

# ***420 S. 2<sup>ND</sup> STREET AND 420 S. 3<sup>RD</sup> STREET PROJECT AIR QUALITY ASSESSMENT***

***San José, California***

**July 15, 2022**

**Prepared for:**

**Natalie Noyes  
Senior Project Manager  
David J. Powers & Associates, Inc.  
1736 Franklin Street, Suite 300  
Oakland, CA 94612**

**Prepared by:**

**Casey Divine  
James A. Reyff**

***ILLINGWORTH & RODKIN, INC.***  
***//// Acoustics • Air Quality ////***  
**429 E. Cotati Avenue  
Cotati, CA 94931  
(707) 794-0400**

**I&R Job No.: 21-045**

## **Introduction**

The purpose of this report is to address air quality and community health risk impacts associated with the proposed mixed-used towers located at 420 S. 2<sup>nd</sup> Street and 420 S. 3<sup>rd</sup> Street in San José, California. The air quality impacts from this project would be associated with the demolition of the existing land uses, construction of the new buildings and infrastructure, and operation of the project. Air pollutants associated with construction and operation of the project were predicted using appropriate computer models. In addition, the potential project health risk impacts (construction and operation) and the impacts of existing toxic air contaminant (TAC) sources affecting the nearby and proposed sensitive receptors were evaluated. The analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).<sup>1</sup>

## **Project Description**

The project proposes the construction of two mixed-used towers at 420 S. 2<sup>nd</sup> Street (Towers A and B) and one mixed-use tower at 420 S. 3<sup>rd</sup> Street (Tower C). The complete project would include 474 residential units and approximately 10,000 square feet of retail space. Tower A would be 20 stories tall, while Towers B and C would each be 22 stories tall. Both sites would include subterranean parking garages with 287 parking spaces at 420 S. 2<sup>nd</sup> Street and 105 parking spaces at 420 S. 3<sup>rd</sup> Street. The project would also include a 200-kilowatt (kW) emergency generator and 125-kW fire pump in each building tower. The project is within the San José Downtown Strategy 2040 Plan area.

Additionally, a showroom building is proposed at 38 W. San Salvador Street. This building would be 3,000 to 4,000 square feet (sf) and would include models of the tower residential units. This showroom facility would operate temporarily for a maximum period of 30 months, daily from 10:00 a.m. to 8:00 p.m.

## **Setting**

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM<sub>10</sub>), and fine particulate matter (PM<sub>2.5</sub>).

## Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

---

<sup>1</sup> Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM<sub>10</sub>) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>). Elevated concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

### Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. The most recent Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines were published in February of 2015.<sup>2</sup> See *Attachment 1* for a detailed description of the community risk modeling methodology used in this assessment.

### Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are the adjacent residences to the south of Buildings A and B and surrounding Building C. There are more sensitive receptors surrounding the sites at farther distances. There are also infants and children at the YWCA Childcare Center (0-6 years old) to the north of the sites and children at the Norte Dame High School (ages 14 - 18) south of the project sites. The project would introduce new sensitive receptors (i.e., residents) to the area.

---

<sup>2</sup> OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

## Regulatory Setting

### Federal Regulations

The United States Environmental Protection Agency (EPA) sets nationwide emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards. California also has the ability to set motor vehicle emission standards and standards for fuel used in California, as long as they are the same or more stringent than the federal standards.

In the past decade the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of NO<sub>x</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and because the EPA has identified DPM as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce particulate matter and NO<sub>x</sub> emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.<sup>3</sup>

In concert with the diesel engine emission standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The new standards reduced the amount of sulfur allowed by 97 percent for highway diesel fuel (from 500 parts per million by weight [ppmw] to 15 ppmw), and by 99 percent for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel (ULSD), is currently required for use by all vehicles in the U.S.

All of the above federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

### State Regulations

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.<sup>4</sup> In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, a significant component of the plan involves application of emission control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the federal on-road and non-road diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

---

<sup>3</sup> USEPA, 2000. *Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*. EPA420-F-00-057. December.

<sup>4</sup> California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and PM<sub>2.5</sub> emissions. This regulation will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

CARB has also adopted and implemented regulations to reduce DPM and NO<sub>x</sub> emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NO<sub>x</sub> exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with stringent federal off-road equipment engine emission limits for new vehicles, will significantly reduce emissions of DPM and NO<sub>x</sub>.

#### Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. The District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.<sup>5</sup> The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement

---

<sup>5</sup> See BAAQMD: <https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program>, accessed 2/18/2021.

programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall CalEnviroScreen score at or above the 70<sup>th</sup> percentile, or (ii) within 1,000 feet of any such census tract.<sup>6</sup> The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco. The project site is located in the San José CARE area but not within a BAAQMD overburdened area as identified by CalEnviroScreen as the Project site is scored at the 65<sup>th</sup> percentile.<sup>7</sup>

The BAAQMD California Environmental Quality Act (*CEQA*) *Air Quality Guidelines*<sup>8</sup> were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. *Attachment 1* includes detailed community risk modeling methodology.

### BAAQMD Rules and Regulations

Combustion equipment associated with the proposed project that includes new diesel engines to power generators that would establish new sources of particulate matter and gaseous emissions. Emissions would primarily result from the testing of the emergency backup generators. Certain emission sources would be subject to BAAQMD Regulations and Rules. The District's rules and regulations that may apply to the project include:

- Regulation 2 – Permits
  - Rule 2-1: General Requirements
  - Rule 2-2: New Source Review
  - Rule 2-5: New Source Review of Toxic Air Contaminants
- Regulation 6 – Particulate Matter and Visible Emissions
  - Rule 6-3: Wood-Burning Devices
- Regulation 9 – Inorganic Gaseous Pollutants
  - Rule 9-1: Sulfur Dioxide
  - Rule 9-7: Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, And Process Heaters
  - Rule 9-8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines

---

<sup>6</sup> See BAAQMD: [https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722\\_01\\_appendixd\\_mapsofoverburdenedcommunities-pdf.pdf?la=en](https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en), accessed 10/1/2021.

<sup>7</sup> OEHHA, CalEnviroScreen 4.0 Indicator Maps <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40>

<sup>8</sup> Bay Area Air Quality Management District, 2017. *CEQA Air Quality Guidelines*. May.

### *Permits*

Rule 2-1-301 requires that any person installing, modifying, or replacing any equipment, the use of which may reduce or control the emission of air contaminants, shall first obtain an Authority to Construct (ATC).

Rule 2-1-302 requires that written authorization from the BAAQMD in the form of a Permit to Operate (PTO) be secured before any such equipment is used or operated.

Rule 2-1 lists sources that are exempt from permitting.

### *New Source Review*

Rule 2-2, New Source Review (NSR), applies to all new and modified sources or facilities that are subject to the requirements of Rule 2-1-301. The purpose of the rule is to provide for review of such sources and to provide mechanisms by which no net increase in emissions will result.

Rule 2-2-301 requires that an applicant for an ATC or PTO apply Best Available Control Technology (BACT) to any new or modified source that results in an increase in emissions and has emissions of precursor organic compounds, non-precursor organic compounds, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, or CO of 10.0 pounds or more per highest day. Based on the estimated emissions from the proposed project, BACT will be required for NO<sub>x</sub> emissions from the diesel-fueled generator engines.

Rule 2-5 applies to new and modified sources of TAC emissions. BAAQMD evaluates the TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Toxics BACT (or TBACT) is applied to any new or modified source of TACs where the source risk is a cancer risk greater than 1.0 in one million and/or a chronic hazard index greater than 0.20. Permits are not issued for any new or modified source that has risks or net project risks that exceed a cancer risk of 10.0 in one million or a chronic or acute hazard index of 1.0.

### *Stationary Diesel Airborne Toxic Control Measure*

The BAAQMD administers the CARB's Airborne Toxic Control Measure (ACTM) for Stationary Diesel engines (section 93115, title 17 CA Code of Regulations). The project's stationary sources will be new stationary emergency stationary emergency standby diesel engines larger than 50 hp. These limits vary based on maximum engine power. All engines are limited to PM emission rates of 0.15 g/hp-hour, regardless of size. This ACTM limits engine operation 50 hours per year for routine testing and maintenance.

### *Offsets*

Rule 2-2-302 require that offsets be provided for a new or modified source that emits more than 10 tons per year of NO<sub>x</sub> or precursor organic compounds. It is not expected that emissions of any pollutant will exceed the offset thresholds.

### *Prohibitory Rules*

Regulation 6 pertains to particulate matter and visible emissions. Although the engines will be fueled with diesel, they will be modern, low emission engines. Thus, the engines are expected to comply with Regulation 6.

Rule 6-3 applies to emissions from wood-burning devices. Effective November 1, 2016, no person or builder shall install a wood-burning device in a new building construction.

Rule 9-1 applies to sulfur dioxide. The engines will use ultra-low sulfur diesel fuel (less than 15 ppm sulfur) and will not be a significant source of sulfur dioxide emissions and are expected to comply with the requirements of Rule 9-1.

Rule 9-7 limits the emissions of NO<sub>x</sub> CO from industrial, institutional and commercial boilers, steam generators and process heaters. This regulation typically applies to boilers with a heat rating of 2 million British Thermal Units (BTU) per hour

Rule 9-8 prescribes NO<sub>x</sub> and CO emission limits for stationary internal combustion engines. Since the proposed engines will be used with emergency standby generators, Regulation 9-8-110 exempts the engines from the requirements of this Rule, except for the recordkeeping requirements (9-8-530) and limitations on hours of operation for reliability-related operation (maintenance and testing). The engines will not operate more than 50 hours per year, which will satisfy the requirements of 9-8-111.

### *BACT for Diesel Generator Engines*

Since the generators will be used exclusively for emergency use during involuntary loss of power, the BACT levels listed for IC compression engines in the BAAQMD BACT Guidelines would apply. These are provided for two separate size ranges of diesel engines:

I.C. Engine – Compression Ignition >50hp and <1,000hp: BAAQMD applies BACT 2 emission limits based on the ACTM for stationary emergency standby diesel engines larger than 50 brake-horsepower (BHP). NO<sub>x</sub> emission factor limit is subject to the CARB ACTM that ranges from 3.0 to 3.5 grams per horsepower hour (g/hp-hr). The PM (PM<sub>10</sub> or PM<sub>2.5</sub>) limit is 0.15 g/hp-hr per CARB's ACTM.

I.C. Engine – Compression Ignition >999hp: BAAQMD applies specific BACT emission limits for stationary emergency standby diesel engines equal or larger than 1,000 brake-horsepower (BHP). NO<sub>x</sub> emission factor limit is subject to the CARB ACTM that ranges



from 0.5 g/hp-hr. The PM (PM10 or PM2.5) limit is 0.02 g/hp-hr. POC (i.e., ROG) limits are 0.14 g/hp-hr.

### San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project and this assessment:

#### *Applicable Goals – Air Pollutant Emission Reduction*

Goal MS-10 Minimize emissions from new development.

#### *Applicable Policies – Air Pollutant Emission Reduction*

- MS-10.1 Assess projected air emissions from new development in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.
- MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.
- MS-10.3 Promote the expansion and improvement of public transportation services and facilities, where appropriate, to both encourage energy conservation and reduce air pollution.
- MS-10.5 In order to reduce vehicle miles traveled and traffic congestion, require new development within 2,000 feet of an existing or planned transit station to encourage the use of public transit and minimize the dependence on the automobile through the application of site design guidelines and transit incentives.
- MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.
- MS-10.11 Enforce the City's wood-burning appliance ordinance to limit air pollutant emissions from residential and commercial buildings.
- MS-10.13 As a part of City of San José Sustainable City efforts, educate the public about air polluting household consumer products and activities that generate air pollution. Increase public awareness about the alternative products and activities that reduce air pollutant emissions.

#### *Applicable Goals – Toxic Air Contaminants*

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

*Applicable Policies – Toxic Air Contaminants*

- MS-11.2 For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.
- MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.
- MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

*Actions – Toxic Air Contaminants*

- MS-11.6 Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of toxic air contaminants (TACs) and particulate matter smaller than 2.5 microns (PM<sub>2.5</sub>), emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate
- MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.
- MS-11.8 For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.

*Applicable Goals – Construction Air Emissions*

- Goal MS-13 Minimize air pollutant emissions during demolition and construction activities

*Applicable Policies – Construction Air Emissions*

- MS-13.1 Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

*Applicable Actions – Construction Air Emissions*

MS-13.4 Adopt and periodically update dust, particulate, and exhaust control standard measures for demolition and grading activities to include on project plans as conditions of approval based upon construction mitigation measures in the BAAQMD CEQA Guidelines.

Downtown Strategy 2040 Plan

The San José Downtown Strategy (DTS) 2040 Plan is an urban design plan that guides development activities planned within the Downtown area. This strategy would increase the amount of new commercial office by an additional three million sf (approximately 10,000 jobs with the new total being 14.2 million sf of commercial by the year 2040. The residential capacity would be increased up to 4,360 units. The amount of new retail development (1.4 million sf) and hotel room (3,600 rooms) capacities of the Downtown Strategy 2000 would be maintained. The integrated Final Environmental Impact Report was published December 2018.

The DTS identified less-than-significant construction period emissions if development projects are in conformance with 2017 BAAQMD CEQA Guidelines, GP Policy MS-13.1, and current City requirements that include various levels of construction emissions control measures. All projects are required to implement the following control measures:

City requirements, all projects will be required to implement the following control measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Future projects developed under the DTS that incorporate these measures and are below the screening levels would not result in a significant impact related to construction emissions of regional criteria pollutants. Projects that exceed the screening levels would be required to complete additional project level analysis of construction-related emissions of criteria pollutants and may require additional measures to ensure that construction emissions would not exceed the threshold for average daily emissions.

Traffic-related operational emissions of regional criteria air pollutants with measures included to reduce emissions under the DTS were identified as significant and unavoidable. To reduce operational emissions associated with vehicle travel, future development will be required to implement a transportation demand management (TDM) program, consistent with the Downtown Transportation Plan. The TDM programs may incorporate, but would not be limited to, the following Transportation Control Measures (TCMs):

- Rideshare Measures:
  - Implement carpool/vanpool program (e.g., carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, etc.)
- Transit Measures:
  - Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc.
  - Design and locate buildings to facilitate transit access (e.g., locate building entrances near transit stops, eliminate building setbacks, etc.)
- Services Measures:
  - Provide on-site shops and services for employees, such as cafeteria, bank/ATM, dry cleaners, convenience market, etc.;
  - Provide on-site childcare or contribute to off-site childcare within walking distance.
- Shuttle Measures:
  - Establish mid-day shuttle service from work site to food service establishments/commercial areas;
  - Provide shuttle service to transit stations/multimodal centers
- Parking Measures:
  - Provide preferential parking (e.g., near building entrance, sheltered area, etc.) for carpool and vanpool vehicles;
  - Implement parking fees for single occupancy vehicle commuters;
  - Implement parking cash-out program for employees (i.e., non-driving employees receive transportation allowance equivalent to value of subsidized parking);
- Bicycle and Pedestrian Measures:
  - Provide secure, weather-protected bicycle parking for employees;
  - Provide safe, direct access for bicyclists to adjacent bicycle routes;
  - Provide showers and lockers for employees bicycling or walking to work;
  - Provide secure short-term bicycle parking for retail customers or non-commute trips;
  - Provide direct, safe, attractive pedestrian access from Planning Area to transit stops and adjacent development;
- Other Measures:

- Implement compressed work week schedule (e.g., 4 days/40 hours, 9 days/80 hours);
- Implement home-based telecommuting program.

During project-level supplemental review of future individual development projects, the measures will be evaluated for consistency with the Downtown Strategy 2040 and General Plan policies. All feasible and applicable measures will be required as part of project design or as conditions of approval.

### Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District’s 2011 CEQA Air Quality Guidelines. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The thresholds were challenged through a series of court challenges and were mostly upheld. BAAQMD updated the CEQA Air Quality Guidelines in 2017 to include the latest significance thresholds, which were used in this analysis and are summarized in Table 1. Impacts above the threshold are considered potentially significant.

**Table 1. BAAQMD CEQA Significance Thresholds**

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (Exhaust)	82	15
PM <sub>2.5</sub>	54 (Exhaust)	54	10
Local CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust (PM <sub>10</sub> /PM <sub>2.5</sub> )	Construction Dust Ordinance or other Best Management Practices	None	
<b>Health Risks and Hazards</b>	<b>Single Sources Within 1,000-foot Zone of Influence</b>	<b>Combined Sources (Cumulative from all sources within 1000-foot zone of influence)</b>	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental annual PM <sub>2.5</sub>	0.3 µg/m <sup>3</sup>	0.8 µg/m <sup>3</sup>	
Note: ROG = reactive organic gases, NO <sub>x</sub> = nitrogen oxides, PM <sub>10</sub> = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM <sub>2.5</sub> = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.			

Source: Bay Area Air Quality Management District, 2017

## AIR QUALITY IMPACTS AND MITIGATION MEASURES

### **Impact AIR-1: Conflict with or obstruct implementation of the applicable air quality plan?**

BAAQMD is the regional agency responsible for overseeing compliance with State and Federal laws, regulations, and programs within the San Francisco Bay Area Air Basin (SFBAAB). BAAQMD, with assistance from the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), prepares and implements specific plans to meet the applicable laws, regulations, and programs. The most recent and comprehensive of which is the *Bay Area 2017 Clean Air Plan*.<sup>9</sup> The primary goals of the Clean Air Plan are to attain air quality standards, reduce population exposure and protect public health, and reduce GHG emissions and protect the climate. The BAAQMD has also developed CEQA guidelines to assist lead agencies in evaluating the significance of air quality and GHG impacts. In formulating compliance strategies, BAAQMD relies on planned land uses established by local general plans. Land use planning affects vehicle travel, which, in turn, affects region-wide emissions of air pollutants and GHGs.

The 2017 Clean Air Plan, adopted by BAAQMD in April 2017, includes control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. Plans must show consistency with the control measures listed within the Clean Air Plan. At the project-level, there are no consistency measures or thresholds. The proposed project would not conflict with the latest Clean Air planning efforts since 1) the project is included in the adopted San José DTS 2040 Plan, 2) project would have construction and operational emissions below the BAAQMD thresholds (see Impact 2 below), 3) the project would be considered urban infill, 4) the project would be located near employment centers, 5) the project would be located near transit with regional connections.

### **Impact AIR-2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

The Bay Area is considered a non-attainment area for ground-level ozone and PM<sub>2.5</sub> under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM<sub>10</sub> under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM<sub>10</sub>, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> and apply to both construction period and operational period impacts.

### Project Showroom

The 3,000 to 4,000-sf showroom building would be constructed on the existing parking lot at 38 W. San Salvador Street. Site preparation activity would be required; however, the construction would require assembling of prefabricated components over a few weeks, and then interior work

---

<sup>9</sup> Bay Area Air Quality Management District (BAAQMD), 2017. *Final 2017 Clean Air Plan*.

would take a couple months. Construction activity involving diesel-powered equipment would be limited to site preparation and possibly some crane or forklift use and truck traffic when preassembled components are delivered. Interior work is not anticipated to include diesel equipment. The showroom facility would operate temporarily for a maximum period of 30 months. The construction and operational emissions of the showroom would be negligible in comparison to the main project and were therefore not modeled or quantified and are not discussed in the remainder of this report.

### Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CARB Emission FACTors 2021 (EMFAC2021) model was used to predict emissions from construction traffic, which includes worker travel, vendor trucks, and haul trucks.<sup>10</sup> The CalEEMod model output along with construction inputs are included in *Attachment 2* and EMFAC2021 vehicle emissions modeling outputs are included in *Attachment 3*.

#### CalEEMod Inputs

##### *Land Use Inputs*

For the proposed project, Tower A is expected to be constructed first; however, it has not been confirmed whether Tower B or Tower C would follow. Therefore, the project has two construction scenarios that have been proposed: one where the towers would be constructed in the order of Towers A, B, then C (Scenario ABC), and one in the order of Towers A, C, then B (Scenario ACB). Both construction scenarios would develop the same project land uses for each tower, the construction schedules would just switch for Towers B and C depending on the scenario. Modeling of project construction impacts were based on three CalEEMod modeling runs that each represented a project tower. The proposed project land uses were entered into CalEEMod as described in Table 2.

**Table 2. Construction Land Uses Entered into CalEEMod**

Project Land Uses	Size	Units	Square Feet	Acreage
<b>Tower A (2022 – 2024)</b>				
Apartments High Rise	137	Dwelling Units	224,556	0.45
Regional Shopping Center	3.25	1,000-sf	3,250	
Enclosed Parking with Elevator	87	Parking Spaces	55,644	
<b>Tower B (2024 – 2026)</b>				
Apartments High Rise	169	Dwelling Units	248,472	0.62
Regional Shopping Center	3.25	1,000-sf	3,250	
Enclosed Parking with Elevator	200	Parking Spaces	80,730	
<b>Tower C (2027-2029)</b>				
Apartments High Rise	168	Dwelling Units	247,748	1.07
Regional Shopping Center	3.50	1,000-sf	3,500	
Enclosed Parking with Elevator	105	Parking Spaces	64,398	

<sup>10</sup> See CARB’s EMFAC2021 Emissions Inventory at <https://arb.ca.gov/emfac/emissions-inventory>

### *Construction Inputs*

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic.

The CalEEMod model generates a default set of construction assumptions for “typical construction site scenarios”; however, these are not appropriate for a project like this that involves demolition, excavation, and extensive vertical construction on a relatively small site.<sup>11</sup> For this project, both construction build-out scenarios, including equipment list and schedule, were based on project-specific construction information provided by the project applicant.

The project construction equipment worksheets provided by the applicant included the schedule for each phase for both scenarios (included in *Attachment 2*), where Towers B and C would switch schedules depending on which tower would be construction first. Within each phase, the quantity of equipment to be used along with the average hours per day and total number of workdays were provided. Since different equipment would have different estimates of the working days per phase, the hours per day for each phase was computed by dividing the total number of hours that the equipment would be used by the total number of days in that phase. The construction schedule for both scenarios assumed that the earliest possible start date would be August 2022 and the project would be built out 6 days a week over a period of approximately 7 years or 1,857 construction workdays. The earliest year of full operation was assumed to be 2030.

### *Construction Traffic Emissions*

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the estimate of demolition material to be exported, soil material imported and/or exported to the site, and the estimate of cement and asphalt truck trips. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. The total trips for those were computed by multiplying the daily trip rate by the number of days in that phase. For both construction scenarios, the haul trips for demolition and grading were estimated from the provided demolition and grading volumes and assuming each truck could carry 10 tons per load. The number of concrete and asphalt total round haul trips for both construction scenarios were provided for the project and converted to total one-way trips, assuming two trips per delivery.

The latest version of the CalEEMod model is based on the older version of the CARB EMFAC2017 motor vehicle emission factor model. This model has been superseded by the EMFAC2021 model; however, CalEEMod has not been updated to include EMFAC2021. The construction traffic information was combined with EMFAC2021 motor vehicle emissions factors. EMFAC2021 provides aggregate emission rates in grams per mile for each vehicle type. The vehicle mix for this study was based on CalEEMod defaults, where worker trips are assumed to be

---

<sup>11</sup> SCAQMD. 2005. *Sample Construction Scenarios for Projects Less than Five Acres in Size*. February. Note that this is the supporting report used to develop CalEEMod default construction inputs (see Appendix E – Technical Source Documentation of the CalEEMod User’s Guide).



comprised of light-duty autos (EMFAC category LDA) and light duty trucks (EMFAC category LDT1 and LDT2). Vendor trips are comprised of delivery and large trucks (EMFAC category MHDT and HHDT) and haul trips, including cement trucks, are comprised of large trucks (EMFAC category HHDT). Travel distances are based on CalEEMod default lengths, which are 10.8 miles for worker travel, 7.3 miles for vendor trips and 20 miles for hauling (demolition material export and soil import/export). Since CalEEMod does not address cement or asphalt trucks, these were treated as vendor travel distances. Each trip was assumed to include an idle time of 5 minutes. Emissions associated with vehicle starts were also included. On-road emission rates from the years 2022-2029 for Santa Clara County were used. Table 3 provides the traffic inputs that were combined with the EMFAC2021 emission database to compute vehicle emissions.

**Table 3. Construction Traffic Data Used for EMFAC2021 Model Runs**

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker <sup>1</sup>	Total Vendor <sup>1</sup>	Total Haul <sup>2</sup>	
Vehicle mix <sup>1</sup>	50% LDA 25% LDT1 25% LDT2	50% MHDT 50% HHDT	100% HHDT	
Trip Length (miles)	10.8	7.3	20.0 (Demo/Soil) 7.3 (Cement/Asphalt)	CalEEMod default distance with 5-min truck idle time.
<b>Tower A (2022 – 2024)</b>				
Demolition	96	-	165	10,000-sf existing building and 600 tons of pavement demolition. CalEEMod default worker trips.
Site Preparation	40	-	-	CalEEMod default worker trips.
Grading	2,210	-	3,788	30,300-cy of soil export. CalEEMod default worker trips.
Trenching/Foundation	1,000	-	-	CalEEMod default worker trips.
Building Construction	19,311	3,765	4,000	2,000 cement truck round trips. CalEEMod default worker and vendor trips.
Architectural Coating	3,575	-	-	CalEEMod default worker trips.
Paving	120	-	12	48-cy asphalt hauling. CalEEMod default worker trips.
<b>Tower B (2024 – 2026)</b>				
Demolition	96	-	120	600 tons of pavement demolition. CalEEMod default worker trips.
Site Preparation	40	-	-	CalEEMod default worker trips.
Grading	845	-	3,788	30,300-cy of soil export. CalEEMod default worker trips.
Trenching/Foundation	1,100	-	-	CalEEMod default worker trips.
Building Construction	27,161	5,536	4,000	2,000 cement truck round trips. CalEEMod default worker and vendor trips.
Architectural Coating	4,898	-	-	CalEEMod default worker trips.
Paving	140	-	12	48-cy asphalt hauling. CalEEMod default worker trips.

CalEEMod Run/Land Uses and Construction Phase	Trips by Trip Type			Notes
	Total Worker <sup>1</sup>	Total Vendor <sup>1</sup>	Total Haul <sup>2</sup>	
<b>Tower C (2027 – 2029)</b>				
Demolition	96	-	171	520 ton of existing building and 600 tons of pavement demolition. CalEEMod default worker trips.
Site Preparation	40	-	-	CalEEMod default worker trips.
Grading	845	-	3,788	30,300-cy of soil export. CalEEMod default worker trips.
Trenching/Foundation	1,100	-	-	CalEEMod default worker trips.
Building Construction	25,777	5,017	4,000	2,000 cement truck round trips. CalEEMod default worker and vendor trips.
Architectural Coating	4,740	-	-	CalEEMod default worker trips.
Paving	140	-	12	48-cy asphalt hauling. CalEEMod default worker trips.
Notes: <sup>1</sup> Based on 2022-2029 EMFAC2021 light-duty vehicle fleet mix for Santa Clara County.				
<sup>2</sup> Includes demolition and grading trips estimated by CalEEMod based on amount of material to be removed. Cement and trips estimated based on data provided by the applicant.				

### Summary of Computed Construction Period Emissions

Average daily emissions for both construction scenarios were annualized for each year of construction by dividing the annual construction emissions by the number of active workdays during that year. Table 4 shows the annualized average daily construction emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub> exhaust, and PM<sub>2.5</sub> exhaust during construction for both scenarios of the project. As indicated in Table 4, predicted annualized project construction emissions for both construction scenarios would not exceed the BAAQMD significance thresholds during any year of construction.

**Table 4. Construction Period Emissions**

Year	ROG	NOx	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust
Scenario Construct A then B then C				
<i>Construction Emissions Per Year (Tons)</i>				
2022 (Tower A)	0.02	0.23	0.01	0.01
2023 (Tower A)	0.10	0.86	0.04	0.03
2024 (Towers A and B)	1.75	1.23	0.06	0.05
2025 (Tower B)	0.11	0.89	0.04	0.03
2026 (Tower B)	1.89	0.84	0.04	0.03
2027 (Tower C)	0.08	0.60	0.03	0.02
2028 (Tower C)	0.64	0.94	0.05	0.04
2029 (Tower C)	1.29	0.41	0.02	0.02
<i>Annualized Daily Construction Emissions (pounds/day)</i>				
2022 (131 construction workdays)	0.37	3.51	0.18	0.12
2023 (313 construction workdays)	0.63	5.47	0.27	0.21
2024 (203 construction workdays)	17.31	12.12	0.58	0.49
2025 (313 construction workdays)	0.67	5.69	0.28	0.21
2026 (235 construction workdays)	16.04	7.15	0.33	0.27
2027 (224 construction workdays)	0.68	5.31	0.25	0.19
2028 (314 construction workdays)	4.09	5.98	0.30	0.24
2029 (123 construction workdays)	20.99	6.62	0.31	0.25
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
<b>Exceed Threshold?</b>	No	No	No	No
Scenario Construct A then C then B				
<i>Construction Emissions Per Year (Tons)</i>				
2022 (Tower A)	0.02	0.23	0.01	0.01
2023 (Tower A)	0.10	0.86	0.04	0.03
2024 (Towers A and C)	1.76	1.24	0.06	0.05
2025 (Tower C)	0.10	0.88	0.04	0.03
2026 (Tower C)	1.88	0.84	0.04	0.03
2027 (Tower B)	0.08	0.60	0.03	0.02
2028 (Tower B)	0.65	0.94	0.05	0.04
2029 (Tower B)	1.29	0.41	0.02	0.02
<i>Annualized Daily Construction Emissions (pounds/day)</i>				
2022 (131 construction workdays)	0.37	3.51	0.18	0.12
2023 (313 construction workdays)	0.63	5.47	0.27	0.21
2024 (203 construction workdays)	17.33	12.23	0.59	0.50
2025 (313 construction workdays)	0.66	5.59	0.27	0.21
2026 (235 construction workdays)	15.97	7.13	0.33	0.27
2027 (224 construction workdays)	0.68	5.33	0.25	0.19
2028 (314 construction workdays)	4.11	6.00	0.30	0.24
2029 (123 construction workdays)	21.08	6.64	0.31	0.25
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs./day	54 lbs./day	82 lbs./day	54 lbs./day
<b>Exceed Threshold?</b>	No	No	No	No

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM<sub>10</sub> and PM<sub>2.5</sub>. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines

consider these impacts to be less than significant if best management practices are implemented to reduce these emissions and the project is less than screening criteria. The DTS requires control measures to implement the standard BAAQMD CEQA Air Quality Guidelines best management practices to control dust and exhaust during construction. However, enhanced measures to control dust are required for this project's community health risk impact. *Mitigation Measure AQ-1 would implement BAAQMD's standard and enhanced best management practices.*

**Mitigation Measure AQ-1: Implement BAAQMD-Recommended Standard and Enhanced Measures to Control Particulate Matter Emissions during Construction.**

Measures to reduce DPM and fugitive dust (i.e., PM<sub>2.5</sub>) emissions from construction are recommended to and ensure that health impacts to nearby sensitive receptors are minimized. During any construction period ground disturbance, the applicant shall ensure that the project contractor implements both basic and additional measures to control dust and exhaust. Implementation of the dust control measures recommended by BAAQMD and listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following enhanced best management practices:

1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
7. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
8. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
9. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.

10. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
11. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
12. Avoid tracking of visible soil material on to public roadways by employing the following measures if necessary: (1) Site accesses to a distance of 100 feet from public paved roads shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel and (2) washing truck tires and construction equipment of prior to leaving the site.
13. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
14. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes. Clear signage shall be provided for construction workers at all access points.

#### *Effectiveness of Mitigation Measure AQ-1*

*Mitigation Measure AQ-1* represents standard and enhanced mitigation measures that would achieve greater than an 80 percent reduction in on-site fugitive PM<sub>2.5</sub> emissions. These measures are consistent with recommendations in the BAAMQD CEQA Guidance for providing “best management practices” to control construction emissions.

#### **Operational Period Emissions**

The impact of operational traffic related emissions was addressed in the DTS DEIR and found to be significant and unavoidable for the entire plan. Traffic-related and stationary-related emissions from the project were computed in this assessment. Operational air emissions from the project would be generated primarily from autos driven by future residents, employees, and customers, and periodic testing of the emergency generators. Evaporative emissions from architectural coatings and maintenance products (classified as consumer products) are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

#### CalEEMod Inputs

##### *Land Uses*

All project land uses were combined and input to CalEEMod for the operational period modeling in the year 2030. Inputs are summarized in Table 5.

**Table 5. Operational Land Uses Entered into CalEEMod**

Project Land Uses	Size	Units	Square Feet	Acreage
Apartments High Rise	474	Dwelling Units	720,776	2.14
Regional Shopping Center	10	1,000-sf	10,000	
Enclosed Parking with Elevator	392	Parking Spaces	200,772	
Standby Diesel Generator (3)	200	kW	Note: 270 HP	
Standby Fire Pumps (3)	125	kW	Note: 170 HP	

*Model Year*

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. The earliest full year of operation would be 2030 if construction begins in 2022. Emissions associated with build-out later than 2030 would be lower.

