| <b>Major Street Sources<sup>1</sup></b>   | 0.19                                   | 8.15                      | 0.76        |
| <b>Highway Sources<sup>1</sup></b>  | 0.32                                   | 36.42                     | 1.28        |
| <b>Railway Sources<sup>1</sup></b>  | 0.001                                  | 0.40                      | 0.03        |
| <b>Stationary Sources</b>   |  |                           |             |
| <i>Name of Facility</i>   |  |                           |             |
| <i>Blossom Valley Collision</i>   | 0.00                                   | 0.00                      | 0.00        |
| <b>Cumulative Health Risk Values</b>  | <b>0.51</b>                            | <b>45.22</b>              | <b>2.07</b> |
| <i>BAAQMD Cumulative Threshold</i>  | <i>0.8</i>                             | <i>100</i>                | <i>10</i>   |
| <b>Threshold Exceeded?</b>  | <b>No</b>                              | <b>No</b>                 | <b>No</b>   |
| 1. BAAQMD GIS data.<br>Source: BAAQMD's Stationary Source Data and GIS Mapping Tools, 2022. |  |                           |             |

As shown in [Table 5](#), cumulative impacts related to PM<sub>2.5</sub>, cancer risk and hazard would be less than cumulatively considerable and within acceptable limits. The primary contributor to those concentrations are the existing major street and highway sources near the project area. The existing major street sources have a high PM<sub>2.5</sub> (0.19 µg/m<sup>3</sup>) and highway sources have a high PM<sub>2.5</sub> (0.32 µg/m<sup>3</sup>). The major street and highway sources combined represent approximately 99.99 percent of the total concentrations and are completely unrelated to the project. The project represents less than 0.01 percent of total cumulative PM<sub>2.5</sub> in the project area. Therefore, the project would not be cumulatively considerable and cumulative impacts would be less than significant.

The incremental effect of the individual project is less than significant.<sup>9</sup> Therefore, the project's cumulative impacts would be less than significant.

**Mitigation Measures:** None required.

**Level of Significance:** Less than significant and less than cumulatively considerable impacts.

<sup>9</sup> CEQA case law has held that any additional emissions in an impacted area does not necessarily create a significant cumulative impact, finding that "the 'one [additional] molecule rule' is not the law" (Communities for a Better Environment v. California Resources Agency (2002) 103 Cal. App. 4th 98, 120).

## 6 REFERENCES

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# Appendix A

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## Modeling Data

**Construction - Unmitigated**

| Year | PM <sub>2.5</sub> Exhaust Onsite |          | Weighted Average On-Site Rate |
|------|----------------------------------|----------|-------------------------------|
|      | Tons/Year                        | g/s      |                               |
| 2022 | 3.15E-02                         | 0.015251 | 0.009460502                   |
| 2023 | 6.61E-02                         | 0.008013 |                               |

**Construction - Mitigated**

| Year | PM <sub>2.5</sub> Exhaust Onsite |          | Weighted Average On-Site Rate |
|------|----------------------------------|----------|-------------------------------|
|      | Tons/Year                        | g/s      |                               |
| 2022 | 4.72E-03                         | 0.002288 | 0.001419075                   |
| 2023 | 9.92E-03                         | 0.001202 |                               |

|                        | 2022 | 2023 | Total |
|------------------------|------|------|-------|
| Const Duration (Days): | 65   | 260  | 325   |

|      | Trips  |         | Miles  |         | Weighted Trip length |
|------|--------|---------|--------|---------|----------------------|
|      | Vendor | Hauling | Vendor | Hauling |                      |
| 2022 | 0      | 699     | 7.3    | 20      | 20.00                |
| 2023 | 39     | 0       | 7.3    | 20      | 7.30                 |

|      | PM <sub>2.5</sub> Exhaust Off-Site |          |              | Weighted Average Off-Site Rate |
|------|------------------------------------|----------|--------------|--------------------------------|
|      | Tons/Year                          | g/s      | g/s per mile |                                |
| 2022 | 5.50E-04                           | 0.000267 | 3.86281E-05  | 2.60E-05                       |
| 2023 | 1.30E-03                           | 0.000157 | 2.28257E-05  |                                |

| Construction Route | Length (meters) | Length (Miles) | Emissions (g/sec per mile) | Emission Rate (g/sec) |
|--------------------|-----------------|----------------|----------------------------|-----------------------|
| King Haul Route    | 747.4           | 0.46           | 2.60E-05                   | 1.21E-05              |

| On-Site Construction Emissions |              |                                   | Mitigated                         | Off-Site Construction Emissions |              |                                   |
|--------------------------------|--------------|-----------------------------------|-----------------------------------|---------------------------------|--------------|-----------------------------------|
| Year                           | Phase        | tons/yr Exhaust PM <sub>2.5</sub> | tons/yr Exhaust PM <sub>2.5</sub> | Year                            | Phase        | tons/yr Exhaust PM <sub>2.5</sub> |
| 2022                           | Site Prep    | 1.63E-02                          | 0.002445                          | 2022                            | Site Prep    | 1.00E-05                          |
| 2022                           | Grading      | 9.95E-03                          | 0.0014925                         | 2022                            | Grading      | 5.30E-04                          |
| 2022                           | Paving       | 5.22E-03                          | 0.000783                          | 2022                            | Paving       | 1.00E-05                          |
|                                | Total        | 3.15E-02                          | 4.72E-03                          |                                 | Total        | 5.50E-04                          |
| 2023                           | Building     | 0.0629                            | 0.009435                          | 2023                            | Building     | 1.28E-03                          |
| 2023                           | Arch Coating | 2.30E-03                          | 0.000345                          | 2023                            | Arch Coating | 2.00E-05                          |
| 2023                           | Paving       | 9.40E-04                          | 0.000141                          | 2023                            | Paving       | 0.00E+00                          |
|                                | Total        | 0.06614                           | 0.009921                          |                                 | Total        | 1.30E-03                          |

**Construction (unmitigated)**

|                | $\mu\text{g}/\text{m}^3$ |          |          |
|----------------|--------------------------|----------|----------|
|                | 1 hr                     | 24 hr    | Period   |
| <b>Project</b> | 3.18E+00                 | 3.75E-01 | 6.36E-02 |

**HARP 2 Risk Summary**

| INDEX | POLID             | CONC     | Cancer   | Per 1 million | Chronic  | Acute    |          |
|-------|-------------------|----------|----------|---------------|----------|----------|----------|
|       |                   |          | INH_RISK |               | RESP     | CONC     | RESP     |
| 1     | 9901 Diesel ExhPM | 6.36E-02 | 2.03E-05 | 20.28         | 1.27E-02 | 3.18E+00 | 0.00E+00 |
| 2     | 107028 Acrolein   | 0.00E+00 | 0.00E+00 |               | 0.00E+00 | 3.18E+00 | 1.27E+00 |

**Tier 4**

|                | $\mu\text{g}/\text{m}^3$ |          |          |
|----------------|--------------------------|----------|----------|
|                | 1 hr                     | 24 hr    | Period   |
| <b>Project</b> | 4.78E-01                 | 5.62E-02 | 9.64E-03 |

**HARP 2 Risk Summary**

| INDEX | POLID             | CONC     | Cancer   | Per 1 million | Chronic  | Acute    |          |
|-------|-------------------|----------|----------|---------------|----------|----------|----------|
|       |                   |          | INH_RISK |               | RESP     | CONC     | RESP     |
| 1     | 9901 Diesel ExhPM | 9.64E-03 | 3.07E-06 | 3.07          | 1.93E-03 | 4.78E-01 | 0.00E+00 |
| 2     | 107028 Acrolein   | 0.00E+00 | 0.00E+00 |               | 0.00E+00 | 4.78E-01 | 1.91E-01 |

**Operations**

|                | $\mu\text{g}/\text{m}^3$ |          |          |
|----------------|--------------------------|----------|----------|
|                | 1 hr                     | 24 hr    | Period   |
| <b>Project</b> | 1.10E-02                 | 2.51E-03 | 3.60E-04 |

**HARP 2 Risk Summary**

| INDEX | POLID             | CONC     | Cancer   | Per 1 million | Chronic  | Acute    |          |
|-------|-------------------|----------|----------|---------------|----------|----------|----------|
|       |                   |          | INH_RISK |               | RESP     | CONC     | RESP     |
| 1     | 9901 Diesel ExhPM | 3.60E-04 | 2.45E-07 | 0.25          | 7.20E-05 | 1.10E-02 | 0.00E+00 |
| 2     | 107028 Acrolein   | 0.00E+00 | 0.00E+00 |               | 0.00E+00 | 1.10E-02 | 4.40E-03 |



**Operational Emissions Rates Calculations**

| <b>Truck Route Emissions</b> | <b>Speed (mph)</b> | <b>Trips (veh/day)</b> | <b>Emission Factor (g/mi)</b> | <b>Length (meters)</b> | <b>Length (mi/veh)</b> | <b>Emissions (g/day)</b> | <b>Emission Rate (g/sec)</b> |
|------------------------------|--------------------|------------------------|-------------------------------|------------------------|------------------------|--------------------------|------------------------------|
| South King Road              | 35                 | 29                     | 0.00057                       | 747.4                  | 0.46                   | 7.55E-03                 | 8.74E-08                     |
| On-Site Travel               | 15                 | 29                     | 0.00065                       | 143.9                  | 0.09                   | 1.65E-03                 | 1.91E-08                     |

| <b>Loading Dock Idling</b> | <b>Speed (mph)</b> | <b>Trips (veh/day)</b> | <b>Emission Factor (g/hr)</b> | <b>Duration (hr/veh)</b> | <b>Emissions (g/day)</b> | <b>Emission Rate (g/sec)</b> |
|----------------------------|--------------------|------------------------|-------------------------------|--------------------------|--------------------------|------------------------------|
| Loading Area               | Idle               | 29                     | 1.91271E-05                   | 0.25                     | 1.36E-04                 | 1.58E-09                     |

Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: Sub-Area

Region: Santa Clara (SF)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RL

| Speed (mph)   |             |             |
|---------------|-------------|-------------|
| Idle (g/trip) | 15          | 35          |
| 1.9127E-05    | 0.000647566 | 0.000570705 |

| Region      | Calendar Year | Vehicle Cat | Model Year | Speed     | Fuel        | Population  | Total VMT   | Trips       | PM2.5_IDLEX          |
|-------------|---------------|-------------|------------|-----------|-------------|-------------|-------------|-------------|----------------------|
| Santa Clara | 2023          | HHDT        | Aggregate  | Aggregate | Gasoline    | 3.454008773 | 114.3092811 | 69.10780752 | 0 0                  |
| Santa Clara | 2023          | HHDT        | Aggregate  | Aggregate | Diesel      | 8235.058614 | 991289.0051 | 120860.7913 | 0.000287135 2.364574 |
| Santa Clara | 2023          | HHDT        | Aggregate  | Aggregate | Electricity | 6.701710188 | 411.5053623 | 103.2043986 | 0 0                  |
| Santa Clara | 2023          | HHDT        | Aggregate  | Aggregate | Natural Gas | 753.7365664 | 53295.9669  | 6914.033693 | 2.01376E-05 0.015178 |
| Santa Clara | 2023          | LHDT2       | Aggregate  | Aggregate | Gasoline    | 2494.382223 | 90793.03842 | 37162.5785  | 0 0                  |
| Santa Clara | 2023          | LHDT2       | Aggregate  | Aggregate | Diesel      | 4479.531561 | 176769.2012 | 56346.87178 | 0.000133448 0.597783 |
| Santa Clara | 2023          | MHDT        | Aggregate  | Aggregate | Gasoline    | 1418.702832 | 70785.85764 | 28385.40626 | 0 0                  |
| Santa Clara | 2023          | MHDT        | Aggregate  | Aggregate | Diesel      | 10273.55393 | 431550.3805 | 122418.6563 | 0.000404761 4.158337 |
| Santa Clara | 2023          | MHDT        | Aggregate  | Aggregate | Electricity | 4.749835347 | 101.802183  | 59.6458006  | 0 0                  |
| Santa Clara | 2023          | MHDT        | Aggregate  | Aggregate | Natural Gas | 83.84099699 | 4047.873672 | 762.8100386 | 1.63095E-06 0.000137 |

| Region      | Calendar Year | Vehicle Cat | Model Year | Speed | Fuel        | Total VMT   | PM2.5_RUNEX             |
|-------------|---------------|-------------|------------|-------|-------------|-------------|-------------------------|
| Santa Clara | 2023          | HHDT        | Aggregate  | 15    | Gasoline    | 3.03801782  | 3.16518E-08 9.61587E-08 |
| Santa Clara | 2023          | HHDT        | Aggregate  | 15    | Diesel      | 18434.06342 | 0.000250965 4.626305762 |
| Santa Clara | 2023          | HHDT        | Aggregate  | 15    | Electricity | 7.047129849 | 0 0                     |
| Santa Clara | 2023          | HHDT        | Aggregate  | 15    | Natural Gas | 2554.187095 | 1.11513E-05 0.028482602 |
| Santa Clara | 2023          | LHDT2       | Aggregate  | 15    | Gasoline    | 15750.8655  | 3.39964E-05 0.53547207  |
| Santa Clara | 2023          | LHDT2       | Aggregate  | 15    | Diesel      | 23847.13656 | 0.001359402 32.41785117 |
| Santa Clara | 2023          | MHDT        | Aggregate  | 15    | Gasoline    | 2489.902537 | 8.20597E-06 0.020432075 |
| Santa Clara | 2023          | MHDT        | Aggregate  | 15    | Diesel      | 21408.00922 | 0.000804501 17.22276102 |
| Santa Clara | 2023          | MHDT        | Aggregate  | 15    | Electricity | 5.210773563 | 0 0                     |
| Santa Clara | 2023          | MHDT        | Aggregate  | 15    | Natural Gas | 204.4908468 | 5.74369E-07 0.000117453 |

| Region      | Calendar Year | Vehicle Cat | Model Year | Speed | Fuel        | Total VMT   | PM2.5_RUNEX             |
|-------------|---------------|-------------|------------|-------|-------------|-------------|-------------------------|
| Santa Clara | 2023          | HHDT        | Aggregate  | 35    | Gasoline    | 6.324548662 | 2.4748E-08 1.5652E-07   |
| Santa Clara | 2023          | HHDT        | Aggregate  | 35    | Diesel      | 28594.8437  | 0.000320037 9.151418982 |
| Santa Clara | 2023          | HHDT        | Aggregate  | 35    | Electricity | 11.04830649 | 0 0                     |
| Santa Clara | 2023          | HHDT        | Aggregate  | 35    | Natural Gas | 3049.980396 | 5.97032E-06 0.018209365 |
| Santa Clara | 2023          | LHDT2       | Aggregate  | 35    | Gasoline    | 4600.04444  | 4.41924E-06 0.02032869  |
| Santa Clara | 2023          | LHDT2       | Aggregate  | 35    | Diesel      | 11745.49285 | 0.000322428 3.78708082  |
| Santa Clara | 2023          | MHDT        | Aggregate  | 35    | Gasoline    | 4297.547713 | 4.73518E-06 0.020349646 |
| Santa Clara | 2023          | MHDT        | Aggregate  | 35    | Diesel      | 65317.11782 | 0.000833529 54.44372288 |
| Santa Clara | 2023          | MHDT        | Aggregate  | 35    | Electricity | 15.77717257 | 0 0                     |
| Santa Clara | 2023          | MHDT        | Aggregate  | 35    | Natural Gas | 533.8971021 | 5.42013E-07 0.000289379 |

PM2.5 (exhaust)

Tons/year

grams/year

grams/sec

Stationary Source

0.0181

16420.0485

0.000521

each generator

0.000130318

\*\*  
\*\*\*\*\*  
\*\*  
\*\* AERMOD Input Produced by:  
\*\* AERMOD View Ver. 10.2.1  
\*\* Lakes Environmental Software Inc.  
\*\* Date: 3/24/2022  
\*\* File: C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_\2905 King\_Const\_.ADI  
\*\*

\*\*\*\*\*  
\*\*  
\*\*  
\*\*\*\*\*

\*\* AERMOD Control Pathway  
\*\*\*\*\*  
\*\*  
\*\*

CO STARTING  
TITLEONE C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_\2905 King\_Const  
MODELOPT DFAULT CONC  
AVERTIME 1 8 24 PERIOD  
URBANOPT 1928000 Santa\_Clara\_County  
POLLUTID PM\_2.5  
RUNORNOT RUN  
ERRORFIL "2905 King\_Const\_.err"

CO FINISHED  
\*\*  
\*\*\*\*\*

\*\* AERMOD Source Pathway  
\*\*\*\*\*  
\*\*  
\*\*

SO STARTING  
\*\* Source Location \*\*  
\*\* Source ID - Type - X Coord. - Y Coord. \*\*  
\*\* -----  
\*\* Line Source Represented by Adjacent Volume Sources  
\*\* LINE VOLUME Source ID = SLINE1  
\*\* DESCRSRC On-site Construction  
\*\* PREFIX  
\*\* Length of Side = 8.50  
\*\* Configuration = Adjacent  
\*\* Emission Rate = 0.001751476  
\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 10  
\*\* 604875.056, 4130183.443, 44.76, 3.11, 3.95  
\*\* 604780.422, 4130100.854, 44.38, 3.11, 3.95  
\*\* 604832.040, 4130035.471, 44.30, 3.11, 3.95  
\*\* 604934.416, 4130117.199, 44.94, 3.11, 3.95  
\*\* 604886.239, 4130166.237, 44.87, 3.11, 3.95

\*\* 604810.533, 4130106.876, 44.27, 3.11, 3.95  
\*\* 604838.063, 4130064.721, 44.20, 3.11, 3.95  
\*\* 604906.887, 4130122.361, 45.08, 3.11, 3.95  
\*\* 604888.820, 4130144.729, 45.05, 3.11, 3.95  
\*\* 604836.342, 4130103.435, 44.32, 3.11, 3.95

\*\* -----  
LOCATION L0000001 VOLUME 604871.853 4130180.648 44.76  
LOCATION L0000002 VOLUME 604865.449 4130175.059 44.81  
LOCATION L0000003 VOLUME 604859.045 4130169.470 44.82  
LOCATION L0000004 VOLUME 604852.641 4130163.881 44.80  
LOCATION L0000005 VOLUME 604846.237 4130158.292 44.74  
LOCATION L0000006 VOLUME 604839.833 4130152.703 44.68  
LOCATION L0000007 VOLUME 604833.429 4130147.114 44.59  
LOCATION L0000008 VOLUME 604827.025 4130141.525 44.49  
LOCATION L0000009 VOLUME 604820.621 4130135.936 44.39  
LOCATION L0000010 VOLUME 604814.217 4130130.347 44.35  
LOCATION L0000011 VOLUME 604807.812 4130124.758 44.30  
LOCATION L0000012 VOLUME 604801.408 4130119.169 44.25  
LOCATION L0000013 VOLUME 604795.004 4130113.580 44.31  
LOCATION L0000014 VOLUME 604788.600 4130107.991 44.37  
LOCATION L0000015 VOLUME 604782.196 4130102.402 44.40  
LOCATION L0000016 VOLUME 604784.230 4130096.030 44.39  
LOCATION L0000017 VOLUME 604789.497 4130089.358 44.41  
LOCATION L0000018 VOLUME 604794.764 4130082.687 44.42  
LOCATION L0000019 VOLUME 604800.031 4130076.015 44.38  
LOCATION L0000020 VOLUME 604805.298 4130069.344 44.34  
LOCATION L0000021 VOLUME 604810.565 4130062.672 44.32  
LOCATION L0000022 VOLUME 604815.832 4130056.001 44.32  
LOCATION L0000023 VOLUME 604821.099 4130049.329 44.31  
LOCATION L0000024 VOLUME 604826.366 4130042.658 44.27  
LOCATION L0000025 VOLUME 604831.633 4130035.986 44.27  
LOCATION L0000026 VOLUME 604838.170 4130040.364 44.28  
LOCATION L0000027 VOLUME 604844.813 4130045.667 44.25  
LOCATION L0000028 VOLUME 604851.455 4130050.970 44.26  
LOCATION L0000029 VOLUME 604858.098 4130056.273 44.25  
LOCATION L0000030 VOLUME 604864.741 4130061.576 44.27  
LOCATION L0000031 VOLUME 604871.384 4130066.879 44.32  
LOCATION L0000032 VOLUME 604878.027 4130072.182 44.46  
LOCATION L0000033 VOLUME 604884.670 4130077.485 44.60  
LOCATION L0000034 VOLUME 604891.312 4130082.789 44.73  
LOCATION L0000035 VOLUME 604897.955 4130088.092 44.81  
LOCATION L0000036 VOLUME 604904.598 4130093.395 44.86  
LOCATION L0000037 VOLUME 604911.241 4130098.698 44.89  
LOCATION L0000038 VOLUME 604917.884 4130104.001 44.91  
LOCATION L0000039 VOLUME 604924.526 4130109.304 44.93  
LOCATION L0000040 VOLUME 604931.169 4130114.607 44.95  
LOCATION L0000041 VOLUME 604931.371 4130120.299 44.96  
LOCATION L0000042 VOLUME 604925.414 4130126.362 44.96  
LOCATION L0000043 VOLUME 604919.457 4130132.426 44.96  
LOCATION L0000044 VOLUME 604913.500 4130138.489 44.99  
LOCATION L0000045 VOLUME 604907.543 4130144.552 45.01

LOCATION L0000046 VOLUME 604901.586 4130150.616 45.02  
LOCATION L0000047 VOLUME 604895.629 4130156.679 45.00  
LOCATION L0000048 VOLUME 604889.672 4130162.742 44.94  
LOCATION L0000049 VOLUME 604883.405 4130164.014 44.92  
LOCATION L0000050 VOLUME 604876.716 4130158.770 44.95  
LOCATION L0000051 VOLUME 604870.027 4130153.525 44.98  
LOCATION L0000052 VOLUME 604863.338 4130148.280 44.91  
LOCATION L0000053 VOLUME 604856.649 4130143.035 44.77  
LOCATION L0000054 VOLUME 604849.960 4130137.791 44.61  
LOCATION L0000055 VOLUME 604843.271 4130132.546 44.46  
LOCATION L0000056 VOLUME 604836.582 4130127.301 44.35  
LOCATION L0000057 VOLUME 604829.893 4130122.056 44.25  
LOCATION L0000058 VOLUME 604823.204 4130116.811 44.20  
LOCATION L0000059 VOLUME 604816.515 4130111.567 44.25  
LOCATION L0000060 VOLUME 604811.024 4130106.124 44.31  
LOCATION L0000061 VOLUME 604815.671 4130099.007 44.36  
LOCATION L0000062 VOLUME 604820.319 4130091.891 44.41  
LOCATION L0000063 VOLUME 604824.967 4130084.774 44.41  
LOCATION L0000064 VOLUME 604829.614 4130077.657 44.36  
LOCATION L0000065 VOLUME 604834.262 4130070.540 44.30  
LOCATION L0000066 VOLUME 604839.251 4130065.716 44.24  
LOCATION L0000067 VOLUME 604845.767 4130071.173 44.21  
LOCATION L0000068 VOLUME 604852.284 4130076.631 44.24  
LOCATION L0000069 VOLUME 604858.800 4130082.089 44.29  
LOCATION L0000070 VOLUME 604865.317 4130087.546 44.33  
LOCATION L0000071 VOLUME 604871.833 4130093.004 44.45  
LOCATION L0000072 VOLUME 604878.350 4130098.461 44.66  
LOCATION L0000073 VOLUME 604884.866 4130103.919 44.84  
LOCATION L0000074 VOLUME 604891.383 4130109.377 45.01  
LOCATION L0000075 VOLUME 604897.899 4130114.834 45.12  
LOCATION L0000076 VOLUME 604904.416 4130120.292 45.12  
LOCATION L0000077 VOLUME 604903.571 4130126.466 45.10  
LOCATION L0000078 VOLUME 604898.230 4130133.079 45.11  
LOCATION L0000079 VOLUME 604892.889 4130139.691 45.09  
LOCATION L0000080 VOLUME 604887.230 4130143.477 45.06  
LOCATION L0000081 VOLUME 604880.550 4130138.221 45.04  
LOCATION L0000082 VOLUME 604873.870 4130132.965 45.01  
LOCATION L0000083 VOLUME 604867.190 4130127.708 44.89  
LOCATION L0000084 VOLUME 604860.510 4130122.452 44.70  
LOCATION L0000085 VOLUME 604853.830 4130117.196 44.48  
LOCATION L0000086 VOLUME 604847.150 4130111.939 44.30  
LOCATION L0000087 VOLUME 604840.470 4130106.683 44.28

\*\* End of LINE VOLUME Source ID = SLINE1

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE2

\*\* DESCRSRC King Road Haul Route

\*\* PREFIX

\*\* Length of Side = 8.50

\*\* Configuration = Adjacent

\*\* Emission Rate = 2.42E-06

\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 5  
\*\* 604663.570, 4130467.410, 44.64, 3.11, 3.95  
\*\* 604842.882, 4130248.874, 44.74, 3.11, 3.95  
\*\* 604980.168, 4130111.588, 45.10, 3.11, 3.95  
\*\* 605151.075, 4129936.479, 45.68, 3.11, 3.95  
\*\* 605169.128, 4129917.975, 45.71, 3.11, 3.95

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LOCATION L0000088 VOLUME 604666.266 4130464.125 44.64  
LOCATION L0000089 VOLUME 604671.658 4130457.553 44.62  
LOCATION L0000090 VOLUME 604677.050 4130450.982 44.62  
LOCATION L0000091 VOLUME 604682.441 4130444.411 44.62  
LOCATION L0000092 VOLUME 604687.833 4130437.840 44.60  
LOCATION L0000093 VOLUME 604693.225 4130431.269 44.57  
LOCATION L0000094 VOLUME 604698.616 4130424.698 44.50  
LOCATION L0000095 VOLUME 604704.008 4130418.127 44.46  
LOCATION L0000096 VOLUME 604709.400 4130411.556 44.42  
LOCATION L0000097 VOLUME 604714.791 4130404.984 44.39  
LOCATION L0000098 VOLUME 604720.183 4130398.413 44.37  
LOCATION L0000099 VOLUME 604725.575 4130391.842 44.33  
LOCATION L0000100 VOLUME 604730.967 4130385.271 44.30  
LOCATION L0000101 VOLUME 604736.358 4130378.700 44.28  
LOCATION L0000102 VOLUME 604741.750 4130372.129 44.27  
LOCATION L0000103 VOLUME 604747.142 4130365.558 44.28  
LOCATION L0000104 VOLUME 604752.533 4130358.987 44.30  
LOCATION L0000105 VOLUME 604757.925 4130352.415 44.32  
LOCATION L0000106 VOLUME 604763.317 4130345.844 44.34  
LOCATION L0000107 VOLUME 604768.708 4130339.273 44.34  
LOCATION L0000108 VOLUME 604774.100 4130332.702 44.36  
LOCATION L0000109 VOLUME 604779.492 4130326.131 44.37  
LOCATION L0000110 VOLUME 604784.883 4130319.560 44.36  
LOCATION L0000111 VOLUME 604790.275 4130312.989 44.33  
LOCATION L0000112 VOLUME 604795.667 4130306.418 44.27  
LOCATION L0000113 VOLUME 604801.059 4130299.846 44.28  
LOCATION L0000114 VOLUME 604806.450 4130293.275 44.33  
LOCATION L0000115 VOLUME 604811.842 4130286.704 44.40  
LOCATION L0000116 VOLUME 604817.234 4130280.133 44.48  
LOCATION L0000117 VOLUME 604822.625 4130273.562 44.61  
LOCATION L0000118 VOLUME 604828.017 4130266.991 44.69  
LOCATION L0000119 VOLUME 604833.409 4130260.420 44.74  
LOCATION L0000120 VOLUME 604838.800 4130253.849 44.75  
LOCATION L0000121 VOLUME 604844.342 4130247.414 44.73  
LOCATION L0000122 VOLUME 604850.353 4130241.403 44.76  
LOCATION L0000123 VOLUME 604856.363 4130235.393 44.80  
LOCATION L0000124 VOLUME 604862.374 4130229.382 44.81  
LOCATION L0000125 VOLUME 604868.384 4130223.372 44.80  
LOCATION L0000126 VOLUME 604874.394 4130217.362 44.78  
LOCATION L0000127 VOLUME 604880.405 4130211.351 44.76  
LOCATION L0000128 VOLUME 604886.415 4130205.341 44.78  
LOCATION L0000129 VOLUME 604892.426 4130199.330 44.79