*Traffic Information*

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific daily trip generation rate provided by the traffic consultant was entered into the model.<sup>12</sup> The proposed project would produce 1,750 new daily trips after applying a *Housing & Retail Reduction* and *Location-Based Reduction*. The daily trip generation was calculated using the size of the project and the adjusted total vehicle trips. The Saturday and Sunday trip rates were adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

*EMFAC2021 Adjustment*

The vehicle emission factors and fleet mix used in CalEEMod are based on EMFAC2017, which is an older CARB emission inventory for on road and off road mobile sources. Since the release of CalEEMod Version 2020.4.0, new emission factors have been produced by CARB. EMFAC2021 became available for use in January 2021. It includes the latest data on California's car and truck fleets and travel activity. The CalEEMod vehicle emission factors and fleet mix were updated with the emission rates and fleet mix from EMFAC2021, which were adjusted with the CARB EMFAC off-model adjustment factors. On road emission rates from 2030 Santa Clara County were used (See *Attachment 3*). More details about the updates in emissions calculation methodologies and data are available in the EMFAC2021 Technical Support Document.<sup>13</sup>

*Energy*

CalEEMod defaults for energy use were used, which include the 2019 Title 24 Building Standards. GHG emissions modeling includes those indirect emissions from electricity consumption. The

<sup>12</sup> Email correspondence with Natalie Noyes, AICP, Senior Project Manager, David J. Powers & Associates, Inc., March 30, 2022. Attachment: *Volumes for DJP 2022-03-29.xlsx*.

<sup>13</sup> See CARB 2021: <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msci-modeling-tools-emfac>

electricity produced emission rate was modified in CalEEMod. An emission factor of 178 pounds of CO<sub>2</sub> per megawatt of electricity produced was entered into CalEEMod, which is based on San Jose Clean Energy's 2020 emissions rate.<sup>14</sup> It should be noted that per Climate Smart San Jose and San Jose's Greenhouse Gas Reduction Strategy, SJCE's goal is provision of 100-percent carbon-free electricity prior to 2030.<sup>15</sup>

The City of San José passed an ordinance in December 2020 that prohibits the use of natural gas infrastructure in new residential, office, and most retail-type buildings.<sup>16</sup> This ordinance applies to any new construction starting August 1, 2021. Natural gas use for the residential land use was set to zero and assigned to electricity use in CalEEMod. Natural gas use was assumed for the retail use as a restaurant (which is allowed to use natural gas) could occupy the space.

### *Wood-Burning Devices*

CalEEMod default inputs assume new residential construction would include woodburning fireplaces and stoves. The project would not include wood-burning devices, as these devices are prohibited by BAAQMD Regulation 6, Rule 3.<sup>17</sup> Therefore, the number of woodstoves and woodburning fireplaces in CalEEMod were set to zero.

### *Project Stationary Sources*

The project proposes to include three stand-by emergency diesel generators and three stand-by emergency fire pumps. Each tower would have a generator and fire pump which would be located on the second floors. Each generator would be 200-kilowatts (kW) powered by a 270 horsepower (HP) diesel engine and each fire pump would be 125-kW powered by a 170-HP diesel engine. The generators and fire pumps would be tested periodically and power the buildings in the event of a power failure. For modeling purposes, it was assumed that the generators and fire pumps would be operated primarily for testing and maintenance purposes. CARB and BAAQMD requirements limit these engine operations to 50 hours each per year of non-emergency operation. During testing periods, the engines would typically be run for less than one hour. The engines would be required to meet CARB and EPA emission standards and consume commercially available California low-sulfur diesel fuel. Additionally, the generator would have to meet BAAQMD BACT requirements for IC Engine-Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump sources. The generators and fire pumps' emissions were modeled using CalEEMod.

### *Other Inputs*

Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the project. Water/wastewater use was changed to 100%

---

<sup>14</sup> San Jose Clean Energy Website, Standard Greensource service. Web: <https://sanjosecleanenergy.org/commercial-rates/>

<sup>15</sup> City of San José, 2020. "2030 Greenhouse Gas Reduction Strategy", August. Web: <https://www.sanjoseca.gov/home/showpublisheddocument/63667/637347412207870000>

<sup>16</sup> City of San José, 2020. "Expand Natural Gas Ban", December. Web: <https://www.sanjoseca.gov/Home/Components/News/News/2210/4699>

<sup>17</sup> Bay Area Air Quality Management District, [https://www.baaqmd.gov/~/\\_/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120\\_r0603\\_final-pdf.pdf?la=en](https://www.baaqmd.gov/~/_/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120_r0603_final-pdf.pdf?la=en)

aerobic conditions to represent wastewater treatment plant conditions. The project site would not send wastewater to septic tanks or facultative lagoons.

*Existing Uses*

The sites currently consist of variety of uses, including several commercial uses (Towers A and B sites), residential uses (Tower C site), and associated surface parking. These uses produce low operational and traffic emissions that would not considerably offset emissions from the proposed project. In addition, no project-specific trip generation rates for the existing land uses were available for this assessment. Therefore, the emissions from the existing uses were not considered in this analysis.

Summary of Computed Operational Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimating assuming 365 days of operation. Table 6 shows average daily construction emissions of ROG, NO<sub>x</sub>, total PM<sub>10</sub>, and total PM<sub>2.5</sub> during operation of the project. The operational period emissions would not exceed the BAAQMD significance thresholds.

**Table 6. Operational Period Emissions**

<b>Scenario</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
2030 Annual Project Operational Emissions ( <i>tons/year</i> )	4.36	0.70	1.32	0.36
<i>BAAQMD Thresholds (tons /year)</i>	<i>10 tons</i>	<i>10 tons</i>	<i>15 tons</i>	<i>10 tons</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
2030 Daily Project Operational Emissions ( <i>pounds/day</i> ) <sup>1</sup>	23.87	3.83	7.26	1.96
<i>BAAQMD Thresholds (pounds/day)</i>	<i>54 lbs.</i>	<i>54 lbs.</i>	<i>82 lbs.</i>	<i>54 lbs.</i>
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Notes: <sup>1</sup>Assumes 365-day operation.

**Impact AIR-3: Expose sensitive receptors to substantial pollutant concentrations?**

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. This project would introduce new sources of TACs during construction (i.e., on-site construction and truck hauling emissions) and operation (i.e., stationary and mobile sources).

Project construction activity would generate dust and equipment exhaust that would affect nearby sensitive receptors. The project would also include the installation of stand-by generators and fire pumps powered by diesel engines and would generate some traffic consisting of mostly light-duty vehicles, which would produce TAC and air pollutant emissions.

Project impacts to existing sensitive receptors were addressed for temporary construction activities and long-term operational conditions. There are also several sources of existing TACs and localized air pollutants in the vicinity of the project. The impact of the existing sources of TAC



was also assessed in terms of the cumulative risk which includes the project contribution; as well as the risk on the new sensitive receptors introduced by the project.

### **Community Risk Methodology for Construction and Operation**

Community risk impacts were addressed by predicting increased cancer risk, the increase in annual PM<sub>2.5</sub> concentrations and computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling, project stationary sources, and increased traffic from the project. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per BAAQMD guidance,<sup>18</sup> with the sensitive receptors being exposed to both project construction and operation emissions during this timeframe.

The project increased cancer risk is computed by summing the project construction cancer risk and operation cancer risk contributions. Unlike, the increased maximum cancer risk, the annual PM<sub>2.5</sub> concentration and HI values are not additive but based on the annual maximum values for the entirety of the project. The project maximally exposed individual (MEI) is identified as the sensitive receptor that is most impacted by the project's construction and operation.

The methodology for computing community risks impacts is contained in *Attachment 1*. This involved the calculation of TAC and PM<sub>2.5</sub> emissions, dispersion modeling of these emissions, and computations of cancer risk and non-cancer health effects.

### **Modeled Sensitive Receptors**

Receptors for this assessment included locations where sensitive populations would be present for extended periods of time (i.e., chronic exposures). This includes the nearby existing and future residences surrounding the site, as shown in Figure 1. Residential receptors are assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to project emissions. Community risks were also computed for infants and children at the YWCA Childcare Center (ages 0-6) and students at the Notre Dame High School (ages 14-18).

### **Community Risks from Project Construction**

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issue associated with construction emissions are cancer risk and exposure to PM<sub>2.5</sub>. Diesel exhaust (i.e., DPM) poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and PM<sub>2.5</sub>.<sup>19</sup> This assessment included dispersion modeling to predict the offsite and onsite

---

<sup>18</sup> BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

<sup>19</sup> DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

concentrations resulting from project construction, so that increased cancer risks and non-cancer health effects could be evaluated.

### Construction Emissions

The CalEEMod and EMFAC2021 models provided total annual PM<sub>10</sub> exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. Total DPM emissions from all construction phases for both scenarios are reported in Table 7 and are on an annual basis. The annual on-road emissions result from haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site to represent localized vehicle emissions from construction. Fugitive PM<sub>2.5</sub> dust emissions were computed by CalEEMod for the overall construction period for both scenarios and are included as part of the total PM<sub>2.5</sub> emissions reported in Table 7.

**Table 7. Annual Unmitigated Construction Emissions of DPM and Fugitive PM<sub>2.5</sub> (tons)**

Contaminant	2022	2023	2024	2025	2026	2027	2028	2029
Scenario A then B then C								
PM <sub>10</sub> Exhaust (DPM)	0.007	0.031	0.047	0.031	0.030	0.020	0.035	0.014
PM <sub>2.5</sub> Fugitive	0.017	0.007	0.024	0.001	0.001	0.024	0.001	0.0004
Scenario A then C then B								
PM <sub>10</sub> Exhaust (DPM)	0.007	0.031	0.048	0.031	0.030	0.020	0.035	0.014
PM <sub>2.5</sub> Fugitive	0.017	0.007	0.025	0.001	0.001	0.024	0.001	0.0004

### Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and PM<sub>2.5</sub> concentrations at sensitive receptors (i.e., residences and schools) in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.<sup>20,21</sup> Emission sources for the construction site were grouped into two categories for each construction scenario: exhaust emissions of DPM and fugitive PM<sub>2.5</sub> dust emissions.

### *Construction Sources*

Combustion equipment DPM exhaust emissions were modeled as a series of point sources with a nine-foot release height (replicating construction equipment exhaust stack height) placed at 20 feet (6 meter) intervals throughout the construction sites for each construction scenario. This resulted in 49 individual point sources for Tower A, 70 point sources for Tower B, and 56 point sources for Tower C being used to represent mobile equipment DPM exhaust emissions in the construction

<sup>20</sup> BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May. Web: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en>

<sup>21</sup> BAAQMD, 2020, *BAAQMD Health Risk Assessment Modeling Protocol*. December. Web: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en)

areas for each construction scenario, with DPM emissions occurring throughout the project construction sites. In addition, the following stack parameters were used: a vertical release, a stack diameter of 2.5 inches, an exhaust temperature of 918°F, and an exit velocity of 309 feet per second. Since these are point sources, plume rise is calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources throughout the site for each construction scenario. The locations of the point sources used for the modeling are identified in Figure 1.

For modeling fugitive PM<sub>2.5</sub> emissions, a near-ground level release height of 7 feet (2 meters) was used for the area sources for each construction scenario. Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the construction sites. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources for each construction scenario.

#### *AERMOD Inputs and Meteorological Data*

Since there are a number of tall buildings adjacent to or in close proximity to the project construction site, the effects of building downwash on the construction equipment exhaust plumes were included in the modeling analysis. The locations of the point sources used for the modeling and the buildings that were evaluated for potential downwash effects are identified in Figure 1.

The modeling used a five-year meteorological data set (2013-2017) from the San José Airport prepared for use with the AERMOD model by the BAAQMD. Construction emissions were modeled as occurring between 7:00 a.m. to 7:00 p.m. Monday through Saturday per the project applicant's construction schedule for each construction scenario. Annual DPM and PM<sub>2.5</sub> concentrations from construction activities during the 2022-2029 period were calculated using the model. DPM and PM<sub>2.5</sub> concentrations were calculated at nearby sensitive receptor locations. Receptor heights of 5 feet (1.5 meters), 15 feet (4.5 meters), 25 feet (7.6 meters), 32 feet (9.8 meters), 35 feet (10.7 meters), and 43 feet (13.1 meters), were used to represent the breathing heights of residents on the first and second residential levels in nearby mixed-use commercial/residential buildings, apartment buildings, and single-family homes, respectively.<sup>22</sup> Receptor heights of 3 feet (1 meter) and 5 feet (1.5 meters) were used to represent the breathing height of infants and children at the childcare center and older children at the high school.

#### Summary of Construction Community Risk Impacts

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the OEHHA guidance for age sensitivity factors and exposure parameters as

---

<sup>22</sup> Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May. Web: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en>

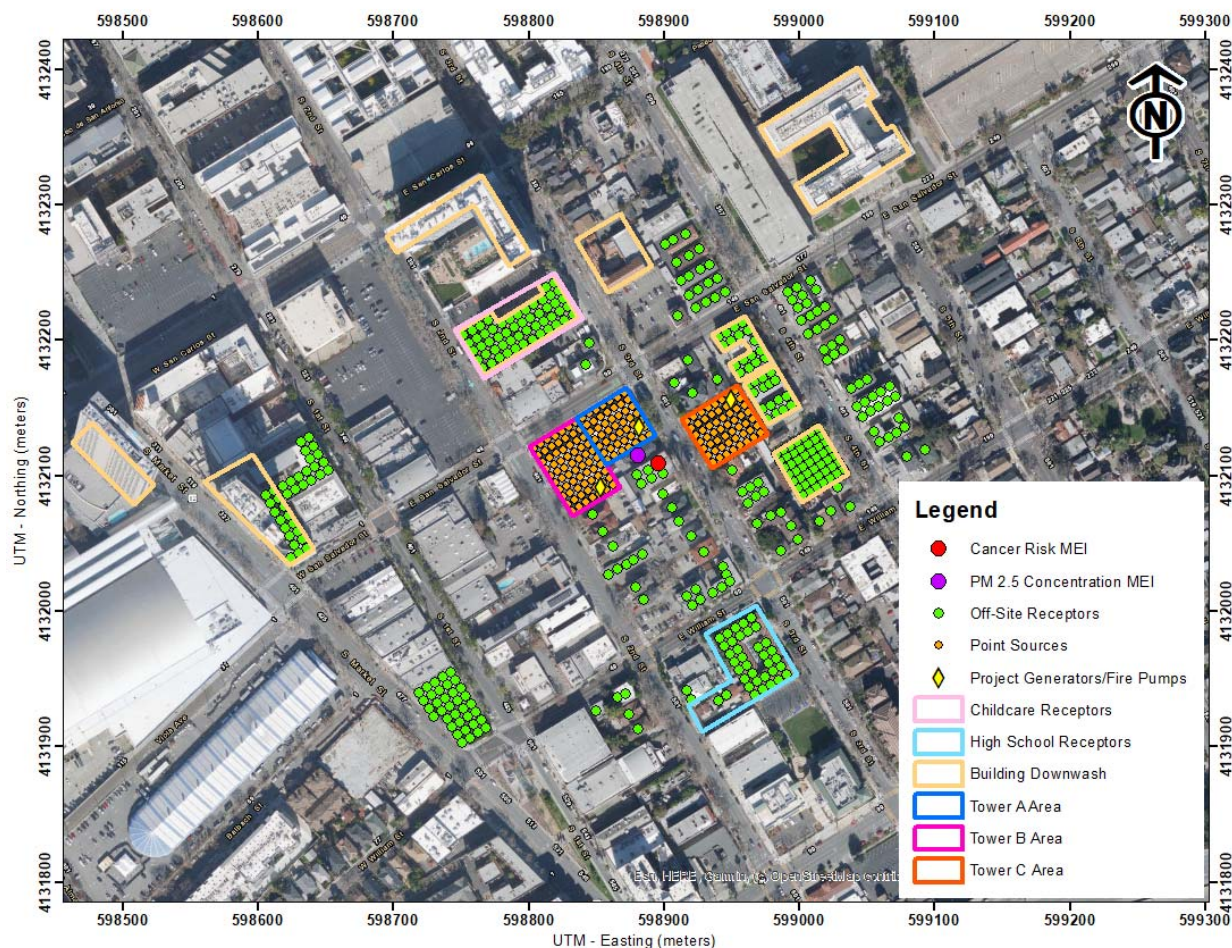
recommended by BAAQMD, as described in *Attachment 1*. Non-cancer health hazards and maximum PM<sub>2.5</sub> concentrations were also calculated and identified. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period. Infants and children at the childcare center were assumed to be between the ages of 0 and 6 years old and students at the high school were assumed to be between the ages of 14 and 18 years old. The infant (ages 0 through 2 years old) and child (ages 2 through 16 years old) cancer risk parameters were used to calculate the increased cancer risk for the childcare students and the child cancer risk parameters were used to calculate the increased cancer risk for the high school students.

The maximum modeled annual PM<sub>2.5</sub> concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI values was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation reference exposure level of 5 µg/m<sup>3</sup>.

The maximum modeled annual DPM and PM<sub>2.5</sub> concentrations were identified at nearby sensitive receptors to find the MEI. Results of this assessment indicated that the construction MEIs were located at two different receptor locations, which were the same for both construction scenarios. The cancer risk MEI was located on the second level (15 feet above ground) of a multi-family residence to the south of Tower A. The PM<sub>2.5</sub> concentration MEI was located on the first level (5 feet above ground) of the adjacent residence to the south of Tower A. The locations of the construction MEIs and nearby sensitive receptors are shown in Figure 1. Table 8 lists the community risks from construction at the location of the residential MEIs. *Attachment 4* to this report includes the emission calculations used for the construction modeling and the cancer risk calculations for both construction scenarios.

Additionally, modeling was conducted to predict the cancer risks, non-cancer health hazards, and maximum PM<sub>2.5</sub> concentrations associated with construction activities at the nearby childcare center and high school for both construction scenarios. The maximum cancer risk at the school receptors occurs when construction exposure begins in 2023. The maximum increased cancer risks were adjusted using infant and child exposure parameters at the childcare center and high school. Project construction health risks at the most impacted school receptor are shown in Table 9.

**Figure 1. Locations of Project Construction Sites, Modeled DPM Point Sources, Project Stationary Sources, Off-Site Sensitive Receptors, and Maximum TAC Location (MEIs)**



### Community Risks from Project Operation – Traffic and Generators

Operation of the project would have long-term emissions from mobile sources (i.e., traffic) and stationary sources (i.e., generators and fire pumps). While these emissions would not be as intensive at or near the site as construction activity, they would contribute to long-term effects to sensitive receptors.

#### Project Operational Traffic

Diesel powered vehicles are the primary concern with local traffic-generated TAC impacts. Per BAAQMD recommended risks and methodology, a road with less than 10,000 total vehicle per day is considered a low-impact source of TACs.<sup>23</sup> This project would generate 1,750 daily trips<sup>24</sup>

<sup>23</sup> BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May. Web: <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en>

<sup>24</sup> Email correspondence with Natalie Noyes, AICP, Senior Project Manager, David J. Powers & Associates, Inc., March 30, 2022. Attachment: *Volumes for DJP 2022-03-29.xlsx*.

dispersed on the roadway system with a majority of the trips being from light-duty vehicles (i.e., passenger automobiles), which is a fraction of 10,000 daily vehicles. In addition, projects with the potential to cause or contribute to increased cancer risk from traffic include those that have attract high numbers of diesel-powered on road trucks or use off-road diesel equipment on site, such as a warehouse distribution center, a quarry, or a manufacturing facility, may potentially expose existing or future planned receptors to substantial cancer risk levels and/or health hazards. This is not a project of concern for non-BAAQMD permitted mobile sources. Therefore, emissions from project traffic are considered negligible and not included within this analysis.

### Project Operational Stand-By Diesel Generators and Fire Pumps

The project proposes to include three stand-by emergency diesel generators and three stand-by emergency fire pumps. Each tower would have a generator and fire pump which would be located on the second floors. Each generator would be 200-kW powered by a 270-HP diesel engine and each fire pump would be 125-kW powered by a 170-HP diesel engine. The locations of the modeled generators are shown in Figure 1.

Operation of a diesel generator and fire pump would be a source of TAC emissions. The generators and fire pumps would be operated for testing and maintenance purposes, with a maximum of 50 hours per year of non-emergency operation under normal conditions. During testing periods, the engines would typically be run for less than one hour under light engine loads. The engines would be required to meet EPA emission standards and consume commercially available low sulfur diesel fuel. Additionally, the engines would have to meet BAAQMD BACT requirements for IC Engine-Compression Ignition: Stationary Emergency, non-Agricultural, non-direct drive fire pump sources. The emissions from the operation of the generators and fire pumps were calculated using the CalEEMod model.

This diesel engines would be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) and require permits from the BAAQMD, since it will be equipped with an engine larger than 50-HP. As part of the BAAQMD permit requirements for toxics screening analysis, the engine emissions will have to meet Best Available Control Technology for Toxics (BACT) and pass the toxic risk screening level of less than ten in a million. The risk assessment would be prepared by BAAQMD. Depending on results, BAAQMD would set limits for DPM emissions (e.g., more restricted engine operation periods). Sources of air pollutant emissions complying with all applicable BAAQMD regulations generally will not be considered to have a significant air quality community risk impact.

### *Dispersion Modeling*

To estimate potential increased cancer risks and PM<sub>2.5</sub> impacts from operation of the emergency generators and fire pumps, the U.S. EPA AERMOD dispersion model was used to calculate the maximum annual DPM concentration at off-site sensitive receptors (i.e., nearby residences and schools). Emissions of DPM were based on PM<sub>10</sub> exhaust emissions predicted by CalEEMod for operation of the project stationary sources. The same receptors, breathing heights, and BAAQMD San José International Airport meteorological data used in the construction dispersion modeling were used for the stationary source modeling. Stack parameters (exhaust flow rate, exhaust gas

temperature) for modeling the generator was based on BAAQMD default parameters for emergency generators<sup>25</sup> except for the stack height which was placed on the top of the second floor next to the corresponding generator room of each project tower. Annual average DPM and PM<sub>2.5</sub> concentrations were modeled assuming that generator testing could occur at any time of the day (24 hours per day, 365 days per year).

#### *Computed Risks and Hazards from Project Stationary Sources*

Increased cancer risks from use of the generators were calculated using the modeled maximum annual DPM concentrations and BAAQMD recommended risk assessment methods and parameters (*Attachment 1*). The PM<sub>2.5</sub> concentration and non-cancerous (i.e., Hazard Index) health risk impacts were also calculated. Since Tower A's generator and fire pump could potentially be operational by 2024 (2 years after start of construction), an exposure duration of 28 years at residences (2024-2051) was used to calculate the increased cancer risk from the project stationary sources at the residential MEIs. Exposure durations of 4 years and 2 years were also used to calculate the increased cancer risk from the project stationary sources at the childcare center and high school receptors, respectively. Table 8 lists the community risks from the project diesel generators and fire pumps at the locations of residential MEIs, and at the most impacted school receptor in Table 9. The emissions and health risk calculations for the proposed project stationary sources are included in *Attachment 4*.

#### **Summary of Project-Related Community Risks at the Off-Site Project MEIs**

The cumulative risk impacts from a project are the combination of construction and operation sources. These sources include on-site construction activity and project generators and fire pumps. The project impact is computed by adding the construction cancer risk for an infant/child to the increased cancer risk for the project operational conditions for the stationary sources at the MEIs over a 30-year period. The project MEI is identified as the sensitive receptor that is most impacted by the project's construction and operation.

For this project under both construction scenarios, the sensitive receptors identified in Figure 1 as the construction MEIs for increased cancer risk and PM<sub>2.5</sub> construction are also the project MEIs for both construction and operation. The unmitigated cancer risk MEI would be exposed to 2 year of construction cancer risks, 6 years of construction and operation, and 22 years of operation emissions. Operation includes stand-by generators and fire pumps operation. The cancer risks from construction and operation of the project were summed together. Unlike, the increased maximum cancer risk, the annual PM<sub>2.5</sub> concentration and HI risks are not additive but based on an annual maximum risk for the entirety of the project.

Project risk impacts for both construction scenarios at the residential project MEIs are shown in Table 8. The unmitigated maximum cancer risks and annual PM<sub>2.5</sub> concentration from construction activities at the residential project MEI locations would exceed the single-source significance thresholds. However, with the incorporation of *Mitigation Measure AQ-1 and AQ-2*, the mitigated cancer risks and annual PM<sub>2.5</sub> concentration would no longer exceed the BAAQMD single-source

---

<sup>25</sup> The San Francisco Community Risk Reduction Plan: Technical Support Document, BAAQMD, San Francisco Dept. of Public Health, and San Francisco Planning Dept., December 2012

significance thresholds. The unmitigated annual non-cancer hazards at the MEIs from project construction and operation activities would be below the single-source significance thresholds.

**Table 8. Construction & Operation Risk Impacts at the Off-Site Residential Receptors**

Source	Cancer Risk** (per million)	Annual PM <sub>2.5</sub> ** (µg/m <sup>3</sup> )	Hazard Index
Most Affected Residential Receptor			
Scenario A then B then C			
Project Construction (Years 0-8)	Unmitigated	<b>73.96 (infant)</b>	<b>0.52</b>
	Mitigated*	7.13 (infant)	0.11
Project Stationary Sources, three 200-kW, 270-HP Generators and three 125-kW, 170-HP Fire Pumps (Years 3-30)		0.36 (child)	<0.01
Total/Maximum Project Impact (Years 0-30)	Unmitigated	<b>74.32 (infant)</b>	<b>0.52</b>
	Mitigated*	7.49 (infant)	0.11
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>
<i>Exceed Threshold?</i>			
	Unmitigated	<b>Yes</b>	<b>Yes</b>
	Mitigated*	<b>No</b>	<b>No</b>
Scenario A then C then B			
Project Construction (Years 0-8)	Unmitigated	<b>72.62 (infant)</b>	<b>0.52</b>
	Mitigated*	6.96 (infant)	0.11
Project Stationary Sources, three 200-kW, 270-HP Generators and three 125-kW, 170-HP Fire Pumps (Years 3-30)		0.36 (child)	<0.01
Total/Maximum Project Impact (Years 0-30)	Unmitigated	<b>72.98 (infant)</b>	<b>0.52</b>
	Mitigated*	7.32 (infant)	0.11
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>
<i>Exceed Threshold?</i>			
	Unmitigated	<b>Yes</b>	<b>Yes</b>
	Mitigated*	<b>No</b>	<b>No</b>

\* Construction equipment with Tier 4 final engines and enhanced BMPs as Mitigation Measures.

\*\* Maximum cancer risk and maximum PM<sub>2.5</sub> concentration occur at different levels and receptors.

Project risk impacts for both construction scenarios at the most affected school receptor, which was at the childcare center, are shown in Table 9. The unmitigated maximum cancer risks from construction activities at the maximum childcare receptor location would exceed the single-source significance threshold. However, with the incorporation of *Mitigation Measure AQ-1 and AQ-2*, the mitigated cancer risks would no longer exceed the BAAQMD single-source significance threshold. The unmitigated annual PM<sub>2.5</sub> concentration and non-cancer hazards at the maximum childcare receptor from project construction and operation activities would be below the single-source significance thresholds.



**Table 9. Construction & Operation Risk Impacts at the Off-Site School Receptors**

Source	Cancer Risk (per million)	Annual PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Hazard Index
Most Affected School Receptor – YWCA Childcare Center			
Scenario A then B then C			
Project Construction (Years 0-6)	Unmitigated	<b>20.38 (infant)</b>	0.06
	Mitigated*	2.02 (infant)	0.01
Project Stationary Sources, three 200-kW, 270-HP Generators and three 125-kW, 170-HP Fire Pumps (Years 3-6)		0.10 (child)	<0.01
Total/Maximum Project Impact (Years 0-6)	Unmitigated	<b>20.48 (infant)</b>	0.06
	Mitigated*	2.12 (infant)	0.01
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>
<i>Exceed Threshold?</i>			
	Unmitigated	<b>Yes</b>	<i>No</i>
	Mitigated*	<i>No</i>	<i>No</i>
Scenario A then C then B			
Project Construction (Years 0-6)	Unmitigated	<b>19.38 (infant)</b>	0.05
	Mitigated*	1.88 (infant)	0.01
Project Stationary Sources, three 200-kW, 270-HP Generators and three 125-kW, 170-HP Fire Pumps (Years 3-6)		0.10 (child)	<0.01
Total/Maximum Project Impact (Years 0-6)	Unmitigated	<b>19.48 (infant)</b>	0.05
	Mitigated*	1.98 (infant)	0.01
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>
<i>Exceed Threshold?</i>			
	Unmitigated	<b>Yes</b>	<i>No</i>
	Mitigated*	<i>No</i>	<i>No</i>

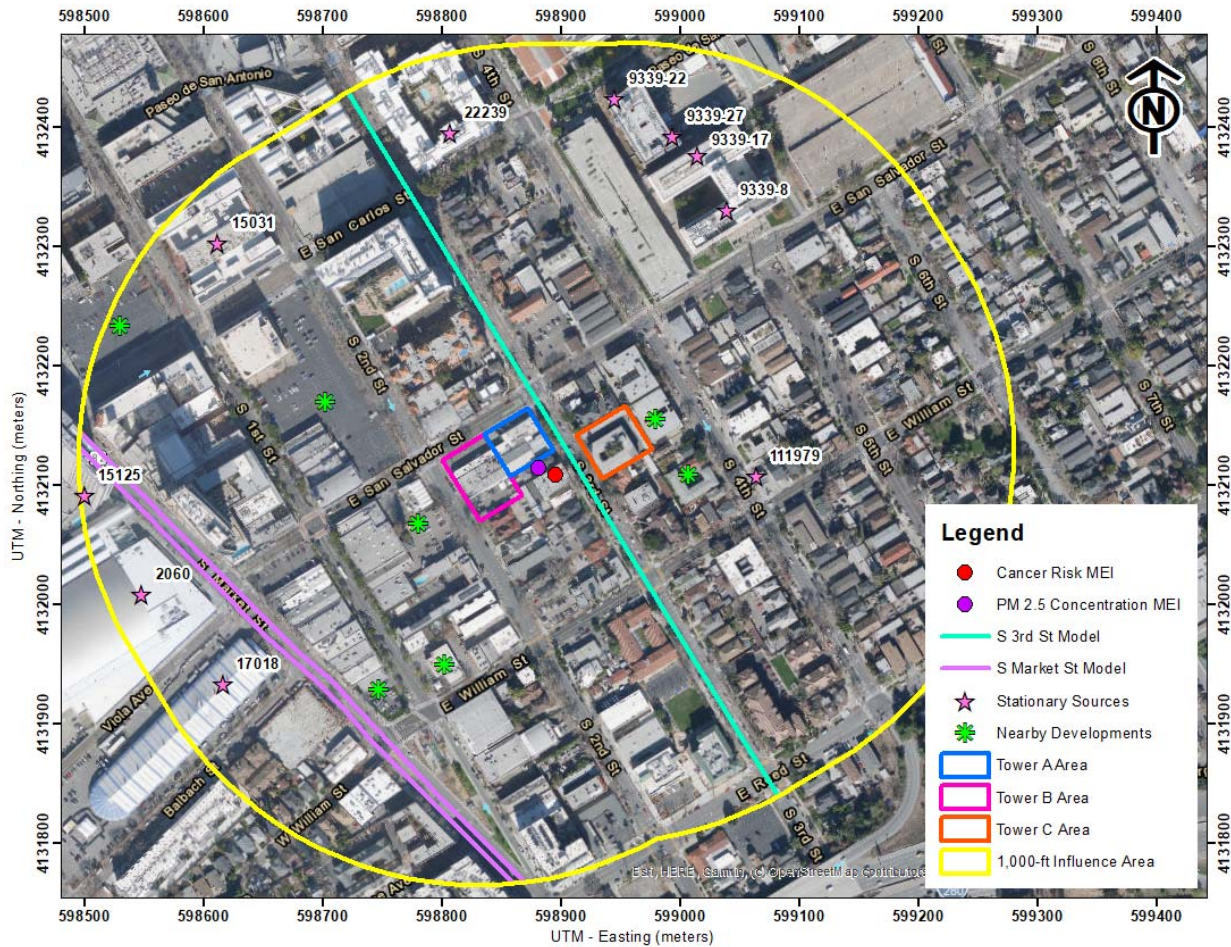
\* Construction equipment with Tier 4 final engines and enhanced BMPs as Mitigation Measures.

**Cumulative Community Risks of all TAC Sources at the Off-Site Project MEIs**

Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within 1,000 feet of a project site (i.e., influence area). These sources include rail lines, freeways or highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of the project area based on provided traffic information indicated that traffic on S. 3<sup>rd</sup> Street and S. Market Street would exceed 10,000 vehicles per day. Other nearby streets would have less than 10,000 vehicles per day. A review of BAAQMD’s stationary source map website identified 10 stationary sources with the potential to affect the project MEIs. In addition, there are several development projects whose construction would contribute to the cumulative risk. The risk impacts from these developments are included within the analysis. Figure 2 shows the location of the sources affecting the MEIs. Community risk impacts from these sources upon the MEIs are reported in Table 10. Details of the modeling and community risk calculations are included in Attachment 5.

**Figure 2. Project Site and Nearby TAC and PM<sub>2.5</sub> Sources**



Local Roadways – S. 3<sup>rd</sup> Street and S. Market Street

A refined analysis of potential health impacts from vehicle traffic on S. 3<sup>rd</sup> Street and S. Market Street was conducted since the roadway was estimated to have average daily traffic (ADT) exceeding 10,000 vehicles. The refined analysis involved predicting emissions for the traffic volume and mix of vehicle types on the roadway near the project site and using an atmospheric dispersion model to predict exposure to TACs. The associated cancer risks are then computed based on the modeled exposures. *Attachment 1* includes a description of how community risk impacts, including cancer risk are computed.

*Emission Rates*

This analysis involved the development of DPM, organic TACs, and PM<sub>2.5</sub> emissions for traffic on S. 3<sup>rd</sup> Street and S. Market Street using the Caltrans version of the EMFAC2017 emissions model, known as CT-EMFAC2017. CT-EMFAC2017 provides emission factors for mobile source criteria pollutants and TACs, including DPM. Emission processes modeled include running exhaust for DPM, PM<sub>2.5</sub> and total organic compounds (e.g., TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for PM<sub>2.5</sub>. All PM<sub>2.5</sub> emissions from all

vehicles were used, rather than just the PM<sub>2.5</sub> fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce PM<sub>2.5</sub>. Additionally, PM<sub>2.5</sub> emissions from vehicle tire and brake wear and from re-entrained roadway dust were included. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2017 emissions data. Inputs to the model include region (i.e., Santa Clara County), type of road (i.e., major/collector), truck percentage for non-state highways in Santa Clara County (3.51 percent),<sup>26</sup> traffic mix assigned by CT-EMFAC2017 for the county, year of analysis (2022 – construction start year), and season (annual).

In order to estimate TAC and PM<sub>2.5</sub> emissions over the 30-year exposure period used for calculating the increased cancer risks for sensitive receptors at the MEIs, the CT-EMFAC2017 model was used to develop vehicle emission factors for the year 2022 (project construction year). Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CT-EMFAC2017. Year 2022 emissions were conservatively assumed as being representative of future conditions over the time period that cancer risks are evaluated since, as discussed above, overall vehicle emissions, and in particular diesel truck emissions, will decrease in the future.

The ADT for S. 3<sup>rd</sup> Street and S. Market Street were based on AM and PM peak-hour background plus project traffic volumes for the nearby roadway provided by the project's traffic data<sup>27</sup> and traffic data from nearby projects. The calculated ADT on S. 3<sup>rd</sup> Street was 12,825 vehicles and on S. Market Street was 17,559. Average hourly traffic distributions for Santa Clara County roadways were developed using the EMFAC model,<sup>28</sup> which were then applied to the ADT volumes to obtain estimated hourly traffic volumes and emissions for the roadway. Speed limit signs of 30 miles per hour (mph) were posted on both roadways. Five miles per hour was subtracted from those posted speed limit signs to better represent a congested traffic flow and provide a more conservative analysis of the impacts from traffic on each roadway. An average travel speed of 25 mph on S. 3<sup>rd</sup> Street and S. Market Street was used for all hours of the day.

### *Dispersion Modeling*

Dispersion modeling of TAC and PM<sub>2.5</sub> emissions was conducted using the EPA AERMOD air quality dispersion model, which is recommended by the BAAQMD for this type of analysis.<sup>29</sup> TAC and PM<sub>2.5</sub> emissions from traffic on S. 3<sup>rd</sup> Street and S. Market Street within 1,000 feet of the project site were evaluated. Vehicle traffic on the roadways was modeled using volume sources along a line (line volume sources); with line segments used for opposing travel directions on each roadway. The same meteorological data and off-site sensitive receptors used in the previous dispersion modeling were used in the roadway modeling. Other inputs to the model included road geometry, hourly traffic emissions, and receptor locations. Annual TAC and PM<sub>2.5</sub> concentrations

---

<sup>26</sup> BAAQMD, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0*. May. Web: [https://www.baaqmd.gov/~/\\_media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en](https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en)

<sup>27</sup> Email correspondence with Natalie Noyes, AICP, Senior Project Manager, David J. Powers & Associates, Inc., March 30, 2022. Attachment: *Volumes for DJP 2022-03-29.xlsx*.

<sup>28</sup> The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2014 does not include Burden type output with hour by hour traffic volume information.

<sup>29</sup> BAAQMD. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May 2012

for 2022 from traffic on the roadways were calculated using the model. Concentrations were calculated at the project MEIs with receptor heights of 5 feet (1.5 meters) and 15 feet (4.5 meters) to represent the breathing heights on the first and second floors of the nearby residences.

### *Computed Cancer and Non-Cancer Health Impacts*

The cancer risk, PM<sub>2.5</sub> concentration, and HI impacts from S. 3<sup>rd</sup> Street and S. Market Street on the project MEIs are shown in Table 10. Figure 2 shows the roadway links used for the modeling and receptor locations where concentrations were calculated. Details of the emission calculations, dispersion modeling, and cancer risk calculations for the receptors with the maximum cancer risk from S. 3<sup>rd</sup> Street and S. Market Street traffic are provided in *Attachment 5*.

### Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using BAAQMD's *Permitted Stationary Sources 2018* GIS website,<sup>30</sup> which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, including emissions and adjustments to account for new OEHHA guidance. Ten sources were identified using this tool, with nine sources being diesel generators and one source being a gas dispensing facility. The BAAQMD GIS website and previous stationary source requests provided screening risks and hazards for these sources, so a stationary source information request was not required to be submitted to BAAQMD.

The screening level risks and hazards provided by BAAQMD for the stationary sources were adjusted for distance using BAAQMD's *Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines and Gasoline Dispensing Facilities*. Community risk impacts from the stationary sources upon the project MEIs are reported in Table 10.

### Construction Risk Impacts from Nearby Developments

Based on the City's website,<sup>31</sup> the following planned or approved projects are located within 1,000 feet of the proposed project:

- **S. 4<sup>th</sup> Street Metro Station** – this residential project site is located at 439 S. 4<sup>th</sup> Street and adjoins the Tower C project site to the east. The project consists of an 18-story mixed-use building with 218 residential units, 1,345-sf of commercial use, and 12,381-sf of public eating space. This project is currently in the planning review phase. Construction for S. 4<sup>th</sup> Street Metro Station is proposed for 2023-2024, which means there could be overlapping periods with the proposed project. While the construction schedules may change for both projects, construction could occur simultaneously.
- **The Mark** – this project is located at 459 S. 4<sup>th</sup> Street, which adjoins the S. 4<sup>th</sup> Street Metro Station site to the south, approximately 30 feet southeast of the Tower C site. The Mark would consist of a 23-story multi-family residential building with 222 residential units and

---

<sup>30</sup> BAAQMD, <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>

<sup>31</sup> City of San Jose, Private / Key Economic Development Projects Map, Web: <https://gis.sanjoseca.gov/maps/devprojects/>

has been approved. While construction has not yet started, construction could occur simultaneously.

- **Bo Town** – this mixed-use building is located at 409 S. 2<sup>nd</sup> Street, located approximately 60 feet west of the Tower A and Tower B project site. This project would consist of 29 stories with 520 residential units and 7,645-sf of commercial space. This project is currently in the planning review phase. Construction for Bo Town is proposed to start in late 2022, which means there could be overlapping periods with the proposed project. While the construction schedules may change for both projects, construction could occur simultaneously.
- **Valley Title** – this proposed office building is located at 345 S. 2<sup>nd</sup> Street, which is approximately 100 feet northwest of the Tower A and Tower B project site. This project would consist of 20 stories with 1.39 million square feet of office space with ground floor retail. This project is currently in the planning review phase. Construction for Valley Title is proposed to start in 2023, which means there could be overlapping periods with the proposed project. While the construction schedules may change for both projects, construction could occur simultaneously.
- **Block 8** – this proposed office building is located at 282 S. Market Street, which is approximately 825 feet northwest of the Tower A and Tower B project site. This project would consist of 18 stories of office space and 12,771-sf of ground floor commercial space. This project has been approved and while construction has not yet started, construction could occur simultaneously.
- **San José Stage/Home 2 Hotel** – this proposed hotel building is located at 490 S. 1<sup>st</sup> Street, which is approximately 300 feet southwest of the Tower A and Tower B project site. This project would consist of 22,102-sf of theatre space and 144 hotel rooms. This project is currently in the planning review phase. Construction for • San José Stage/Home 2 Hotel is proposed for 2022-2023, which means there could be overlapping periods with the proposed project. While the construction schedules may change for both projects, construction could occur simultaneously.
- **Gateway Tower** – this proposed residential building is located at 455 to 493 S. 1<sup>st</sup> Street on the northeast corner of S. Market Street and E. William Street, which is approximately 470 feet southwest of the Tower A and Tower B project site. This project would construct 25 stories with 300 residential units and 4,850-sf of ground floor retail. This project has been approved and while construction has not yet started, construction could occur simultaneously.

The mitigated construction risks and hazard impact values for certain developments were available from their air quality technical reports either conducted by *Illingworth & Rodin, Inc.* or on the City

of San José Environmental Review website for Active EIRs,<sup>32</sup> Completed EIRs,<sup>33</sup> or Negative Declaration / Initial Studies.<sup>34</sup> For developments that did not have available construction impact results at the time of this study, it was assumed the maximum construction risks at sensitive receptors would be less than the BAAQMD single-source thresholds for community risks and hazards. If the nearby developments were more than 500 feet from the project site, the construction risks were assumed to be half of the BAAQMD single-source thresholds due to the distance and dispersion between the source and receptors. For the purpose of this analysis, it was conservatively assumed the entire construction period from the proposed project would overlap with the nearby developments' construction schedule. This approach likely provides an overestimate of the community risk and hazard levels because it assumes that maximum impacts from the nearby development occurs concurrently with the proposed project at the proposed project's MEI. The mitigated construction risks reported in that air quality assessment were included in the cumulative risks Table 10.

### Summary of Cumulative Risks at the Project MEI

Table 10 reports both the project and cumulative community risk impacts at the sensitive receptors most affected by project construction and operation (i.e., the project MEIs) for both construction scenarios. The project would have an exceedance with respect to community risk caused by project construction and operation activities, since the unmitigated maximum cancer risk and annual PM<sub>2.5</sub> concentration exceed the BAAQMD single-source thresholds for both construction scenarios. The combined unmitigated maximum cancer risk and annual PM<sub>2.5</sub> concentration would also exceed the BAAQMD cumulative-source thresholds for both construction scenarios. With the implementation of *Mitigation Measure AQ-1 and AQ-2*, the project's cancer risk and annual PM<sub>2.5</sub> concentration would be lowered to a level below the single-source thresholds and the combined maximum cancer risk would be lowered to below the cumulative-source threshold for both construction scenarios. The combined annual PM<sub>2.5</sub> concentration, which includes unmitigated and mitigated impacts for both construction scenarios, would exceed its cumulative thresholds due to the concentration from the existing TAC sources and simultaneous construction of nearby developments. The cumulative threshold would be exceeded in the case where all construction activity occurs simultaneously. The HI, unmitigated and mitigated, does not exceed the single or cumulative thresholds for both construction scenarios.

---

<sup>32</sup> City of San José, *Active EIRs*, <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/active-eirs>

<sup>33</sup> City of San José, *Completed EIRs*, <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/completed-eirs>

<sup>34</sup> City of San José, *Negative Declaration / Initial Studies*, <https://www.sanjoseca.gov/your-government/departments/planning-building-code-enforcement/planning-division/environmental-planning/environmental-review/negative-declaration-initial-studies>

**Table 10. Cumulative Community Risk Impacts at the Project Residential MEIs**

Source		Cancer Risk* (per million)	Annual PM <sub>2.5</sub> * (µg/m <sup>3</sup> )	Hazard Index
<b>Project Impacts</b>				
Scenario ABC Total/Maximum Project Impacts	Unmitigated	<b>74.32 (infant)</b>	<b>0.52</b>	0.05
	Mitigated	7.49 (infant)	0.11	<0.01
Scenario ACB Total/Maximum Project Impacts	Unmitigated	<b>72.98 (infant)</b>	<b>0.52</b>	0.05
	Mitigated	7.32 (infant)	0.11	<0.01
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>	<b>1.0</b>
<i>Exceed Threshold?</i>	Unmitigated	<b>Yes</b>	<b>Yes</b>	<b>No</b>
	Mitigated	<b>No</b>	<b>No</b>	<b>No</b>
<b>Cumulative Operational Sources</b>				
S. 3 <sup>rd</sup> Street, ADT 12,825		3.25	0.13	<0.01
S. Market Street, ADT 17,559		0.28	0.01	<0.01
Facility ID #2060, Generator, MEIs at 1,000/940 feet		0.80	0.02	<0.01
Facility ID #9339-8, Generator, MEIs at 690/690 feet		<0.01	-	-
Facility ID #9339-17, Generator, MEIs at 690/690 feet		0.93	<0.01	<0.01
Facility ID #9339-22, Generator, MEIs at 850/850 feet		0.01	-	-
Facility ID #9339-27, Generator, MEIs at 850/850 feet		0.31	<0.01	<0.01
Facility ID #15031, Generator, MEIs at 940/880 feet		0.06	0.01	-
Facility ID #15125, Generator, MEIs at 1,000/1,000 feet		0.05	<0.01	-
Facility ID #17018, Generator, MEIs at 930/865 feet		0.01	-	-
Facility ID #22239, Generator, MEIs at 890/850 feet		0.05	-	-
Facility ID #111979, Gas Station, MEIs at 500/550 feet		0.10	-	<0.01
<b>Cumulative Temporary Construction Sources</b>				
S. 4 <sup>th</sup> Street Metro Station Mitigated Construction Emissions – 250 feet east		<7.70	<0.04	<0.01
The Mark Mitigated Construction Emissions – 290 feet southeast		<9.45	<0.05	<0.01
Bo Town Mitigated Construction Emissions – 280 feet west		<11.63	<0.08	<0.01
Valley Title Mitigated Construction Emissions – 350 feet northwest		<8.21	<0.09	<0.01
Block 8 Mitigated Construction Emissions – 1,000 feet northwest		<9.20	<0.13	<0.05
San José Stage/Home 2 Hotel Mitigated Construction Emissions – 490 feet southwest		<3.20	<0.17	<0.01
Gateway Tower Mitigated Construction Emissions – 680 feet southwest		<4.90	<0.06	<0.01
Scenario ABC Combined Sources	Unmitigated	<b>&lt;134.47</b>	<b>&lt;1.34</b>	<0.22
	Mitigated	<67.64	<b>&lt;0.93</b>	<0.18
Scenario ACB Combined Sources	Unmitigated	<b>&lt;133.13</b>	<b>&lt;1.34</b>	<0.22
	Mitigated	<67.47	<b>&lt;0.93</b>	<0.18
<b>BAAQMD Cumulative Source Threshold</b>		<b>100</b>	<b>0.8</b>	<b>10.0</b>
<i>Exceed Threshold?</i>	Unmitigated	<b>Yes</b>	<b>Yes</b>	<b>No</b>
	Mitigated	<b>No</b>	<b>Yes</b>	<b>No</b>

\*\* Maximum cancer risk and maximum PM<sub>2.5</sub> concentration occur at different levels and receptors.

**Mitigation Measure AQ-2: Use construction equipment that has low diesel particulate matter exhaust emissions.**

For both construction scenarios, implement a feasible plan to reduce DPM emissions by 88 percent such that increased cancer risk and annual PM<sub>2.5</sub> concentrations from construction would be reduced below TAC significance levels as follows:

1. All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for PM (PM<sub>10</sub> and PM<sub>2.5</sub>), if feasible, otherwise,
  - a. If use of Tier 4 Final equipment is not available, alternatively use equipment that meets U.S. EPA emission standards for Tier 4 Interim engines or Tier 3 engines that include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 88 percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination).
  - b. Building cranes shall be powered by electricity
  - c. Provide electricity during initial construction stages to power portable equipment (e.g., air compressors, lifts, welders) and minimize use of any generators.
  - d. If possible, use electrical or non-diesel fueled equipment.
2. Alternatively, the applicant may develop another construction operations plan demonstrating that the construction equipment used on-site would achieve a reduction in construction diesel particulate matter emissions by 88 percent or greater. Elements of the plan could include a combination of some of the following measures:
  - Implementation of No. 1 above to use Tier 4 Final or alternatively fueled equipment,
  - Installation of electric power lines during early construction phases to avoid use of diesel-powered equipment,
  - Use of electrically-powered equipment,
  - Forklifts and aerial lifts used for exterior and interior building construction shall be electric or propane/natural gas powered,
  - Change in construction build-out plans to lengthen phases, and
  - Implementation of different building techniques that result in less diesel equipment usage.

Such a construction operations plan would be subject to review by an air quality expert and approved by the City prior to construction.



### *Effectiveness of Mitigation Measure AQ-1 and AQ-2*

For both construction scenarios, CalEEMod was used to compute emissions associated with this mitigation measure assuming that all equipment met U.S. EPA Tier 4 Final engines standards were used along with enhanced BAAQMD best management practices for construction. With these implemented, the project's construction cancer risk levels (assuming infant exposure) for Scenario ABC would be reduced by 90 percent to 7.13 chances per million and the project's total cancer risk impact would be reduced to 7.49 chances per million and for Scenario ACB would be reduced by 90 percent to 6.96 chances per million and the project's total cancer risk impact would be reduced to 7.32 chances per million. The project's annual PM<sub>2.5</sub> concentrations for both construction scenarios would be reduced by 79 percent to 0.11 µg/m<sup>3</sup> and would no longer exceed the single-source threshold. This would reduce the cumulative annual PM<sub>2.5</sub> concentration risk to less than 0.93 µg/m<sup>3</sup>. The cumulative PM<sub>2.5</sub> concentration would still exceed the cumulative threshold due to the overwhelming contribution of non-project sources.

*Mitigation Measure AQ-1 and AQ-2* represent the best available measures to reduce project construction period emissions. The PM<sub>2.5</sub> concentration from existing sources and potential simultaneous nearby developments alone almost exceed the cumulative threshold at 0.74 µg/m<sup>3</sup>. Cumulative risks exceed the PM<sub>2.5</sub> concentration threshold because of the influence from local roadways and the potentially simultaneous nearby developments at the MEIs. The project's mitigated PM<sub>2.5</sub> concentration represents 12 percent of the total mitigated cumulative concentration. In addition, according to BAAQMD, health risks would be less-than-significant to the MEIs if the risks from the project are reduced below the single-source thresholds.<sup>35</sup> Therefore, the project would not substantially contribute to the total cumulative PM<sub>2.5</sub> concentration. The project would not be cumulatively considerable and additional mitigation would not be required on the part of the project to mitigate the exceedance of the cumulative source threshold for annual PM<sub>2.5</sub> concentration. Note that the project would apply best practices in reducing construction emissions, including those of PM<sub>2.5</sub>.

---

<sup>35</sup> Correspondence with Areana Flores, MSc, Environmental Planner, BAAQMD, February 23, 2021.

## **Non-CEQA: On-Site Community Risk Assessment for TAC Sources - New Project Residences**

The City's General Plan Policy MS-11.1 requires new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs to avoid significant risks to health and safety required when new residential are proposed near existing sources of TACs. BAAQMD's recommended thresholds for health risks and hazards, shown in Table 1, are used to evaluate on-site exposure.

In addition to evaluating health impact from project construction, a health risk assessment was completed to assess the impact that the phased construction emissions from the proposed project and the existing TAC sources would have on the new proposed sensitive receptors (residents) that the project would introduce. The same TAC sources identified above were used in this health risk assessment.<sup>36</sup> Figure 3 shows the on-site sensitive receptors in relation to the project's phased construction and nearby TAC sources. All on-site community task results are listed in Table 11. *Attachment 5* includes the dispersion modeling and risk calculations for TAC source impacts upon the proposed on-site sensitive receptors.

### Project Phased Construction

Project residents could occupy a tower once it has been constructed while other towers are under construction. Therefore, it was assumed that Tower A would have sensitive receptors during the construction of Towers B and C, and depending on the construction scenario Towers B and C would be occupied while Tower A is being constructed. The construction analysis for the project residents was conducted in the same manner as described above for the off-site MEIs. The project set of receptors were placed within the project site and were spaced every 20 feet (6 meter). Project impacts were modeled at receptor heights of 35 feet (10.5 meters) representing sensitive receptors on the third floors (first residential level) of the future residential towers. Maximum increased cancer risks were calculated for the residents at the project site using the maximum modeled TAC concentrations. A 30-year exposure period was used in calculating cancer risks assuming the residents would include third trimester pregnancy and infants/children and were assumed to be in the new residential areas for 24 hours per day for 350 days per year. The project construction community risk impacts at the project sites are shown in Table 11. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 5*.

### Local Roadways – S. 3<sup>rd</sup> Street and S. Market Street

The roadway analysis for the project residents was conducted in the same manner as described above for the off-site MEIs. However, year 2024 (operational year of Tower A) emission factors were conservatively assumed as being representative of future conditions, instead of 2022 (construction year). An analysis based on 2024 resulted in an increased ADT on S. 3<sup>rd</sup> Street of 13,082 vehicles and on S. Market Street of 17,907 vehicles. The portions of S. 3<sup>rd</sup> Street and S.

---

<sup>36</sup> We note that to the extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the environment on a project are excluded from CEQA unless the project itself "exacerbates" such impacts.

Market Street included in the modeling are shown in Figure 3 along with the project site and receptor locations where impacts were modeled. The highest impacts from S. 3<sup>rd</sup> Street occurred at the third-floor (first residential level) receptor in the southwest corner of Tower C and from S. Market Street occurred at the third -floor (first residential level) receptor in the southwest corner of Tower B. Cancer risks associated with each roadway are greatest closest to those roadways and decrease with distance. The roadway community risk impacts at the project sites are shown in Table 11. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 5*.

### Stationary Sources

The stationary source screening analysis for the new project sensitive receptors was conducted in the same manner as described above for the project MEIs. Table 11 shows the health risk assessment results from the stationary sources upon the project residents.

### Construction Risk Impacts from Nearby Developments

The same mitigated construction risks from the nearby developments were included in the cumulative table for the on-site project sensitive receptors. However, the on-site project sensitive receptors would only be exposed to a portion of the construction from the nearby developments, as opposed to the project MEI which could be exposed to the entire portion of the nearby developments' construction. Therefore, the construction risks from the nearby developments would be lower at the proposed on-site project sensitive receptors.

### Summary of Cumulative Community Risks at the Project Site

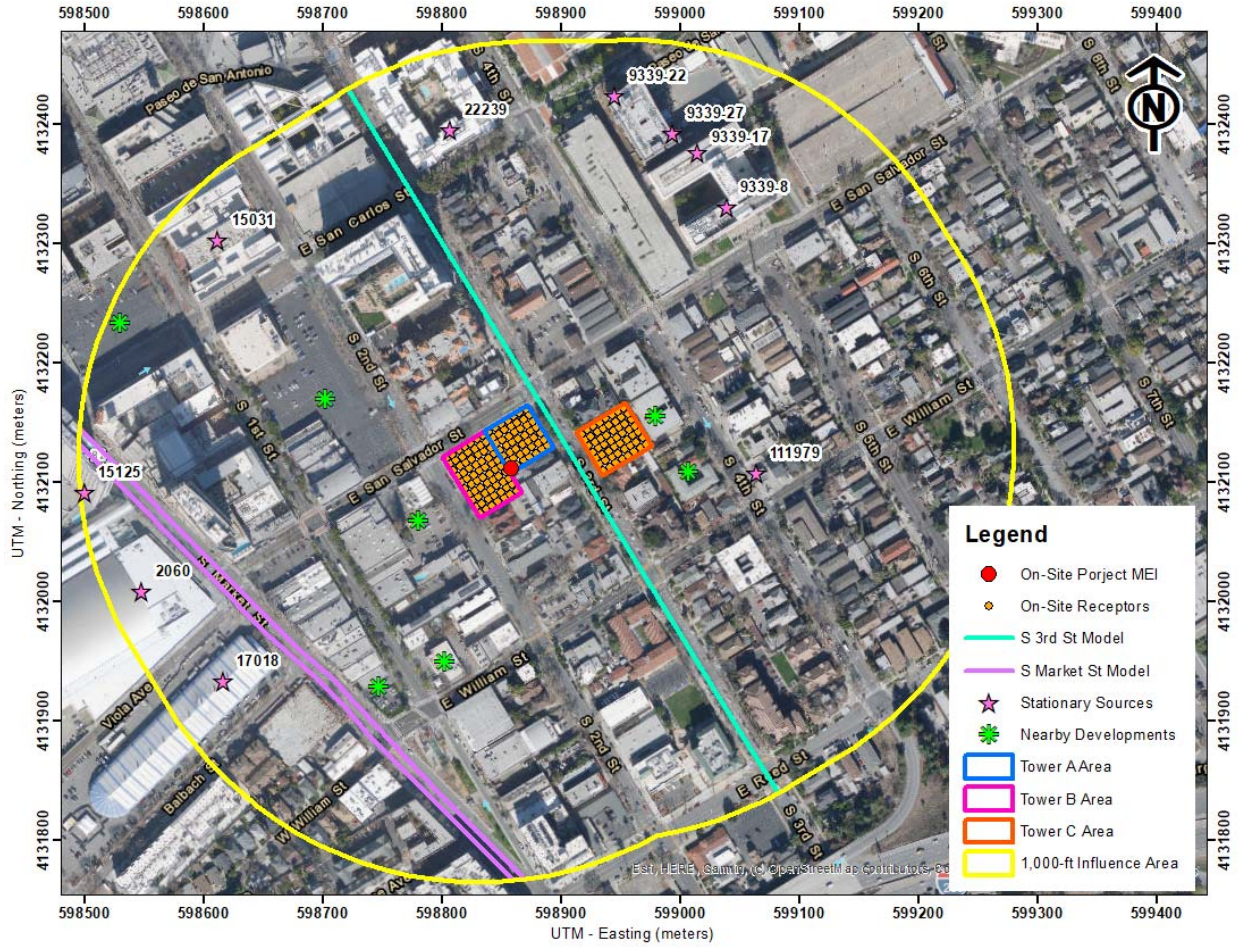
Community risk impacts from both project construction scenarios and existing TAC sources upon the project sites are reported in Table 11. The risks from the singular TAC sources are compared against the BAAQMD single-source threshold. The risks from all the sources are then combined and compared against the BAAQMD cumulative-source threshold. As shown, the project construction sources' unmitigated cancer risk impacts exceed the single-source thresholds, but not the cumulative-source thresholds. Implementation of *Mitigation Measures AQ-1 and AQ-2* would reduce cancer risks below the single-source thresholds.

In addition, the maximum cancer risk, and annual PM<sub>2.5</sub> concentrations, and HI from the nearby fixed sources (roadways and stationary sources) do not exceed the single-source thresholds. The maximum cancer risk and HI from nearby temporary sources (nearby developments construction) would not exceed their single-source thresholds, but the annual PM<sub>2.5</sub> concentration from the Bo Town mitigated construction emissions would exceed the PM<sub>2.5</sub> concentration threshold. Given that the construction of this development is temporary, the construction schedule for this development may change and not overlap with this project, and the development's impact results at the project site would be less than what is shown in Table 11, no additional project design features (i.e., air filtration) would be recommended since the proposed project would comply with City policies over the lifetime of the project. The combined mitigated maximum cancer risk, annual PM<sub>2.5</sub> concentrations, and HI from all nearby sources would not exceed the cumulative thresholds.

**Table 11. Impacts from Cumulative TAC Sources at the Project Site**

Source		Cancer Risk (per million)	Annual PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Hazard Index
<b>Project Sources</b>				
Scenario ABC Project Impacts	Unmitigated	<b>51.45</b>	0.16	0.03
	Mitigated	5.98	0.02	<0.01
Scenario ACB Project Impacts	Unmitigated	<b>48.75</b>	0.18	0.04
	Mitigated	5.75	0.02	<0.01
<b>Fixed Operational Sources</b>				
S. 3 <sup>rd</sup> Street, ADT 13,082		0.84	0.05	<0.01
S. Market Street, ADT 17,907		0.19	0.01	<0.01
Facility ID #2060, Generator, Project Site at 755 feet		1.40	0.04	<0.01
Facility ID #9339-8, Generator, Project Site at 465 feet		<0.01	-	-
Facility ID #9339-17, Generator, Project Site at 465 feet		1.63	<0.01	<0.01
Facility ID #9339-22, Generator, Project Site at 670 feet		0.02	-	-
Facility ID #9339-27, Generator, Project Site at 670 feet		0.50	<0.01	<0.01
Facility ID #15031, Generator, Project Site at 710 feet		0.11	0.01	-
Facility ID #15125, Generator, Project Site at 940 feet		0.05	<0.01	-
Facility ID #17018, Generator, Project Site at 690 feet		0.01	-	-
Facility ID #22239, Generator, Project Site at 715 feet		0.07	-	-
Facility ID #111979, Gas Station, Project Site at 280 feet		0.27	-	<0.01
<b>Temporary Construction Sources</b>				
S. 4 <sup>th</sup> Street Metro Station Mitigated Construction Emissions – 10 feet east		<7.70	<0.04	<0.01
The Mark Mitigated Construction Emissions – 30 feet southeast		<9.45	<0.05	<0.01
Bo Town Mitigated Construction Emissions – 60 feet west		< <b>11.63</b>	<0.08	<0.01
Valley Title Mitigated Construction Emissions – 100 feet northwest		<8.21	<0.09	<0.01
Block 8 Mitigated Construction Emissions – 825 feet northwest		<9.20	<0.13	<0.05
San José Stage/Home 2 Hotel Mitigated Construction Emissions – 300 feet southwest		<3.20	<0.17	<0.01
Gateway Tower Mitigated Construction Emissions – 470 feet southwest		<4.90	<0.06	<0.01
<b>BAAQMD Single-Source Threshold</b>		<b>10</b>	<b>0.3</b>	<b>1.0</b>
<b>Exceed Threshold?</b>	Unmitigated	<b>Yes</b>	<i>No</i>	<i>No</i>
	Mitigated	<b>Yes</b>	<i>No</i>	<i>No</i>
Scenario ABC Combined Sources	Unmitigated	< <b>110.84</b>	< <b>0.92</b>	<0.20
	Mitigated	<65.37	<0.78	<0.18
Scenario ACB Combined Sources	Unmitigated	< <b>108.14</b>	< <b>0.94</b>	<0.21
	Mitigated	<65.14	<0.78	<0.18
<b>BAAQMD Cumulative Source Threshold</b>		<b>100</b>	<b>0.8</b>	<b>10.0</b>
<b>Exceed Threshold?</b>	Unmitigated	<b>Yes</b>	<b>Yes</b>	<i>No</i>
	Mitigated	<i>No</i>	<i>No</i>	<i>No</i>

**Figure 3. Locations of Project Construction Sites, On-Site Residential Receptors, Existing TAC Sources, and Project Maximum TAC Impacts**



## **Supporting Documentation**

*Attachment 1* is the methodology used to compute community risk impacts, including the methods to compute increased cancer risk from exposure to project emissions.

*Attachment 2* includes the CalEEMod output for project construction and operational criteria air pollutant. Also included are any modeling assumptions.

*Attachment 3* includes the EMFAC2021 emissions modeling. The input files for these calculations are voluminous and are available upon request in digital format.

*Attachment 4* is the health risk assessment. This includes the summary of the dispersion modeling and the cancer risk calculations for construction and operation. The AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

*Attachment 5* includes the cumulative community risk calculations, modeling results, and health risk calculations from sources affecting the project MEIs and project sensitive receptors.

## Attachment 1: Health Risk Calculation Methodology

### Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015.<sup>37</sup> These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods.<sup>38</sup> This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.<sup>39</sup> Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

### Cancer Risk

Potential increased cancer risk from inhalation of TACs is calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD for residential exposures, 95<sup>th</sup> percentile breathing rates are used for the third trimester and infant exposures, and 80<sup>th</sup> percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95<sup>th</sup> percentile 8-hour breathing rates.

---

<sup>37</sup> OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

<sup>38</sup> CARB, 2015. *Risk Management Guidance for Stationary Sources of Air Toxics*. July 23.

<sup>39</sup> BAAQMD, 2016. *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*. December 2016.

Additionally, CARB and the BAAQMD recommend the use of a residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

$$\text{Cancer Risk (per million)} = CPF \times \text{Inhalation Dose} \times ASF \times ED/AT \times FAH \times 10^6$$

Where:

CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

$$\text{Inhalation Dose} = C_{\text{air}} \times DBR^* \times A \times (EF/365) \times 10^{-6}$$

Where:

C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)

DBR = daily breathing rate (L/kg body weight-day)

8HrBR = 8-hour breathing rate (L/kg body weight-8 hours)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10<sup>-6</sup> = Conversion factor

\* An 8-hour breathing rate (8HrBR) is used for worker and school child exposures.