|                   |        |            |             |       |
|-------------------|--------|------------|-------------|-------|
| LOCATION L0000130 | VOLUME | 604898.436 | 4130193.320 | 44.81 |
| LOCATION L0000131 | VOLUME | 604904.446 | 4130187.310 | 44.83 |
| LOCATION L0000132 | VOLUME | 604910.457 | 4130181.299 | 44.86 |
| LOCATION L0000133 | VOLUME | 604916.467 | 4130175.289 | 44.90 |
| LOCATION L0000134 | VOLUME | 604922.478 | 4130169.278 | 44.93 |
| LOCATION L0000135 | VOLUME | 604928.488 | 4130163.268 | 44.96 |
| LOCATION L0000136 | VOLUME | 604934.498 | 4130157.258 | 44.97 |
| LOCATION L0000137 | VOLUME | 604940.509 | 4130151.247 | 44.94 |
| LOCATION L0000138 | VOLUME | 604946.519 | 4130145.237 | 44.94 |
| LOCATION L0000139 | VOLUME | 604952.530 | 4130139.226 | 44.95 |
| LOCATION L0000140 | VOLUME | 604958.540 | 4130133.216 | 44.97 |
| LOCATION L0000141 | VOLUME | 604964.551 | 4130127.206 | 45.02 |
| LOCATION L0000142 | VOLUME | 604970.561 | 4130121.195 | 45.09 |
| LOCATION L0000143 | VOLUME | 604976.571 | 4130115.185 | 45.15 |
| LOCATION L0000144 | VOLUME | 604982.552 | 4130109.145 | 45.19 |
| LOCATION L0000145 | VOLUME | 604988.489 | 4130103.062 | 45.21 |
| LOCATION L0000146 | VOLUME | 604994.426 | 4130096.979 | 45.20 |
| LOCATION L0000147 | VOLUME | 605000.363 | 4130090.896 | 45.17 |
| LOCATION L0000148 | VOLUME | 605006.300 | 4130084.813 | 45.18 |
| LOCATION L0000149 | VOLUME | 605012.237 | 4130078.730 | 45.20 |
| LOCATION L0000150 | VOLUME | 605018.174 | 4130072.647 | 45.23 |
| LOCATION L0000151 | VOLUME | 605024.111 | 4130066.564 | 45.29 |
| LOCATION L0000152 | VOLUME | 605030.048 | 4130060.481 | 45.34 |
| LOCATION L0000153 | VOLUME | 605035.985 | 4130054.399 | 45.38 |
| LOCATION L0000154 | VOLUME | 605041.922 | 4130048.316 | 45.42 |
| LOCATION L0000155 | VOLUME | 605047.859 | 4130042.233 | 45.43 |
| LOCATION L0000156 | VOLUME | 605053.796 | 4130036.150 | 45.42 |
| LOCATION L0000157 | VOLUME | 605059.733 | 4130030.067 | 45.40 |
| LOCATION L0000158 | VOLUME | 605065.670 | 4130023.984 | 45.42 |
| LOCATION L0000159 | VOLUME | 605071.607 | 4130017.901 | 45.45 |
| LOCATION L0000160 | VOLUME | 605077.544 | 4130011.818 | 45.49 |
| LOCATION L0000161 | VOLUME | 605083.481 | 4130005.735 | 45.53 |
| LOCATION L0000162 | VOLUME | 605089.418 | 4129999.652 | 45.56 |
| LOCATION L0000163 | VOLUME | 605095.355 | 4129993.569 | 45.56 |
| LOCATION L0000164 | VOLUME | 605101.292 | 4129987.486 | 45.58 |
| LOCATION L0000165 | VOLUME | 605107.229 | 4129981.403 | 45.60 |
| LOCATION L0000166 | VOLUME | 605113.166 | 4129975.320 | 45.63 |
| LOCATION L0000167 | VOLUME | 605119.103 | 4129969.237 | 45.65 |
| LOCATION L0000168 | VOLUME | 605125.040 | 4129963.154 | 45.65 |
| LOCATION L0000169 | VOLUME | 605130.976 | 4129957.071 | 45.64 |
| LOCATION L0000170 | VOLUME | 605136.913 | 4129950.988 | 45.65 |
| LOCATION L0000171 | VOLUME | 605142.850 | 4129944.905 | 45.67 |
| LOCATION L0000172 | VOLUME | 605148.787 | 4129938.822 | 45.68 |
| LOCATION L0000173 | VOLUME | 605154.724 | 4129932.739 | 45.66 |
| LOCATION L0000174 | VOLUME | 605160.660 | 4129926.655 | 45.65 |
| LOCATION L0000175 | VOLUME | 605166.596 | 4129920.571 | 45.66 |

\*\* End of LINE VOLUME Source ID = SLINE2

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = SLINE1

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000001 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000002 | 0.0000201319 | 3.11 | 3.95 | 2.89 |





|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000054 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000055 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000056 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000057 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000058 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000059 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000060 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000061 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000062 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000063 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000064 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000065 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000066 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000067 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000068 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000069 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000070 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000071 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000072 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000073 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000074 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000075 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000076 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000077 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000078 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000079 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000080 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000081 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000082 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000083 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000084 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000085 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000086 | 0.0000201319 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000087 | 0.0000201319 | 3.11 | 3.95 | 2.89 |

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\*\* LINE VOLUME Source ID = SLINE2

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000088 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000089 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000090 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000091 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000092 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000093 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000094 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000095 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000096 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000097 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000098 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000099 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000100 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000101 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000102 | 0.0000000275 | 3.11 | 3.95 | 2.89 |



|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000154 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000155 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000156 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000157 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000158 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000159 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000160 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000161 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000162 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000163 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000164 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000165 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000166 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000167 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000168 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000169 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000170 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000171 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000172 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000173 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000174 | 0.0000000275 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000175 | 0.0000000275 | 3.11 | 3.95 | 2.89 |

\*\* -----

URBANSRC ALL  
SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

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RE STARTING

INCLUDED "2905 King\_Const\_.rou"

RE FINISHED

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\*\* AERMOD Meteorology Pathway

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\*\*

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ME STARTING

SURFFILE ..\724946.SFC

PROFFILE ..\724946.PFL

SURFDATA 93232 2009

UAIRDATA 23230 2009 OAKLAND/WSO\_AP

PROFBASE 40.5 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*  
\*\*

OU STARTING

RECTABLE ALLAVE 1ST  
RECTABLE 1 1ST  
RECTABLE 8 1ST  
RECTABLE 24 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "2905 King\_Const\_.AD\01H1GALL.PLT" 31  
PLOTFILE 8 ALL 1ST "2905 King\_Const\_.AD\08H1GALL.PLT" 32  
PLOTFILE 24 ALL 1ST "2905 King\_Const\_.AD\24H1GALL.PLT" 33  
PLOTFILE PERIOD ALL "2905 King\_Const\_.AD\PE00GALL.PLT" 34  
SUMMFILE "2905 King\_Const\_.sum"

OU FINISHED

\*\*

\*\*\*\*\*

\*\* Project Parameters

\*\*\*\*\*

\*\* PROJCTN CoordinateSystemUTM  
\*\* DESCPTN UTM: Universal Transverse Mercator  
\*\* DATUM World Geodetic System 1984  
\*\* DTMRGN Global Definition  
\*\* UNITS m  
\*\* ZONE 10  
\*\* ZONEINX 0  
\*\*

\*\*  
\*\*\*\*\*  
\*\*  
\*\* AERMOD Input Produced by:  
\*\* AERMOD View Ver. 10.2.1  
\*\* Lakes Environmental Software Inc.  
\*\* Date: 4/4/2022  
\*\* File: C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_Mit\2905 King\_Const\_Mit.ADI  
\*\*

\*\*\*\*\*  
\*\*  
\*\*  
\*\*\*\*\*

\*\* AERMOD Control Pathway  
\*\*\*\*\*  
\*\*  
\*\*

CO STARTING  
TITLEONE C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_\2905 King\_Const  
MODELOPT CONC FLAT ELEV  
AVERTIME 1 8 24 PERIOD  
URBANOPT 1928000 Santa\_Clara\_County  
POLLUTID PM\_2.5  
RUNORNOT RUN  
ERRORFIL "2905 King\_Const\_Mit.err"

CO FINISHED  
\*\*  
\*\*\*\*\*

\*\* AERMOD Source Pathway  
\*\*\*\*\*  
\*\*  
\*\*

SO STARTING  
\*\* Source Location \*\*  
\*\* Source ID - Type - X Coord. - Y Coord. \*\*  
\*\* -----  
\*\* Line Source Represented by Adjacent Volume Sources  
\*\* LINE VOLUME Source ID = SLINE1  
\*\* DESCRSRC On-site Construction  
\*\* PREFIX  
\*\* Length of Side = 8.50  
\*\* Configuration = Adjacent  
\*\* Emission Rate = 0.001419075  
\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 10  
\*\* 604875.056, 4130183.443, 44.76, 3.11, 3.95  
\*\* 604780.422, 4130100.854, 44.38, 3.11, 3.95  
\*\* 604832.040, 4130035.471, 44.30, 3.11, 3.95  
\*\* 604934.416, 4130117.199, 44.94, 3.11, 3.95  
\*\* 604886.239, 4130166.237, 44.87, 3.11, 3.95

\*\* 604810.533, 4130106.876, 44.27, 3.11, 3.95  
\*\* 604838.063, 4130064.721, 44.20, 3.11, 3.95  
\*\* 604906.887, 4130122.361, 45.08, 3.11, 3.95  
\*\* 604888.820, 4130144.729, 45.05, 3.11, 3.95  
\*\* 604836.342, 4130103.435, 44.32, 3.11, 3.95

\*\* -----  
LOCATION L0000527 VOLUME 604871.853 4130180.648 44.76  
LOCATION L0000528 VOLUME 604865.449 4130175.059 44.81  
LOCATION L0000529 VOLUME 604859.045 4130169.470 44.82  
LOCATION L0000530 VOLUME 604852.641 4130163.881 44.80  
LOCATION L0000531 VOLUME 604846.237 4130158.292 44.74  
LOCATION L0000532 VOLUME 604839.833 4130152.703 44.68  
LOCATION L0000533 VOLUME 604833.429 4130147.114 44.59  
LOCATION L0000534 VOLUME 604827.025 4130141.525 44.49  
LOCATION L0000535 VOLUME 604820.621 4130135.936 44.39  
LOCATION L0000536 VOLUME 604814.217 4130130.347 44.35  
LOCATION L0000537 VOLUME 604807.812 4130124.758 44.30  
LOCATION L0000538 VOLUME 604801.408 4130119.169 44.25  
LOCATION L0000539 VOLUME 604795.004 4130113.580 44.31  
LOCATION L0000540 VOLUME 604788.600 4130107.991 44.37  
LOCATION L0000541 VOLUME 604782.196 4130102.402 44.40  
LOCATION L0000542 VOLUME 604784.230 4130096.030 44.39  
LOCATION L0000543 VOLUME 604789.497 4130089.358 44.41  
LOCATION L0000544 VOLUME 604794.764 4130082.687 44.42  
LOCATION L0000545 VOLUME 604800.031 4130076.015 44.38  
LOCATION L0000546 VOLUME 604805.298 4130069.344 44.34  
LOCATION L0000547 VOLUME 604810.565 4130062.672 44.32  
LOCATION L0000548 VOLUME 604815.832 4130056.001 44.32  
LOCATION L0000549 VOLUME 604821.099 4130049.329 44.31  
LOCATION L0000550 VOLUME 604826.366 4130042.658 44.27  
LOCATION L0000551 VOLUME 604831.633 4130035.986 44.27  
LOCATION L0000552 VOLUME 604838.170 4130040.364 44.28  
LOCATION L0000553 VOLUME 604844.813 4130045.667 44.25  
LOCATION L0000554 VOLUME 604851.455 4130050.970 44.26  
LOCATION L0000555 VOLUME 604858.098 4130056.273 44.25  
LOCATION L0000556 VOLUME 604864.741 4130061.576 44.27  
LOCATION L0000557 VOLUME 604871.384 4130066.879 44.32  
LOCATION L0000558 VOLUME 604878.027 4130072.182 44.46  
LOCATION L0000559 VOLUME 604884.670 4130077.485 44.60  
LOCATION L0000560 VOLUME 604891.312 4130082.789 44.73  
LOCATION L0000561 VOLUME 604897.955 4130088.092 44.81  
LOCATION L0000562 VOLUME 604904.598 4130093.395 44.86  
LOCATION L0000563 VOLUME 604911.241 4130098.698 44.89  
LOCATION L0000564 VOLUME 604917.884 4130104.001 44.91  
LOCATION L0000565 VOLUME 604924.526 4130109.304 44.93  
LOCATION L0000566 VOLUME 604931.169 4130114.607 44.95  
LOCATION L0000567 VOLUME 604931.371 4130120.299 44.96  
LOCATION L0000568 VOLUME 604925.414 4130126.362 44.96  
LOCATION L0000569 VOLUME 604919.457 4130132.426 44.96  
LOCATION L0000570 VOLUME 604913.500 4130138.489 44.99  
LOCATION L0000571 VOLUME 604907.543 4130144.552 45.01

LOCATION L0000572 VOLUME 604901.586 4130150.616 45.02  
LOCATION L0000573 VOLUME 604895.629 4130156.679 45.00  
LOCATION L0000574 VOLUME 604889.672 4130162.742 44.94  
LOCATION L0000575 VOLUME 604883.405 4130164.014 44.92  
LOCATION L0000576 VOLUME 604876.716 4130158.770 44.95  
LOCATION L0000577 VOLUME 604870.027 4130153.525 44.98  
LOCATION L0000578 VOLUME 604863.338 4130148.280 44.91  
LOCATION L0000579 VOLUME 604856.649 4130143.035 44.77  
LOCATION L0000580 VOLUME 604849.960 4130137.791 44.61  
LOCATION L0000581 VOLUME 604843.271 4130132.546 44.46  
LOCATION L0000582 VOLUME 604836.582 4130127.301 44.35  
LOCATION L0000583 VOLUME 604829.893 4130122.056 44.25  
LOCATION L0000584 VOLUME 604823.204 4130116.811 44.20  
LOCATION L0000585 VOLUME 604816.515 4130111.567 44.25  
LOCATION L0000586 VOLUME 604811.024 4130106.124 44.31  
LOCATION L0000587 VOLUME 604815.671 4130099.007 44.36  
LOCATION L0000588 VOLUME 604820.319 4130091.891 44.41  
LOCATION L0000589 VOLUME 604824.967 4130084.774 44.41  
LOCATION L0000590 VOLUME 604829.614 4130077.657 44.36  
LOCATION L0000591 VOLUME 604834.262 4130070.540 44.30  
LOCATION L0000592 VOLUME 604839.251 4130065.716 44.24  
LOCATION L0000593 VOLUME 604845.767 4130071.173 44.21  
LOCATION L0000594 VOLUME 604852.284 4130076.631 44.24  
LOCATION L0000595 VOLUME 604858.800 4130082.089 44.29  
LOCATION L0000596 VOLUME 604865.317 4130087.546 44.33  
LOCATION L0000597 VOLUME 604871.833 4130093.004 44.45  
LOCATION L0000598 VOLUME 604878.350 4130098.461 44.66  
LOCATION L0000599 VOLUME 604884.866 4130103.919 44.84  
LOCATION L0000600 VOLUME 604891.383 4130109.377 45.01  
LOCATION L0000601 VOLUME 604897.899 4130114.834 45.12  
LOCATION L0000602 VOLUME 604904.416 4130120.292 45.12  
LOCATION L0000603 VOLUME 604903.571 4130126.466 45.10  
LOCATION L0000604 VOLUME 604898.230 4130133.079 45.11  
LOCATION L0000605 VOLUME 604892.889 4130139.691 45.09  
LOCATION L0000606 VOLUME 604887.230 4130143.477 45.06  
LOCATION L0000607 VOLUME 604880.550 4130138.221 45.04  
LOCATION L0000608 VOLUME 604873.870 4130132.965 45.01  
LOCATION L0000609 VOLUME 604867.190 4130127.708 44.89  
LOCATION L0000610 VOLUME 604860.510 4130122.452 44.70  
LOCATION L0000611 VOLUME 604853.830 4130117.196 44.48  
LOCATION L0000612 VOLUME 604847.150 4130111.939 44.30  
LOCATION L0000613 VOLUME 604840.470 4130106.683 44.28

\*\* End of LINE VOLUME Source ID = SLINE1

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE2

\*\* DESCRSRC King Road Haul Route

\*\* PREFIX

\*\* Length of Side = 8.50

\*\* Configuration = Adjacent

\*\* Emission Rate = 0.0000121



\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 5  
\*\* 604663.570, 4130467.410, 44.64, 3.11, 3.95  
\*\* 604842.882, 4130248.874, 44.74, 3.11, 3.95  
\*\* 604980.168, 4130111.588, 45.10, 3.11, 3.95  
\*\* 605151.075, 4129936.479, 45.68, 3.11, 3.95  
\*\* 605169.128, 4129917.975, 45.71, 3.11, 3.95