The health risk parameters used in this evaluation are summarized as follows:

Parameter	Exposure Type →	Infant		Child	Adult
	Age Range →	3 <sup>rd</sup> Trimester	0<2	2 < 16	16 - 30
DPM Cancer Potency Factor (mg/kg-day) <sup>-1</sup>		1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-day) 80 <sup>th</sup> Percentile Rate		273	758	572	261
Daily Breathing Rate (L/kg-day) 95 <sup>th</sup> Percentile Rate		361	1,090	745	335
8-hour Breathing Rate (L/kg-8 hours) 95 <sup>th</sup> Percentile Rate		-	1,200	520	240
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14*
Exposure Frequency (days/year)		350	350	350	350*
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home (FAH)		0.85-1.0	0.85-1.0	0.72-1.0	0.73*

\* For worker exposures (adult) the exposure duration and frequency are 25 years 250 days/year and FAH is not applicable.

### Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

### Annual PM<sub>2.5</sub> Concentrations

While not a TAC, fine particulate matter (PM<sub>2.5</sub>) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM<sub>2.5</sub> (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM<sub>2.5</sub> impacts, the contribution from all sources of PM<sub>2.5</sub> emissions should be included. For projects with potential impacts from nearby local roadways, the PM<sub>2.5</sub> impacts should include those from vehicle exhaust emissions, PM<sub>2.5</sub> generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

**Attachment 2: CalEEMod Modeling Inputs and Outputs**

## Air Quality/Noise Construction Information Data Request

<b>Project Name:</b>	<b>420 S. 2nd Street - Tower A</b>	<b>Complete ALL Portions in Yellow</b>
<small>See Equipment Type TAB for type, horsepower and load factor</small>		
<b>Project Size</b>	137 Dwelling Units 165,860 s.f. residential 3,250 s.f. retail/commercial NA s.f. office 58,696 s.f. other, specify: Utilities, Lobby, Common areas 55,644 s.f. parking garage 87 spaces NA s.f. parking lot NA spaces	0.447 total project acres disturbed
<b>Construction Days</b>	8/1/2022 to 8/23/2024	
<b>Construction Hours (Monday to Saturday)</b>	7 am to 7 pm	
<b>Pile Driving? Y/N? Y</b>		
<b>Project include on-site GENERATOR OR FIRE PUMP during project OPERATION? Y/N? Y</b>		
IF YES (if BOTH separate values) -> 1 generator, 1 fire pump		
Kilowatts/Horsepower: 1 Generator (200 kW), 1 fire pump (125 kW)		
Fuel Type: Diesel		
Location in project (Plans Desired if Available): NA		
<b>DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT</b>		

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
<b>Demolition</b>		<b>Start Date:</b>	<b>8/1/2022</b>		<b>Total phase:</b>		<b>12</b>	<b>Overall Import/Export Volumes</b>
		<b>End Date:</b>	<b>8/13/2022</b>					
1	Concrete/Industrial Saws	81	0.73	4	5	1.7	1,183	<b>Demolition Volume</b>
1	Excavators	158	0.38	4	12	4.0	2,882	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	247	0.4	6	8	4.0	4,742	(or total tons to be hauled)
						0	-	<b>Approx. 10,000 square feet</b>
								<b>Any pavement demolished and hauled: 600 tons</b>
<b>Site Preparation</b>		<b>Start Date:</b>	<b>8/15/2022</b>		<b>Total phase:</b>		<b>5</b>	
		<b>End Date:</b>	<b>8/19/2022</b>					
1	Graders	187	0.41	2	3	1.2	460	
1	Rubber Tired Dozers	247	0.4	4	4	3.2	1,581	
1	Tractors/Loaders/Backhoes	97	0.37	7	4	5.6	1,005	
<b>Shoring/Grading / Excavation</b>		<b>Start Date:</b>	<b>8/22/2022</b>		<b>Total phase:</b>		<b>170</b>	<b>Soil Hauling Volume</b>
		<b>End Date:</b>	<b>3/7/2023</b>					Export volume = 30,300 cubic yards?
2	Excavators	158	0.38	6	35	1.2	25,217	
1	Drill Rigs	221	0.5	6	30	1.1	19,890	
1	Forklifts	89	0.2	4	45	1.1	3,204	
1	Rubber Tired Dozers	247	0.4	6	15	0.5	8,892	
						0	-	
						0	-	
<b>Trenching/Foundation</b>		<b>Start Date:</b>	<b>3/8/2023</b>		<b>Total phase:</b>		<b>50</b>	
		<b>End Date:</b>	<b>5/4/2023</b>					
1	Tractor/Loader/Backhoe	97	0.37	8	50	8	14,356	
2	Excavators	158	0.38	8	50	8	48,032	
1	Cranes	231	0.29	8	50	8	26,796	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Welders	46	0.45	8	50	8	33,120	
<b>Building - Exterior</b>		<b>Start Date:</b>	<b>10/19/2023</b>		<b>Total phase:</b>		<b>157</b>	<b>Cement Trucks? 2000 Total Round-Trips</b>
		<b>End Date:</b>	<b>4/18/2024</b>					
1	Cranes	231	0.29	10	157	10	105,174	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Forklifts	89	0.2	5	157	5	55,892	Liquid Propane (LPG)? (Y/N) Diesel Otherwise Assumed diesel
2	Tractors/Loaders/Backhoes	97	0.37	4	157	4	45,078	Or temporary line power? (Y/N) Y
<b>Building - Interior/Architectural Coating</b>		<b>Start Date:</b>	<b>3/11/2024</b>		<b>Total phase:</b>		<b>143</b>	
		<b>End Date:</b>	<b>8/23/2024</b>					
3	Air Compressors	78	0.48	8	143	8	128,494	
5	Aerial Lift	62	0.31	4	143	4	54,969	
<b>Paving</b>		<b>Start Date:</b>	<b>7/18/2024</b>		<b>Total phase:</b>		<b>12</b>	
		<b>Start Date:</b>	<b>7/31/2024</b>					
1	Cement and Mortar Mixers	9	0.56	6	12	6	363	
1	Pavers	130	0.42	5	12	5	3,276	Asphalt? ___48_ cubic yards or ___ round trips?
1	Paving Equipment	132	0.36	8	12	8	4,562	
1	Rollers	80	0.38	3	12	3	1,094	

Equipment types listed in "Equipment Types" worksheet tab.

Equipment listed in this sheet is to provide an example of inputs  
It is assumed that water trucks would be used during grading  
**Add or subtract phases and equipment, as appropriate**  
**Modify horsepower or load factor, as appropriate**

**Complete one sheet for each project component**

## Air Quality/Noise Construction Information Data Request

<b>Project Name:</b> 420 S. 2nd Street - Tower B	<b>Complete ALL Portions in Yellow</b>
<small>See Equipment Type TAB for type, horsepower and load factor</small>	
Project Size: 169 Dwelling Units, 0.621 total project acres disturbed 185,118 s.f. residential 3,250 s.f. retail/commercial NA s.f. office 63,354 s.f. other, specify: Utilities, Lobby, Common areas 80,730 s.f. parking garage, 200 spaces NA s.f. parking lot, NA spaces Construction Days: 8/24/2024 to 4/14/2027 Construction Hours (Monday to Sat): 7 am to 7 pm	Pile Driving? Y/N? N  Project include on-site GENERATOR OR FIRE PUMP during project OPERATION? Y/N? <u>Y</u> IF YES (if BOTH separate values) --> 1 generator, 1 fire pump Kilowatts/Horsepower: 1 Generator (200 kW), 1 fire pump (125 kW) Fuel Type: <u>Diesel</u>  Location in project (Plans Desired if Available): <u>NA</u>

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
<b>Demolition</b>					<b>Start Date:</b> 8/24/2024	<b>Total phase:</b> 12		Overall Import/Export Volumes
					<b>End Date:</b> 9/10/2024			
1	Concrete/Industrial Saws	81	0.73	4	5	1.7	1,183	Demolition Volume Square footage of buildings to be demolished (or total tons to be hauled)
1	Excavators	158	0.38	4	12	4.0	2,882	
1	Rubber-Tired Dozers	247	0.4	6	8	4.0	4,742	7 square feet or Any pavement demolished and hauled? <u>600 tons</u>
0		0	0	0	8	0	-	
<b>Site Preparation</b>					<b>Start Date:</b> 9/11/024	<b>Total phase:</b> 5		
					<b>End Date:</b> 9/17/2022			
1	Graders	187	0.41	2	3	1.2	460	
1	Rubber Tired Dozers	247	0.4	4	4	3.2	1,581	
1	Tractors/Loaders/Backhoes	97	0.37	7	4	5.6	1,005	
<b>Shoring/Grading / Excavation</b>					<b>Start Date:</b> 9/19/2024	<b>Total phase:</b> 65		
					<b>End Date:</b> 12/19/2024			Soil Hauling Volume
2	Excavators	158	0.38	6	35	3.2	25,217	Export volume = <u>30,300</u> cubic yards?
1	Drill Rigs	221	0.5	6	30	2.8	19,890	Import volume = <u>2</u> cubic yards?
1	Forklifts	89	0.2	4	45	2.8	3,204	
1	Rubber Tired Dozers	247	0.4	6	15	1.4	8,892	
0		0	0	0	15	0	-	
0		0	0	0	15	0	-	
<b>Trenching/Foundation</b>					<b>Start Date:</b> 12/20/2024	<b>Total phase:</b> 55		
					<b>End Date:</b> 3/7/2025			
1	Tractor/Loader/Backhoe	97	0.37	8	55	8	15,792	
2	Excavators	158	0.38	8	55	8	52,835	
1	Cranes	231	0.29	8	55	8	29,476	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Welders	46	0.45	8	55	8	36,432	
<b>Building - Exterior</b>					<b>Start Date:</b> 8/22/2025	<b>Total phase:</b> 173		Cement Trucks? <u>2000</u> Total Round-Trips
					<b>End Date:</b> 4/22/2026			
1	Cranes	231	0.29	10	173	10	115,893	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Forklifts	89	0.2	5	173	5	61,588	Liquid Propane (LPG)? (Y/N) Diesel Otherwise Assumed diesel
2	Tractors/Loaders/Backhoes	97	0.37	4	173	4	49,672	Or temporary line power? (Y/N) <u>y</u>
<b>Building - Interior/Architectural Coating</b>					<b>Start Date:</b> 3/16/2026	<b>Total phase:</b> 158		
					<b>End Date:</b> 10/22/2026			
3	Air Compressors	78	0.48	8	158	8	141,972	
5	Aerial Lift	62	0.31	4	158	4	60,735	
<b>Paving</b>					<b>Start Date:</b> 9/16/2026	<b>Total phase:</b> 14		
					<b>End Date:</b> 10/6/2026			Asphalt? <u>48</u> cubic yards or <u>    </u> round trips?
1	Cement and Mortar Mixers	9	0.56	6	14	6	423	
1	Pavers	130	0.42	5	14	5	3,822	
1	Paving Equipment	132	0.36	8	14	8	5,322	
1	Rollers	80	0.38	3	14	3	1,277	

Equipment listed in this sheet is to provide an example of inputs  
 It is assumed that water trucks would be used during grading  
 Add or subtract phases and equipment, as appropriate  
 Modify horsepower or load factor, as appropriate

Complete one sheet for each project component

## Air Quality/Noise Construction Information Data Request

<b>Project Name:</b>	420 S. 3rd Street - Tower C			<b>Complete ALL Portions in Yellow</b>
<small>See Equipment Type TAB for type, horsepower and load factor</small>				
<b>Project Size</b>	168 Dwelling Units	1,068 total project	acres disturbed	
	183,976 s.f. residential			<b>Pile Driving? Y/N? N</b>
	3,500 s.f. retail/commercial			
	NA s.f. office			<b>Project include on-site GENERATOR OR FIRE PUMP during project OPERATION? Y/N? Y</b>
	63,772 s.f. other, specify: Utilities, Lobby, Common areas			<b>IF YES (if BOTH separate values) --&gt; 1 generator, 1 fire pump</b>
	64,398 s.f. parking garage	105 spaces		<b>Kilowatts/Horsepower: 1 Generator (200 kW), 1 fire pump (125 kW)</b>
	NA s.f. parking lot	NA spaces		<b>Fuel Type: Diesel</b>
<b>Construction Days</b>	4/15/2027 to	12/5/2029		<b>Location in project (Plans Desired if Available): NA</b>
<b>Construction Hours (Monday to Saturday)</b>	7 am to	7 pm	0.0892053	<b>DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT</b>

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	<b>Demolition</b>							<b>Overall Import/Export Volumes</b>
		<b>Start Date:</b>	4/15/2027	<b>Total phase:</b>	12			
		<b>End Date:</b>	5/3/2027					
1	Concrete/Industrial Saws	81	0.73	4	5	1.7	1,183	<b>Demolition Volume</b>
1	Excavators	158	0.38	4	12	4.0	2,882	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	247	0.4	6	8	4.0	4,742	(or total tons to be hauled)
0		0	0	0	8	0	-	7 square feet or
								520 Hauling volume (tons)
								Any pavement demolished and hauled: 600 tons
	<b>Site Preparation</b>							
		<b>Start Date:</b>	5/4/2027	<b>Total phase:</b>	5			
		<b>End Date:</b>	5/10/2027					
1	Graders	187	0.41	2	3	1.2	460	
1	Rubber Tired Dozers	247	0.4	4	4	3.2	1,581	
1	Tractors/Loaders/Backhoes	97	0.37	7	4	5.6	1,005	
	<b>Shoring/Grading / Excavation</b>							<b>Soil Hauling Volume</b>
		<b>Start Date:</b>	5/12/2027	<b>Total phase:</b>	65			
		<b>End Date:</b>	8/11/2027					
2	Excavators	158	0.38	6	35	3.2	25,217	Export volume = 30,300 cubic yards?
1	Drill Rigs	221	0.5	6	30	2.8	19,890	Import volume = 2 cubic yards?
1	Forklifts	89	0.2	4	45	2.8	3,204	
1	Rubber Tired Dozers	247	0.4	6	15	1.4	8,892	
0		0	0	0	15	0	-	
0		0	0	0	15	0	-	
	<b>Trenching/Foundation</b>							
		<b>Start Date:</b>	8/12/2027	<b>Total phase:</b>	55			
		<b>End Date:</b>	10/28/2027					
1	Tractor/Loader/Backhoe	97	0.37	8	55	8	15,792	
2	Excavators	158	0.38	8	55	8	52,835	
1	Cranes	231	0.29	8	55	8	29,476	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Welders	46	0.45	8	55	8	36,432	
	<b>Building - Exterior</b>							<b>Cement Trucks? 2000_ Total Round-Trips</b>
		<b>Start Date:</b>	4/13/2028	<b>Total phase:</b>	173			
		<b>End Date:</b>	12/12/2028					
1	Cranes	231	0.29	10	173	10	115,893	Electric? (Y/N) Generator till temp power Otherwise assumed diesel
4	Forklifts	89	0.2	5	173	5	61,588	Liquid Propane (LPG)? (Y/N) Diesel Otherwise Assumed diesel
2	Tractors/Loaders/Backhoes	97	0.37	4	173	4	49,672	Or temporary line power? (Y/N)
	<b>Building - Interior/Architectural Coating</b>							
		<b>Start Date:</b>	11/5/2028	<b>Total phase:</b>	158			
		<b>End Date:</b>	6/13/2029					
3	Air Compressors	78	0.48	8	158	8	141,972	
5	Aerial Lift	62	0.31	4	158	4	60,735	
	<b>Paving</b>							
		<b>Start Date:</b>	5/8/2029	<b>Total phase:</b>	14			
		<b>Start Date:</b>	5/28/2029					
1	Cement and Mortar Mixers	9	0.56	6	14	6	423	
1	Pavers	130	0.42	5	14	5	3,822	Asphalt? 48_ cubic yards or ___ round trips?
1	Paving Equipment	132	0.36	8	14	8	5,322	
1	Rollers	80	0.38	3	14	3	1,277	

Equipment listed in this sheet is to provide an example of inputs  
 It is assumed that water trucks would be used during grading  
**Add or subtract phases and equipment, as appropriate**  
**Modify horsepower or load factor, as appropriate**

**Complete one sheet for each project component**

Traffic Consultant Trip Gen					CalEEMod Default			
Land Use	Size	Daily Trips	New Trips	Weekday Trip Gen	Weekday	Sat	Sun	
Apartment High Rise	du	474	2152	1490	3.14	4.45	4.53	3.59
Housing & Retail Reduction			-56		Rev	3.20	2.54	
Location Based Reduction			-606					
Shopping Center	ksf	10	371	264	26.40	37.75	46.12	21.1
Housing & Retail Reduction			-56		Rev	32.25	14.76	
Location Based Reduction			-51					

## MVP Mixed-Use Trip Generation

Land Use	ITE Land Use Code	Reduction %	Size	Daily		AM Peak Hour			PM Peak Hour				
				Rate	Trip	Rate	In	Out	Total	Rate	In	Out	Total
<b>Towers A &amp; B</b>													
Multifamily Housing (High-Rise)	222		305 Dwelling Units	4.540	1,385	0.270	28	54	82	0.320	55	43	98
Housing & Retail (1)		15%			-36		0	0	0		-2	-2	-4
Location Based Reduction (2)		29%			-391		-8	-16	-24		-15	-12	-28
Shopping Center	820		6,500 Square Feet	37.010	241	0.840	3	2	5	3.400	10	12	22
Housing & Retail (1)		15%			-36		0	0	0		-2	-2	-4
Location Based Reduction (2)		16%			-33		0	-1	-1		-2	-2	-3
<b>Total Tower A&amp;B Trips</b>					<b>1,130</b>		<b>23</b>	<b>39</b>	<b>62</b>		<b>44</b>	<b>37</b>	<b>81</b>
<b>Tower C</b>													
Multifamily Housing (High-Rise)	222		168 Dwelling Units	4.540	763	0.270	15	30	45	0.320	30	24	54
Housing & Retail (1)		15%			-20		0	0	0		-1	-1	-2
Location Based Reduction (2)		29%			-215		-4	-9	-13		-8	-7	-15
Shopping Center	820		3,500 Square Feet	37.010	130	0.840	2	1	3	3.400	5	7	12
Housing & Retail (1)		15%			-20		0	0	0		-1	-1	-2
Location Based Reduction (2)		16%			-18		0	-1	-1		-1	-1	-2
<b>Total Tower C Trips</b>					<b>620</b>		<b>13</b>	<b>21</b>	<b>34</b>		<b>24</b>	<b>21</b>	<b>45</b>
<b>Total Project Trips</b>					<b>1,750</b>		<b>36</b>	<b>60</b>	<b>96</b>		<b>68</b>	<b>58</b>	<b>126</b>

Source: ITE Trip Generation Manual, 11<sup>th</sup> Edition 2021

**Notes:**

(1) As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail is equal to 15% of the retail component.

(2) The project site is located within the central city urban area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose, Transportation Analysis Handbook (April 2020). The trip reductions are based on the percent of mode share for all of the other modes of travel besides vehicle.

Unmitigated ABC Total Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022	0.01	0.14	0.01	0.01	23.91	
2023	0.08	0.66	0.03	0.03	109.79	
2024	1.73	1.04	0.05	0.04	205.96	
2025	0.08	0.70	0.03	0.03	128.56	
2026	1.87	0.71	0.03	0.03	152.97	
2027	0.06	0.47	0.02	0.02	100.51	
2028	0.62	0.78	0.03	0.03	141.90	
2029	1.28	0.35	0.01	0.01	81.89	
EMFAC						
2022	0.01	0.09	0.01	0.00	66.98	
2023	0.02	0.19	0.01	0.01	156.25	
2024	0.02	0.18	0.01	0.01	158.20	
2025	0.02	0.19	0.01	0.01	169.17	
2026	0.02	0.13	0.01	0.00	124.48	
2027	0.02	0.12	0.01	0.00	112.95	
2028	0.02	0.16	0.01	0.01	154.67	
2029	0.01	0.06	0.01	0.00	58.93	
Total Construction Emissions by Year						
2022	0.02	0.23	0.01	0.01	90.89	
2023	0.10	0.86	0.04	0.03	266.04	
2024	1.75	1.23	0.06	0.05	364.16	
2025	0.11	0.89	0.04	0.03	297.73	
2026	1.89	0.84	0.04	0.03	277.44	
2027	0.08	0.60	0.03	0.02	213.47	
2028	0.64	0.94	0.05	0.04	296.56	
2029	1.29	0.41	0.02	0.02	140.83	
Total Construction Emissions						
Tons	5.88	5.99	0.29	0.23	1947.11	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	0.37	3.51	0.18	0.12		131
2023	0.63	5.47	0.27	0.21		313
2024	17.31	12.12	0.58	0.49		203
2025	0.67	5.69	0.28	0.21		313
2026	16.04	7.15	0.33	0.27		235
2027	0.68	5.31	0.25	0.19		224
2028	4.09	5.98	0.30	0.24		314
2029	20.99	6.62	0.31	0.25		123
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	60.79	51.85	2.51	2.00	0.00	
Average	6.33	6.45	0.31	0.25	0.00	1856.83
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	4.36	0.70	1.32	0.36
Existing Use Emissions				
Total				
Net Annual Operational Emissions				
Tons/year	4.36	0.70	1.32	0.36
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	23.87	3.83	7.26	1.96
Threshold - lbs/day	54.0	54.0	82.0	54.0

Category	CO2e			
	Project	Existing	Project 2030	Existing
Area	5.89			
Energy	248.66			
Mobile	1191.65			
Waste	114.93			
Water	39.07			
TOTAL	1600.21	0.00	0.00	0.00
Net GHG Emissions		1600.21		0.00
Service Population	1488			
Per Capita Emissions		1.08		0.00
CA DOF 2020 =		474 units		
		3.14 pphh		

Building A Unmitigated ABC Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022	0.01	0.14	0.01	0.01	23.91	
2023	0.08	0.66	0.03	0.03	109.79	
2024	1.71	0.84	0.04	0.04	163.07	
2025						
2026						
2027						
2028						
2029						
EMFAC						
2022	0.01	0.09	0.01	0.002	66.98	
2023	0.02	0.19	0.01	0.005	156.25	
2024	0.01	0.12	0.01	0.003	96.75	
2025						
2026						
2027						
2028						
2029						
Total Construction Emissions by Year						
2022	0.02	0.23	0.01	0.01	90.89	
2023	0.10	0.86	0.04	0.03	266.04	
2024	1.72	0.96	0.05	0.04	259.82	
2025	0.00	0.00	0.00	0.00	0.00	
2026	0.00	0.00	0.00	0.00	0.00	
2027	0.00	0.00	0.00	0.00	0.00	
2028	0.00	0.00	0.00	0.00	0.00	
2029	0.00	0.00	0.00	0.00	0.00	
Total Construction Emissions						
Tons	1.84	2.04	0.10	0.08	616.75	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	0.37	3.51	0.18	0.12		131
2023	0.63	5.47	0.27	0.21		313
2024	16.99	9.44	0.45	0.39		203
2025	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2026	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2027	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2028	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2029	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	18.00	18.42	0.90	0.73	0.00	
Average	5.70	6.31	0.31	0.25	0.00	647.29
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Building B Unmitigated ABC Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022						
2023						
2024	0.02	0.20	0.01	0.01	42.89	
2025	0.08	0.70	0.03	0.03	128.56	
2026	1.87	0.71	0.03	0.03	152.97	
2027						
2028						
2029						
EMFAC						
2022						
2023						
2024	0.01	0.07	0.005	0.002	61.45	
2025	0.02	0.19	0.01	0.01	169.17	
2026	0.02	0.13	0.01	0.004	124.48	
2027						
2028						
2029						
Total Construction Emissions by Year						
2022	0.00	0.00	0.00	0.00	0.00	
2023	0.00	0.00	0.00	0.00	0.00	
2024	0.03	0.27	0.01	0.01	104.34	
2025	0.11	0.89	0.04	0.03	297.73	
2026	1.89	0.84	0.04	0.03	277.44	
2027	0.00	0.00	0.00	0.00	0.00	
2028	0.00	0.00	0.00	0.00	0.00	
2029	0.00	0.00	0.00	0.00	0.00	
Total Construction Emissions						
Tons	2.02	2.00	0.10	0.08	679.51	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2023	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2024	0.59	4.86	0.25	0.18		112
2025	0.67	5.69	0.28	0.21		313
2026	16.04	7.15	0.33	0.27		235
2027	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2028	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2029	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	17.29	17.71	0.86	0.67	0.00	
Average	6.13	6.07	0.29	0.23	0.00	660.14
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Building C Unmitigated ABC Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022						
2023						
2024						
2025						
2026						
2027	0.06	0.47	0.02	0.02	100.51	
2028	0.62	0.78	0.03	0.03	141.90	
2029	1.28	0.35	0.01	0.01	81.89	
EMFAC						
2022						
2023						
2024						
2025						
2026						
2027	0.02	0.12	0.01	0.004	112.95	
2028	0.02	0.16	0.01	0.005	154.67	
2029	0.01	0.06	0.01	0.002	58.93	
Total Construction Emissions by Year						
2022	0.00	0.00	0.00	0.00	0.00	
2023	0.00	0.00	0.00	0.00	0.00	
2024	0.00	0.00	0.00	0.00	0.00	
2025	0.00	0.00	0.00	0.00	0.00	
2026	0.00	0.00	0.00	0.00	0.00	
2027	0.08	0.60	0.03	0.02	213.47	
2028	0.64	0.94	0.05	0.04	296.56	
2029	1.29	0.41	0.02	0.02	140.83	
Total Construction Emissions						
Tons	2.01	1.94	0.09	0.07	650.85	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2023	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2024	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2025	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2026	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2027	0.68	5.31	0.25	0.19		224
2028	4.09	5.98	0.30	0.24		314
2029	20.99	6.62	0.31	0.25		123
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	25.76	17.91	0.86	0.68	0.00	
Average	6.07	5.87	0.29	0.22	0.00	661.00
Threshold - lbs/day	54.0	54.0	82.0	54.0		



Unmitigated ACB Total Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022	0.01	0.14	0.01	0.01	23.91	
2023	0.08	0.66	0.03	0.03	109.79	
2024	1.73	1.06	0.05	0.04	208.42	
2025	0.08	0.69	0.03	0.03	126.11	
2026	1.86	0.71	0.03	0.03	152.97	
2027	0.06	0.47	0.02	0.02	100.50	
2028	0.62	0.78	0.03	0.03	141.90	
2029	1.29	0.35	0.01	0.01	81.89	
EMFAC						
2022	0.01	0.09	0.01	0.00	66.98	
2023	0.02	0.19	0.01	0.01	156.25	
2024	0.02	0.18	0.01	0.01	156.65	
2025	0.02	0.18	0.01	0.01	164.91	
2026	0.02	0.13	0.01	0.00	121.35	
2027	0.02	0.12	0.01	0.00	115.87	
2028	0.02	0.17	0.01	0.01	158.68	
2029	0.01	0.06	0.01	0.00	60.47	
Total Construction Emissions by Year						
2022	0.02	0.23	0.01	0.01	90.89	
2023	0.10	0.86	0.04	0.03	266.04	
2024	1.76	1.24	0.06	0.05	365.07	
2025	0.10	0.88	0.04	0.03	291.02	
2026	1.88	0.84	0.04	0.03	274.31	
2027	0.08	0.60	0.03	0.02	216.38	
2028	0.65	0.94	0.05	0.04	300.57	
2029	1.29	0.41	0.02	0.02	142.36	
Total Construction Emissions						
Tons	5.88	5.99	0.29	0.23	1946.64	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	0.37	3.51	0.18	0.12		131
2023	0.63	5.47	0.27	0.21		313
2024	17.33	12.23	0.59	0.50		203
2025	0.66	5.59	0.27	0.21		313
2026	15.97	7.13	0.33	0.27		235
2027	0.68	5.33	0.25	0.19		224
2028	4.11	6.00	0.30	0.24		314
2029	21.08	6.64	0.31	0.25		123
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	60.83	51.90	2.51	2.00	0.00	
Average	6.33	6.45	0.31	0.25	0.00	1856.83
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	4.36	0.70	1.32	0.36
Existing Use Emissions				
Total				
Net Annual Operational Emissions				
Tons/year	4.36	0.70	1.32	0.36
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	23.87	3.83	7.26	1.96
Threshold - lbs/day	54.0	54.0	82.0	54.0

Category	CO2e			
	Project	Existing	Project 2030	Existing
Area	5.89			
Energy	248.66			
Mobile	1191.65			
Waste	114.93			
Water	39.07			
TOTAL	1600.21	0.00	0.00	0.00
Net GHG Emissions		1600.21		0.00
Service Population	1488			
Per Capita Emissions		1.08		0.00
CA DOF 2020 =		474 units		
		3.14 pphh		

Building A Unmitigated ACB Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022	0.01	0.14	0.01	0.01	23.91	
2023	0.08	0.66	0.03	0.03	109.79	
2024	1.71	0.84	0.04	0.04	163.07	
2025						
2026						
2027						
2028						
2029						
EMFAC						
2022	0.01	0.09	0.01	0.002	66.98	
2023	0.02	0.19	0.01	0.005	156.25	
2024	0.01	0.12	0.01	0.003	96.75	
2025						
2026						
2027						
2028						
2029						
Total Construction Emissions by Year						
2022	0.02	0.23	0.01	0.01	90.89	
2023	0.10	0.86	0.04	0.03	266.04	
2024	1.72	0.96	0.05	0.04	259.82	
2025	0.00	0.00	0.00	0.00	0.00	
2026	0.00	0.00	0.00	0.00	0.00	
2027	0.00	0.00	0.00	0.00	0.00	
2028	0.00	0.00	0.00	0.00	0.00	
2029	0.00	0.00	0.00	0.00	0.00	
Total Construction Emissions						
Tons	1.84	2.04	0.10	0.08	616.75	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	0.37	3.51	0.18	0.12		131
2023	0.63	5.47	0.27	0.21		313
2024	16.99	9.44	0.45	0.39		203
2025	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2026	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2027	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2028	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2029	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	18.00	18.42	0.90	0.73	0.00	
Average	5.70	6.31	0.31	0.25	0.00	647.29
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Building C Unmitigated ACB Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022						
2023						
2024	0.03	0.22	0.01	0.01	45.35	
2025	0.08	0.69	0.03	0.03	126.11	
2026	1.86	0.71	0.03	0.03	152.97	
2027						
2028						
2029						
EMFAC						
2022						
2023						
2024	0.01	0.07	0.005	0.002	59.90	
2025	0.02	0.18	0.01	0.006	164.91	
2026	0.02	0.13	0.01	0.004	121.35	
2027						
2028						
2029						
Total Construction Emissions by Year						
2022	0.00	0.00	0.00	0.00	0.00	
2023	0.00	0.00	0.00	0.00	0.00	
2024	0.03	0.28	0.01	0.01	105.25	
2025	0.10	0.88	0.04	0.03	291.02	
2026	1.88	0.84	0.04	0.03	274.31	
2027	0.00	0.00	0.00	0.00	0.00	
2028	0.00	0.00	0.00	0.00	0.00	
2029	0.00	0.00	0.00	0.00	0.00	
Total Construction Emissions						
Tons	2.01	2.00	0.10	0.08	670.59	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2023	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2024	0.61	5.08	0.25	0.19		112
2025	0.66	5.59	0.27	0.21		313
2026	15.97	7.13	0.33	0.27		235
2027	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2028	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2029	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	17.23	17.80	0.86	0.67	0.00	
Average	6.10	6.05	0.29	0.23	0.00	660.14
Threshold - lbs/day	54.0	54.0	82.0	54.0		

Building B Unmitigated ACB Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	CO2e	
Year	Tons					MT
Construction Equipment						
2022						
2023						
2024						
2025						
2026						
2027	0.06	0.47	0.02	0.02	100.50	
2028	0.62	0.78	0.03	0.03	141.90	
2029	1.29	0.35	0.01	0.01	81.89	
EMFAC						
2022						
2023						
2024						
2025						
2026						
2027	0.02	0.12	0.01	0.004	115.87	
2028	0.02	0.17	0.01	0.005	158.68	
2029	0.01	0.06	0.01	0.002	60.47	
Total Construction Emissions by Year						
2022	0.00	0.00	0.00	0.00	0.00	
2023	0.00	0.00	0.00	0.00	0.00	
2024	0.00	0.00	0.00	0.00	0.00	
2025	0.00	0.00	0.00	0.00	0.00	
2026	0.00	0.00	0.00	0.00	0.00	
2027	0.08	0.60	0.03	0.02	216.38	
2028	0.65	0.94	0.05	0.04	300.57	
2029	1.29	0.41	0.02	0.02	142.36	
Total Construction Emissions						
Tons	2.02	1.95	0.10	0.07	659.31	
Average Daily Emissions						
Pounds/Workdays						Workdays
2022	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2023	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2024	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2025	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2026	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
2027	0.68	5.33	0.25	0.19		224
2028	4.11	6.00	0.30	0.24		314
2029	21.08	6.64	0.31	0.25		123
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Total Construction Emissions						
Pounds	25.87	17.97	0.87	0.68	0.00	
Average	6.10	5.89	0.29	0.23	0.00	661.00
Threshold - lbs/day	54.0	54.0	82.0	54.0		





420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	143.00
tblConstructionPhase	NumDays	100.00	157.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDays	2.00	170.00
tblConstructionPhase	NumDays	5.00	12.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialExported	0.00	30,300.00
tblLandUse	LandUseSquareFeet	34,800.00	55,644.00
tblLandUse	LandUseSquareFeet	137,000.00	224,556.00
tblLandUse	LotAcreage	0.78	0.00
tblLandUse	LotAcreage	2.21	0.45
tblLandUse	LotAcreage	0.07	0.00