\*\* -----  
LOCATION L0000351 VOLUME 604666.266 4130464.125 44.64  
LOCATION L0000352 VOLUME 604671.658 4130457.553 44.62  
LOCATION L0000353 VOLUME 604677.050 4130450.982 44.62  
LOCATION L0000354 VOLUME 604682.441 4130444.411 44.62  
LOCATION L0000355 VOLUME 604687.833 4130437.840 44.60  
LOCATION L0000356 VOLUME 604693.225 4130431.269 44.57  
LOCATION L0000357 VOLUME 604698.616 4130424.698 44.50  
LOCATION L0000358 VOLUME 604704.008 4130418.127 44.46  
LOCATION L0000359 VOLUME 604709.400 4130411.556 44.42  
LOCATION L0000360 VOLUME 604714.791 4130404.984 44.39  
LOCATION L0000361 VOLUME 604720.183 4130398.413 44.37  
LOCATION L0000362 VOLUME 604725.575 4130391.842 44.33  
LOCATION L0000363 VOLUME 604730.967 4130385.271 44.30  
LOCATION L0000364 VOLUME 604736.358 4130378.700 44.28  
LOCATION L0000365 VOLUME 604741.750 4130372.129 44.27  
LOCATION L0000366 VOLUME 604747.142 4130365.558 44.28  
LOCATION L0000367 VOLUME 604752.533 4130358.987 44.30  
LOCATION L0000368 VOLUME 604757.925 4130352.415 44.32  
LOCATION L0000369 VOLUME 604763.317 4130345.844 44.34  
LOCATION L0000370 VOLUME 604768.708 4130339.273 44.34  
LOCATION L0000371 VOLUME 604774.100 4130332.702 44.36  
LOCATION L0000372 VOLUME 604779.492 4130326.131 44.37  
LOCATION L0000373 VOLUME 604784.883 4130319.560 44.36  
LOCATION L0000374 VOLUME 604790.275 4130312.989 44.33  
LOCATION L0000375 VOLUME 604795.667 4130306.418 44.27  
LOCATION L0000376 VOLUME 604801.059 4130299.846 44.28  
LOCATION L0000377 VOLUME 604806.450 4130293.275 44.33  
LOCATION L0000378 VOLUME 604811.842 4130286.704 44.40  
LOCATION L0000379 VOLUME 604817.234 4130280.133 44.48  
LOCATION L0000380 VOLUME 604822.625 4130273.562 44.61  
LOCATION L0000381 VOLUME 604828.017 4130266.991 44.69  
LOCATION L0000382 VOLUME 604833.409 4130260.420 44.74  
LOCATION L0000383 VOLUME 604838.800 4130253.849 44.75  
LOCATION L0000384 VOLUME 604844.342 4130247.414 44.73  
LOCATION L0000385 VOLUME 604850.353 4130241.403 44.76  
LOCATION L0000386 VOLUME 604856.363 4130235.393 44.80  
LOCATION L0000387 VOLUME 604862.374 4130229.382 44.81  
LOCATION L0000388 VOLUME 604868.384 4130223.372 44.80  
LOCATION L0000389 VOLUME 604874.394 4130217.362 44.78  
LOCATION L0000390 VOLUME 604880.405 4130211.351 44.76  
LOCATION L0000391 VOLUME 604886.415 4130205.341 44.78  
LOCATION L0000392 VOLUME 604892.426 4130199.330 44.79

|                   |        |            |             |       |
|-------------------|--------|------------|-------------|-------|
| LOCATION L0000393 | VOLUME | 604898.436 | 4130193.320 | 44.81 |
| LOCATION L0000394 | VOLUME | 604904.446 | 4130187.310 | 44.83 |
| LOCATION L0000395 | VOLUME | 604910.457 | 4130181.299 | 44.86 |
| LOCATION L0000396 | VOLUME | 604916.467 | 4130175.289 | 44.90 |
| LOCATION L0000397 | VOLUME | 604922.478 | 4130169.278 | 44.93 |
| LOCATION L0000398 | VOLUME | 604928.488 | 4130163.268 | 44.96 |
| LOCATION L0000399 | VOLUME | 604934.498 | 4130157.258 | 44.97 |
| LOCATION L0000400 | VOLUME | 604940.509 | 4130151.247 | 44.94 |
| LOCATION L0000401 | VOLUME | 604946.519 | 4130145.237 | 44.94 |
| LOCATION L0000402 | VOLUME | 604952.530 | 4130139.226 | 44.95 |
| LOCATION L0000403 | VOLUME | 604958.540 | 4130133.216 | 44.97 |
| LOCATION L0000404 | VOLUME | 604964.551 | 4130127.206 | 45.02 |
| LOCATION L0000405 | VOLUME | 604970.561 | 4130121.195 | 45.09 |
| LOCATION L0000406 | VOLUME | 604976.571 | 4130115.185 | 45.15 |
| LOCATION L0000407 | VOLUME | 604982.552 | 4130109.145 | 45.19 |
| LOCATION L0000408 | VOLUME | 604988.489 | 4130103.062 | 45.21 |
| LOCATION L0000409 | VOLUME | 604994.426 | 4130096.979 | 45.20 |
| LOCATION L0000410 | VOLUME | 605000.363 | 4130090.896 | 45.17 |
| LOCATION L0000411 | VOLUME | 605006.300 | 4130084.813 | 45.18 |
| LOCATION L0000412 | VOLUME | 605012.237 | 4130078.730 | 45.20 |
| LOCATION L0000413 | VOLUME | 605018.174 | 4130072.647 | 45.23 |
| LOCATION L0000414 | VOLUME | 605024.111 | 4130066.564 | 45.29 |
| LOCATION L0000415 | VOLUME | 605030.048 | 4130060.481 | 45.34 |
| LOCATION L0000416 | VOLUME | 605035.985 | 4130054.399 | 45.38 |
| LOCATION L0000417 | VOLUME | 605041.922 | 4130048.316 | 45.42 |
| LOCATION L0000418 | VOLUME | 605047.859 | 4130042.233 | 45.43 |
| LOCATION L0000419 | VOLUME | 605053.796 | 4130036.150 | 45.42 |
| LOCATION L0000420 | VOLUME | 605059.733 | 4130030.067 | 45.40 |
| LOCATION L0000421 | VOLUME | 605065.670 | 4130023.984 | 45.42 |
| LOCATION L0000422 | VOLUME | 605071.607 | 4130017.901 | 45.45 |
| LOCATION L0000423 | VOLUME | 605077.544 | 4130011.818 | 45.49 |
| LOCATION L0000424 | VOLUME | 605083.481 | 4130005.735 | 45.53 |
| LOCATION L0000425 | VOLUME | 605089.418 | 4129999.652 | 45.56 |
| LOCATION L0000426 | VOLUME | 605095.355 | 4129993.569 | 45.56 |
| LOCATION L0000427 | VOLUME | 605101.292 | 4129987.486 | 45.58 |
| LOCATION L0000428 | VOLUME | 605107.229 | 4129981.403 | 45.60 |
| LOCATION L0000429 | VOLUME | 605113.166 | 4129975.320 | 45.63 |
| LOCATION L0000430 | VOLUME | 605119.103 | 4129969.237 | 45.65 |
| LOCATION L0000431 | VOLUME | 605125.040 | 4129963.154 | 45.65 |
| LOCATION L0000432 | VOLUME | 605130.976 | 4129957.071 | 45.64 |
| LOCATION L0000433 | VOLUME | 605136.913 | 4129950.988 | 45.65 |
| LOCATION L0000434 | VOLUME | 605142.850 | 4129944.905 | 45.67 |
| LOCATION L0000435 | VOLUME | 605148.787 | 4129938.822 | 45.68 |
| LOCATION L0000436 | VOLUME | 605154.724 | 4129932.739 | 45.66 |
| LOCATION L0000437 | VOLUME | 605160.660 | 4129926.655 | 45.65 |
| LOCATION L0000438 | VOLUME | 605166.596 | 4129920.571 | 45.66 |

\*\* End of LINE VOLUME Source ID = SLINE2

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = SLINE1

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000527 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000528 | 0.0000163112 | 3.11 | 3.95 | 2.89 |



|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000580 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000581 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000582 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000583 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000584 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000585 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000586 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000587 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000588 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000589 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000590 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000591 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000592 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000593 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000594 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000595 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000596 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000597 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000598 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000599 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000600 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000601 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000602 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000603 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000604 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000605 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000606 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000607 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000608 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000609 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000610 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000611 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000612 | 0.0000163112 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000613 | 0.0000163112 | 3.11 | 3.95 | 2.89 |

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\*\* LINE VOLUME Source ID = SLINE2

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000351 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000352 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000353 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000354 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000355 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000356 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000357 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000358 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000359 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000360 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000361 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000362 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000363 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000364 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000365 | 0.0000001375 | 3.11 | 3.95 | 2.89 |



|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000417 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000418 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000419 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000420 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000421 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000422 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000423 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000424 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000425 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000426 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000427 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000428 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000429 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000430 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000431 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000432 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000433 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000434 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000435 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000436 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000437 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000438 | 0.0000001375 | 3.11 | 3.95 | 2.89 |

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URBANSRC ALL

\*\* Variable Emissions Type: "By Hour / Day (HRDOW)"

\*\* Variable Emission Scenario: "Scenario 1"

\*\* WeekDays:

|                   |                               |
|-------------------|-------------------------------|
| EMISFACT L0000527 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000527 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000527 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000527 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000528 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000529 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000530 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000531 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000532 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000532 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000532 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |



























































































EMISFACT L0000428 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000428 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0

SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

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\*\*

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RE STARTING

```
INCLUDED "2905 King_Const_Mit.rou"
RE FINISHED
**
*****
** AERMOD Meteorology Pathway
*****
**
**
ME STARTING
SURFFILE ..\724946.SFC
PROFFILE ..\724946.PFL
SURFDATA 93232 2009
UAIRDATA 23230 2009 OAKLAND/WSO_AP
PROFBASE 40.5 METERS
ME FINISHED
**
*****
** AERMOD Output Pathway
*****
**
**
OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 1 1ST
RECTABLE 8 1ST
RECTABLE 24 1ST
** Auto-Generated Plotfiles
PLOTFILE 1 ALL 1ST "2905 KING_CONST_MIT.AD\01H1GALL.PLT" 31
PLOTFILE 8 ALL 1ST "2905 KING_CONST_MIT.AD\08H1GALL.PLT" 32
PLOTFILE 24 ALL 1ST "2905 KING_CONST_MIT.AD\24H1GALL.PLT" 33
PLOTFILE PERIOD ALL "2905 KING_CONST_MIT.AD\PE00GALL.PLT" 34
SUMMFILE "2905 King_Const_Mit.sum"
OU FINISHED
**
*****
** Project Parameters
*****
** PROJCTN CoordinateSystemUTM
** DESCPTN UTM: Universal Transverse Mercator
** DATUM World Geodetic System 1984
** DTMRGN Global Definition
** UNITS m
** ZONE 10
** ZONEINX 0
**
```



\*HARP - HRACalc v19044 4/4/2022 9:10:03 PM - Cancer Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\Variable Const\2905 King\_Const\_Mit\_HRAInput.hra

| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC    | RISK_SUM | SCENARIO                      | DETAILS | INH_RISK | SOIL_RISK    | DERMAL_RISK | MMILK_RISK | WATER_RISK | FISH_RISK    | CROP_RISK | BEEF_RISK  | DAIRY_RISK |
|-------|------|------|--------|-------------|---------|----------|-------------------------------|---------|----------|--------------|-------------|------------|------------|--------------|-----------|------------|------------|
| 1     |      |      | 9901   | DieselExhPM | 0.00964 | 3.07E-06 | 3YrCancerHighEnd_Inh_FAH3to70 | *       | 3.07E-06 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
| 2     |      |      | 107028 | Acrolein    | 0       | 0.00E+00 | 3YrCancerHighEnd_Inh_FAH3to70 | *       | 0.00E+00 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
|       |      |      |        |             |         |          |                               |         | PIG_RISK | CHICKEN_RISK | EGG_RISK    | 1ST_DRIVER | 2ND_DRIVER | PASTURE_CONC | FISH_CONC | WATER_CONC |            |
|       |      |      |        |             |         |          |                               |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |
|       |      |      |        |             |         |          |                               |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |

\*HARP - HRACalc v19044 4/4/2022 9:10:03 PM - Acute Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\Variable Const\2905 King\_Const\_Mit\_HRAInput.hra

| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC  | SCENARIO       | CV       | CNS      | IMMUN      | KIDNEY   | GILV     | REPRO/DEVEL | RESP     |
|-------|------|------|--------|-------------|-------|----------------|----------|----------|------------|----------|----------|-------------|----------|
| 1     |      |      | 9901   | DieselExhPM | 0.478 | NonCancerAcute | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |
| 2     |      |      | 107028 | Acrolein    | 0.478 | NonCancerAcute | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 1.91E-01 |
|       |      |      |        |             |       |                | SKIN     | EYE      | BONE/TEETH | ENDO     | BLOOD    | ODOR        | GENERAL  |
|       |      |      |        |             |       |                | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |
|       |      |      |        |             |       |                | 0.00E+00 | 1.91E-01 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |

\*HARP - HRACalc v19044 4/4/2022 9:10:03 PM - Chronic Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\Variable Const\2905 King\_Const\_Mit\_HRAInput.hra

| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC    | SCENARIO                    | CV       | CNS        | IMMUN      | KIDNEY     | GILV         | REPRO/DEVEL | RESP       | SKIN      | EYE       | BONE/TEETH | ENDO       | BLOOD    | ODOR         |          |  |
|-------|------|------|--------|-------------|---------|-----------------------------|----------|------------|------------|------------|--------------|-------------|------------|-----------|-----------|------------|------------|----------|--------------|----------|--|
| 1     |      |      | 9901   | DieselExhPM | 0.00964 | NonCancerChronicHighEnd_Inh | 0.00E+00 | 0.00E+00   | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 1.93E-03  | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00 | 0.00E+00     | 0.00E+00 |  |
| 2     |      |      | 107028 | Acrolein    | 0       | NonCancerChronicHighEnd_Inh | 0.00E+00 | 0.00E+00   | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00 | 0.00E+00     | 0.00E+00 |  |
|       |      |      |        |             |         |                             | GENERAL  | DETAILS    | INH_CONC   | SOIL_DOSE  | DERMAL_DOSE  | MMILK_DOSE  | WATER_DOSE | FISH_DOSE | CROP_DOSE | BEEF_DOSE  | DAIRY_DOSE | PIG_DOSE | CHICKEN_DOSE |          |  |
|       |      |      |        |             |         |                             |          |            | 0.00E+00 * | 9.64E-03   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00 | 0.00E+00     | 0.00E+00 |  |
|       |      |      |        |             |         |                             |          |            | 0.00E+00 * | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00 | 0.00E+00     | 0.00E+00 |  |
|       |      |      |        |             |         |                             | EGG_DOSE | 1ST_DRIVER | 2ND_DRIVER | 3RD_DRIVER | PASTURE_CONC | FISH_CONC   | WATER_CONC |           |           |            |            |          |              |          |  |
|       |      |      |        |             |         |                             | 0.00E+00 | INHALATION | NA         | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |           |            |            |          |              |          |  |
|       |      |      |        |             |         |                             | 0.00E+00 | INHALATION | NA         | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |           |            |            |          |              |          |  |

\*HARP - HRACalc v19044 4/4/2022 5:41:50 PM - Cancer Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\Variable Const\2905 King\_Const\_Unmit\_HRAInput.hra

| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC   | RISK_SUM | SCENARIO                      | DETAILS | INH_RISK | SOIL_RISK    | DERMAL_RISK | MMILK_RISK | WATER_RISK | FISH_RISK    | CROP_RISK | BEEF_RISK  | DAIRY_RISK |
|-------|------|------|--------|-------------|--------|----------|-------------------------------|---------|----------|--------------|-------------|------------|------------|--------------|-----------|------------|------------|
| 1     |      |      | 9901   | DieselExhPM | 0.0636 | 2.03E-05 | 3YrCancerHighEnd_Inh_FAH3to70 | *       | 2.03E-05 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
| 2     |      |      | 107028 | Acrolein    | 0      | 0.00E+00 | 3YrCancerHighEnd_Inh_FAH3to70 | *       | 0.00E+00 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
|       |      |      |        |             |        |          |                               |         | PIG_RISK | CHICKEN_RISK | EGG_RISK    | 1ST_DRIVER | 2ND_DRIVER | PASTURE_CONC | FISH_CONC | WATER_CONC |            |
|       |      |      |        |             |        |          |                               |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |
|       |      |      |        |             |        |          |                               |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |



\*HARP - HRACalc v19044 4/4/2022 5:41:50 PM - Chronic Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\Variable Const\2905 King\_Const\_Unmit\_HRAInput.hra

| INDEX           | GRP1 | GRP2 | POLID  | POLABBREV   | CONC   | SCENARIO                      | CV         | CNS        | IMMUN       | KIDNEY     | GILV         | REPRO/DEVEL | RESP       | SKIN      | EYE        | BONE/TEETH | ENDO         | BLOOD    | ODOR     |          |          |
|-----------------|------|------|--------|-------------|--------|-------------------------------|------------|------------|-------------|------------|--------------|-------------|------------|-----------|------------|------------|--------------|----------|----------|----------|----------|
| 1               |      |      | 9901   | DieselExhPM | 0.0636 | NonCancerChronicHighEnd_Inh   | 0.00E+00   | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 1.27E-02  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 |          |
| 2               |      |      | 107028 | Acrolein    |        | 0 NonCancerChronicHighEnd_Inh | 0.00E+00   | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 |          |
| GENERAL DETAILS |      |      |        |             |        |                               | INH_CONC   | SOIL_DOSE  | DERMAL_DOSE | MMILK_DOSE | WATER_DOSE   | FISH_DOSE   | CROP_DOSE  | BEEF_DOSE | DAIRY_DOSE | PIG_DOSE   | CHICKEN_DOSE |          |          |          |          |
|                 |      |      |        |             |        |                               | 0.00E+00 * | 6.36E-02   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|                 |      |      |        |             |        |                               | 0.00E+00 * | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|                 |      |      |        |             |        |                               | EGG_DOSE   | 1ST_DRIVER | 2ND_DRIVER  | 3RD_DRIVER | PASTURE_CONC | FISH_CONC   | WATER_CONC |           |            |            |              |          |          |          |          |
|                 |      |      |        |             |        |                               | 0.00E+00   | INHALATION | NA          | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |            |            |              |          |          |          |          |
|                 |      |      |        |             |        |                               | 0.00E+00   | INHALATION | NA          | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |            |            |              |          |          |          |          |

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\*\*  
\*\* AERMOD Input Produced by:  
\*\* AERMOD View Ver. 10.2.1  
\*\* Lakes Environmental Software Inc.  
\*\* Date: 4/4/2022  
\*\* File: C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_Variable\2905 King\_Const\_Variable  
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\*\* AERMOD Control Pathway  
\*\*\*\*\*  
\*\*  
\*\*

CO STARTING  
TITLEONE C:\Lakes\AERMOD View\2905 King Road\2905 King\_Const\_\2905 King\_Const  
MODELOPT CONC FLAT ELEV  
AVERTIME 1 8 24 PERIOD  
URBANOPT 1928000 Santa\_Clara\_County  
POLLUTID PM\_2.5  
RUNORNOT RUN  
ERRORFIL "2905 King\_Const\_Variable.err"

CO FINISHED  
\*\*  
\*\*\*\*\*

\*\* AERMOD Source Pathway  
\*\*\*\*\*  
\*\*  
\*\*

SO STARTING  
\*\* Source Location \*\*  
\*\* Source ID - Type - X Coord. - Y Coord. \*\*  
\*\* -----  
\*\* Line Source Represented by Adjacent Volume Sources  
\*\* LINE VOLUME Source ID = SLINE1  
\*\* DESCRSRC On-site Construction  
\*\* PREFIX  
\*\* Length of Side = 8.50  
\*\* Configuration = Adjacent  
\*\* Emission Rate = 0.009460502  
\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 10  
\*\* 604875.056, 4130183.443, 44.76, 3.11, 3.95  
\*\* 604780.422, 4130100.854, 44.38, 3.11, 3.95  
\*\* 604832.040, 4130035.471, 44.30, 3.11, 3.95  
\*\* 604934.416, 4130117.199, 44.94, 3.11, 3.95  
\*\* 604886.239, 4130166.237, 44.87, 3.11, 3.95

\*\* 604810.533, 4130106.876, 44.27, 3.11, 3.95  
\*\* 604838.063, 4130064.721, 44.20, 3.11, 3.95  
\*\* 604906.887, 4130122.361, 45.08, 3.11, 3.95  
\*\* 604888.820, 4130144.729, 45.05, 3.11, 3.95  
\*\* 604836.342, 4130103.435, 44.32, 3.11, 3.95

\*\* -----  
LOCATION L0000527 VOLUME 604871.853 4130180.648 44.76  
LOCATION L0000528 VOLUME 604865.449 4130175.059 44.81  
LOCATION L0000529 VOLUME 604859.045 4130169.470 44.82  
LOCATION L0000530 VOLUME 604852.641 4130163.881 44.80  
LOCATION L0000531 VOLUME 604846.237 4130158.292 44.74  
LOCATION L0000532 VOLUME 604839.833 4130152.703 44.68  
LOCATION L0000533 VOLUME 604833.429 4130147.114 44.59  
LOCATION L0000534 VOLUME 604827.025 4130141.525 44.49  
LOCATION L0000535 VOLUME 604820.621 4130135.936 44.39  
LOCATION L0000536 VOLUME 604814.217 4130130.347 44.35  
LOCATION L0000537 VOLUME 604807.812 4130124.758 44.30  
LOCATION L0000538 VOLUME 604801.408 4130119.169 44.25  
LOCATION L0000539 VOLUME 604795.004 4130113.580 44.31  
LOCATION L0000540 VOLUME 604788.600 4130107.991 44.37  
LOCATION L0000541 VOLUME 604782.196 4130102.402 44.40  
LOCATION L0000542 VOLUME 604784.230 4130096.030 44.39  
LOCATION L0000543 VOLUME 604789.497 4130089.358 44.41  
LOCATION L0000544 VOLUME 604794.764 4130082.687 44.42  
LOCATION L0000545 VOLUME 604800.031 4130076.015 44.38  
LOCATION L0000546 VOLUME 604805.298 4130069.344 44.34  
LOCATION L0000547 VOLUME 604810.565 4130062.672 44.32  
LOCATION L0000548 VOLUME 604815.832 4130056.001 44.32  
LOCATION L0000549 VOLUME 604821.099 4130049.329 44.31  
LOCATION L0000550 VOLUME 604826.366 4130042.658 44.27  
LOCATION L0000551 VOLUME 604831.633 4130035.986 44.27  
LOCATION L0000552 VOLUME 604838.170 4130040.364 44.28  
LOCATION L0000553 VOLUME 604844.813 4130045.667 44.25  
LOCATION L0000554 VOLUME 604851.455 4130050.970 44.26  
LOCATION L0000555 VOLUME 604858.098 4130056.273 44.25  
LOCATION L0000556 VOLUME 604864.741 4130061.576 44.27  
LOCATION L0000557 VOLUME 604871.384 4130066.879 44.32  
LOCATION L0000558 VOLUME 604878.027 4130072.182 44.46  
LOCATION L0000559 VOLUME 604884.670 4130077.485 44.60  
LOCATION L0000560 VOLUME 604891.312 4130082.789 44.73  
LOCATION L0000561 VOLUME 604897.955 4130088.092 44.81  
LOCATION L0000562 VOLUME 604904.598 4130093.395 44.86  
LOCATION L0000563 VOLUME 604911.241 4130098.698 44.89  
LOCATION L0000564 VOLUME 604917.884 4130104.001 44.91  
LOCATION L0000565 VOLUME 604924.526 4130109.304 44.93  
LOCATION L0000566 VOLUME 604931.169 4130114.607 44.95  
LOCATION L0000567 VOLUME 604931.371 4130120.299 44.96  
LOCATION L0000568 VOLUME 604925.414 4130126.362 44.96  
LOCATION L0000569 VOLUME 604919.457 4130132.426 44.96  
LOCATION L0000570 VOLUME 604913.500 4130138.489 44.99  
LOCATION L0000571 VOLUME 604907.543 4130144.552 45.01



LOCATION L0000572 VOLUME 604901.586 4130150.616 45.02  
LOCATION L0000573 VOLUME 604895.629 4130156.679 45.00  
LOCATION L0000574 VOLUME 604889.672 4130162.742 44.94  
LOCATION L0000575 VOLUME 604883.405 4130164.014 44.92  
LOCATION L0000576 VOLUME 604876.716 4130158.770 44.95  
LOCATION L0000577 VOLUME 604870.027 4130153.525 44.98  
LOCATION L0000578 VOLUME 604863.338 4130148.280 44.91  
LOCATION L0000579 VOLUME 604856.649 4130143.035 44.77  
LOCATION L0000580 VOLUME 604849.960 4130137.791 44.61  
LOCATION L0000581 VOLUME 604843.271 4130132.546 44.46  
LOCATION L0000582 VOLUME 604836.582 4130127.301 44.35  
LOCATION L0000583 VOLUME 604829.893 4130122.056 44.25  
LOCATION L0000584 VOLUME 604823.204 4130116.811 44.20  
LOCATION L0000585 VOLUME 604816.515 4130111.567 44.25  
LOCATION L0000586 VOLUME 604811.024 4130106.124 44.31  
LOCATION L0000587 VOLUME 604815.671 4130099.007 44.36  
LOCATION L0000588 VOLUME 604820.319 4130091.891 44.41  
LOCATION L0000589 VOLUME 604824.967 4130084.774 44.41  
LOCATION L0000590 VOLUME 604829.614 4130077.657 44.36  
LOCATION L0000591 VOLUME 604834.262 4130070.540 44.30  
LOCATION L0000592 VOLUME 604839.251 4130065.716 44.24  
LOCATION L0000593 VOLUME 604845.767 4130071.173 44.21  
LOCATION L0000594 VOLUME 604852.284 4130076.631 44.24  
LOCATION L0000595 VOLUME 604858.800 4130082.089 44.29  
LOCATION L0000596 VOLUME 604865.317 4130087.546 44.33  
LOCATION L0000597 VOLUME 604871.833 4130093.004 44.45  
LOCATION L0000598 VOLUME 604878.350 4130098.461 44.66  
LOCATION L0000599 VOLUME 604884.866 4130103.919 44.84  
LOCATION L0000600 VOLUME 604891.383 4130109.377 45.01  
LOCATION L0000601 VOLUME 604897.899 4130114.834 45.12  
LOCATION L0000602 VOLUME 604904.416 4130120.292 45.12  
LOCATION L0000603 VOLUME 604903.571 4130126.466 45.10  
LOCATION L0000604 VOLUME 604898.230 4130133.079 45.11  
LOCATION L0000605 VOLUME 604892.889 4130139.691 45.09  
LOCATION L0000606 VOLUME 604887.230 4130143.477 45.06  
LOCATION L0000607 VOLUME 604880.550 4130138.221 45.04  
LOCATION L0000608 VOLUME 604873.870 4130132.965 45.01  
LOCATION L0000609 VOLUME 604867.190 4130127.708 44.89  
LOCATION L0000610 VOLUME 604860.510 4130122.452 44.70  
LOCATION L0000611 VOLUME 604853.830 4130117.196 44.48  
LOCATION L0000612 VOLUME 604847.150 4130111.939 44.30  
LOCATION L0000613 VOLUME 604840.470 4130106.683 44.28

\*\* End of LINE VOLUME Source ID = SLINE1

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE2

\*\* DESCRSRC King Road Haul Route

\*\* PREFIX

\*\* Length of Side = 8.50

\*\* Configuration = Adjacent

\*\* Emission Rate = 0.0000121

\*\* Vertical Dimension = 6.22  
\*\* SZINIT = 2.89  
\*\* Nodes = 5  
\*\* 604663.570, 4130467.410, 44.64, 3.11, 3.95  
\*\* 604842.882, 4130248.874, 44.74, 3.11, 3.95  
\*\* 604980.168, 4130111.588, 45.10, 3.11, 3.95  
\*\* 605151.075, 4129936.479, 45.68, 3.11, 3.95  
\*\* 605169.128, 4129917.975, 45.71, 3.11, 3.95

\*\* -----  
LOCATION L0000351 VOLUME 604666.266 4130464.125 44.64  
LOCATION L0000352 VOLUME 604671.658 4130457.553 44.62  
LOCATION L0000353 VOLUME 604677.050 4130450.982 44.62  
LOCATION L0000354 VOLUME 604682.441 4130444.411 44.62  
LOCATION L0000355 VOLUME 604687.833 4130437.840 44.60  
LOCATION L0000356 VOLUME 604693.225 4130431.269 44.57  
LOCATION L0000357 VOLUME 604698.616 4130424.698 44.50  
LOCATION L0000358 VOLUME 604704.008 4130418.127 44.46  
LOCATION L0000359 VOLUME 604709.400 4130411.556 44.42  
LOCATION L0000360 VOLUME 604714.791 4130404.984 44.39  
LOCATION L0000361 VOLUME 604720.183 4130398.413 44.37  
LOCATION L0000362 VOLUME 604725.575 4130391.842 44.33  
LOCATION L0000363 VOLUME 604730.967 4130385.271 44.30  
LOCATION L0000364 VOLUME 604736.358 4130378.700 44.28  
LOCATION L0000365 VOLUME 604741.750 4130372.129 44.27  
LOCATION L0000366 VOLUME 604747.142 4130365.558 44.28  
LOCATION L0000367 VOLUME 604752.533 4130358.987 44.30  
LOCATION L0000368 VOLUME 604757.925 4130352.415 44.32  
LOCATION L0000369 VOLUME 604763.317 4130345.844 44.34  
LOCATION L0000370 VOLUME 604768.708 4130339.273 44.34  
LOCATION L0000371 VOLUME 604774.100 4130332.702 44.36  
LOCATION L0000372 VOLUME 604779.492 4130326.131 44.37  
LOCATION L0000373 VOLUME 604784.883 4130319.560 44.36  
LOCATION L0000374 VOLUME 604790.275 4130312.989 44.33  
LOCATION L0000375 VOLUME 604795.667 4130306.418 44.27  
LOCATION L0000376 VOLUME 604801.059 4130299.846 44.28  
LOCATION L0000377 VOLUME 604806.450 4130293.275 44.33  
LOCATION L0000378 VOLUME 604811.842 4130286.704 44.40  
LOCATION L0000379 VOLUME 604817.234 4130280.133 44.48  
LOCATION L0000380 VOLUME 604822.625 4130273.562 44.61  
LOCATION L0000381 VOLUME 604828.017 4130266.991 44.69  
LOCATION L0000382 VOLUME 604833.409 4130260.420 44.74  
LOCATION L0000383 VOLUME 604838.800 4130253.849 44.75  
LOCATION L0000384 VOLUME 604844.342 4130247.414 44.73  
LOCATION L0000385 VOLUME 604850.353 4130241.403 44.76  
LOCATION L0000386 VOLUME 604856.363 4130235.393 44.80  
LOCATION L0000387 VOLUME 604862.374 4130229.382 44.81  
LOCATION L0000388 VOLUME 604868.384 4130223.372 44.80  
LOCATION L0000389 VOLUME 604874.394 4130217.362 44.78  
LOCATION L0000390 VOLUME 604880.405 4130211.351 44.76  
LOCATION L0000391 VOLUME 604886.415 4130205.341 44.78  
LOCATION L0000392 VOLUME 604892.426 4130199.330 44.79