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.70
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.20
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	6.00	0.50
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.60
tblProjectCharacteristics	CO2IntensityFactor	807.98	178
tblTripsAndVMT	HaulingTripNumber	45.00	0.00
tblTripsAndVMT	HaulingTripNumber	3,788.00	0.00
tblTripsAndVMT	VendorTripNumber	24.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	123.00	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0140	0.1367	0.1268	2.7000e-004	0.0377	6.4100e-003	0.0441	0.0165	5.9200e-003	0.0224	0.0000	23.7213	23.7213	7.4900e-003	0.0000	23.9085
2023	0.0781	0.6645	0.7100	1.2800e-003	0.0151	0.0302	0.0453	6.3600e-003	0.0282	0.0346	0.0000	109.0127	109.0127	0.0312	0.0000	109.7933
2024	1.7068	0.8410	1.0881	1.8700e-003	0.0000	0.0377	0.0377	0.0000	0.0361	0.0361	0.0000	162.2426	162.2426	0.0329	0.0000	163.0656
<b>Maximum</b>	<b>1.7068</b>	<b>0.8410</b>	<b>1.0881</b>	<b>1.8700e-003</b>	<b>0.0377</b>	<b>0.0377</b>	<b>0.0453</b>	<b>0.0165</b>	<b>0.0361</b>	<b>0.0361</b>	<b>0.0000</b>	<b>162.2426</b>	<b>162.2426</b>	<b>0.0329</b>	<b>0.0000</b>	<b>163.0656</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2022	3.3100e-003	0.0143	0.1606	2.7000e-004	0.0147	4.4000e-004	0.0151	3.2200e-003	4.4000e-004	3.6600e-003	0.0000	23.7213	23.7213	7.4900e-003	0.0000	23.9085
2023	0.0170	0.1550	0.7973	1.2800e-003	5.8800e-003	1.9700e-003	7.8500e-003	1.2400e-003	1.9700e-003	3.2100e-003	0.0000	109.0125	109.0125	0.0312	0.0000	109.7931
2024	1.6339	0.2435	1.1876	1.8700e-003	0.0000	2.7900e-003	2.7900e-003	0.0000	2.7900e-003	2.7900e-003	0.0000	162.2424	162.2424	0.0329	0.0000	163.0654
<b>Maximum</b>	<b>1.6339</b>	<b>0.2435</b>	<b>1.1876</b>	<b>1.8700e-003</b>	<b>0.0147</b>	<b>2.7900e-003</b>	<b>0.0151</b>	<b>3.2200e-003</b>	<b>2.7900e-003</b>	<b>3.6600e-003</b>	<b>0.0000</b>	<b>162.2424</b>	<b>162.2424</b>	<b>0.0329</b>	<b>0.0000</b>	<b>163.0654</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
<b>Percent Reduction</b>	8.04	74.86	-11.46	0.00	60.99	93.00	79.72	80.48	92.60	89.62	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2022	10-31-2022	0.1006	0.0110
2	11-1-2022	1-31-2023	0.0639	0.0093
3	2-1-2023	4-30-2023	0.3929	0.1297
4	5-1-2023	7-31-2023	0.0275	0.0093
5	8-1-2023	10-31-2023	0.0532	0.0052
6	11-1-2023	1-31-2024	0.3670	0.0365
7	2-1-2024	4-30-2024	0.9402	0.5906
8	5-1-2024	7-31-2024	1.1863	1.0127
9	8-1-2024	9-30-2024	0.2909	0.2524
		<b>Highest</b>	1.1863	1.0127

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2022	8/13/2022	6	12	



420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2	Site Preparation	Site Preparation	8/15/2022	8/19/2022	6	5
3	Grading	Grading	8/22/2022	3/7/2023	6	170
4	Trenching	Trenching	3/8/2023	5/4/2023	6	50
5	Building Construction	Building Construction	10/19/2023	4/18/2024	6	157
6	Architectural Coating	Architectural Coating	3/11/2024	8/23/2024	6	143
7	Paving	Paving	7/18/2024	7/31/2024	6	12

**Acres of Grading (Site Preparation Phase): 1.38**

**Acres of Grading (Grading Phase): 5.31**

**Acres of Paving: 0**

**Residential Indoor: 454,726; Residential Outdoor: 151,575; Non-Residential Indoor: 4,875; Non-Residential Outdoor: 1,625; Striped Parking Area:**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.70	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	1	1.20	187	0.41
Site Preparation	Rubber Tired Dozers	1	3.20	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	5.60	97	0.37
Grading	Bore/Drill Rigs	1	1.10	221	0.50
Grading	Excavators	2	1.20	158	0.38
Grading	Forklifts	1	1.10	89	0.20
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.50	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Trenching	Cranes	1	8.00	231	0.29
Trenching	Excavators	2	8.00	158	0.38
Trenching	Graders	0	0.00	187	0.41
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
Building Construction	Cranes	1	10.00	231	0.29
Building Construction	Forklifts	4	5.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Architectural Coating	Aerial Lifts	5	4.00	63	0.31
Architectural Coating	Air Compressors	3	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	5.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	3.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



























420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.6 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0373	0.3778	0.3432	6.7000e-004		0.0177	0.0177		0.0163	0.0163	0.0000	58.4287	58.4287	0.0189	0.0000	58.9011
<b>Total</b>	<b>0.0373</b>	<b>0.3778</b>	<b>0.3432</b>	<b>6.7000e-004</b>		<b>0.0177</b>	<b>0.0177</b>		<b>0.0163</b>	<b>0.0163</b>	<b>0.0000</b>	<b>58.4287</b>	<b>58.4287</b>	<b>0.0189</b>	<b>0.0000</b>	<b>58.9011</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1600e-003	0.0354	0.3993	6.7000e-004		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	58.4286	58.4286	0.0189	0.0000	58.9010
<b>Total</b>	<b>8.1600e-003</b>	<b>0.0354</b>	<b>0.3993</b>	<b>6.7000e-004</b>		<b>1.0900e-003</b>	<b>1.0900e-003</b>		<b>1.0900e-003</b>	<b>1.0900e-003</b>	<b>0.0000</b>	<b>58.4286</b>	<b>58.4286</b>	<b>0.0189</b>	<b>0.0000</b>	<b>58.9010</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**



420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6093					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0579	0.4427	0.7130	1.1500e-003		0.0191	0.0191		0.0189	0.0189	0.0000	99.3934	99.3934	0.0126	0.0000	99.7094
<b>Total</b>	<b>1.6672</b>	<b>0.4427</b>	<b>0.7130</b>	<b>1.1500e-003</b>		<b>0.0191</b>	<b>0.0191</b>		<b>0.0189</b>	<b>0.0189</b>	<b>0.0000</b>	<b>99.3934</b>	<b>99.3934</b>	<b>0.0126</b>	<b>0.0000</b>	<b>99.7094</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6093					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.2055	0.7519	1.1500e-003		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	99.3933	99.3933	0.0126	0.0000	99.7093
<b>Total</b>	<b>1.6252</b>	<b>0.2055</b>	<b>0.7519</b>	<b>1.1500e-003</b>		<b>1.6300e-003</b>	<b>1.6300e-003</b>		<b>1.6300e-003</b>	<b>1.6300e-003</b>	<b>0.0000</b>	<b>99.3933</b>	<b>99.3933</b>	<b>0.0126</b>	<b>0.0000</b>	<b>99.7093</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.8 Paving - 2024**

**Unmitigated Construction On-Site**

420 S 2nd Street, San Jose - Tower A Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2700e-003	0.0206	0.0318	5.0000e-005		9.8000e-004	9.8000e-004		9.1000e-004	9.1000e-004	0.0000	4.4205	4.4205	1.3800e-003	0.0000	4.4551
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.2700e-003</b>	<b>0.0206</b>	<b>0.0318</b>	<b>5.0000e-005</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>		<b>9.1000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>4.4205</b>	<b>4.4205</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>4.4551</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**







ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	158.00
tblConstructionPhase	NumDays	100.00	173.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialExported	0.00	30,300.00
tblLandUse	LandUseSquareFeet	80,000.00	80,730.00
tblLandUse	LandUseSquareFeet	169,000.00	248,472.00
tblLandUse	LotAcreage	1.80	0.00
tblLandUse	LotAcreage	2.73	0.62
tblLandUse	LotAcreage	0.07	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.70
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.20
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	6.00	1.40
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.60
tblProjectCharacteristics	CO2IntensityFactor	807.98	178
tblTripsAndVMT	HaulingTripNumber	3,788.00	0.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	157.00	0.00



ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblTripsAndVMT	WorkerTripNumber	31.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0233	0.2017	0.2391	4.9000e-004	0.0457	8.87E-03	0.0546	0.0228	8.2400e-003	0.0310	0.0000	42.5705	42.5705	0.0129	0.0000	42.8933
2025	0.0808	0.7042	0.8104	1.4900e-003	0.0000	0.0299	0.0299	0.0000	0.0278	0.0278	0.0000	127.6338	127.6338	0.0372	0.0000	128.5647
2026	1.8683	0.7065	1.0412	1.7600e-003	0.0000	0.0290	0.0290	0.0000	0.0280	0.0280	0.0000	152.2781	152.2781	0.0275	0.0000	152.9657
<b>Maximum</b>	<b>1.8683</b>	<b>0.7065</b>	<b>1.0412</b>	<b>1.7600e-003</b>	<b>0.0457</b>	<b>0.0299</b>	<b>0.0546</b>	<b>0.0228</b>	<b>0.0280</b>	<b>0.0310</b>	<b>0.0000</b>	<b>152.2781</b>	<b>152.2781</b>	<b>0.0372</b>	<b>0.0000</b>	<b>152.9657</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	6.2200e-003	0.0400	0.2979	4.9000e-004	0.0178	7.8000e-004	0.0186	4.4500e-003	7.8000e-004	5.2300e-003	0.0000	42.5704	42.5704	0.0129	0.0000	42.8932

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2025	0.0195	0.1609	0.9210	1.4900e-003	0.0000	2.3200e-003	2.3200e-003	0.0000	2.3200e-003	2.3200e-003	0.0000	127.6336	127.6336	0.0372	0.0000	128.5646
2026	1.8063	0.2527	1.1281	1.7600e-003	0.0000	2.5800e-003	2.5800e-003	0.0000	2.5800e-003	2.5800e-003	0.0000	152.2780	152.2780	0.0275	0.0000	152.9656
<b>Maximum</b>	<b>1.8063</b>	<b>0.2527</b>	<b>1.1281</b>	<b>1.7600e-003</b>	<b>0.0178</b>	<b>2.5800e-003</b>	<b>0.0186</b>	<b>4.4500e-003</b>	<b>2.5800e-003</b>	<b>5.2300e-003</b>	<b>0.0000</b>	<b>152.2780</b>	<b>152.2780</b>	<b>0.0372</b>	<b>0.0000</b>	<b>152.9656</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	7.12	71.87	-12.26	0.00	60.99	91.62	79.27	80.48	91.13	88.33	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-24-2024	11-23-2024	0.1495	0.0218
2	11-24-2024	2-23-2025	0.3500	0.1311
3	2-24-2025	5-23-2025	0.0549	0.0214
4	5-24-2025	8-23-2025	0.0069	0.0008
5	8-24-2025	11-23-2025	0.3187	0.0365
6	11-24-2025	2-23-2026	0.3187	0.0365
7	2-24-2026	5-23-2026	0.9195	0.7653
8	5-24-2026	8-23-2026	1.1521	1.0119
9	8-24-2026	9-30-2026	0.3100	0.2564
		<b>Highest</b>	1.1521	1.0119

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/24/2024	9/6/2024	6	12	
2	Site Preparation	Site Preparation	9/11/2024	9/16/2024	6	5	
3	Grading	Grading	9/19/2024	12/3/2024	6	65	

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

4	Trenching	Trenching	12/20/2024	3/6/2025	5	55
5	Building Construction	Building Construction	8/22/2025	3/11/2026	6	173
6	Architectural Coating	Architectural Coating	3/16/2026	9/15/2026	6	158
7	Paving	Paving	9/16/2026	10/1/2026	6	14

**Acres of Grading (Site Preparation Phase): 1.38**

**Acres of Grading (Grading Phase): 5.69**

**Acres of Paving: 0**

**Residential Indoor: 503,156; Residential Outdoor: 167,719; Non-Residential Indoor: 4,875; Non-Residential Outdoor: 1,625; Striped Parking Area:**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.70	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	1	1.20	187	0.41
Site Preparation	Rubber Tired Dozers	1	3.20	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	5.60	97	0.37
Grading	Bore/Drill Rigs	1	2.80	221	0.50
Grading	Excavators	2	3.20	158	0.38
Grading	Forklifts	1	2.80	89	0.20
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	1	1.40	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Trenching	Cranes	1	8.00	231	0.29
Trenching	Excavators	2	8.00	158	0.38

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
Building Construction	Cranes	1	10.00	231	0.29
Building Construction	Forklifts	4	5.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Architectural Coating	Aerial Lifts	5	4.00	63	0.31
Architectural Coating	Air Compressors	3	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	5.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	3.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover



















ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.5 Trenching - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0390	0.2894	0.4017	6.9000e-004		0.0111	0.0111		0.0105	0.0105	0.0000	57.3790	57.3790	0.0145	0.0000	57.7419
<b>Total</b>	<b>0.0390</b>	<b>0.2894</b>	<b>0.4017</b>	<b>6.9000e-004</b>		<b>0.0111</b>	<b>0.0111</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>57.3790</b>	<b>57.3790</b>	<b>0.0145</b>	<b>0.0000</b>	<b>57.7419</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.6600e-003	0.1184	0.4410	6.9000e-004		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	57.3789	57.3789	0.0145	0.0000	57.7418
<b>Total</b>	<b>9.6600e-003</b>	<b>0.1184</b>	<b>0.4410</b>	<b>6.9000e-004</b>		<b>1.0100e-003</b>	<b>1.0100e-003</b>		<b>1.0100e-003</b>	<b>1.0100e-003</b>	<b>0.0000</b>	<b>57.3789</b>	<b>57.3789</b>	<b>0.0145</b>	<b>0.0000</b>	<b>57.7418</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.6 Building Construction - 2025**

**Unmitigated Construction On-Site**

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0418	0.4148	0.4088	8.0000e-004		0.0188	0.0188		0.0173	0.0173	0.0000	70.2548	70.2548	0.0227	0.0000	70.8228
<b>Total</b>	<b>0.0418</b>	<b>0.4148</b>	<b>0.4088</b>	<b>8.0000e-004</b>		<b>0.0188</b>	<b>0.0188</b>		<b>0.0173</b>	<b>0.0173</b>	<b>0.0000</b>	<b>70.2548</b>	<b>70.2548</b>	<b>0.0227</b>	<b>0.0000</b>	<b>70.8228</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr									MT/yr						
	Off-Road	9.8100e-003	0.0425	0.4800	8.0000e-004		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	70.2547	70.2547	0.0227	0.0000
<b>Total</b>	<b>9.8100e-003</b>	<b>0.0425</b>	<b>0.4800</b>	<b>8.0000e-004</b>		<b>1.3100e-003</b>	<b>1.3100e-003</b>		<b>1.3100e-003</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>70.2547</b>	<b>70.2547</b>	<b>0.0227</b>	<b>0.0000</b>	<b>70.8227</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.6 Building Construction - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	0.0222	0.2202	0.2170	4.2000e-004		9.9600e-003	9.9600e-003		9.1600e-003	9.1600e-003	0.0000	37.3034	37.3034	0.0121	0.0000	37.6050
<b>Total</b>	<b>0.0222</b>	<b>0.2202</b>	<b>0.2170</b>	<b>4.2000e-004</b>		<b>9.9600e-003</b>	<b>9.9600e-003</b>		<b>9.1600e-003</b>	<b>9.1600e-003</b>	<b>0.0000</b>	<b>37.3034</b>	<b>37.3034</b>	<b>0.0121</b>	<b>0.0000</b>	<b>37.6050</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.2100e-003	0.0226	0.2549	4.2000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	37.3034	37.3034	0.0121	0.0000	37.6050

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Total	5.2100e-003	0.0226	0.2549	4.2000e-004		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	37.3034	37.3034	0.0121	0.0000	37.6050
-------	-------------	--------	--------	-------------	--	-------------	-------------	--	-------------	-------------	--------	---------	---------	--------	--------	---------

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.7 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0607	0.4648	0.7872	1.2700e-003		0.0180	0.0180		0.0179	0.0179	0.0000	109.8193	109.8193	0.0138	0.0000	110.1649

ABC 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Total	1.8436	0.4648	0.7872	1.2700e-003		0.0180	0.0180		0.0179	0.0179	0.0000	109.8193	109.8193	0.0138	0.0000	110.1649
-------	--------	--------	--------	-------------	--	--------	--------	--	--------	--------	--------	----------	----------	--------	--------	----------

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7829					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0176	0.2271	0.8308	1.2700e-003		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	109.8191	109.8191	0.0138	0.0000	110.1647













ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	158.00
tblConstructionPhase	NumDays	200.00	173.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	4.00	65.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialExported	0.00	30,300.00
tblLandUse	LandUseSquareFeet	42,000.00	64,398.00
tblLandUse	LandUseSquareFeet	168,000.00	247,748.00
tblLandUse	LotAcreage	0.95	0.00
tblLandUse	LotAcreage	2.71	1.07

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblLandUse	LotAcreage	0.08	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.70
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.20
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	1.40
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.60
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	807.98	178

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblTripsAndVMT	HaulingTripNumber	51.00	0.00
tblTripsAndVMT	HaulingTripNumber	3,788.00	0.00
tblTripsAndVMT	VendorTripNumber	29.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	149.00	0.00
tblTripsAndVMT	WorkerTripNumber	30.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0606	0.4744	0.6315	1.1800e-003	0.0513	0.0189	0.0702	0.0236	0.0177	0.0414	0.0000	99.8291	99.8291	0.0274	0.0000	100.5132
2028	0.6219	0.7762	0.8649	1.6100e-003	0.0000	0.0342	0.0342	0.0000	0.0319	0.0319	0.0000	140.9210	140.9210	0.0390	0.0000	141.8956
2029	1.2810	0.3451	0.5850	9.4000e-004	0.0000	0.0136	0.0136	0.0000	0.0134	0.0134	0.0000	81.6119	81.6119	0.0112	0.0000	81.8929
<b>Maximum</b>	<b>1.2810</b>	<b>0.7762</b>	<b>0.8649</b>	<b>1.6100e-003</b>	<b>0.0513</b>	<b>0.0342</b>	<b>0.0702</b>	<b>0.0236</b>	<b>0.0319</b>	<b>0.0414</b>	<b>0.0000</b>	<b>140.9210</b>	<b>140.9210</b>	<b>0.0390</b>	<b>0.0000</b>	<b>141.8956</b>

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0159	0.1583	0.7331	1.1800e-003	0.0200	1.7900e-003	0.0218	4.6100e-003	1.7900e-003	6.4000e-003	0.0000	99.8290	99.8290	0.0274	0.0000	100.5131
2028	0.5598	0.1341	0.9872	1.6100e-003	0.0000	2.5500e-003	2.5500e-003	0.0000	2.5500e-003	2.5500e-003	0.0000	140.9208	140.9208	0.0390	0.0000	141.8955
2029	1.2491	0.1611	0.6209	9.4000e-004	0.0000	1.3400e-003	1.3400e-003	0.0000	1.3400e-003	1.3400e-003	0.0000	81.6118	81.6118	0.0112	0.0000	81.8928
<b>Maximum</b>	<b>1.2491</b>	<b>0.1611</b>	<b>0.9872</b>	<b>1.6100e-003</b>	<b>0.0200</b>	<b>2.5500e-003</b>	<b>0.0218</b>	<b>4.6100e-003</b>	<b>2.5500e-003</b>	<b>6.4000e-003</b>	<b>0.0000</b>	<b>140.9208</b>	<b>140.9208</b>	<b>0.0390</b>	<b>0.0000</b>	<b>141.8955</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>7.06</b>	<b>71.58</b>	<b>-12.48</b>	<b>0.00</b>	<b>60.99</b>	<b>91.48</b>	<b>78.22</b>	<b>80.50</b>	<b>90.98</b>	<b>88.12</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-15-2027	7-14-2027	0.1320	0.0210
2	7-15-2027	10-14-2027	0.4007	0.1527
4	1-15-2028	4-14-2028	0.0069	0.0008
5	4-15-2028	7-14-2028	0.3152	0.0361
6	7-15-2028	10-14-2028	0.3187	0.0365
7	10-15-2028	1-14-2029	0.9452	0.7849
8	1-15-2029	4-14-2029	1.1235	0.9864
9	4-15-2029	7-14-2029	0.3231	0.2666
		<b>Highest</b>	<b>1.1235</b>	<b>0.9864</b>

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2027	4/28/2027	6	12	
2	Site Preperation	Site Preparation	5/4/2027	5/8/2027	6	5	
3	Grading	Grading	5/12/2027	7/26/2027	6	65	
4	Trenching	Trenching	8/12/2027	10/14/2027	6	55	
5	Building Construction	Building Construction	4/13/2028	10/31/2028	6	173	
6	Architectural Coating	Architectural Coating	11/5/2028	5/8/2029	6	158	
7	Paving	Paving	5/8/2029	5/23/2029	6	14	

**Acres of Grading (Site Preparation Phase): 1.38**

**Acres of Grading (Grading Phase): 5.69**

**Acres of Paving: 0**

**Residential Indoor: 501,690; Residential Outdoor: 167,230; Non-Residential Indoor: 5,250; Non-Residential Outdoor: 1,750; Striped Parking Area:**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.70	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preperation	Graders	1	1.20	187	0.41
Site Preperation	Rubber Tired Dozers	1	3.20	247	0.40
Site Preperation	Tractors/Loaders/Backhoes	1	5.60	97	0.37
Grading	Bore/Drill Rigs	1	3.20	221	0.50
Grading	Excavators	2	2.80	158	0.38

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading	Forklifts	1	2.80	89	0.20
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	1	1.40	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Trenching	Cranes	1	8.00	231	0.29
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
Building Construction	Cranes	1	10.00	231	0.29
Building Construction	Forklifts	4	5.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Aerial Lifts	5	4.00	63	0.31
Architectural Coating	Air Compressors	3	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	5.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	3.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Trenching	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5600e-003	0.0000	5.5600e-003	8.4000e-004	0.0000	8.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8200e-003	0.0265	0.0234	5.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	4.2978	4.2978	1.2000e-003	0.0000	4.3278
<b>Total</b>	<b>2.8200e-003</b>	<b>0.0265</b>	<b>0.0234</b>	<b>5.0000e-005</b>	<b>5.5600e-003</b>	<b>1.1700e-003</b>	<b>6.7300e-003</b>	<b>8.4000e-004</b>	<b>1.0800e-003</b>	<b>1.9200e-003</b>	<b>0.0000</b>	<b>4.2978</b>	<b>4.2978</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>4.3278</b>

**Unmitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8000e-004	2.5300e-003	0.0282	5.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.2978	4.2978	1.2000e-003	0.0000	4.3278
<b>Total</b>	<b>5.8000e-004</b>	<b>2.5300e-003</b>	<b>0.0282</b>	<b>5.0000e-005</b>	<b>2.1700e-003</b>	<b>8.0000e-005</b>	<b>2.2500e-003</b>	<b>1.6000e-004</b>	<b>8.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>4.2978</b>	<b>4.2978</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>4.3278</b>

**Mitigated Construction Off-Site**



ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.3 Site Preparation - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7500e-003	0.0000	6.7500e-003	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-003	0.0103	7.5000e-003	2.0000e-005		4.3000e-004	4.3000e-004		3.9000e-004	3.9000e-004	0.0000	1.4476	1.4476	4.7000e-004	0.0000	1.4593
<b>Total</b>	<b>1.0000e-003</b>	<b>0.0103</b>	<b>7.5000e-003</b>	<b>2.0000e-005</b>	<b>6.7500e-003</b>	<b>4.3000e-004</b>	<b>7.1800e-003</b>	<b>3.3900e-003</b>	<b>3.9000e-004</b>	<b>3.7800e-003</b>	<b>0.0000</b>	<b>1.4476</b>	<b>1.4476</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.4593</b>

**Unmitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6300e-003	0.0000	2.6300e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	8.7000e-004	9.0500e-003	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.4476	1.4476	4.7000e-004	0.0000	1.4593
<b>Total</b>	<b>2.0000e-004</b>	<b>8.7000e-004</b>	<b>9.0500e-003</b>	<b>2.0000e-005</b>	<b>2.6300e-003</b>	<b>3.0000e-005</b>	<b>2.6600e-003</b>	<b>6.6000e-004</b>	<b>3.0000e-005</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>1.4476</b>	<b>1.4476</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.4593</b>

**Mitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.4 Grading - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0390	0.0000	0.0390	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0991	0.1306	3.1000e-004		4.3100e-003	4.3100e-003		3.9600e-003	3.9600e-003	0.0000	26.9381	26.9381	8.7100e-003	0.0000	27.1559
<b>Total</b>	<b>0.0112</b>	<b>0.0991</b>	<b>0.1306</b>	<b>3.1000e-004</b>	<b>0.0390</b>	<b>4.3100e-003</b>	<b>0.0433</b>	<b>0.0194</b>	<b>3.9600e-003</b>	<b>0.0234</b>	<b>0.0000</b>	<b>26.9381</b>	<b>26.9381</b>	<b>8.7100e-003</b>	<b>0.0000</b>	<b>27.1559</b>

**Unmitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0152	0.0000	0.0152	3.7900e-003	0.0000	3.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7700e-003	0.0164	0.1799	3.1000e-004		5.0000e-004	5.0000e-004		5.0000e-004	5.0000e-004	0.0000	26.9380	26.9380	8.7100e-003	0.0000	27.1558
<b>Total</b>	<b>3.7700e-003</b>	<b>0.0164</b>	<b>0.1799</b>	<b>3.1000e-004</b>	<b>0.0152</b>	<b>5.0000e-004</b>	<b>0.0157</b>	<b>3.7900e-003</b>	<b>5.0000e-004</b>	<b>4.2900e-003</b>	<b>0.0000</b>	<b>26.9380</b>	<b>26.9380</b>	<b>8.7100e-003</b>	<b>0.0000</b>	<b>27.1558</b>

**Mitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.5 Trenching - 2027**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0456	0.3387	0.4700	8.1000e-004		0.0130	0.0130		0.0123	0.0123	0.0000	67.1456	67.1456	0.0170	0.0000	67.5703
<b>Total</b>	<b>0.0456</b>	<b>0.3387</b>	<b>0.4700</b>	<b>8.1000e-004</b>		<b>0.0130</b>	<b>0.0130</b>		<b>0.0123</b>	<b>0.0123</b>	<b>0.0000</b>	<b>67.1456</b>	<b>67.1456</b>	<b>0.0170</b>	<b>0.0000</b>	<b>67.5703</b>

**Unmitigated Construction Off-Site**

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1386	0.5160	8.1000e-004		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	67.1456	67.1456	0.0170	0.0000	67.5702
<b>Total</b>	<b>0.0113</b>	<b>0.1386</b>	<b>0.5160</b>	<b>8.1000e-004</b>		<b>1.1900e-003</b>	<b>1.1900e-003</b>		<b>1.1900e-003</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>67.1456</b>	<b>67.1456</b>	<b>0.0170</b>	<b>0.0000</b>	<b>67.5702</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ABC 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.6 Building Construction - 2028**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0640	0.6350	0.6258	1.2200e-003		0.0287	0.0287		0.0264	0.0264	0.0000	107.5582	107.5582	0.0348	0.0000	108.4278
<b>Total</b>	<b>0.0640</b>	<b>0.6350</b>	<b>0.6258</b>	<b>1.2200e-003</b>		<b>0.0287</b>	<b>0.0287</b>		<b>0.0264</b>	<b>0.0264</b>	<b>0.0000</b>	<b>107.5582</b>	<b>107.5582</b>	<b>0.0348</b>	<b>0.0000</b>	<b>108.4278</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

























ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	158.00
tblConstructionPhase	NumDays	200.00	173.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	4.00	65.00
tblConstructionPhase	NumDays	10.00	14.00
tblConstructionPhase	NumDays	2.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialExported	0.00	30,300.00
tblLandUse	LandUseSquareFeet	42,000.00	64,398.00
tblLandUse	LandUseSquareFeet	168,000.00	247,748.00
tblLandUse	LotAcreage	0.95	0.00
tblLandUse	LotAcreage	2.71	1.07

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblLandUse	LotAcreage	0.08	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.70
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.20
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	1.40
tblOffRoadEquipment	UsageHours	7.00	3.20
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.60
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	807.98	178

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblTripsAndVMT	HaulingTripNumber	51.00	0.00
tblTripsAndVMT	HaulingTripNumber	3,788.00	0.00
tblTripsAndVMT	VendorTripNumber	29.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	149.00	0.00
tblTripsAndVMT	WorkerTripNumber	30.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0251	0.2150	0.2563	5.2000e-004	0.0513	9.4200e-003	0.0607	0.0236	8.7500e-003	0.0324	0.0000	45.0117	45.0117	0.0135	0.0000	45.3501
2025	0.0791	0.6919	0.7933	1.4600e-003	0.0000	0.0294	0.0294	0.0000	0.0273	0.0273	0.0000	125.1921	125.1921	0.0366	0.0000	126.1076
2026	1.8611	0.7065	1.0412	1.7600e-003	0.0000	0.0290	0.0290	0.0000	0.0280	0.0280	0.0000	152.2781	152.2781	0.0275	0.0000	152.9657
<b>Maximum</b>	<b>1.8611</b>	<b>0.7065</b>	<b>1.0412</b>	<b>1.7600e-003</b>	<b>0.0513</b>	<b>0.0294</b>	<b>0.0607</b>	<b>0.0236</b>	<b>0.0280</b>	<b>0.0324</b>	<b>0.0000</b>	<b>152.2781</b>	<b>152.2781</b>	<b>0.0366</b>	<b>0.0000</b>	<b>152.9657</b>

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	6.6300e-003	0.0450	0.3167	5.2000e-004	0.0200	8.3000e-004	0.0208	4.6100e-003	8.3000e-004	5.4400e-003	0.0000	45.0117	45.0117	0.0135	0.0000	45.3501
2025	0.0191	0.1559	0.9022	1.4600e-003	0.0000	2.2800e-003	2.2800e-003	0.0000	2.2800e-003	2.2800e-003	0.0000	125.1919	125.1919	0.0366	0.0000	126.1075
2026	1.7991	0.2527	1.1281	1.7600e-003	0.0000	2.5800e-003	2.5800e-003	0.0000	2.5800e-003	2.5800e-003	0.0000	152.2780	152.2780	0.0275	0.0000	152.9656
<b>Maximum</b>	<b>1.7991</b>	<b>0.2527</b>	<b>1.1281</b>	<b>1.7600e-003</b>	<b>0.0200</b>	<b>2.5800e-003</b>	<b>0.0208</b>	<b>4.6100e-003</b>	<b>2.5800e-003</b>	<b>5.4400e-003</b>	<b>0.0000</b>	<b>152.2780</b>	<b>152.2780</b>	<b>0.0366</b>	<b>0.0000</b>	<b>152.9656</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>7.15</b>	<b>71.89</b>	<b>-12.25</b>	<b>0.00</b>	<b>60.99</b>	<b>91.61</b>	<b>78.43</b>	<b>80.50</b>	<b>91.12</b>	<b>88.26</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-24-2024	11-23-2024	0.1495	0.0218
2	11-24-2024	2-23-2025	0.4048	0.1521
4	5-24-2025	8-23-2025	0.0069	0.0008
5	8-24-2025	11-23-2025	0.3187	0.0365
6	11-24-2025	2-23-2026	0.3187	0.0365
7	2-24-2026	5-23-2026	0.9168	0.7626
8	5-24-2026	8-23-2026	1.1485	1.0083
9	8-24-2026	9-30-2026	0.3091	0.2555
		<b>Highest</b>	<b>1.1485</b>	<b>1.0083</b>

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/24/2024	9/6/2024	6	12	
2	Site Preperation	Site Preparation	9/11/2024	9/16/2024	6	5	
3	Grading	Grading	9/19/2024	12/3/2024	6	65	
4	Trenching	Trenching	12/20/2024	2/21/2025	6	55	
5	Building Construction	Building Construction	8/22/2025	3/11/2026	6	173	
6	Architectural Coating	Architectural Coating	3/16/2026	9/15/2026	6	158	
7	Paving	Paving	9/16/2026	10/1/2026	6	14	

**Acres of Grading (Site Preparation Phase): 1.38**

**Acres of Grading (Grading Phase): 5.69**

**Acres of Paving: 0**

**Residential Indoor: 501,690; Residential Outdoor: 167,230; Non-Residential Indoor: 5,250; Non-Residential Outdoor: 1,750; Striped Parking Area:**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.70	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preperation	Graders	1	1.20	187	0.41
Site Preperation	Rubber Tired Dozers	1	3.20	247	0.40
Site Preperation	Tractors/Loaders/Backhoes	1	5.60	97	0.37
Grading	Bore/Drill Rigs	1	2.80	221	0.50
Grading	Excavators	2	3.20	158	0.38