|                   |        |            |             |       |
|-------------------|--------|------------|-------------|-------|
| LOCATION L0000393 | VOLUME | 604898.436 | 4130193.320 | 44.81 |
| LOCATION L0000394 | VOLUME | 604904.446 | 4130187.310 | 44.83 |
| LOCATION L0000395 | VOLUME | 604910.457 | 4130181.299 | 44.86 |
| LOCATION L0000396 | VOLUME | 604916.467 | 4130175.289 | 44.90 |
| LOCATION L0000397 | VOLUME | 604922.478 | 4130169.278 | 44.93 |
| LOCATION L0000398 | VOLUME | 604928.488 | 4130163.268 | 44.96 |
| LOCATION L0000399 | VOLUME | 604934.498 | 4130157.258 | 44.97 |
| LOCATION L0000400 | VOLUME | 604940.509 | 4130151.247 | 44.94 |
| LOCATION L0000401 | VOLUME | 604946.519 | 4130145.237 | 44.94 |
| LOCATION L0000402 | VOLUME | 604952.530 | 4130139.226 | 44.95 |
| LOCATION L0000403 | VOLUME | 604958.540 | 4130133.216 | 44.97 |
| LOCATION L0000404 | VOLUME | 604964.551 | 4130127.206 | 45.02 |
| LOCATION L0000405 | VOLUME | 604970.561 | 4130121.195 | 45.09 |
| LOCATION L0000406 | VOLUME | 604976.571 | 4130115.185 | 45.15 |
| LOCATION L0000407 | VOLUME | 604982.552 | 4130109.145 | 45.19 |
| LOCATION L0000408 | VOLUME | 604988.489 | 4130103.062 | 45.21 |
| LOCATION L0000409 | VOLUME | 604994.426 | 4130096.979 | 45.20 |
| LOCATION L0000410 | VOLUME | 605000.363 | 4130090.896 | 45.17 |
| LOCATION L0000411 | VOLUME | 605006.300 | 4130084.813 | 45.18 |
| LOCATION L0000412 | VOLUME | 605012.237 | 4130078.730 | 45.20 |
| LOCATION L0000413 | VOLUME | 605018.174 | 4130072.647 | 45.23 |
| LOCATION L0000414 | VOLUME | 605024.111 | 4130066.564 | 45.29 |
| LOCATION L0000415 | VOLUME | 605030.048 | 4130060.481 | 45.34 |
| LOCATION L0000416 | VOLUME | 605035.985 | 4130054.399 | 45.38 |
| LOCATION L0000417 | VOLUME | 605041.922 | 4130048.316 | 45.42 |
| LOCATION L0000418 | VOLUME | 605047.859 | 4130042.233 | 45.43 |
| LOCATION L0000419 | VOLUME | 605053.796 | 4130036.150 | 45.42 |
| LOCATION L0000420 | VOLUME | 605059.733 | 4130030.067 | 45.40 |
| LOCATION L0000421 | VOLUME | 605065.670 | 4130023.984 | 45.42 |
| LOCATION L0000422 | VOLUME | 605071.607 | 4130017.901 | 45.45 |
| LOCATION L0000423 | VOLUME | 605077.544 | 4130011.818 | 45.49 |
| LOCATION L0000424 | VOLUME | 605083.481 | 4130005.735 | 45.53 |
| LOCATION L0000425 | VOLUME | 605089.418 | 4129999.652 | 45.56 |
| LOCATION L0000426 | VOLUME | 605095.355 | 4129993.569 | 45.56 |
| LOCATION L0000427 | VOLUME | 605101.292 | 4129987.486 | 45.58 |
| LOCATION L0000428 | VOLUME | 605107.229 | 4129981.403 | 45.60 |
| LOCATION L0000429 | VOLUME | 605113.166 | 4129975.320 | 45.63 |
| LOCATION L0000430 | VOLUME | 605119.103 | 4129969.237 | 45.65 |
| LOCATION L0000431 | VOLUME | 605125.040 | 4129963.154 | 45.65 |
| LOCATION L0000432 | VOLUME | 605130.976 | 4129957.071 | 45.64 |
| LOCATION L0000433 | VOLUME | 605136.913 | 4129950.988 | 45.65 |
| LOCATION L0000434 | VOLUME | 605142.850 | 4129944.905 | 45.67 |
| LOCATION L0000435 | VOLUME | 605148.787 | 4129938.822 | 45.68 |
| LOCATION L0000436 | VOLUME | 605154.724 | 4129932.739 | 45.66 |
| LOCATION L0000437 | VOLUME | 605160.660 | 4129926.655 | 45.65 |
| LOCATION L0000438 | VOLUME | 605166.596 | 4129920.571 | 45.66 |

\*\* End of LINE VOLUME Source ID = SLINE2

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = SLINE1

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000527 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000528 | 0.0001087414 | 3.11 | 3.95 | 2.89 |



|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000580 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000581 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000582 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000583 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000584 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000585 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000586 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000587 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000588 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000589 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000590 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000591 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000592 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000593 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000594 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000595 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000596 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000597 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000598 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000599 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000600 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000601 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000602 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000603 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000604 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000605 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000606 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000607 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000608 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000609 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000610 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000611 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000612 | 0.0001087414 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000613 | 0.0001087414 | 3.11 | 3.95 | 2.89 |

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\*\* LINE VOLUME Source ID = SLINE2

|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000351 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000352 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000353 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000354 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000355 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000356 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000357 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000358 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000359 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000360 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000361 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000362 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000363 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000364 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000365 | 0.0000001375 | 3.11 | 3.95 | 2.89 |



|                   |              |      |      |      |
|-------------------|--------------|------|------|------|
| SRCPARAM L0000417 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000418 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000419 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000420 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000421 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000422 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000423 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000424 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000425 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000426 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000427 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000428 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000429 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000430 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000431 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000432 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000433 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000434 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000435 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000436 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000437 | 0.0000001375 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L0000438 | 0.0000001375 | 3.11 | 3.95 | 2.89 |

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URBANSRC ALL

\*\* Variable Emissions Type: "By Hour / Day (HRDOW)"

\*\* Variable Emission Scenario: "Scenario 1"

\*\* WeekDays:

|                   |                               |
|-------------------|-------------------------------|
| EMISFACT L0000527 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000527 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000527 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000527 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000528 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000528 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000529 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000529 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000530 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000530 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000531 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |
| EMISFACT L0000531 | HRDOW 0.0 0.0 0.0 0.0 1.0 0.0 |
| EMISFACT L0000532 | HRDOW 0.0 0.0 0.0 0.0 0.0 0.0 |
| EMISFACT L0000532 | HRDOW 0.0 1.0 1.0 1.0 1.0 1.0 |
| EMISFACT L0000532 | HRDOW 1.0 1.0 1.0 0.0 0.0 0.0 |



























































































EMISFACT L0000428 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000428 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000429 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000430 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000431 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000432 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000433 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000434 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000435 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000436 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000437 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0  
EMISFACT L0000438 HRDOW 0.0 0.0 0.0 0.0 0.0 0.0

SRCGROUP ALL

SO FINISHED

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\*\* AERMOD Receptor Pathway

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\*\*

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RE STARTING



INCLUDED "2905 King\_Const\_Variable.rou"

RE FINISHED

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\*\* AERMOD Meteorology Pathway

\*\*\*\*\*

\*\*

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ME STARTING

SURFFILE ..\724946.SFC

PROFFILE ..\724946.PFL

SURFDATA 93232 2009

UAIRDATA 23230 2009 OAKLAND/WSO\_AP

PROFBASE 40.5 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

RECTABLE 8 1ST

RECTABLE 24 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "2905 KING\_CONST\_VARIABLE.AD\01H1GALL.PLT" 31

PLOTFILE 8 ALL 1ST "2905 KING\_CONST\_VARIABLE.AD\08H1GALL.PLT" 32

PLOTFILE 24 ALL 1ST "2905 KING\_CONST\_VARIABLE.AD\24H1GALL.PLT" 33

PLOTFILE PERIOD ALL "2905 KING\_CONST\_VARIABLE.AD\PE00GALL.PLT" 34

SUMMFILE "2905 King\_Const\_Variable.sum"