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Grading	Forklifts	1	2.80	89	0.20
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	1	1.40	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Trenching	Cranes	1	8.00	231	0.29
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
Building Construction	Cranes	1	10.00	231	0.29
Building Construction	Forklifts	4	5.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Architectural Coating	Aerial Lifts	5	4.00	63	0.31
Architectural Coating	Air Compressors	3	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	5.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	3.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Trenching	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

- Use Cleaner Engines for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5600e-003	0.0000	5.5600e-003	8.4000e-004	0.0000	8.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0200e-003	0.0287	0.0238	5.0000e-005		1.3100e-003	1.3100e-003		1.2200e-003	1.2200e-003	0.0000	4.2977	4.2977	1.2000e-003	0.0000	4.3277
<b>Total</b>	<b>3.0200e-003</b>	<b>0.0287</b>	<b>0.0238</b>	<b>5.0000e-005</b>	<b>5.5600e-003</b>	<b>1.3100e-003</b>	<b>6.8700e-003</b>	<b>8.4000e-004</b>	<b>1.2200e-003</b>	<b>2.0600e-003</b>	<b>0.0000</b>	<b>4.2977</b>	<b>4.2977</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>4.3277</b>

**Unmitigated Construction Off-Site**



ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8000e-004	2.5300e-003	0.0282	5.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	4.2977	4.2977	1.2000e-003	0.0000	4.3277
<b>Total</b>	<b>5.8000e-004</b>	<b>2.5300e-003</b>	<b>0.0282</b>	<b>5.0000e-005</b>	<b>2.1700e-003</b>	<b>8.0000e-005</b>	<b>2.2500e-003</b>	<b>1.6000e-004</b>	<b>8.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>4.2977</b>	<b>4.2977</b>	<b>1.2000e-003</b>	<b>0.0000</b>	<b>4.3277</b>

**Mitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.3 Site Preparation - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7500e-003	0.0000	6.7500e-003	3.3900e-003	0.0000	3.3900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0800e-003	0.0112	7.6600e-003	2.0000e-005		4.9000e-004	4.9000e-004		4.5000e-004	4.5000e-004	0.0000	1.4472	1.4472	4.7000e-004	0.0000	1.4589
<b>Total</b>	<b>1.0800e-003</b>	<b>0.0112</b>	<b>7.6600e-003</b>	<b>2.0000e-005</b>	<b>6.7500e-003</b>	<b>4.9000e-004</b>	<b>7.2400e-003</b>	<b>3.3900e-003</b>	<b>4.5000e-004</b>	<b>3.8400e-003</b>	<b>0.0000</b>	<b>1.4472</b>	<b>1.4472</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.4589</b>

**Unmitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6300e-003	0.0000	2.6300e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0000e-004	8.7000e-004	9.0500e-003	2.0000e-005		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	1.4472	1.4472	4.7000e-004	0.0000	1.4589
<b>Total</b>	<b>2.0000e-004</b>	<b>8.7000e-004</b>	<b>9.0500e-003</b>	<b>2.0000e-005</b>	<b>2.6300e-003</b>	<b>3.0000e-005</b>	<b>2.6600e-003</b>	<b>6.6000e-004</b>	<b>3.0000e-005</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>1.4472</b>	<b>1.4472</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.4589</b>

**Mitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.4 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0390	0.0000	0.0390	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1087	0.1389	3.1000e-004		4.9200e-003	4.9200e-003		4.5200e-003	4.5200e-003	0.0000	27.0606	27.0606	8.7500e-003	0.0000	27.2794
<b>Total</b>	<b>0.0121</b>	<b>0.1087</b>	<b>0.1389</b>	<b>3.1000e-004</b>	<b>0.0390</b>	<b>4.9200e-003</b>	<b>0.0439</b>	<b>0.0194</b>	<b>4.5200e-003</b>	<b>0.0239</b>	<b>0.0000</b>	<b>27.0606</b>	<b>27.0606</b>	<b>8.7500e-003</b>	<b>0.0000</b>	<b>27.2794</b>

**Unmitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0152	0.0000	0.0152	3.7900e-003	0.0000	3.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0164	0.1857	3.1000e-004		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	27.0606	27.0606	8.7500e-003	0.0000	27.2794
<b>Total</b>	<b>3.7900e-003</b>	<b>0.0164</b>	<b>0.1857</b>	<b>3.1000e-004</b>	<b>0.0152</b>	<b>5.1000e-004</b>	<b>0.0157</b>	<b>3.7900e-003</b>	<b>5.1000e-004</b>	<b>4.3000e-003</b>	<b>0.0000</b>	<b>27.0606</b>	<b>27.0606</b>	<b>8.7500e-003</b>	<b>0.0000</b>	<b>27.2794</b>

**Mitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.5 Trenching - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9000e-003	0.0664	0.0860	1.5000e-004		2.7000e-003	2.7000e-003		2.5600e-003	2.5600e-003	0.0000	12.2062	12.2062	3.1100e-003	0.0000	12.2841
<b>Total</b>	<b>8.9000e-003</b>	<b>0.0664</b>	<b>0.0860</b>	<b>1.5000e-004</b>		<b>2.7000e-003</b>	<b>2.7000e-003</b>		<b>2.5600e-003</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>12.2062</b>	<b>12.2062</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>12.2841</b>

**Unmitigated Construction Off-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0600e-003	0.0252	0.0938	1.5000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	12.2062	12.2062	3.1100e-003	0.0000	12.2841
<b>Total</b>	<b>2.0600e-003</b>	<b>0.0252</b>	<b>0.0938</b>	<b>1.5000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>12.2062</b>	<b>12.2062</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>12.2841</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.5 Trenching - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0373	0.2771	0.3846	6.6000e-004		0.0106	0.0106		0.0101	0.0101	0.0000	54.9373	54.9373	0.0139	0.0000	55.2848
<b>Total</b>	<b>0.0373</b>	<b>0.2771</b>	<b>0.3846</b>	<b>6.6000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>0.0101</b>	<b>0.0101</b>	<b>0.0000</b>	<b>54.9373</b>	<b>54.9373</b>	<b>0.0139</b>	<b>0.0000</b>	<b>55.2848</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					















ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7757					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0176	0.2271	0.8308	1.2700e-003		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	109.8191	109.8191	0.0138	0.0000	110.1647
<b>Total</b>	<b>1.7932</b>	<b>0.2271</b>	<b>0.8308</b>	<b>1.2700e-003</b>		<b>1.8000e-003</b>	<b>1.8000e-003</b>		<b>1.8000e-003</b>	<b>1.8000e-003</b>	<b>0.0000</b>	<b>109.8191</b>	<b>109.8191</b>	<b>0.0138</b>	<b>0.0000</b>	<b>110.1647</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.8 Paving - 2026**

**Unmitigated Construction On-Site**

ACB 420 S 3rd Street, San Jose - Tower C Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4600e-003	0.0215	0.0370	6.0000e-005		1.0300e-003	1.0300e-003		9.5000e-004	9.5000e-004	0.0000	5.1555	5.1555	1.6100e-003	0.0000	5.1958
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.4600e-003</b>	<b>0.0215</b>	<b>0.0370</b>	<b>6.0000e-005</b>		<b>1.0300e-003</b>	<b>1.0300e-003</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>5.1555</b>	<b>5.1555</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>5.1958</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**









ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	158.00
tblConstructionPhase	NumDays	100.00	173.00
tblConstructionPhase	NumDays	10.00	12.00
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	1.00	5.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblGrading	MaterialExported	0.00	30,300.00
tblLandUse	LandUseSquareFeet	80,000.00	80,730.00
tblLandUse	LandUseSquareFeet	169,000.00	248,472.00
tblLandUse	LotAcreage	1.80	0.00
tblLandUse	LotAcreage	2.73	0.62
tblLandUse	LotAcreage	0.07	0.00

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	1.70
tblOffRoadEquipment	UsageHours	4.00	10.00
tblOffRoadEquipment	UsageHours	6.00	5.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	1.20
tblOffRoadEquipment	UsageHours	7.00	5.00
tblOffRoadEquipment	UsageHours	7.00	3.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	6.00	1.40
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	5.60
tblProjectCharacteristics	CO2IntensityFactor	807.98	178
tblTripsAndVMT	HaulingTripNumber	3,788.00	0.00
tblTripsAndVMT	VendorTripNumber	32.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	0.00
tblTripsAndVMT	WorkerTripNumber	20.00	0.00

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblTripsAndVMT	WorkerTripNumber	157.00	0.00
tblTripsAndVMT	WorkerTripNumber	31.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0606	0.4744	0.6315	1.1800e-003	0.0457	0.0189	0.0646	0.0228	0.0177	0.0405	0.0000	99.8291	99.8291	0.0274	0.0000	100.5132
2028	0.6241	0.7762	0.8649	1.6100e-003	0.0000	0.0342	0.0342	0.0000	0.0319	0.0319	0.0000	140.9210	140.9210	0.0390	0.0000	141.8956
2029	1.2860	0.3451	0.5850	9.4000e-004	0.0000	0.0136	0.0136	0.0000	0.0134	0.0134	0.0000	81.6119	81.6119	0.0112	0.0000	81.8929
<b>Maximum</b>	<b>1.2860</b>	<b>0.7762</b>	<b>0.8649</b>	<b>1.6100e-003</b>	<b>0.0457</b>	<b>0.0342</b>	<b>0.0646</b>	<b>0.0228</b>	<b>0.0319</b>	<b>0.0405</b>	<b>0.0000</b>	<b>140.9210</b>	<b>140.9210</b>	<b>0.0390</b>	<b>0.0000</b>	<b>141.8956</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0159	0.1583	0.7331	1.1800e-003	0.0178	1.7900e-003	0.0196	4.4500e-003	1.7900e-003	6.2400e-003	0.0000	99.8290	99.8290	0.0274	0.0000	100.5131

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2028	0.5620	0.1341	0.9872	1.6100e-003	0.0000	2.5500e-003	2.5500e-003	0.0000	2.5500e-003	2.5500e-003	0.0000	140.9208	140.9208	0.0390	0.0000	141.8955
2029	1.2542	0.1611	0.6209	9.4000e-004	0.0000	1.3400e-003	1.3400e-003	0.0000	1.3400e-003	1.3400e-003	0.0000	81.6118	81.6118	0.0112	0.0000	81.8928
<b>Maximum</b>	<b>1.2542</b>	<b>0.1611</b>	<b>0.9872</b>	<b>1.6100e-003</b>	<b>0.0178</b>	<b>2.5500e-003</b>	<b>0.0196</b>	<b>4.4500e-003</b>	<b>2.5500e-003</b>	<b>6.2400e-003</b>	<b>0.0000</b>	<b>140.9208</b>	<b>140.9208</b>	<b>0.0390</b>	<b>0.0000</b>	<b>141.8955</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	7.04	71.58	-12.48	0.00	60.99	91.48	79.07	80.48	90.98	88.19	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-15-2027	7-14-2027	0.1320	0.0210
2	7-15-2027	10-14-2027	0.4007	0.1527
4	1-15-2028	4-14-2028	0.0069	0.0008
5	4-15-2028	7-14-2028	0.3152	0.0361
6	7-15-2028	10-14-2028	0.3187	0.0365
7	10-15-2028	1-14-2029	0.9480	0.7877
8	1-15-2029	4-14-2029	1.1270	0.9899
9	4-15-2029	7-14-2029	0.3240	0.2676
		Highest	1.1270	0.9899

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/15/2027	4/28/2027	6	12	
2	Site Preparation	Site Preparation	5/4/2027	5/8/2027	6	5	
3	Grading	Grading	5/12/2027	7/26/2027	6	65	
4	Trenching	Trenching	8/12/2027	10/14/2027	6	55	

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

5	Building Construction	Building Construction	4/13/2028	10/31/2028	6	173
6	Architectural Coating	Architectural Coating	1/5/2028	5/8/2029	6	158
7	Paving	Paving	5/8/2029	5/23/2029	6	14

**Acres of Grading (Site Preparation Phase): 1.38**

**Acres of Grading (Grading Phase): 5.69**

**Acres of Paving: 0**

**Residential Indoor: 503,156; Residential Outdoor: 167,719; Non-Residential Indoor: 4,875; Non-Residential Outdoor: 1,625; Striped Parking Area:**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	1.70	81	0.73
Demolition	Excavators	1	4.00	158	0.38
Demolition	Rubber Tired Dozers	1	4.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Graders	1	1.20	187	0.41
Site Preparation	Rubber Tired Dozers	1	3.20	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	5.60	97	0.37
Grading	Bore/Drill Rigs	1	3.20	221	0.50
Grading	Excavators	2	2.80	158	0.38
Grading	Forklifts	1	2.80	89	0.20
Grading	Graders	0	0.00	187	0.41
Grading	Rubber Tired Dozers	1	1.40	247	0.40
Grading	Scrapers	0	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Trenching	Cranes	1	8.00	231	0.29
Trenching	Excavators	2	8.00	158	0.38
Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37



ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Trenching	Welders	4	8.00	46	0.45
Building Construction	Cranes	1	10.00	231	0.29
Building Construction	Forklifts	4	5.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Architectural Coating	Aerial Lifts	5	4.00	63	0.31
Architectural Coating	Air Compressors	3	8.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	5.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	3.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	0.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

















ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.1386	0.5160	8.1000e-004		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	67.1456	67.1456	0.0170	0.0000	67.5702
<b>Total</b>	<b>0.0113</b>	<b>0.1386</b>	<b>0.5160</b>	<b>8.1000e-004</b>		<b>1.1900e-003</b>	<b>1.1900e-003</b>		<b>1.1900e-003</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>67.1456</b>	<b>67.1456</b>	<b>0.0170</b>	<b>0.0000</b>	<b>67.5702</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.6 Building Construction - 2028**

**Unmitigated Construction On-Site**

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0640	0.6350	0.6258	1.2200e-003		0.0287	0.0287		0.0264	0.0264	0.0000	107.5582	107.5582	0.0348	0.0000	108.4278
<b>Total</b>	<b>0.0640</b>	<b>0.6350</b>	<b>0.6258</b>	<b>1.2200e-003</b>		<b>0.0287</b>	<b>0.0287</b>		<b>0.0264</b>	<b>0.0264</b>	<b>0.0000</b>	<b>107.5582</b>	<b>107.5582</b>	<b>0.0348</b>	<b>0.0000</b>	<b>108.4278</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0150	0.0651	0.7348	1.2200e-003		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	107.5580	107.5580	0.0348	0.0000	108.4277
<b>Total</b>	<b>0.0150</b>	<b>0.0651</b>	<b>0.7348</b>	<b>1.2200e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>	<b>0.0000</b>	<b>107.5580</b>	<b>107.5580</b>	<b>0.0348</b>	<b>0.0000</b>	<b>108.4277</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.7 Architectural Coating - 2028**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
	Archit. Coating	0.5416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0184	0.1412	0.2391	3.9000e-004		5.4800e-003	5.4800e-003		5.4400e-003	5.4400e-003	0.0000	33.3628	33.3628	4.2000e-003	0.0000	33.4678
<b>Total</b>	<b>0.5601</b>	<b>0.1412</b>	<b>0.2391</b>	<b>3.9000e-004</b>		<b>5.4800e-003</b>	<b>5.4800e-003</b>		<b>5.4400e-003</b>	<b>5.4400e-003</b>	<b>0.0000</b>	<b>33.3628</b>	<b>33.3628</b>	<b>4.2000e-003</b>	<b>0.0000</b>	<b>33.4678</b>

**Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
----------	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
	Archit. Coating	0.5416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3300e-003	0.0690	0.2524	3.9000e-004		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	33.3628	33.3628	4.2000e-003	0.0000	33.4678
<b>Total</b>	<b>0.5470</b>	<b>0.0690</b>	<b>0.2524</b>	<b>3.9000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>33.3628</b>	<b>33.3628</b>	<b>4.2000e-003</b>	<b>0.0000</b>	<b>33.4678</b>

**Mitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.7 Architectural Coating - 2029**

**Unmitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
----------	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr									MT/yr						
	Archit. Coating	1.2413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0423	0.3236	0.5480	8.8000e-004		0.0126	0.0126		0.0125	0.0125	0.0000	76.4564	76.4564	9.6200e-003	0.0000	76.6971
<b>Total</b>	<b>1.2835</b>	<b>0.3236</b>	<b>0.5480</b>	<b>8.8000e-004</b>		<b>0.0126</b>	<b>0.0126</b>		<b>0.0125</b>	<b>0.0125</b>	<b>0.0000</b>	<b>76.4564</b>	<b>76.4564</b>	<b>9.6200e-003</b>	<b>0.0000</b>	<b>76.6971</b>

**Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
Archit. Coating	1.2413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0122	0.1581	0.5784	8.8000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	76.4564	76.4564	9.6200e-003	0.0000	76.6970
<b>Total</b>	<b>1.2535</b>	<b>0.1581</b>	<b>0.5784</b>	<b>8.8000e-004</b>		<b>1.2500e-003</b>	<b>1.2500e-003</b>		<b>1.2500e-003</b>	<b>1.2500e-003</b>	<b>0.0000</b>	<b>76.4564</b>	<b>76.4564</b>	<b>9.6200e-003</b>	<b>0.0000</b>	<b>76.6970</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**3.8 Paving - 2029**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

ACB 420 S 2nd Street, San Jose - Tower B Construction - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr								MT/yr							
	Off-Road	2.4600e-003	0.0215	0.0370	6.0000e-005		1.0300e-003	1.0300e-003		9.5000e-004	9.5000e-004	0.0000	5.1555	5.1555	1.6100e-003	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>2.4600e-003</b>	<b>0.0215</b>	<b>0.0370</b>	<b>6.0000e-005</b>		<b>1.0300e-003</b>	<b>1.0300e-003</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>5.1555</b>	<b>5.1555</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>5.1958</b>

**Unmitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction On-Site**

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------





420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**420 S 2nd/3rd Street, San Jose - Total Project Operation  
Santa Clara County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments High Rise	474.00	Dwelling Unit	2.14	720,776.00	1356
Regional Shopping Center	10.00	1000sqft	0.00	10,000.00	0
Enclosed Parking with Elevator	392.00	Space	0.00	200,772.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	4			<b>Operational Year</b>	2030
<b>Utility Company</b>	San Jose Clean Energy				
<b>CO2 Intensity (lb/MWhr)</b>	178	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - SJCE 2020 Rate = 178  
 Land Use - Provided land uses - construction sheet and traffic  
 Construction Phase - Operational run only - no construction  
 Off-road Equipment - Operational run only - no construction  
 Grading -  
 Vehicle Trips - Provided trip gen w/ reductions  
 Vehicle Emission Factors - EMFAC2021 vehicle emission factors Santa Clara Co 2030  
 Fleet Mix - EMFAC2021 fleet mix Santa Clara Co 2030  
 Woodstoves - No fireplaces  
 Energy Use - San Jose Natural Gas Ban effective dec 2021, convert natural gas to electricity, retail still use natural gas

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Water And Wastewater - WWTP 100% aerobic no septic tanks or lagoons in downtown San Jose

Stationary Sources - Emergency Generators and Fire Pumps - 3 200-kW, 270-HP diesel generators and 3 125-kW, 170-HP fire pump (1 per building), 50 hrs/year

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/1/2029	1/30/2029
tblEnergyUse	NT24E	3,054.10	3,055.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	70.89	72.42
tblEnergyUse	T24NG	5,226.68	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	71.10	0.00
tblFireplaces	NumberNoFireplace	18.96	0.00
tblFireplaces	NumberWood	80.58	0.00
tblFleetMix	HHD	6.1320e-003	7.8440e-003
tblFleetMix	HHD	6.1320e-003	7.8440e-003
tblFleetMix	HHD	6.1320e-003	7.8440e-003
tblFleetMix	LDA	0.58	0.51
tblFleetMix	LDA	0.58	0.51
tblFleetMix	LDA	0.58	0.51
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.18	0.24
tblFleetMix	LDT2	0.18	0.24
tblFleetMix	LDT2	0.18	0.24
tblFleetMix	LHD1	0.02	0.02

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.3980e-003	6.1700e-003
tblFleetMix	LHD2	5.3980e-003	6.1700e-003
tblFleetMix	LHD2	5.3980e-003	6.1700e-003
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MCY	0.02	0.02
tblFleetMix	MDV	0.12	0.14
tblFleetMix	MDV	0.12	0.14
tblFleetMix	MDV	0.12	0.14
tblFleetMix	MH	2.5260e-003	2.2720e-003
tblFleetMix	MH	2.5260e-003	2.2720e-003
tblFleetMix	MH	2.5260e-003	2.2720e-003
tblFleetMix	MHD	8.2190e-003	9.6590e-003
tblFleetMix	MHD	8.2190e-003	9.6590e-003
tblFleetMix	MHD	8.2190e-003	9.6590e-003
tblFleetMix	OBUS	8.5200e-004	1.0640e-003
tblFleetMix	OBUS	8.5200e-004	1.0640e-003
tblFleetMix	OBUS	8.5200e-004	1.0640e-003
tblFleetMix	SBUS	8.3700e-004	6.8100e-004
tblFleetMix	SBUS	8.3700e-004	6.8100e-004
tblFleetMix	SBUS	8.3700e-004	6.8100e-004
tblFleetMix	UBUS	3.3500e-004	3.9600e-004
tblFleetMix	UBUS	3.3500e-004	3.9600e-004
tblFleetMix	UBUS	3.3500e-004	3.9600e-004
tblLandUse	LandUseSquareFeet	474,000.00	720,776.00
tblLandUse	LandUseSquareFeet	156,800.00	200,772.00
tblLandUse	LotAcreage	7.65	2.14

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblLandUse	LotAcreage	0.23	0.00
tblLandUse	LotAcreage	3.53	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	807.98	178
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	270.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	170.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleEF	HHD	0.02	0.20
tblVehicleEF	HHD	0.05	0.09
tblVehicleEF	HHD	6.28	5.00
tblVehicleEF	HHD	0.41	0.63
tblVehicleEF	HHD	6.6850e-003	8.7300e-004
tblVehicleEF	HHD	930.05	719.71
tblVehicleEF	HHD	1,226.35	1,395.93
tblVehicleEF	HHD	0.05	9.4370e-003
tblVehicleEF	HHD	0.15	0.12
tblVehicleEF	HHD	0.19	0.22

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	HHD	2.0000e-006	4.0000e-006
tblVehicleEF	HHD	5.20	3.81
tblVehicleEF	HHD	2.52	1.45
tblVehicleEF	HHD	2.31	2.60
tblVehicleEF	HHD	2.1460e-003	1.7380e-003
tblVehicleEF	HHD	0.06	0.08
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	2.0530e-003	1.6560e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9050e-003	8.7860e-003
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.0000e-006	4.0000e-005
tblVehicleEF	HHD	5.8000e-005	1.3000e-005
tblVehicleEF	HHD	0.42	0.31
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	2.5000e-005	1.1400e-004
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	HHD	8.6530e-003	6.2150e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.0000e-006	4.0000e-005
tblVehicleEF	HHD	5.8000e-005	1.3000e-005
tblVehicleEF	HHD	0.49	0.54
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	0.07	0.10

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	HHD	2.5000e-005	1.1400e-004
tblVehicleEF	HHD	2.0000e-006	0.00
tblVehicleEF	LDA	9.5900e-004	1.2510e-003
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.40	0.48
tblVehicleEF	LDA	1.69	2.09
tblVehicleEF	LDA	199.86	218.64
tblVehicleEF	LDA	42.17	55.99
tblVehicleEF	LDA	3.1760e-003	3.1650e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.12	0.18
tblVehicleEF	LDA	0.04	7.0780e-003
tblVehicleEF	LDA	9.1600e-004	8.3800e-004
tblVehicleEF	LDA	1.2750e-003	1.4820e-003
tblVehicleEF	LDA	0.02	2.4770e-003
tblVehicleEF	LDA	8.4300e-004	7.7100e-004
tblVehicleEF	LDA	1.1720e-003	1.3620e-003
tblVehicleEF	LDA	0.02	0.23
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.00
tblVehicleEF	LDA	3.2350e-003	4.3400e-003
tblVehicleEF	LDA	0.02	0.17
tblVehicleEF	LDA	0.12	0.20
tblVehicleEF	LDA	1.9770e-003	2.1610e-003
tblVehicleEF	LDA	4.1700e-004	5.5400e-004
tblVehicleEF	LDA	0.02	0.23
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.02	0.00

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LDA	4.6990e-003	6.3290e-003
tblVehicleEF	LDA	0.02	0.17
tblVehicleEF	LDA	0.13	0.22
tblVehicleEF	LDT1	1.6710e-003	3.2730e-003
tblVehicleEF	LDT1	0.04	0.07
tblVehicleEF	LDT1	0.53	0.90
tblVehicleEF	LDT1	1.82	3.41
tblVehicleEF	LDT1	241.46	296.02
tblVehicleEF	LDT1	51.55	76.24
tblVehicleEF	LDT1	3.7700e-003	5.8700e-003
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.03	0.07
tblVehicleEF	LDT1	0.15	0.27
tblVehicleEF	LDT1	0.04	9.1380e-003
tblVehicleEF	LDT1	1.0550e-003	1.2600e-003
tblVehicleEF	LDT1	1.4610e-003	2.0740e-003
tblVehicleEF	LDT1	0.02	3.1980e-003
tblVehicleEF	LDT1	9.7000e-004	1.1590e-003
tblVehicleEF	LDT1	1.3440e-003	1.9070e-003
tblVehicleEF	LDT1	0.05	0.47
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	0.04	0.00
tblVehicleEF	LDT1	6.4760e-003	0.01
tblVehicleEF	LDT1	0.06	0.36
tblVehicleEF	LDT1	0.15	0.34
tblVehicleEF	LDT1	2.3890e-003	2.9260e-003
tblVehicleEF	LDT1	5.1000e-004	7.5400e-004
tblVehicleEF	LDT1	0.05	0.47
tblVehicleEF	LDT1	0.09	0.12



420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LDT1	0.04	0.00
tblVehicleEF	LDT1	9.4480e-003	0.02
tblVehicleEF	LDT1	0.06	0.36
tblVehicleEF	LDT1	0.17	0.37
tblVehicleEF	LDT2	1.7260e-003	1.8780e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.55	0.64
tblVehicleEF	LDT2	2.25	2.73
tblVehicleEF	LDT2	249.80	304.99
tblVehicleEF	LDT2	53.79	77.16
tblVehicleEF	LDT2	4.0490e-003	4.5010e-003
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.17	0.25
tblVehicleEF	LDT2	0.04	8.8380e-003
tblVehicleEF	LDT2	1.0100e-003	9.8900e-004
tblVehicleEF	LDT2	1.3400e-003	1.6580e-003
tblVehicleEF	LDT2	0.02	3.0930e-003
tblVehicleEF	LDT2	9.3000e-004	9.1000e-004
tblVehicleEF	LDT2	1.2320e-003	1.5240e-003
tblVehicleEF	LDT2	0.05	0.25
tblVehicleEF	LDT2	0.09	0.06
tblVehicleEF	LDT2	0.05	0.00
tblVehicleEF	LDT2	6.5290e-003	6.8650e-003
tblVehicleEF	LDT2	0.05	0.19
tblVehicleEF	LDT2	0.18	0.27
tblVehicleEF	LDT2	2.4710e-003	3.0150e-003
tblVehicleEF	LDT2	5.3200e-004	7.6300e-004
tblVehicleEF	LDT2	0.05	0.25

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LDT2	0.09	0.06
tblVehicleEF	LDT2	0.05	0.00
tblVehicleEF	LDT2	9.4890e-003	0.01
tblVehicleEF	LDT2	0.05	0.19
tblVehicleEF	LDT2	0.20	0.29
tblVehicleEF	LHD1	4.1480e-003	4.3350e-003
tblVehicleEF	LHD1	5.1950e-003	4.0280e-003
tblVehicleEF	LHD1	9.0230e-003	0.02
tblVehicleEF	LHD1	0.18	0.18
tblVehicleEF	LHD1	0.47	0.54
tblVehicleEF	LHD1	0.89	2.05
tblVehicleEF	LHD1	8.25	7.81
tblVehicleEF	LHD1	698.55	665.93
tblVehicleEF	LHD1	10.09	15.88
tblVehicleEF	LHD1	7.2900e-004	5.8900e-004
tblVehicleEF	LHD1	0.04	0.04
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	0.05	0.04
tblVehicleEF	LHD1	0.30	0.31
tblVehicleEF	LHD1	0.23	0.33
tblVehicleEF	LHD1	9.1500e-004	6.6600e-004
tblVehicleEF	LHD1	0.08	0.07
tblVehicleEF	LHD1	9.9010e-003	9.3430e-003
tblVehicleEF	LHD1	7.0190e-003	9.1890e-003
tblVehicleEF	LHD1	2.1000e-004	1.3400e-004
tblVehicleEF	LHD1	8.7500e-004	6.3700e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.4750e-003	2.3360e-003
tblVehicleEF	LHD1	6.6710e-003	8.7610e-003

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LHD1	1.9300e-004	1.2300e-004
tblVehicleEF	LHD1	1.4030e-003	0.09
tblVehicleEF	LHD1	0.05	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	7.7200e-004	0.00
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.18	0.12
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	8.0000e-005	7.6000e-005
tblVehicleEF	LHD1	6.8120e-003	6.4980e-003
tblVehicleEF	LHD1	1.0000e-004	1.5700e-004
tblVehicleEF	LHD1	1.4030e-003	0.09
tblVehicleEF	LHD1	0.05	0.02
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	7.7200e-004	0.00
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.18	0.12
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD2	2.5050e-003	2.5080e-003
tblVehicleEF	LHD2	5.3390e-003	4.4570e-003
tblVehicleEF	LHD2	4.8110e-003	8.7200e-003
tblVehicleEF	LHD2	0.13	0.14
tblVehicleEF	LHD2	0.49	0.38
tblVehicleEF	LHD2	0.48	1.11
tblVehicleEF	LHD2	13.00	13.36
tblVehicleEF	LHD2	679.81	713.03
tblVehicleEF	LHD2	6.44	8.54
tblVehicleEF	LHD2	1.6660e-003	1.6800e-003
tblVehicleEF	LHD2	0.06	0.07

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	0.38	0.50
tblVehicleEF	LHD2	0.12	0.18
tblVehicleEF	LHD2	1.5020e-003	1.4560e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.0600e-004	5.7000e-005
tblVehicleEF	LHD2	1.4370e-003	1.3930e-003
tblVehicleEF	LHD2	0.04	0.03
tblVehicleEF	LHD2	2.7110e-003	2.6340e-003
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	9.8000e-005	5.2000e-005
tblVehicleEF	LHD2	6.4200e-004	0.05
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	0.00
tblVehicleEF	LHD2	0.10	0.08
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	1.2400e-004	1.2800e-004
tblVehicleEF	LHD2	6.5570e-003	6.8600e-003
tblVehicleEF	LHD2	6.4000e-005	8.4000e-005
tblVehicleEF	LHD2	6.4200e-004	0.05
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.7400e-004	0.00
tblVehicleEF	LHD2	0.11	0.10

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	MCY	0.32	0.14
tblVehicleEF	MCY	0.25	0.16
tblVehicleEF	MCY	17.61	11.05
tblVehicleEF	MCY	9.20	7.83
tblVehicleEF	MCY	209.76	185.58
tblVehicleEF	MCY	59.23	42.83
tblVehicleEF	MCY	0.07	0.04
tblVehicleEF	MCY	0.02	6.3410e-003
tblVehicleEF	MCY	1.14	0.51
tblVehicleEF	MCY	0.27	0.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.1380e-003	1.9970e-003
tblVehicleEF	MCY	2.8620e-003	3.4160e-003
tblVehicleEF	MCY	5.0400e-003	4.2000e-003
tblVehicleEF	MCY	1.9940e-003	1.8640e-003
tblVehicleEF	MCY	2.6760e-003	3.1970e-003
tblVehicleEF	MCY	0.89	3.68
tblVehicleEF	MCY	0.63	3.56
tblVehicleEF	MCY	0.47	0.00
tblVehicleEF	MCY	2.13	0.89
tblVehicleEF	MCY	0.46	3.78
tblVehicleEF	MCY	1.88	1.13
tblVehicleEF	MCY	2.0760e-003	1.8350e-003
tblVehicleEF	MCY	5.8600e-004	4.2300e-004
tblVehicleEF	MCY	0.89	0.08
tblVehicleEF	MCY	0.63	3.56
tblVehicleEF	MCY	0.47	0.00

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	MCY	2.67	1.09
tblVehicleEF	MCY	0.46	3.78
tblVehicleEF	MCY	2.04	1.23
tblVehicleEF	MDV	1.7720e-003	2.0970e-003
tblVehicleEF	MDV	0.04	0.07
tblVehicleEF	MDV	0.54	0.66
tblVehicleEF	MDV	2.29	2.78
tblVehicleEF	MDV	301.13	364.04
tblVehicleEF	MDV	63.46	91.48
tblVehicleEF	MDV	5.2660e-003	5.4050e-003
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.18	0.27
tblVehicleEF	MDV	0.04	8.8920e-003
tblVehicleEF	MDV	1.0200e-003	9.7100e-004
tblVehicleEF	MDV	1.3440e-003	1.6080e-003
tblVehicleEF	MDV	0.02	3.1120e-003
tblVehicleEF	MDV	9.4000e-004	8.9400e-004
tblVehicleEF	MDV	1.2360e-003	1.4780e-003
tblVehicleEF	MDV	0.06	0.28
tblVehicleEF	MDV	0.10	0.07
tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	6.8620e-003	8.0910e-003
tblVehicleEF	MDV	0.05	0.21
tblVehicleEF	MDV	0.20	0.30
tblVehicleEF	MDV	2.9760e-003	3.5970e-003
tblVehicleEF	MDV	6.2800e-004	9.0400e-004
tblVehicleEF	MDV	0.06	0.28
tblVehicleEF	MDV	0.10	0.07