OU FINISHED

\*\*

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\*\* Project Parameters

\*\*\*\*\*

\*\* PROJCTN CoordinateSystemUTM

\*\* DESCPTN UTM: Universal Transverse Mercator

\*\* DATUM World Geodetic System 1984

\*\* DTMRGN Global Definition

\*\* UNITS m

\*\* ZONE 10

\*\* ZONEINX 0

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.ADI

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**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 10.2.1
** Lakes Environmental Software Inc.
** Date: 4/4/2022
** File: C:\Lakes\AERMOD View\2905 King Road\2905 King_Ops\2905 King_Ops.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Lakes\AERMOD View\2905 King Road\2905 King_Const_\2905 King_Const
  MODELOPT CONC FLAT ELEV
  AVERTIME 1 8 24 PERIOD
  URBANOPT 1928000 Santa_Clara_County
  POLLUTID PM_2.5
  RUNORNOT RUN
  ERRORFIL "2905 King_Ops.err"
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE2
** DESCRSRC King Road Haul Route
** PREFIX
** Length of Side = 8.50
** Configuration = Adjacent
** Emission Rate = 8.74E-08
** Vertical Dimension = 6.22
** SZINIT = 2.89
** Nodes = 5
** 604663.570, 4130467.410, 44.64, 3.11, 3.95
** 604842.882, 4130248.874, 44.74, 3.11, 3.95
** 604980.168, 4130111.588, 45.10, 3.11, 3.95
** 605151.075, 4129936.479, 45.68, 3.11, 3.95
** 605169.128, 4129917.975, 45.71, 3.11, 3.95
```

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|                   |        |            |             |       |
|-------------------|--------|------------|-------------|-------|
| LOCATION L0000793 | VOLUME | 604666.266 | 4130464.125 | 44.64 |
| LOCATION L0000794 | VOLUME | 604671.658 | 4130457.553 | 44.62 |
| LOCATION L0000795 | VOLUME | 604677.050 | 4130450.982 | 44.62 |
| LOCATION L0000796 | VOLUME | 604682.441 | 4130444.411 | 44.62 |
| LOCATION L0000797 | VOLUME | 604687.833 | 4130437.840 | 44.60 |
| LOCATION L0000798 | VOLUME | 604693.225 | 4130431.269 | 44.57 |
| LOCATION L0000799 | VOLUME | 604698.616 | 4130424.698 | 44.50 |
| LOCATION L0000800 | VOLUME | 604704.008 | 4130418.127 | 44.46 |
| LOCATION L0000801 | VOLUME | 604709.400 | 4130411.556 | 44.42 |
| LOCATION L0000802 | VOLUME | 604714.791 | 4130404.984 | 44.39 |
| LOCATION L0000803 | VOLUME | 604720.183 | 4130398.413 | 44.37 |
| LOCATION L0000804 | VOLUME | 604725.575 | 4130391.842 | 44.33 |
| LOCATION L0000805 | VOLUME | 604730.967 | 4130385.271 | 44.30 |
| LOCATION L0000806 | VOLUME | 604736.358 | 4130378.700 | 44.28 |
| LOCATION L0000807 | VOLUME | 604741.750 | 4130372.129 | 44.27 |
| LOCATION L0000808 | VOLUME | 604747.142 | 4130365.558 | 44.28 |
| LOCATION L0000809 | VOLUME | 604752.533 | 4130358.987 | 44.30 |
| LOCATION L0000810 | VOLUME | 604757.925 | 4130352.415 | 44.32 |
| LOCATION L0000811 | VOLUME | 604763.317 | 4130345.844 | 44.34 |
| LOCATION L0000812 | VOLUME | 604768.708 | 4130339.273 | 44.34 |
| LOCATION L0000813 | VOLUME | 604774.100 | 4130332.702 | 44.36 |
| LOCATION L0000814 | VOLUME | 604779.492 | 4130326.131 | 44.37 |
| LOCATION L0000815 | VOLUME | 604784.883 | 4130319.560 | 44.36 |
| LOCATION L0000816 | VOLUME | 604790.275 | 4130312.989 | 44.33 |
| LOCATION L0000817 | VOLUME | 604795.667 | 4130306.418 | 44.27 |
| LOCATION L0000818 | VOLUME | 604801.059 | 4130299.846 | 44.28 |
| LOCATION L0000819 | VOLUME | 604806.450 | 4130293.275 | 44.33 |
| LOCATION L0000820 | VOLUME | 604811.842 | 4130286.704 | 44.40 |
| LOCATION L0000821 | VOLUME | 604817.234 | 4130280.133 | 44.48 |
| LOCATION L0000822 | VOLUME | 604822.625 | 4130273.562 | 44.61 |
| LOCATION L0000823 | VOLUME | 604828.017 | 4130266.991 | 44.69 |
| LOCATION L0000824 | VOLUME | 604833.409 | 4130260.420 | 44.74 |
| LOCATION L0000825 | VOLUME | 604838.800 | 4130253.849 | 44.75 |
| LOCATION L0000826 | VOLUME | 604844.342 | 4130247.414 | 44.73 |
| LOCATION L0000827 | VOLUME | 604850.353 | 4130241.403 | 44.76 |
| LOCATION L0000828 | VOLUME | 604856.363 | 4130235.393 | 44.80 |
| LOCATION L0000829 | VOLUME | 604862.374 | 4130229.382 | 44.81 |
| LOCATION L0000830 | VOLUME | 604868.384 | 4130223.372 | 44.80 |
| LOCATION L0000831 | VOLUME | 604874.394 | 4130217.362 | 44.78 |
| LOCATION L0000832 | VOLUME | 604880.405 | 4130211.351 | 44.76 |
| LOCATION L0000833 | VOLUME | 604886.415 | 4130205.341 | 44.78 |
| LOCATION L0000834 | VOLUME | 604892.426 | 4130199.330 | 44.79 |
| LOCATION L0000835 | VOLUME | 604898.436 | 4130193.320 | 44.81 |
| LOCATION L0000836 | VOLUME | 604904.446 | 4130187.310 | 44.83 |
| LOCATION L0000837 | VOLUME | 604910.457 | 4130181.299 | 44.86 |
| LOCATION L0000838 | VOLUME | 604916.467 | 4130175.289 | 44.90 |
| LOCATION L0000839 | VOLUME | 604922.478 | 4130169.278 | 44.93 |
| LOCATION L0000840 | VOLUME | 604928.488 | 4130163.268 | 44.96 |
| LOCATION L0000841 | VOLUME | 604934.498 | 4130157.258 | 44.97 |
| LOCATION L0000842 | VOLUME | 604940.509 | 4130151.247 | 44.94 |

|                   |        |            |             |       |
|-------------------|--------|------------|-------------|-------|
| LOCATION L0000843 | VOLUME | 604946.519 | 4130145.237 | 44.94 |
| LOCATION L0000844 | VOLUME | 604952.530 | 4130139.226 | 44.95 |
| LOCATION L0000845 | VOLUME | 604958.540 | 4130133.216 | 44.97 |
| LOCATION L0000846 | VOLUME | 604964.551 | 4130127.206 | 45.02 |
| LOCATION L0000847 | VOLUME | 604970.561 | 4130121.195 | 45.09 |
| LOCATION L0000848 | VOLUME | 604976.571 | 4130115.185 | 45.15 |
| LOCATION L0000849 | VOLUME | 604982.552 | 4130109.145 | 45.19 |
| LOCATION L0000850 | VOLUME | 604988.489 | 4130103.062 | 45.21 |
| LOCATION L0000851 | VOLUME | 604994.426 | 4130096.979 | 45.20 |
| LOCATION L0000852 | VOLUME | 605000.363 | 4130090.896 | 45.17 |
| LOCATION L0000853 | VOLUME | 605006.300 | 4130084.813 | 45.18 |
| LOCATION L0000854 | VOLUME | 605012.237 | 4130078.730 | 45.20 |
| LOCATION L0000855 | VOLUME | 605018.174 | 4130072.647 | 45.23 |
| LOCATION L0000856 | VOLUME | 605024.111 | 4130066.564 | 45.29 |
| LOCATION L0000857 | VOLUME | 605030.048 | 4130060.481 | 45.34 |
| LOCATION L0000858 | VOLUME | 605035.985 | 4130054.399 | 45.38 |
| LOCATION L0000859 | VOLUME | 605041.922 | 4130048.316 | 45.42 |
| LOCATION L0000860 | VOLUME | 605047.859 | 4130042.233 | 45.43 |
| LOCATION L0000861 | VOLUME | 605053.796 | 4130036.150 | 45.42 |
| LOCATION L0000862 | VOLUME | 605059.733 | 4130030.067 | 45.40 |
| LOCATION L0000863 | VOLUME | 605065.670 | 4130023.984 | 45.42 |
| LOCATION L0000864 | VOLUME | 605071.607 | 4130017.901 | 45.45 |
| LOCATION L0000865 | VOLUME | 605077.544 | 4130011.818 | 45.49 |
| LOCATION L0000866 | VOLUME | 605083.481 | 4130005.735 | 45.53 |
| LOCATION L0000867 | VOLUME | 605089.418 | 4129999.652 | 45.56 |
| LOCATION L0000868 | VOLUME | 605095.355 | 4129993.569 | 45.56 |
| LOCATION L0000869 | VOLUME | 605101.292 | 4129987.486 | 45.58 |
| LOCATION L0000870 | VOLUME | 605107.229 | 4129981.403 | 45.60 |
| LOCATION L0000871 | VOLUME | 605113.166 | 4129975.320 | 45.63 |
| LOCATION L0000872 | VOLUME | 605119.103 | 4129969.237 | 45.65 |
| LOCATION L0000873 | VOLUME | 605125.040 | 4129963.154 | 45.65 |
| LOCATION L0000874 | VOLUME | 605130.976 | 4129957.071 | 45.64 |
| LOCATION L0000875 | VOLUME | 605136.913 | 4129950.988 | 45.65 |
| LOCATION L0000876 | VOLUME | 605142.850 | 4129944.905 | 45.67 |
| LOCATION L0000877 | VOLUME | 605148.787 | 4129938.822 | 45.68 |
| LOCATION L0000878 | VOLUME | 605154.724 | 4129932.739 | 45.66 |
| LOCATION L0000879 | VOLUME | 605160.660 | 4129926.655 | 45.65 |
| LOCATION L0000880 | VOLUME | 605166.596 | 4129920.571 | 45.66 |

\*\* End of LINE VOLUME Source ID = SLINE2

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\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE3

\*\* DESCRSRC Loading Area

\*\* PREFIX

\*\* Length of Side = 8.50

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.58E-09

\*\* Vertical Dimension = 6.22

\*\* SZINIT = 2.89

\*\* Nodes = 3

\*\* 604814.240, 4130101.485, 44.32, 3.11, 3.95

\*\* 604850.121, 4130129.195, 44.44, 3.11, 3.95

\*\* 604860.600, 4130137.288, 44.92, 3.11, 3.95

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LOCATION L0000898 VOLUME 604817.603 4130104.082 44.31  
LOCATION L0000899 VOLUME 604824.331 4130109.278 44.26  
LOCATION L0000900 VOLUME 604831.058 4130114.473 44.24  
LOCATION L0000901 VOLUME 604837.785 4130119.668 44.26  
LOCATION L0000902 VOLUME 604844.513 4130124.864 44.36  
LOCATION L0000903 VOLUME 604851.240 4130130.059 44.55  
LOCATION L0000904 VOLUME 604857.968 4130135.255 44.73

\*\* End of LINE VOLUME Source ID = SLINE3

\*\* -----

\*\* Line Source Represented by Adjacent Volume Sources

\*\* LINE VOLUME Source ID = SLINE4

\*\* DESCRSRC Onsite Trucks

\*\* PREFIX

\*\* Length of Side = 8.50

\*\* Configuration = Adjacent

\*\* Emission Rate = 1.91E-08

\*\* Vertical Dimension = 6.22

\*\* SZINIT = 2.89

\*\* Nodes = 2

\*\* 604878.961, 4130194.205, 44.84, 3.11, 3.95

\*\* 604769.715, 4130100.567, 44.40, 3.11, 3.95

\*\* -----

LOCATION L0000881 VOLUME 604875.734 4130191.440 44.75  
LOCATION L0000882 VOLUME 604869.280 4130185.908 44.75  
LOCATION L0000883 VOLUME 604862.826 4130180.376 44.79  
LOCATION L0000884 VOLUME 604856.373 4130174.844 44.82  
LOCATION L0000885 VOLUME 604849.919 4130169.313 44.81  
LOCATION L0000886 VOLUME 604843.465 4130163.781 44.76  
LOCATION L0000887 VOLUME 604837.012 4130158.249 44.70  
LOCATION L0000888 VOLUME 604830.558 4130152.717 44.63  
LOCATION L0000889 VOLUME 604824.104 4130147.186 44.54  
LOCATION L0000890 VOLUME 604817.651 4130141.654 44.48  
LOCATION L0000891 VOLUME 604811.197 4130136.122 44.44  
LOCATION L0000892 VOLUME 604804.743 4130130.591 44.39  
LOCATION L0000893 VOLUME 604798.290 4130125.059 44.34  
LOCATION L0000894 VOLUME 604791.836 4130119.527 44.33  
LOCATION L0000895 VOLUME 604785.382 4130113.995 44.39  
LOCATION L0000896 VOLUME 604778.929 4130108.464 44.42  
LOCATION L0000897 VOLUME 604772.475 4130102.932 44.43

\*\* End of LINE VOLUME Source ID = SLINE4

LOCATION STCK1 POINT 604812.400 4130076.700 44.400

\*\* DESCRSRC Backup Generator

\*\* Source Parameters \*\*

\*\* LINE VOLUME Source ID = SLINE2

SRCPARAM L0000793 0.000000000993 3.11 3.95 2.89  
SRCPARAM L0000794 0.000000000993 3.11 3.95 2.89  
SRCPARAM L0000795 0.000000000993 3.11 3.95 2.89  
SRCPARAM L0000796 0.000000000993 3.11 3.95 2.89



|                  |                |      |      |      |
|------------------|----------------|------|------|------|
| SRCPARAM L000848 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000849 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000850 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000851 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000852 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000853 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000854 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000855 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000856 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000857 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000858 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000859 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000860 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000861 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000862 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000863 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000864 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000865 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000866 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000867 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000868 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000869 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000870 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000871 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000872 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000873 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000874 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000875 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000876 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000877 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000878 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000879 | 0.000000000993 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000880 | 0.000000000993 | 3.11 | 3.95 | 2.89 |