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	MDV	0.06	0.00
tblVehicleEF	MDV	9.9460e-003	0.01
tblVehicleEF	MDV	0.05	0.21
tblVehicleEF	MDV	0.22	0.33
tblVehicleEF	MH	5.0270e-003	6.0740e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.31	0.37
tblVehicleEF	MH	1.64	1.92
tblVehicleEF	MH	1,350.27	1,656.25
tblVehicleEF	MH	15.54	20.13
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	1.06	1.28
tblVehicleEF	MH	0.24	0.30
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.1200e-004	2.3300e-004
tblVehicleEF	MH	0.06	0.02
tblVehicleEF	MH	3.2970e-003	3.3360e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.9500e-004	2.1400e-004
tblVehicleEF	MH	0.35	20.30
tblVehicleEF	MH	0.03	4.90
tblVehicleEF	MH	0.14	0.00
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	5.8500e-003	0.12
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.01	0.02

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	MH	1.5400e-004	1.9900e-004
tblVehicleEF	MH	0.35	20.30
tblVehicleEF	MH	0.03	4.90
tblVehicleEF	MH	0.14	0.00
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	5.8500e-003	0.12
tblVehicleEF	MH	0.08	0.10
tblVehicleEF	MHD	3.8320e-003	0.02
tblVehicleEF	MHD	1.0340e-003	9.4650e-003
tblVehicleEF	MHD	8.3830e-003	6.5780e-003
tblVehicleEF	MHD	0.41	0.63
tblVehicleEF	MHD	0.15	0.16
tblVehicleEF	MHD	0.87	0.72
tblVehicleEF	MHD	65.10	143.38
tblVehicleEF	MHD	993.45	1,074.54
tblVehicleEF	MHD	8.55	6.79
tblVehicleEF	MHD	9.3710e-003	0.02
tblVehicleEF	MHD	0.12	0.14
tblVehicleEF	MHD	7.7400e-003	4.7600e-003
tblVehicleEF	MHD	0.34	0.73
tblVehicleEF	MHD	1.43	0.58
tblVehicleEF	MHD	1.69	1.22
tblVehicleEF	MHD	1.6200e-004	6.5500e-004
tblVehicleEF	MHD	0.13	0.04
tblVehicleEF	MHD	7.0060e-003	5.4200e-003
tblVehicleEF	MHD	1.1200e-004	8.2000e-005
tblVehicleEF	MHD	1.5500e-004	6.2600e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	6.6960e-003	5.1780e-003



420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	MHD	1.0300e-004	7.6000e-005
tblVehicleEF	MHD	2.8900e-004	0.01
tblVehicleEF	MHD	0.01	3.4200e-003
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.6800e-004	0.00
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.1800e-004	1.3200e-003
tblVehicleEF	MHD	9.4800e-003	0.01
tblVehicleEF	MHD	8.5000e-005	6.7000e-005
tblVehicleEF	MHD	2.8900e-004	0.01
tblVehicleEF	MHD	0.01	3.4200e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	1.6800e-004	0.00
tblVehicleEF	MHD	0.01	0.03
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.05	0.04
tblVehicleEF	OBUS	7.0980e-003	7.5210e-003
tblVehicleEF	OBUS	2.1970e-003	0.01
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.64	0.55
tblVehicleEF	OBUS	0.26	0.29
tblVehicleEF	OBUS	1.58	1.46
tblVehicleEF	OBUS	97.36	89.81
tblVehicleEF	OBUS	1,210.85	1,245.37
tblVehicleEF	OBUS	13.46	12.02
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.12	0.15

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	0.43	0.33
tblVehicleEF	OBUS	1.45	0.83
tblVehicleEF	OBUS	1.13	0.93
tblVehicleEF	OBUS	1.4200e-004	3.1100e-004
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	7.8820e-003	0.01
tblVehicleEF	OBUS	1.5600e-004	1.1800e-004
tblVehicleEF	OBUS	1.3600e-004	2.9700e-004
tblVehicleEF	OBUS	0.06	0.02
tblVehicleEF	OBUS	7.5260e-003	0.01
tblVehicleEF	OBUS	1.4400e-004	1.0900e-004
tblVehicleEF	OBUS	1.0620e-003	0.07
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	4.8700e-004	0.00
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	0.08	0.07
tblVehicleEF	OBUS	9.2400e-004	8.4600e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.3300e-004	1.1900e-004
tblVehicleEF	OBUS	1.0620e-003	0.07
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.06	0.05
tblVehicleEF	OBUS	4.8700e-004	0.00
tblVehicleEF	OBUS	0.02	0.05
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	0.08	0.08

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	SBUS	0.07	0.08
tblVehicleEF	SBUS	4.4040e-003	0.09
tblVehicleEF	SBUS	6.3380e-003	5.2160e-003
tblVehicleEF	SBUS	2.93	1.82
tblVehicleEF	SBUS	0.37	0.72
tblVehicleEF	SBUS	0.86	0.67
tblVehicleEF	SBUS	337.48	181.81
tblVehicleEF	SBUS	970.50	941.81
tblVehicleEF	SBUS	5.06	3.93
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	0.12	0.11
tblVehicleEF	SBUS	6.4910e-003	4.8480e-003
tblVehicleEF	SBUS	2.71	1.09
tblVehicleEF	SBUS	3.09	1.57
tblVehicleEF	SBUS	1.18	0.52
tblVehicleEF	SBUS	2.0480e-003	7.4600e-004
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	8.5750e-003
tblVehicleEF	SBUS	6.8000e-005	4.6000e-005
tblVehicleEF	SBUS	1.9600e-003	7.1300e-004
tblVehicleEF	SBUS	0.32	0.02
tblVehicleEF	SBUS	2.6690e-003	2.6100e-003
tblVehicleEF	SBUS	0.02	8.1870e-003
tblVehicleEF	SBUS	6.2000e-005	4.2000e-005
tblVehicleEF	SBUS	8.7000e-004	0.04
tblVehicleEF	SBUS	8.3040e-003	9.3350e-003
tblVehicleEF	SBUS	0.32	0.20
tblVehicleEF	SBUS	4.1400e-004	0.00

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	SBUS	0.06	0.04
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	3.2190e-003	1.6390e-003
tblVehicleEF	SBUS	9.2880e-003	8.7390e-003
tblVehicleEF	SBUS	5.0000e-005	3.9000e-005
tblVehicleEF	SBUS	8.7000e-004	0.04
tblVehicleEF	SBUS	8.3040e-003	9.3350e-003
tblVehicleEF	SBUS	0.46	0.32
tblVehicleEF	SBUS	4.1400e-004	0.00
tblVehicleEF	SBUS	0.07	0.13
tblVehicleEF	SBUS	0.01	0.03
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	UBUS	1.86	0.63
tblVehicleEF	UBUS	2.1860e-003	2.5020e-003
tblVehicleEF	UBUS	14.11	7.38
tblVehicleEF	UBUS	0.14	0.53
tblVehicleEF	UBUS	1,668.67	969.99
tblVehicleEF	UBUS	1.40	3.03
tblVehicleEF	UBUS	0.28	0.15
tblVehicleEF	UBUS	1.2560e-003	4.5820e-003
tblVehicleEF	UBUS	0.71	0.26
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	0.07	0.15
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	5.1160e-003	4.8220e-003
tblVehicleEF	UBUS	1.5000e-005	1.3000e-005
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	8.3320e-003	0.01

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblVehicleEF	UBUS	4.8930e-003	4.6090e-003
tblVehicleEF	UBUS	1.4000e-005	1.2000e-005
tblVehicleEF	UBUS	6.1000e-005	7.0380e-003
tblVehicleEF	UBUS	8.1400e-004	2.0980e-003
tblVehicleEF	UBUS	3.6000e-005	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	1.7600e-004	7.8780e-003
tblVehicleEF	UBUS	9.2610e-003	8.3780e-003
tblVehicleEF	UBUS	0.01	7.3890e-003
tblVehicleEF	UBUS	1.4000e-005	3.0000e-005
tblVehicleEF	UBUS	6.1000e-005	7.0380e-003
tblVehicleEF	UBUS	8.1400e-004	2.0980e-003
tblVehicleEF	UBUS	3.6000e-005	0.00
tblVehicleEF	UBUS	1.90	0.69
tblVehicleEF	UBUS	1.7600e-004	7.8780e-003
tblVehicleEF	UBUS	0.01	9.1730e-003
tblVehicleTrips	ST_TR	4.53	3.20
tblVehicleTrips	ST_TR	46.12	32.25
tblVehicleTrips	SU_TR	3.59	2.54
tblVehicleTrips	SU_TR	21.10	14.76
tblVehicleTrips	WD_TR	4.45	3.14
tblVehicleTrips	WD_TR	37.75	26.40
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	9.48	0.00
tblWoodstoves	NumberNoncatalytic	9.48	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

2029	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Maximum</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**2.2 Overall Operational Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.4891	0.0405	3.5139	1.9000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	5.7562	5.7562	5.5000e-003	0.0000	5.8936
Energy	1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	245.8843	245.8843	0.0454	5.5200e-003	248.6638
Mobile	0.8125	0.5051	5.0457	0.0127	1.2881	7.4600e-003	1.2955	0.3212	6.9600e-003	0.3282	0.0000	1,174.4405	1,174.4405	0.0566	0.0530	1,191.65
Stationary	0.0542	0.1514	0.1607	2.6000e-004		9.4000e-003	9.4000e-003		9.4000e-003	9.4000e-003	0.0000	25.1326	25.1326	3.5200e-003	0.0000	25.2207
Waste						0.0000	0.0000		0.0000	0.0000	46.3916	0.0000	46.3916	2.7417	0.0000	114.9331
Water						0.0000	0.0000		0.0000	0.0000	11.1885	19.4460	30.6345	0.0421	0.0248	39.0684
<b>Total</b>	<b>4.3559</b>	<b>0.6981</b>	<b>8.7212</b>	<b>0.0132</b>	<b>1.2881</b>	<b>0.0365</b>	<b>1.3246</b>	<b>0.3212</b>	<b>0.0360</b>	<b>0.3572</b>	<b>57.5801</b>	<b>1,470.6597</b>	<b>1,528.2398</b>	<b>2.8948</b>	<b>0.0833</b>	<b>1,625.4275</b>









420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8125	0.5051	5.0457	0.0127	1.2881	7.4600e-003	1.2955	0.3212	6.9600e-003	0.3282	0.0000	1,174.4405	1,174.4405	0.0566	0.0530	1,191.6479
Unmitigated	0.8125	0.5051	5.0457	0.0127	1.2881	7.4600e-003	1.2955	0.3212	6.9600e-003	0.3282	0.0000	1,174.4405	1,174.4405	0.0566	0.0530	1,191.6479

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	1,488.36	1,516.80	1203.96	3,353,075	3,353,075
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	264.00	322.50	147.60	448,370	448,370
<b>Total</b>	<b>1,752.36</b>	<b>1,839.30</b>	<b>1,351.56</b>	<b>3,801,445</b>	<b>3,801,445</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.514977	0.035448	0.239576	0.135703	0.024260	0.006170	0.009659	0.007844	0.001064	0.000396	0.021950	0.000681	0.002272
Enclosed Parking with Elevator	0.514977	0.035448	0.239576	0.135703	0.024260	0.006170	0.009659	0.007844	0.001064	0.000396	0.021950	0.000681	0.002272
Regional Shopping Center	0.514977	0.035448	0.239576	0.135703	0.024260	0.006170	0.009659	0.007844	0.001064	0.000396	0.021950	0.000681	0.002272

**5.0 Energy Detail**

Historical Energy Use: N

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	244.6356	244.6356	0.0454	5.5000e-003	247.4077
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	244.6356	244.6356	0.0454	5.5000e-003	247.4077
NaturalGas Mitigated	1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2487	1.2487	2.0000e-005	2.0000e-005	1.2561
NaturalGas Unmitigated	1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2487	1.2487	2.0000e-005	2.0000e-005	1.2561

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	23400	1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2487	1.2487	2.0000e-005	2.0000e-005	1.2561

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Total		1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2487	1.2487	2.0000e-005	2.0000e-005	1.2561
-------	--	-------------	-------------	-------------	-------------	--	-------------	-------------	--	-------------	-------------	--------	--------	--------	-------------	-------------	--------

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Apartments High Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	23400	1.3000e-004	1.1500e-003	9.6000e-004	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	1.2487	1.2487	2.0000e-005	2.0000e-005	1.2561	
<b>Total</b>		<b>1.3000e-004</b>	<b>1.1500e-003</b>	<b>9.6000e-004</b>	<b>1.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>		<b>9.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.2487</b>	<b>1.2487</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.2561</b>	

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.83384e+006	148.0632	0.0275	3.3300e-003	149.7410
Enclosed Parking with Elevator	1.0922e+006	88.1836	0.0164	1.9800e-003	89.1828

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Regional Shopping Center	103900	8.3888	1.5600e-003	1.9000e-004	8.4839
<b>Total</b>		<b>244.6356</b>	<b>0.0454</b>	<b>5.5000e-003</b>	<b>247.4077</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.83384e+006	148.0632	0.0275	3.3300e-003	149.7410
Enclosed Parking with Elevator	1.0922e+006	88.1836	0.0164	1.9800e-003	89.1828
Regional Shopping Center	103900	8.3888	1.5600e-003	1.9000e-004	8.4839
<b>Total</b>		<b>244.6356</b>	<b>0.0454</b>	<b>5.5000e-003</b>	<b>247.4077</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Category	tons/yr										MT/yr					
Mitigated	3.4891	0.0405	3.5139	1.9000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	5.7562	5.7562	5.5000e-003	0.0000	5.8936
Unmitigated	3.4891	0.0405	3.5139	1.9000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	5.7562	5.7562	5.5000e-003	0.0000	5.8936

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8670					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1053	0.0405	3.5139	1.9000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	5.7562	5.7562	5.5000e-003	0.0000	5.8936
<b>Total</b>	<b>3.4891</b>	<b>0.0405</b>	<b>3.5139</b>	<b>1.9000e-004</b>		<b>0.0195</b>	<b>0.0195</b>		<b>0.0195</b>	<b>0.0195</b>	<b>0.0000</b>	<b>5.7562</b>	<b>5.7562</b>	<b>5.5000e-003</b>	<b>0.0000</b>	<b>5.8936</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------



420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

SubCategory	tons/yr								MT/yr							
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	2.8670					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.1053	0.0405	3.5139	1.9000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	5.7562	5.7562	5.5000e-003	0.0000	5.8936
<b>Total</b>	<b>3.4891</b>	<b>0.0405</b>	<b>3.5139</b>	<b>1.9000e-004</b>		<b>0.0195</b>	<b>0.0195</b>		<b>0.0195</b>	<b>0.0195</b>	<b>0.0000</b>	<b>5.7562</b>	<b>5.7562</b>	<b>5.5000e-003</b>	<b>0.0000</b>	<b>5.8936</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	30.6345	0.0421	0.0248	39.0684
Unmitigated	30.6345	0.0421	0.0248	39.0684

**7.2 Water by Land Use**

**Unmitigated**

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	30.883 / 19.4697	29.9206	0.0411	0.0242	38.1569
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.740725 / 0.453993	0.7140	9.9000e-004	5.8000e-004	0.9115
<b>Total</b>		<b>30.6345</b>	<b>0.0421</b>	<b>0.0248</b>	<b>39.0684</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	30.883 / 19.4697	29.9206	0.0411	0.0242	38.1569
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.740725 / 0.453993	0.7140	9.9000e-004	5.8000e-004	0.9115
<b>Total</b>		<b>30.6345</b>	<b>0.0421</b>	<b>0.0248</b>	<b>39.0684</b>

**8.0 Waste Detail**

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	46.3916	2.7417	0.0000	114.9331
Unmitigated	46.3916	2.7417	0.0000	114.9331

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	218.04	44.2602	2.6157	0.0000	109.6527
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.5	2.1314	0.1260	0.0000	5.2805
<b>Total</b>		<b>46.3916</b>	<b>2.7417</b>	<b>0.0000</b>	<b>114.9331</b>

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	218.04	44.2602	2.6157	0.0000	109.6527
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.5	2.1314	0.1260	0.0000	5.2805
<b>Total</b>		<b>46.3916</b>	<b>2.7417</b>	<b>0.0000</b>	<b>114.9331</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment**

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0	50	270	0.73	Diesel
Fire Pump	3	0	50	170	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

**User Defined Equipment**

420 S 2nd/3rd Street, San Jose - Total Project Operation - Santa Clara County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources**

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 200 HP)	0.0332	0.0929	0.0847	1.6000e-004		4.8900e-003	4.8900e-003		4.8900e-003	4.8900e-003	0.0000	15.4223	15.4223	2.1600e-003	0.0000	15.4763
Fire Pump - Diesel (100 - 175 HP)	0.0209	0.0585	0.0759	1.0000e-004		4.5100e-003	4.5100e-003		4.5100e-003	4.5100e-003	0.0000	9.7103	9.7103	1.3600e-003	0.0000	9.7444
<b>Total</b>	<b>0.0542</b>	<b>0.1514</b>	<b>0.1607</b>	<b>2.6000e-004</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>		<b>9.4000e-003</b>	<b>9.4000e-003</b>	<b>0.0000</b>	<b>25.1326</b>	<b>25.1326</b>	<b>3.5200e-003</b>	<b>0.0000</b>	<b>25.2207</b>

**11.0 Vegetation**

---

**Attachment 3: EMFAC2021 Emissions Calculations**

**Building A - Summary of Construction Traffic Emissions (EMFAC2021)**

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	NBio- CO2	CH4	N2O	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total				
<i>Tons</i>														
<b>Criteria Pollutants</b>														
2022	0.0103	0.0939	0.1262	0.0007	0.0281	0.0053	0.0335	0.0042	0.0023	0.0065	64.5154	0.0043	0.0079	66.9832
2023	0.0210	0.1922	0.2243	0.0016	0.0671	0.0124	0.0795	0.0101	0.0053	0.0154	150.7051	0.0021	0.0184	156.2451
2024	0.0145	0.1152	0.1362	0.0010	0.0434	0.0078	0.0512	0.0065	0.0033	0.0098	93.4081	0.0013	0.0111	96.7495
<b>Toxic Air Contaminants (1 Mile Trip Length)</b>														
2022	0.0083	0.0246	0.0447	0.0001	0.0025	0.0005	0.0030	0.0004	0.0002	0.0006	7.6747	0.0012	0.0011	8.0371
2023	0.0178	0.0568	0.0940	0.0002	0.0061	0.0011	0.0072	0.0009	0.0005	0.0014	17.7885	0.0013	0.0026	18.5825
2024	0.0126	0.0343	0.0576	0.0001	0.0039	0.0007	0.0046	0.0006	0.0003	0.0009	10.9309	0.0008	0.0015	11.4077

**Building B ABC - Summary of Construction Traffic Emissions (EMFAC2021)**

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2	CH4	N2O	CO2e
	<i>Tons</i>										<i>Metric Tons</i>			
<b>Criteria Pollutants</b>														
2024	0.0094	0.0696	0.1155	0.0006	0.0289	0.0049	0.0337	0.0043	0.0020	0.0064	59.2881	0.0038	0.0069	61.4480
2025	0.0248	0.1872	0.3063	0.0017	0.0810	0.0136	0.0946	0.0122	0.0056	0.0178	163.2357	0.0101	0.0190	169.1651
2026	0.0176	0.1349	0.2180	0.0012	0.0608	0.0102	0.0710	0.0092	0.0042	0.0133	120.1298	0.0072	0.0140	124.4781
<b>Toxic Air Contaminants (1 Mile Trip Length)</b>														
2024	0.0080	0.0214	0.0420	0.0001	0.0027	0.0005	0.0031	0.0004	0.0002	0.0006	7.1989	0.0011	0.0010	7.5333
2025	0.0213	0.0588	0.1122	0.0002	0.0075	0.0013	0.0087	0.0011	0.0005	0.0017	19.8104	0.0031	0.0028	20.7261
2026	0.0152	0.0432	0.0804	0.0001	0.0056	0.0009	0.0065	0.0008	0.0004	0.0012	14.5721	0.0022	0.0021	15.2422



**Building C ABC - Summary of Construction Traffic Emissions (EMFAC2021)**

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	NBio- CO2	CH4	N2O	CO2e
	<i>Tons</i>										<i>Metric Tons</i>			
<b>Criteria Pollutants</b>														
2027	0.0153	0.1209	0.1899	0.0011	0.0557	0.0095	0.0652	0.0084	0.0039	0.0123	108.9897	0.0064	0.0128	112.9519
2028	0.0205	0.1627	0.2541	0.0015	0.0781	0.0132	0.0913	0.0118	0.0054	0.0171	149.2649	0.0085	0.0174	154.6654
2029	0.0076	0.0610	0.0949	0.0006	0.0305	0.0051	0.0357	0.0046	0.0021	0.0067	56.8868	0.0032	0.0066	58.9341
<b>Toxic Air Contaminants (1 Mile Trip Length)</b>														
2027	0.0133	0.0391	0.0705	0.0001	0.0051	0.0009	0.0060	0.0008	0.0004	0.0011	13.1050	0.0019	0.0019	13.7064
2028	0.0179	0.0536	0.0949	0.0002	0.0072	0.0012	0.0084	0.0011	0.0005	0.0016	17.9488	0.0026	0.0025	18.7690
2029	0.0067	0.0204	0.0356	0.0001	0.0028	0.0005	0.0033	0.0004	0.0002	0.0006	6.8419	0.0010	0.0010	7.1533

**Building C ACB - Summary of Construction Traffic Emissions (EMFAC2021)**

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	NBio- CO2	CH4	N2O	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total				
					<i>Tons</i>									
<b>Criteria Pollutants</b>														
2024	0.0090	0.0682	0.1112	0.0006	0.0278	0.0048	0.0325	0.0042	0.0020	0.0062	57.7816	0.0037	0.0068	59.9042
2025	0.0237	0.1836	0.2949	0.0016	0.0780	0.0133	0.0913	0.0117	0.0055	0.0172	159.0861	0.0100	0.0187	164.9133
2026	0.0169	0.1323	0.2100	0.0012	0.0586	0.0100	0.0685	0.0088	0.0041	0.0129	117.0722	0.0071	0.0137	121.3457
<b>Toxic Air Contaminants (1 Mile Trip Length)</b>														
2024	0.0076	0.0208	0.0404	0.0001	0.0025	0.0004	0.0030	0.0004	0.0002	0.0006	6.9559	0.0011	0.0010	7.2797
2025	0.0204	0.0571	0.1079	0.0002	0.0072	0.0012	0.0084	0.0011	0.0005	0.0016	19.1411	0.0030	0.0027	20.0279
2026	0.0145	0.0420	0.0774	0.0001	0.0054	0.0009	0.0063	0.0008	0.0004	0.0012	14.0791	0.0021	0.0020	14.7282

**Building B ACB - Summary of Construction Traffic Emissions (EMFAC2021)**

Pollutants YEAR	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	NBio- CO2	CH4	N2O	CO2e
					PM10	PM10	Total	PM2.5	PM2.5	Total				
<i>Tons</i>														
<b>Criteria Pollutants</b>														
2027	0.0160	0.1232	0.1972	0.0011	0.0579	0.0097	0.0675	0.0087	0.0040	0.0127	111.8421	0.0065	0.0130	115.8736
2028	0.0214	0.1658	0.2637	0.0016	0.0812	0.0135	0.0947	0.0122	0.0055	0.0177	153.1818	0.0087	0.0177	158.6766
2029	0.0080	0.0622	0.0985	0.0006	0.0317	0.0053	0.0370	0.0048	0.0021	0.0069	58.3834	0.0032	0.0067	60.4663
<b>Toxic Air Contaminants (1 Mile Trip Length)</b>														
2027	0.0139	0.0402	0.0733	0.0001	0.0053	0.0009	0.0062	0.0008	0.0004	0.0012	13.5644	0.0020	0.0019	14.1854
2028	0.0187	0.0551	0.0986	0.0002	0.0075	0.0012	0.0087	0.0011	0.0005	0.0016	18.5788	0.0027	0.0026	19.4257
2029	0.0070	0.0210	0.0370	0.0001	0.0029	0.0005	0.0034	0.0004	0.0002	0.0006	7.0822	0.0010	0.0010	7.4038

**Building A - CalEEMod Construction Inputs**

Phase	CalEEMod	CalEEMod	Total	Total	CalEEMod	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor Vehicle	Hauling Vehicle	Worker	Vendor	Hauling
	WORKER	VENDOR	Worker	Vendor	HAULING									
Demolition	8	0	96	0	165	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1036.8	0	3300
Site Preparation	8	0	40	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	432	0	0
Grading	13	0	2210	0	3,788	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	23868	0	75760
Trenching	20	0	1000	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	10800	0	0
Building Construction	123	24	19311	3768	4000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	208558.8	27506.4	29200
Architectural Coating	25	0	3575	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	38610	0	0
Paving	10	0	120	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1296	0	87.6

**Number of Days Per Year**

2022	8/1/22	12/31/22	153	131
2023	1/1/23	12/31/23	365	313
2024	1/1/24	8/23/24	236	203
			754	<b>647 Total Workdays</b>

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	8/1/2022	8/13/2022	6	12
Site Preparation	8/15/2022	8/19/2022	6	5
Grading	8/22/2022	3/7/2023	6	170
Trenching	3/8/2023	5/4/2023	6	50
Building Construction	10/19/2023	4/18/2024	6	157
Architectural Coating	3/11/2024	8/23/2024	6	143
Paving	7/18/2024	7/31/2024	6	12

**Building B ABC - CalEEMod Construction Inputs**

Phase	CalEEMod	CalEEMod	Total	Total	CalEEMod	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor Vehicle	Hauling Vehicle	Worker	Vendor	Hauling
	WORKER	VENDOR	Worker	Vendor	HAULING									
Demolition	8	0	96	0	120	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1036.8	0	2400
Site Preparation	8	0	40	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	432	0	0
Grading	13	0	845	0	3,788	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9126	0	75760
Trenching	20	0	1100	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	11880	0	0
Building Construction	157	32	27161	5536	4000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	293338.8	40412.8	29200
Architectural Coating	31	0	4898	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	52898.4	0	0
Paving	10	0	140	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1512	0	87.6

**Number of Days Per Year**

2024	8/24/24	12/31/24	130	112
2025	1/1/25	12/31/25	365	313
2026	1/1/26	10/1/26	274	235
			769	<b>660 Total Workdays</b>

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	8/24/2024	9/6/2024	6	12
Site Preparation	9/11/2024	9/16/2024	6	5
Grading	9/19/2024	12/3/2024	6	65
Trenching	12/20/2024	3/6/2025	6	55
Building Construction	8/22/2025	3/11/2026	6	173
Architectural Coating	3/16/2026	9/15/2026	6	158
Paving	9/16/2026	10/1/2026	6	14

**Building C ABC - CalEEMod Construction Inputs**

Phase	CalEEMod	CalEEMod	Total	Total	CalEEMod	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor Vehicle	Hauling Vehicle	Worker	Vendor	Hauling
	WORKER	VENDOR	Worker	Vendor	HAULING									
Demolition	8	0	96	0	171	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1036.8	0	3420
Site Preparation	8	0	40	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	432	0	0
Grading	13	0	845	0	3,788	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9126	0	75760
Trenching	20	0	1100	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	11880	0	0
Building Construction	149	29	25777	5017	4000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	278391.6	36624.1	29200
Architectural Coating	30	0	4740	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	51192	0	0
Paving	10	0	140	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1512	0	87.6

**Number of Days Per Year**

2027	4/15/27	12/31/27	261	224
2028	1/1/28	12/31/28	366	314
2029	1/1/29	5/23/29	143	123
			770	<b>661 Total Workdays</b>

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	4/15/2027	4/28/2027	6	12
Site Preparation	5/4/2027	5/8/2027	6	5
Grading	5/12/2027	7/26/2027	6	65
Trenching	8/12/2027	10/14/2027	6	55
Building Construction	4/13/2028	10/31/2028	6	173
Architectural Coating	11/5/2028	5/8/2029	6	158
Paving	5/8/2029	5/23/2029	6	14

**Building C ACB - CalEEMod Construction Inputs**

Phase	CalEEMod	CalEEMod	Total	Total	CalEEMod	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor Vehicle	Hauling Vehicle	Worker	Vendor	Hauling
	WORKER	VENDOR	Worker	Vendor	HAULING									
Demolition	8	0	96	0	171	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1036.8	0	3420
Site Preparation	8	0	40	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	432	0	0
Grading	13	0	845	0	3,788	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9126	0	75760
Trenching	20	0	1100	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	11880	0	0
Building Construction	149	29	25777	5017	4000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	278391.6	36624.1	29200
Architectural Coating	30	0	4740	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	51192	0	0
Paving	10	0	140	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1512	0	87.6

**Number of Days Per Year**

2024	8/24/24	12/31/24	130	112
2025	1/1/25	12/31/25	365	313
2026	1/1/26	10/1/26	274	235
			769	<b>660 Total Workdays</b>

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	8/24/2024	9/6/2024	6	12
Site Preparation	9/11/2024	9/16/2024	6	5
Grading	9/19/2024	12/3/2024	6	65
Trenching	12/20/2024	2/21/2025	6	55
Building Construction	8/22/2025	3/11/2026	6	173
Architectural Coating	3/16/2026	9/15/2026	6	158
Paving	9/16/2026	10/1/2026	6	14

**Building B ACB - CalEEMod Construction Inputs**

Phase	CalEEMod	CalEEMod	Total	Total	CalEEMod	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor Vehicle	Hauling Vehicle	Worker	Vendor	Hauling
	WORKER	VENDOR	Worker	Vendor	HAULING									
Demolition	8	0	96	0	120	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	1036.8	0	2400
Site Preparation	8	0	40	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	432	0	0
Grading	13	0	845	0	3,788	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	9126	0	75760
Trenching	20	0	1100	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	11880	0	0
Building Construction	157	32	27161	5536	4000	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	293338.8	40412.8	29200
Architectural Coating	31	0	4898	0	0	10.8	7.3	20	LD_Mix	HDT_Mix	HHDT	52898.4	0	0
Paving	10	0	140	0	12	10.8	7.3	7.3	LD_Mix	HDT_Mix	HHDT	1512	0	87.6

**Number of Days Per Year**

2027	4/15/27	12/31/27	261	224
2028	1/1/28	12/31/28	366	314
2029	1/1/29	5/23/29	143	123
			770	<b>661 Total Workdays</b>

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	4/15/2027	4/28/2027	6	12
Site Preparation	5/4/2027	5/8/2027	6	5
Grading	5/12/2027	7/26/2027	6	65
Trenching	8/12/2027	10/14/2027	6	55
Building Construction	4/13/2028	10/31/2028	6	173
Architectural Coating	11/5/2028	5/8/2029	6	158
Paving	5/8/2029	5/23/2029	6	14