\*\* -----

\*\* LINE VOLUME Source ID = SLINE3

|                  |                |      |      |      |
|------------------|----------------|------|------|------|
| SRCPARAM L000898 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000899 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000900 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000901 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000902 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000903 | 0.000000000226 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000904 | 0.000000000226 | 3.11 | 3.95 | 2.89 |

\*\* -----

\*\* LINE VOLUME Source ID = SLINE4

|                  |                |      |      |      |
|------------------|----------------|------|------|------|
| SRCPARAM L000881 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000882 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000883 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000884 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000885 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000886 | 0.000000001124 | 3.11 | 3.95 | 2.89 |
| SRCPARAM L000887 | 0.000000001124 | 3.11 | 3.95 | 2.89 |



SRCPARAM L000888 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000889 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000890 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000891 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000892 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000893 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000894 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000895 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000896 0.00000001124 3.11 3.95 2.89  
SRCPARAM L000897 0.00000001124 3.11 3.95 2.89

\*\* -----  
SRCPARAM STCK1 0.00130318 5.000 763.850 224.39100 0.229  
URBANSRC ALL  
SRCGROUP ALL

SO FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Receptor Pathway

\*\*\*\*\*

\*\*

\*\*

RE STARTING

INCLUDED "2905 King\_Ops.rou"

RE FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Meteorology Pathway

\*\*\*\*\*

\*\*

\*\*

ME STARTING

SURFFILE ..\724946.SFC

PROFFILE ..\724946.PFL

SURFDATA 93232 2009

UAIRDATA 23230 2009 OAKLAND/WSO\_AP

PROFBASE 40.5 METERS

ME FINISHED

\*\*

\*\*\*\*\*

\*\* AERMOD Output Pathway

\*\*\*\*\*

\*\*

\*\*

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

RECTABLE 8 1ST

RECTABLE 24 1ST

\*\* Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST "2905 KING\_OPS.AD\01H1GALL.PLT" 31

PLOTFILE 8 ALL 1ST "2905 KING\_OPS.AD\08H1GALL.PLT" 32

PLOTFILE 24 ALL 1ST "2905 KING\_OPS.AD\24H1GALL.PLT" 33  
PLOTFILE PERIOD ALL "2905 KING\_OPS.AD\PE00GALL.PLT" 34  
SUMMFILE "2905 King\_Ops.sum"

OU FINISHED

\*\*

\*\*\*\*\*

\*\* Project Parameters

\*\*\*\*\*

\*\* PROJCTN CoordinateSystemUTM

\*\* DESCPTN UTM: Universal Transverse Mercator

\*\* DATUM World Geodetic System 1984

\*\* DTMRGN Global Definition

\*\* UNITS m

\*\* ZONE 10

\*\* ZONEINX 0

\*\*

\*HARP - HRACalc v19044 4/5/2022 12:19:09 AM - Cancer Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\2905 King\_Ops\_HRAInput.hra

| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC    | RISK_SUM | SCENARIO                       | DETAILS | INH_RISK | SOIL_RISK    | DERMAL_RISK | MMILK_RISK | WATER_RISK | FISH_RISK    | CROP_RISK | BEEF_RISK  | DAIRY_RISK |
|-------|------|------|--------|-------------|---------|----------|--------------------------------|---------|----------|--------------|-------------|------------|------------|--------------|-----------|------------|------------|
| 1     |      |      | 9901   | DieselExhPM | 0.00036 | 2.45E-07 | 30YrCancerHighEnd_Inh_FAH3to70 | *       | 2.45E-07 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
| 2     |      |      | 107028 | Acrolein    | 0       | 0.00E+00 | 30YrCancerHighEnd_Inh_FAH3to70 | *       | 0.00E+00 | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00  | 0.00E+00   | 0.00E+00   |
|       |      |      |        |             |         |          |                                |         | PIG_RISK | CHICKEN_RISK | EGG_RISK    | 1ST_DRIVER | 2ND_DRIVER | PASTURE_CONC | FISH_CONC | WATER_CONC |            |
|       |      |      |        |             |         |          |                                |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |
|       |      |      |        |             |         |          |                                |         | 0.00E+00 | 0.00E+00     | 0.00E+00    | NA         | NA         | 0.00E+00     | 0.00E+00  | 0.00E+00   |            |

\*HARP - HRACalc v19044 4/5/2022 12:19:09 AM - Acute Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\2905 King\_Ops\_HRAInput.hra

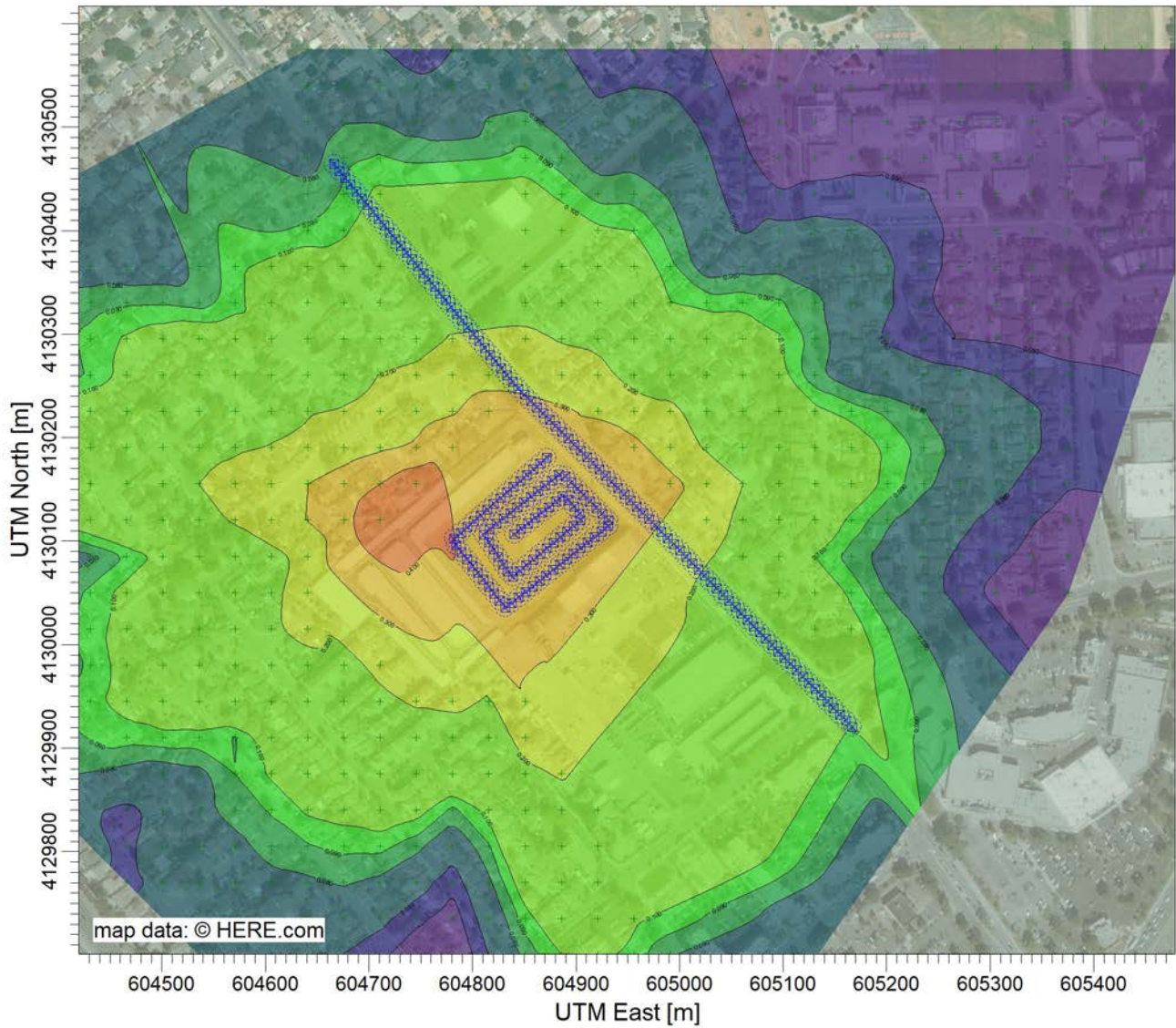
| INDEX | GRP1 | GRP2 | POLID  | POLABBREV   | CONC  | SCENARIO       | CV       | CNS      | IMMUN      | KIDNEY   | GILV     | REPRO/DEVEL | RESP     |
|-------|------|------|--------|-------------|-------|----------------|----------|----------|------------|----------|----------|-------------|----------|
| 1     |      |      | 9901   | DieselExhPM | 0.011 | NonCancerAcute | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |
| 2     |      |      | 107028 | Acrolein    | 0.011 | NonCancerAcute | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 4.40E-03 |
|       |      |      |        |             |       |                | SKIN     | EYE      | BONE/TEETH | ENDO     | BLOOD    | ODOR        | GENERAL  |
|       |      |      |        |             |       |                | 0.00E+00 | 0.00E+00 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |
|       |      |      |        |             |       |                | 0.00E+00 | 4.40E-03 | 0.00E+00   | 0.00E+00 | 0.00E+00 | 0.00E+00    | 0.00E+00 |

\*HARP - HRACalc v19044 4/5/2022 12:19:09 AM - Chronic Risk - Input File: C:\Users\noemi.wyss\Desktop\HARP\2905 King\2905 King\_Ops\_HRAInput.hra

| INDEX           | GRP1 | GRP2 | POLID  | POLABBREV   | CONC    | SCENARIO                      | CV         | CNS        | IMMUN       | KIDNEY     | GILV         | REPRO/DEVEL | RESP       | SKIN      | EYE        | BONE/TEETH | ENDO         | BLOOD    | ODOR     |          |          |
|-----------------|------|------|--------|-------------|---------|-------------------------------|------------|------------|-------------|------------|--------------|-------------|------------|-----------|------------|------------|--------------|----------|----------|----------|----------|
| 1               |      |      | 9901   | DieselExhPM | 0.00036 | NonCancerChronicHighEnd_Inh   | 0.00E+00   | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 7.20E-05  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 |          |
| 2               |      |      | 107028 | Acrolein    |         | 0 NonCancerChronicHighEnd_Inh | 0.00E+00   | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 |          |
| GENERAL DETAILS |      |      |        |             |         |                               | INH_CONC   | SOIL_DOSE  | DERMAL_DOSE | MMILK_DOSE | WATER_DOSE   | FISH_DOSE   | CROP_DOSE  | BEEF_DOSE | DAIRY_DOSE | PIG_DOSE   | CHICKEN_DOSE |          |          |          |          |
|                 |      |      |        |             |         |                               | 0.00E+00 * | 3.60E-04   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|                 |      |      |        |             |         |                               | 0.00E+00 * | 0.00E+00   | 0.00E+00    | 0.00E+00   | 0.00E+00     | 0.00E+00    | 0.00E+00   | 0.00E+00  | 0.00E+00   | 0.00E+00   | 0.00E+00     | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
|                 |      |      |        |             |         |                               | EGG_DOSE   | 1ST_DRIVER | 2ND_DRIVER  | 3RD_DRIVER | PASTURE_CONC | FISH_CONC   | WATER_CONC |           |            |            |              |          |          |          |          |
|                 |      |      |        |             |         |                               | 0.00E+00   | INHALATION | NA          | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |            |            |              |          |          |          |          |
|                 |      |      |        |             |         |                               | 0.00E+00   | INHALATION | NA          | NA         | 0.00E+00     | 0.00E+00    | 0.00E+00   |           |            |            |              |          |          |          |          |

PROJECT TITLE:

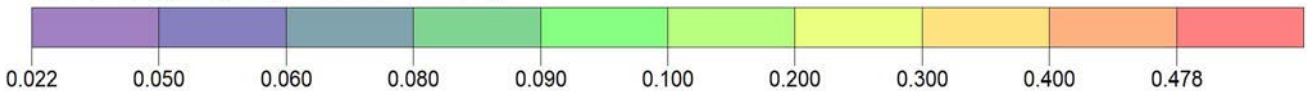
**2905 South King Construction 1 hr**




PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL

ug/m<sup>3</sup>

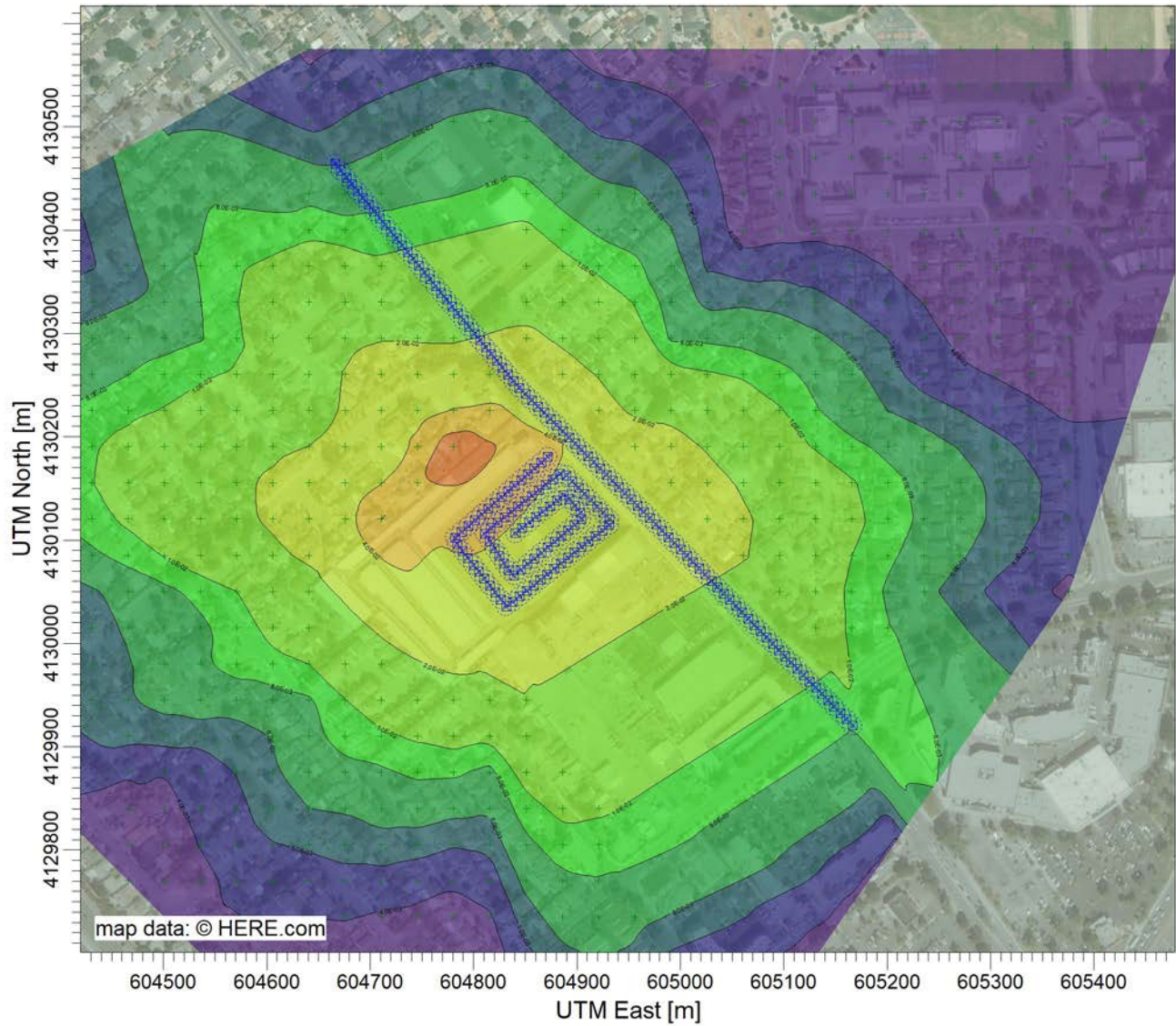
Max: 0.478 [ug/m<sup>3</sup>] at (604710.92, 4130120.33)



|           |                                       |  |              |
|-----------|---------------------------------------|--|--------------|
| COMMENTS: | SOURCES:<br><b>2</b>                  | COMPANY NAME:  |              |
|           | RECEPTORS:<br><b>591</b>              | MODELER:   |              |
|           | OUTPUT TYPE:<br><b>Concentration</b>  | SCALE:<br>1:6,655<br>0  0.2 km |              |
|           | MAX:<br><b>0.478 ug/m<sup>3</sup></b> | DATE:<br><b>4/4/2022</b>   | PROJECT NO.: |

PROJECT TITLE:

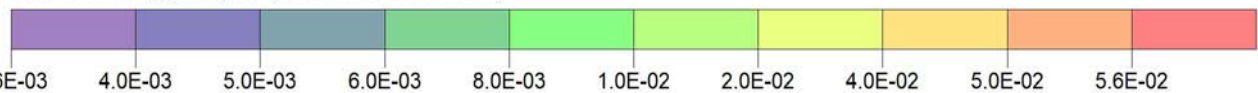
**2905 South King Construction 24 hr**




PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL

ug/m<sup>3</sup>

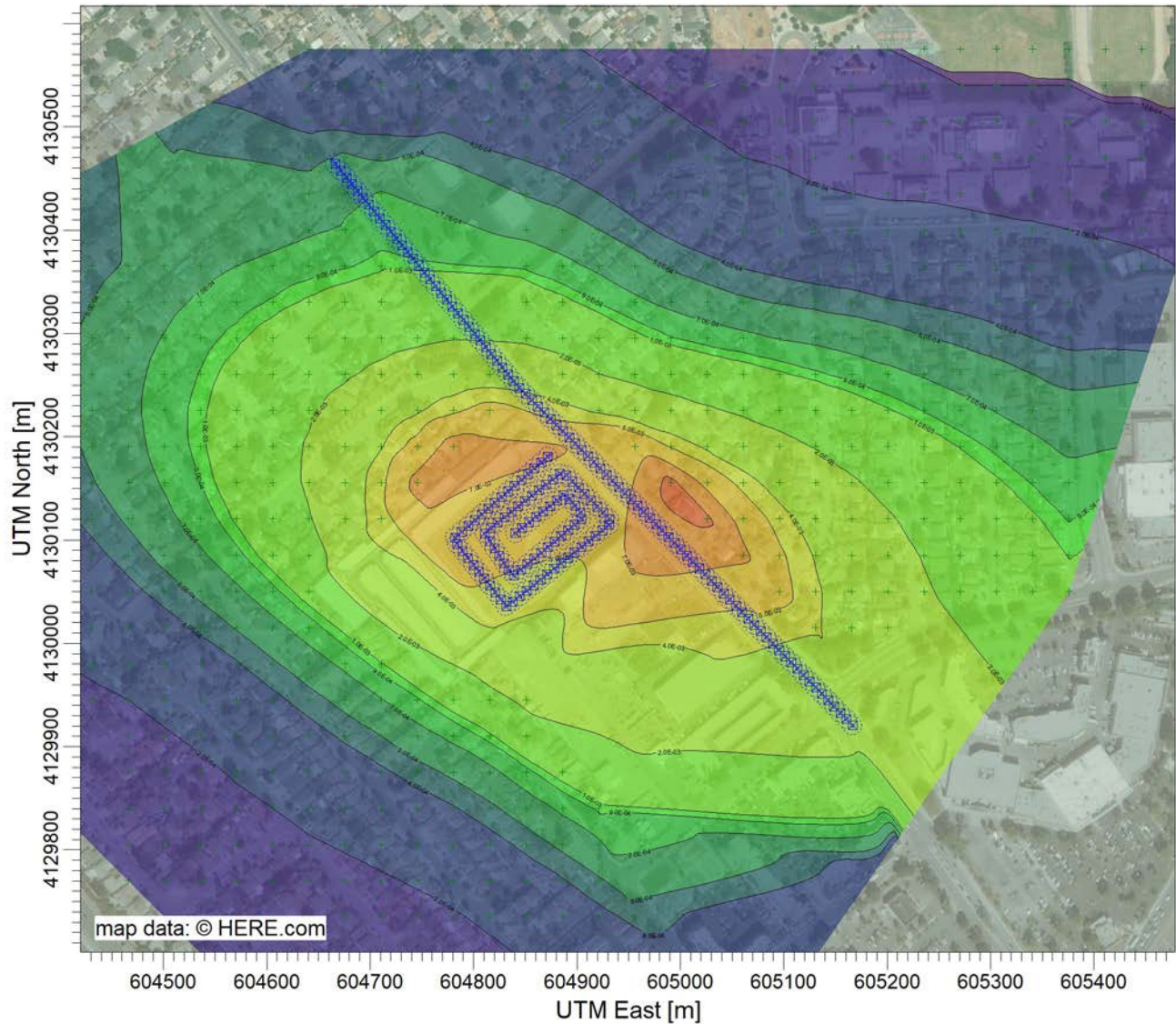
Max: 5.6E-02 [ug/m<sup>3</sup>] at (604780.92, 4130190.33)



|           |   |   |              |
|-----------|---|---|--------------|
| COMMENTS: | SOURCES:<br><b>2</b>                    | COMPANY NAME:   |              |
|           | RECEPTORS:<br><b>591</b>                | MODELER:  |              |
|           | OUTPUT TYPE:<br><b>Concentration</b>    | SCALE: 1:6,654<br>0  0.2 km |              |
|           | MAX:<br><b>5.6E-02 ug/m<sup>3</sup></b> | DATE:<br><b>4/4/2022</b>  | PROJECT NO.: |

PROJECT TITLE:

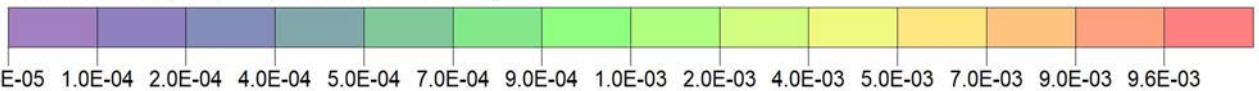
**2905 South King Construction Period**



PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL

ug/m<sup>3</sup>

Max: 9.6E-03 [ug/m<sup>3</sup>] at (604990.92, 4130155.33)



|           |   |                                |              |
|-----------|---|--------------------------------|--------------|
| COMMENTS: | SOURCES:<br><b>2</b>                    | COMPANY NAME:                  |              |
|           | RECEPTORS:<br><b>591</b>                | MODELER:                       |              |
|           | OUTPUT TYPE:<br><b>Concentration</b>    | SCALE:<br>1:6,654<br>0  0.2 km |              |
|           | MAX:<br><b>9.6E-03 ug/m<sup>3</sup></b> | DATE:<br><b>4/4/2022</b>       | PROJECT NO.: |