Category	Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10	PM10_PM	PM10_PM	PM10_IDL	PM10_RU	PM10_STREX	Road Dust	PM25	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	CO2_NBIO	CO2_NBIO	CO2_NBIO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
			PM10	BW	TW	EX	NEX	PM10_STREX	PM25	BW	TW	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
Hauling	100.0	1	0.00336869	9.995596-05	0.234782686	0	0.03310051	0.00090044	5.40242E-07	4.483889	2.994965381	2.425661108	4.976619	0.80202312	0.002047	0.00781215	0.015152294	3.03977E-07		0.082553	0.025118	0.0020476	0.0277281	1.13121E-06		0.028893	0.00878	0.002264	0.0260976	1.04E-06	878.57525	1666.5159	0.0204447	0.205097	0.125617727	9.9441E-08	0.141105	0.265546018	2.37172E-05		
	0.0	0	0.031515776	0.007787406	0.029205731	0	0.06043566	0.06371349	0.055649648	1.0387322	1.574899018	1.281987369	0.651982	0.50133311	1.235154	0.0015398	0.011852234	9.03428E-05	0.299	0.045475	0.012	0.003039	0.016841	0.000122251		0.044499	0.015916	0.003	0.0002908	0.0175392	0.0001124	165.30449	1248.3979	9.138443	0.013325	0.01083545	0.0096801558	0.025434	0.161707499	0.006082033	
Vendor	50.0	0.5	0.000168035	4.9979E-05	0.137391343	0	0.01650207	0.00040202	2.70121E-07	2.2419445	1.19748269	1.212693554	2.488309	0.402120206	0.002138	0.00399007	0.007976197	1.52489E-07		0.041276	0.017539	0.001238	0.013641	5.65606E-07		0.014447	0.004939	0.001182	0.0130488	5.201E-07	439.78762	833.07993	0.0152224	0.102393	0.062880863	4.972025E-08	0.070513	0.132772508	1.18538E-05		
	50.0	0.5	0.015757888	0.003893703	0.014602865	0	0.03021783	0.03185674	0.027824824	0.5193661	0.978449509	0.640993985	0.323991	0.25066655	0.617577	0.0007699	0.00026117	4.51714E-05	0.299	0.027373	0.006	0.002152	0.00917	6.11256E-05		0.007958	0.00315	0.0004454	0.0087096	5.62E-05	82.632493	624.18906	4.9622215	0.006663	0.005416725	0.008440779	0.012717	0.080832749	0.003041017		
	1	0.015925922	0.003943681	0.181994209	0	0.0467681	0.02330697	0.027825094	2.7613106	1.9849322	1.853824238	2.8143	0.65079261	0.617795	0.00467997	0.013502314	4.53219E-05		0.299	0.064014	0.023559	0.002758	0.022811	6.16912E-05		0.044499	0.022405	0.00589	0.0002636	0.0218184	5.672E-05	522.43987	1457.2749	4.5844439	0.109956	0.068225888	0.004840829	0.08327	0.213626258	0.003052875	
Worker	50.0	0.5	0.149177765	0.044561622	0	0.0052479	0.11263736	0.173274914	0	0.024317518	0.130550761	0	0.38047308	1.66115	0	0.001284787	0.00021322		0.003617	0.004	0	0.000645	0.00131601		0.001266	0.001	0	0.0005943	0.0009486	0	129.97191	33.60301	0	0.001310136	0.036940779	0	0.002455006	0.015975366			
	25.0	0.25	0.163672189	0.04534354	0	0.00877232	0.13253357	0.156978608	0	0.039934741	0.10679354	0	0.42304103	1.522563	0	0.000832408	0.000222353		0.002307	0.002	0	0.000549	0.000813891		0.000807	0.0005	0	0.0005057	0.0007484	0	84.201583	22.49169	0	0.001941857	0.029918043	0	0.002786346	0.010206525			
	25.0	0.25	0.076308057	0.02182649	0	0.00342455	0.05722772	0.108982243	0	0.021597911	0.099392989	0	0.21784255	1.023259	0	0.00087885	0.000226117		0.002221	0.002	0	0.000357	0.000552729		0.000778	0.0005	0	0.0002289	0.0005106	0	88.910283	22.872371	0	0.000845787	0.023099113	0	0.001751061	0.009970144			
	1	0.389158461	0.111731852	0	0.017444476	0.30239865	0.439235766	0	0.08505027	0.333264791	0	1.04136666	4.206971	0	0.002996045	0.000789007		0.299	0.008145	0.008	0	0.001552	0.002400772		0.044499	0.002851	0.002	0	0.0014238	0.0022075	0	303.08358	78.967071	0	0.004097779	0.089667936	0	0.006996412	0.036132036		

Category	Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10	PM10_PM	PM10_PM	PM10_EX	PM10_RU	PM10_NEX	PM10_STREX	Road Dust	PM25_PM	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	PM25_EX	PM25_EX	PM25_EX	CO2_IDLEX	CO2_RUNEX	CO2_RUNEX	CO2_NBO	CO2_NBO	CO2_NBO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
			19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	8	9	10	19	22	23	
Hauling	100.0	1	0.00304034	0.04285-05	0.347828699	0	0.0176505	0.0081459	0.588488-07	4.3140505	1.969358369	3.846313712	5.04864	0.09691351	0.0030587	0.00788703	0.015683224	2.811754-07	0.078646	0.025076	0.002249	0.027117	1.055731-06	0.002543	0.016639	0.000113486	0.04499	0.027526	0.008769	0.000152	0.0219442	9.7076-07	832.89659	1656.5883	0.0084417	0.0161556	0.000847164	1.029772-07	0.131223	0.309915335	2.609221-05	0.024349	0.15977786	0.006125876				
	0.0	0	0.028561371	0.00699509	0.027522552	0	0.04605876	0.0568808	0.052589325	0.9248659	1.283752097	1.402835166	0.658116	0.38348852	1.158043	0.00150936	0.011835407	8.77732E-05	0.299	0.045459	0.012073	0.002543	0.016639	0.000113486	0.04499	0.015911	0.003018	0.0002483	0.015911	0.0001043	159.17134	1238.9359	8.8785167	0.003231	0.004055846	0.009290011	0.024349	0.15977786	0.006125876									
Vendor	50.0	0.5	0.000120217	4.52145E-05	0.173914849	0	0.00802025	0.00040729	2.79525E-07	2.1570323	0.884029184	1.421358856	2.23433	0.04845076	0.000293	0.0094351	0.007848212	1.40038E-07	0.059232	0.017538	0.001125	0.013359	5.27807E-07	0.013763	0.004384	0.0001076	0.0129721	4.854E-07	416.44884	828.09416	0.0142209	0.000078	0.000423862	5.14839E-08	0.002612	0.12845768	1.30424E-05	0.077786	0.210346597	0.003075984								
	50.0	0.5	0.014280685	0.003497545	0.013761276	0	0.02302938	0.0284404	0.026294663	0.462433	0.641876049	0.703437583	0.320058	0.19174426	0.579021	0.00075468	0.000917704	4.38866E-05	0.22273	0.006337	0.002172	0.008319	5.6743E-05	0.007955	0.001509	0.0001217	0.0079555	5.217E-05	78.585672	613.46793	4.4922584	0.003615	0.002027923	0.006450006	0.012174	0.07988893	0.00362938											
	1	0.014432702	0.00354276	0.187676125	0	0.03185463	0.0288477	0.026294942	2.6194582	1.626505233	2.124574439	2.853378	0.24020102	0.579315	0.00469819	0.013759316	4.40272E-05	0.299	0.062053	0.023574	0.002396	0.021878	5.72709E-05	0.04499	0.021718	0.005894	0.0002293	0.0209276	5.2666E-05	496.03372	1447.5621	4.4534792	0.006693	0.002451805	0.006450057	0.077786	0.210346597	0.003075984										
Worker	50.0	0.5	0.144880439	0.043063012	7.021214E-05	0	0.00468527	0.10934682	0.160783376	0.0017067	0.023000859	0.123561424	0.009072	0.37120225	1.561783	0	0.001265148	0.000322928	0.003783	0.00403	3.23E-06	0.000622	0.000984673	0.001324	0.001008	2.97E-06	0.0005728	0.0009054	1.302552	129.49043	32.665515	0.004588	0.003814346	0.034742775	0.000266	0.002606656	0.015112242	0.001869762	0.008916376									
	25.0	0.25	0.129076419	0.036268779	0	0.00566708	0.10043684	0.123448767	0	0.02578568	0.085338967	0.29193743	1.179816	0	0.000686899	0.000206395	0.001929	0.002	0.000419	0.000730073	0.000675	0.0005	0	0.000186	0.0006713	0	0.000186	0.0006713	0	69.482518	20.877428	0	0.001275531	0.024314086	0	0.001869762	0.008916376											
	25.0	0.25	0.074422251	0.02111135	0	0.00309335	0.05360188	0.101871082	0	0.019196545	0.0881878089	0	0.22262542	0.960332	0	0.000863989	0.000220872	0.002228	0.002	0	0.000146	0.000540403	0.00078	0.0005	0	0.000187	0.0004969	0	87.45069	22.841818	0	0.000774785	0.021766744	0	0.001627993	0.009585341												
	1	0.348379108	0.100443141	7.021214E-05	0	0.0134457	0.26538954	0.386103225	0.0017067	0.067863084	0.29777848	0.009072	0.38576059	3.706931	0	0.002816036	0.000790194	0.299	0.007939	0.00803	3.23E-06	0.001388	0.00225515	0.04499	0.002179	0.002008	2.97E-06	0.0012774	0.00020736	1.302552	286.37985	75.884362	0.004588	0.003864662	0.080823605	0.000266	0.006104409	0.034013959										

Category	Mtx %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10	PM10_PM	PM10_PM	PM10_IDL	PM10_RU	PM10_STREX	Road Dust	PM25_PM	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	CO2_NBIO	CO2_NBIO	CO2_NBIO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
			PM10	BW	TW	EX	NEX	PM10_STREX	PM25	BW	TW	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
Hauling	100.0	1	0.000199377	5.83846E-05	0.23789936	0	0.01860554	0.00032501	4.36152E-07	4.1112137	1.850604526	7.7348381	5.19556	0.77488683	0.000626	0.00728035	0.014635772	1.93499E-07	0.081298	0.025125	0.002182	0.025474	6.09682E-07	0.028454	0.008781	0.0003082	0.0243688	5.606E-07	832.31669	1617.1297	0.010573	0.222934	0.121678903	8.02769E-08	0.134072	0.258070714	1.34765E-05	0.024668	0.158249654	0.006031915	
	0.0	0	0.025794994	0.006359754	0.026359118	0	0.03811329	0.05096401	0.04894298	0.8943127	1.12291974	1.40789614	0.673181	0.34617278	1.07433	0.00148998	0.011664295	8.43209E-05	0.299	0.045389	0.012	0.002128	0.012985	0.000106814	0.044499	0.01589	0.003	0.0002035	0.0124511	9.821E-05	160.25985	1229.1806	8.5293121	0.013383	0.00965827	0.008772715	0.024668	0.158249654	0.006031915		
Vendor	50.0	0.5	9.79886E-05	2.91428E-05	0.164894908	0	0.00530277	0.0002625	2.18076E-07	2.0254069	0.925202263	1.38170419	2.50778	0.38744341	0.000313	0.00364017	0.007317886	9.87497E-08	0.040649	0.017563	0.001091	0.012737	3.04841E-07	0.014217	0.004391	0.001041	0.0121644	2.803E-07	416.13835	808.54485	0.0097865	0.110467	0.006892451	4.01380E-08	0.007836	0.129038357	9.73817E-05	0.024668	0.158249654	0.006031915	
	50.0	0.5	0.012897497	0.003129877	0.013179559	0	0.019056644	0.02548201	0.02447149	0.4473563	0.556460987	0.70394807	0.335691	0.17398639	0.537165	0.00074499	0.005821247	4.21605E-05	0.0227	0.006	0.001064	0.006902	5.3407E-05	0.007945	0.0015	0.0001018	0.0062075	8.911E-05	80.239514	614.5903	4.2646661	0.006691	0.004829164	0.004386358	0.021344	0.079124827	0.003015508	0.024668	0.158249654	0.006031915	
	1	0.012995486	0.003190019	0.178074527	0	0.02835941	0.02574451	0.024471708	2.5027632	1.48176325	2.06965226	2.933471	0.5605298	0.537478	0.00438516	0.013150033	4.22572E-05	0.299	0.063348	0.023563	0.002155	0.01923	5.3719E-05	0.044499	0.022172	0.005891	0.0002059	0.0183919	4.939E-05	496.28827	1423.1552	4.2744426	0.123158	0.065668615	0.004386398	0.07938	0.208161184	0.003025696	0.024668	0.158249654	0.006031915
Worker	50.0	0.5	0.136796864	0.040510207	0	0.00394385	0.10236849	0.147535756	0	0.018684555	0.115476587	0	0.32485557	1.445873	0	0.001219878	0.000315615	0.003584	0.004	0	0.000585	0.000954881	0.001254	0.001	0	0.000539	0.000878	0	123.40405	31.925346	0	0.001026569	0.03235985	0	0.002081025	0.014940319	0.024668	0.158249654	0.006031915		
	25.0	0.25	0.148814258	0.041105424	0	0.00690435	0.11745495	0.134116008	0	0.0319581	0.094816504	0	0.35468144	1.306204	0	0.00080836	0.000213259	0.002306	0.002	0	0.000482	0.00072446	0.000807	0.0005	0	0.0004435	0.0006661	0	81.76883	21.571794	0	0.001555571	0.026204278	0	0.00234364	0.009623613	0.024668	0.158249654	0.006031915		
	25.0	0.25	0.072043204	0.020150051	0	0.00277508	0.05338915	0.094795741	0	0.017007912	0.082407943	0	0.2073317	0.905899	0	0.00084201	0.000215546	0.002217	0.002	0	0.000333	0.000526973	0.000776	0.0005	0	0.0003065	0.0004845	0	85.183477	21.80511	0	0.000794556	0.020482249	0	0.001504676	0.009197602	0.024668	0.158249654	0.006031915		
	1	0.357654326	0.101760681	0	0.01362228	0.2734126	0.376447505	0	0.067650567	0.292701033	0	0.88686871	3.657977	0	0.002870248	0.000744439	0.299	0.008107	0.008	0	0.001401	0.002296134	0.044499	0.002837	0.002	0	0.001289	0.0002086	0	290.35636	79.302249	0	0.001286696	0.079046277	0	0.00509341	0.033761535	0.024668	0.158249654	0.006031915	

Category	Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust			PM10			PM25			PM2.5			CO2_NBIO_IDLEX	CO2_NBIO_RUNEX	CO2_NBIO_STREX	CH4_IDLEX	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
																			PM10_BW	PM10_TW	PM10_EX	PM10_BW	PM10_TW	PM10_EX	PM25_BW	PM25_TW	PM25_EX	PM25_BW	PM25_TW	PM25_EX									
Hauling	100.0	1	0.000161301	4.79645E-05	0.32711902	0	0.0177956	0.00042204	4.20623E-07	4.9544561	1.774037666	2.751173224	5.17629	0.736653561	0.003085	0.00709894	0.014348163	1.691916E-07	0.081222	0.025128	0.002097	0.025021	5.20295E-07	0.028428	0.008782	0.002	0.0229449	4.785E-07	813.97236	1586.8336	0.017142	0.229861	0.117122109	7.74759E-08	0.131219	0.252304832	1.42154E-05		
	0.0	0	0.02318162	0.005603296	0.025250869	0	0.032148334	0.04529134	0.045776126	0.8648942	1.006394097	1.405484797	0.668176	0.2369393	1.000247	0.00147206	0.011511702	8.11155E-05	0.299	0.04526	0.012	0.001762	0.011186	0.000109932	0.04499	0.015841	0.003	0.0001685	0.0106842	9.28E-05	158.59364	1213.6546	8.2050726	0.013842	0.0095255	0.008314196	0.024457	0.156014841	0.005892352
Vendor	50.0	0.5	8.00020E-05	2.39821E-05	0.16359291	0	0.0088998	0.00021002	2.10316E-07	2.0207281	0.89702831	1.37588662	2.588145	0.3732678	0.000382	0.00354047	0.007174082	8.40565E-08	0.040611	0.017504	0.001048	0.012516	2.02108E-07	0.014214	0.004391	0.001	0.0119775	2.392E-07	406.98663	793.41681	0.008571	0.114931	0.050566054	3.87379E-08	0.00561	0.126662016	7.10709E-05		
	50.0	0.5	0.011559081	0.002802648	0.012625434	0	0.01624167	0.002264507	0.022888063	0.4324471	0.502197049	0.703742398	0.334088	0.14846966	0.500124	0.00973603	0.005755831	4.05577E-05	0.022963	0.006	0.000881	0.005093	5.96468E-05	0.00792	0.00315	0.000843	0.0053471	4.64E-05	79.396518	606.82729	4.1023363	0.006921	0.00476775	0.004157098	0.022228	0.078009171	0.002929126		
		1	0.011639731	0.00282563	0.176184944	0	0.02514147	0.00286159	0.022888273	2.4631751	1.390225882	2.07732906	2.922233	0.52673746	0.500466	0.0042855	0.012929933	4.06423E-05	0.299	0.063241	0.023564	0.001929	0.018109	5.0726E-05	0.04499	0.022134	0.005891	0.0001842	0.0173196	4.664E-05	486.28315	1400.2441	4.1110934	0.121851	0.063333805	0.004157137	0.077838	0.204661187	0.002936234
Worker	50.0	0.5	0.132316144	0.038798622	0	0.003147076	0.09896031	0.136662954	0	0.01669164	0.109258161	0	0.30329008	1.355747	0	0.0001187649	0.000307718	0.003568	0.004	0	0.00056	0.000924606	0.001249	0.001	0	0.0005155	0.0008501	0	120.14294	31.126584	0	0.000920346	0.030308682	0	0.001942289	0.014436598			
	25.0	0.25	0.140646011	0.03898451	0	0.0061396	0.10983229	0.123932987	0	0.028671908	0.08936931	0	0.32677601	1.213816	0	0.000795316	0.000308804	0.002305	0.002	0	0.000453	0.000687493	0.000807	0.0005	0	0.0004172	0.0006321	0	80.449305	21.121122	0	0.001394323	0.02448908	0	0.002156684	0.009328014			
	25.0	0.25	0.070892203	0.019532741	0	0.00212234	0.05275079	0.088626213	0	0.01516585	0.07730776	0	0.19535268	0.854482	0	0.000824183	0.000210579	0.002215	0.002	0	0.000123	0.000515217	0.000775	0.0005	0	0.0002971	0.0004737	0	83.400309	21.300669	0	0.000484321	0.019128106	0	0.001412647	0.008875809			
		1	0.1348954318	0.097313873	0	0.01211371	0.26154339	0.349222174	0	0.060720398	0.279935432	0	0.82541877	3.434044	0	0.002807347	0.000777101	0.299	0.008088	0.008	0	0.001336	0.002127136	0.04499	0.002831	0.002	0	0.0012299	0.001956	0	283.99255	73.548375	0	0.000296279	0.014129868	0	0.005511876	0.012635421	

Category	Mix %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10	PM10_PM	PM10_PM	PM10_IDL	PM10_RU	PM10_STREX	Road Dust	PM25	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	PM25_STR	CO2_NBIO	CO2_NBIO	CO2_NBIO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
			19	22	23	8	9	10	X																																	
Hauling	100.0	1	0.000106002	3.361438-05	0.22445582	0	0.01701891	0.00030273	0.068488-07	4.013652	1.701647234	2.760133946	5.153655	0.73309991	0.000738	0.00692351	0.014049606	1.337396-07	0.081458	0.025132	0.002013	0.024769	2.28979E-07	0.001445	0.009635	9.6335E-05	0.04499	0.015781	0.003	0.003382	0.0092102	8.858E-05	156.6958	1196.5286	7.914622	0.014329	0.009524548	0.007918504	0.024186	0.135578352	0.005689167	
	0.0	0	0.0221312827	0.005105771	0.0242461021	0	0.027766184	0.04201809	0.043042965	0.837392	0.906228922	1.39169173	0.664762	0.2571492	0.934813	0.00145189	0.011343734	7.82441E-05	0.299	0.045088	0.012	0.001445	0.009635	9.6335E-05	0.04499	0.015781	0.003	0.003382	0.0092102	8.858E-05	156.6958	1196.5286	7.914622	0.014329	0.009524548	0.007918504	0.024186	0.135578352	0.005689167			
Vendor	50.0	0.5	3.30030E-05	1.88071E-05	0.16221791	0	0.000809045	0.00011136	0.03242E-07	2.068206	0.802823617	1.380660373	2.576828	0.36654996	0.000389	0.00346176	0.007018803	6.8888E-08	0.040729	0.017506	0.001006	0.012385	1.64687E-07	0.0014255	0.004391	0.000996	0.0118871	1.524E-07	397.83497	777.4807	0.0067939	0.112154	0.005923068	3.74914E-08	0.004173	0.12412973	4.0208E-05					
	50.0	0.5	0.010656414	0.002558885	0.012133051	0	0.01383092	0.002100905	0.021521482	0.418896	0.651114461	0.695845865	0.333381	0.1285746	0.467407	0.00072595	0.009573867	3.9112E-05	0.022544	0.006	0.000723	0.004818	4.81675E-05	0.0014255	0.004391	0.000996	0.0118871	1.524E-07	397.83497	777.4807	0.0067939	0.112154	0.005923068	3.74914E-08	0.004173	0.12412973	4.0208E-05					
		1	0.010709414	0.002569693	0.17435842	0	0.02234037	0.021116041	0.021516886	2.425522	1.303938078	2.075912838	2.909209	0.49512456	0.467775	0.0041877	0.01269667	3.91889E-05	0.299	0.063273	0.023566	0.001729	0.017202	4.83322E-05	0.04499	0.022146	0.005891	0.0031651	0.0164522	4.444E-05	476.18287	1375.751	3.9640749	0.119319	0.060685342	0.003959289	0.076266	0.200922149	0.002848604			
Worker	50.0	0.5	0.127252154	0.036844958	0	0.000310372	0.09549445	0.127728959	0	0.015187697	0.103974769	0	0.2865276	1.277031	0	0.001162034	0.000300399	0.003561	0.004	0	0.000536	0.000895416	0.001246	0.001	0	0.000493	0.0008233	0	117.55101	30.386258	0	0.000837586	0.028479341	0	0.001839043	0.013991495						
	25.0	0.25	0.132430724	0.036849484	0	0.00546911	0.10347702	0.114576224	0	0.025800958	0.084390428	0	0.30194857	1.128878	0	0.000782025	0.000204392	0.002303	0.002	0	0.000427	0.000636611	0.000806	0.0005	0	0.0003926	0.000601	0	79.104787	20.674857	0	0.00125256	0.022898387	0	0.001992702	0.009041201						
	25.0	0.25	0.069772888	0.018822709	0	0.00238206	0.05209969	0.083130872	0	0.014000924	0.071061014	0	0.18549243	0.809666	0	0.000807532	0.000209841	0.002214	0.002	0	0.000111	0.000500467	0.000775	0.0005	0	0.000286	0.0004602	0	81.699543	20.821419	0	0.000600438	0.018292607	0	0.001336696	0.008608075						
		1	0.329455766	0.09236225	0	0.01088088	0.25107136	0.324837454	0	0.054989579	0.261420211	0	0.7739606	3.215575	0	0.002751591	0.000710632	0.299	0.008078	0.008	0	0.001273	0.000249544	0.04499	0.002827	0.002	0	0.0111716	0.0018845	0	278.35144	71.882534	0	0.002600584	0.069670334	0	0.005168441	0.031640771				



Category	Mtx %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNUN	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10	PM10_PM	PM10_PM	PM10_IDL	PM10_RU	PM10_STREX	Road Dust	PM25_PM	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	CO2_NBIO	CO2_NBIO	CO2_NBIO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX
			PM10	BW	TW	EX	NEX	PM10_STREX	PM25	BW	TW	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
Hauling	100.0	1	5.521538E-05	1.750028E-05	0.318402282	0	0.01554384	0.00015738	0.265166E-07	2.5142972	1.566149473	2.706913868	5.089184	0.68226811	0.000818	0.08656794	0.013349969	9.813515E-08	0.081989	0.025139	0.001864	0.024127	1.63816E-07	0.028696	0.008785	0.001776	0.0220796	1.506E-07	757.81994	1479.563	0.0099367	0.212116	0.100129994	6.02384E-08	0.122369	0.236311945	5.68332E-06	0.023392	0.147052559	0.005251572	
	0.0	0	0.018086411	0.004224003	0.022533624	0	0.0202507	0.03518802	0.0383006	0.7840844	0.730790143	1.328267001	0.652204	0.15813093	0.820911	0.00139723	0.010874145	7.27712E-05	0.044461	0.012	0.000973	0.007191	8.91338E-05	0.044499	0.015561	0.003	0.000093	0.00068725	8.196E-05	151.31368	1148.1122	7.3609993	0.015111	0.00957601	0.00717541	0.002392	0.147052559	0.005251572			
	0.0	0	0.018086411	0.004224003	0.022533624	0	0.0202507	0.03518802	0.0383006	0.7840844	0.730790143	1.328267001	0.652204	0.15813093	0.820911	0.00139723	0.010874145	7.27712E-05	0.044461	0.012	0.000973	0.007191	8.91338E-05	0.044499	0.015561	0.003	0.000093	0.00068725	8.196E-05	151.31368	1148.1122	7.3609993	0.015111	0.00957601	0.00717541	0.002392	0.147052559	0.005251572			
Vendor	50.0	0.5	2.76132E-05	8.75012E-06	0.125011101	0	0.00777192	7.808E-05	1.63388E-07	1.9571486	0.783074736	1.352466284	2.244932	0.34113406	0.000409	0.00238297	0.006674984	4.20675E-08	0.040995	0.017569	0.000932	0.012963	8.13079E-08	0.014348	0.004392	0.000888	0.0113298	7.531E-08	578.90597	738.7815	0.0049633	0.100208	0.000944967	3.01322E-08	0.001184	0.11815672	2.84166E-06	0.001184	0.11815672	2.84166E-06	
	50.0	0.5	0.009043205	0.002112001	0.011266812	0	0.001021535	0.01759401	0.0191503	0.3920427	0.365380071	0.664133501	0.328102	0.09906547	0.410456	0.00069861	0.00547072	3.63835E-05	0.022231	0.006	0.000487	0.002596	4.45679E-05	0.007781	0.0015	0.000465	0.0034362	8.098E-05	75.656638	574.05611	3.6804996	0.007556	0.0047788	0.00360877	0.011696	0.07353028	0.002625786	0.011696	0.07353028	0.002625786	
	1	0.009070818	0.002120752	0.170468003	0	0.01789727	0.0176727	0.019150463	2.3491908	1.148454808	2.01790434	2.870694	0.44019952	0.410865	0.00398259	0.012112057	3.64346E-05	0.0299	0.063225	0.023569	0.001418	0.015659	4.46498E-05	0.044499	0.022129	0.005892	0.001353	0.014976	4.105E-05	454.56681	1313.8376	3.685463	0.113613	0.054843767	0.0036088	0.07228	0.191681952	0.002628628	0.07228	0.191681952	0.002628628
Worker	50.0	0.5	0.121405719	0.033868063	0	0.00225245	0.09132453	0.111329065	0	0.013011461	0.095860357	0	0.26055635	1.147115	0	0.001117153	0.000287519	0.003549	0.004	0	0.000477	0.000821871	0.001242	0.001	0	0.0004392	0.0007557	0	113.00952	29.08341	0	0.000712537	0.025390033	0	0.001686502	0.01263803	0	0.001686502	0.01263803		
	25.0	0.25	0.126607034	0.033524532	0	0.00433508	0.09650276	0.098324934	0	0.020776268	0.075692594	0	0.23921794	0.980939	0	0.000756073	0.000196114	0.002295	0.002	0	0.000366	0.000584797	0.000803	0.0005	0	0.0003668	0.0005377	0	76.479161	19.83747	0	0.001012977	0.020099971	0	0.001707138	0.008541119	0	0.001707138	0.008541119		
	25.0	0.25	0.066674332	0.01739701	0	0.00186624	0.04978744	0.073866077	0	0.011850272	0.066470894	0	0.170188364	0.737497	0	0.000778068	0.000197586	0.002212	0.002	0	0.000279	0.000450993	0.000774	0.0005	0	0.0002566	0.0004221	0	78.714852	19.886453	0	0.000524764	0.016532732	0	0.001215363	0.008301125	0	0.001215363	0.008301125		
1	0.1313587085	0.084607056	0	0.00885377	0.23761472	0.283519076	0	0.040639021	0.237843844	0	0.69013792	2.865551	0	0.002651294	0.000681219	0.299	0.008056	0.008	0	0.001123	0.001860761	0.044499	0.00282	0.002	0	0.0010327	0.0017155	0	268.20353	68.907334	0	0.00220277	0.063022736	0	0.004609004	0.030006047	0	0.004609004	0.030006047		

Category	Mtx %	Adj	ROG_DIURN	ROG_HTSK	ROG_IDLEX	ROG_RESTL	ROG_RUNEX	ROG_RUNLS	ROG_STREX	NOX_IDLEX	NOX_RUNEX	NOX_STREX	CO_IDLEX	CO_RUNEX	CO_STREX	SO2_IDLEX	SO2_RUNEX	SO2_STREX	Road Dust	PM10_PM	PM10_PM	PM10_PM	PM10_IDL	PM10_RU	PM10_STREX	Road Dust	PM25_PM	PM25_PM	PM25_PM	PM25_IDL	PM25_RUN	PM25_STR	CO2_NBIO	CO2_NBIO	CO2_NBIO	CH4_IDLE	CH4_RUNEX	CH4_STREX	N2O_IDLEX	N2O_RUNEX	N2O_STREX	
			PM10	BW	TW	EX	NEX	PM10_STREX	PM25	BW	TW	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
Hauling	100.0	1	5.144838-05	1.620156-05	0.314877286	0	0.01493401	0.0014644	2.811426-07	3.8668925	1.503534639	2.654112888	5.046658	0.65703157	0.003846	0.00638822	0.012566883	9.93697E-08	0.082097	0.035142	0.0018	0.022773	1.62043E-07	0.028734	0.008785	0.001716	0.0227415	1.48E-07	738.65624	1438.278	0.0100165	0.203993	0.084166881	5.20469E-08	0.153941	0.229736287	4.58282E-06	0.02284	0.142641072	0.05000865		
	0.0	0	0.016403624	0.003806654	0.021705354	0	0.01739386	0.03174215	0.03617952	0.7566287	0.6547538	1.275398666	0.643722	0.17521548	0.768783	0.00136106	0.01054984	6.99982E-05	0.299	0.045967	0.012	0.000798	0.066238	8.58334E-05	0.04499	0.015385	0.003	0.000763	0.0059603	7.892E-05	147.64529	1114.373	7.0805366	0.015383	0.009537041	0.006893289	0.02284	0.142641072	0.05000865			
	50.0	0.5	2.57201E-05	8.13077E-06	0.117438643	0	0.007452	7.322E-06	1.41071E-07	1.3594462	0.71376710	1.377050044	2.32334	0.32831078	0.004023	0.00319411	0.006483442	4.96849E-08	0.041049	0.017571	0.0009	0.011387	8.31017E-08	0.014367	0.004393	0.000868	0.0113707	7.46E-08	305.32812	718.3639	0.0020268	0.103496	0.047983441	2.02324E-08	0.05967	0.114886144	2.20141E-06	0.02284	0.142641072	0.05000865		
Vendor	50.0	0.5	0.008201812	0.001502327	0.010285267	0	0.008696693	0.01587108	0.018089976	0.3783144	0.32713769	0.637699333	0.320881	0.087620774	0.394391	0.00068053	0.00527472	3.49991E-05	0.0121979	0.0006	0.000399	0.003113	4.20167E-05	0.007693	0.0015	0.000381	0.0028001	3.346E-05	73.822643	57.33602	3.9402633	0.007693	0.004768521	0.003446645	0.01142	0.071230536	0.002520432	0.02284	0.142641072	0.05000865		
	0.0	0	0.008227532	0.001911478	0.16829132	0	0.01614893	0.0159443	0.018089901	2.3087606	1.078905009	1.964755377	2.844201	0.41612352	0.384815	0.00387464	0.011758162	3.50488E-05	0.299	0.063027	0.023571	0.001299	0.015006	4.29977E-05	0.04499	0.02206	0.005893	0.001239	0.0143509	3.953E-05	443.15076	1276.2504	3.545289	0.111188	0.051851961	0.003446671	0.071091	0.18618868	0.002502724	0.02284	0.142641072	0.05000865
	50.0	0.5	0.116714056	0.011928285	0	0.00234448	0.08769128	0.104680353	0	0.01222524	0.092388473	0	0.25058027	1.092882	0	0.001097916	0.000281889	0.0003543	0.004	0.000448	0.000781446	0.00124	0.001	0	0.0004118	0.0007185	0	111.06294	28.513857	0	0.000665147	0.024069566	0	0.001629672	0.012964307	0.02284	0.142641072	0.05000865				
Worker	25.0	0.25	0.121496748	0.031737492	0	0.00385074	0.09248847	0.091107501	0	0.01855544	0.071803003	0	0.24058479	0.914977	0	0.000743647	0.000192196	0.000229	0.0029	0.00034	0.000551194	0.000802	0.0005	0	0.0003126	0.0005068	0	75.222204	19.44118	0	0.000910146	0.018845073	0	0.00158202	0.008314927	0.02284	0.142641072	0.05000865				
	25.0	0.25	0.061729422	0.016564237	0	0.00183067	0.04756214	0.06992275	0	0.011007276	0.063920562	0	0.16461972	0.708021	0	0.00076327	0.000193994	0.000221	0.002	0.000263	0.000436558	0.000774	0.0005	0	0.0002417	0.0004014	0	77.425941	19.623052	0	0.000494787	0.01577531	0	0.001166984	0.008044712	0.02284	0.142641072	0.05000865				
	1	0.305940226	0.080232013	0	0	0.0080239	0.22774289	0.365710604	0	0.041785344	0.228112037	0	0.65578478	2.713879	0	0.002606891	0.000668078	0.299	0.008045	0.008	0	0.00105	0.001769198	0.04499	0.022616	0.002	0	0.0009662	0.0016267	0	263.71108	67.578089	0	0.00207008	0.050688949	0	0.004378676	0.029323946	0.02284	0.142641072	0.05000865	



CalEEMod EMFAC2021 Emission Factors Input

Year 2030

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
A	CH4_IDLEX	0	0	0	0	0.004335	0.002508	0.015544	0.200689575	0.007521	0	0	0.081907	0
A	CH4_RUNEX	0.001251	0.003273	0.001878	0.002097	0.004028	0.004457	0.009465	0.087739612	0.010745	0.633168094	0.142987	0.08726	0.006074
A	CH4_STREX	0.045719	0.070684	0.060357	0.065129	0.016442	0.00872	0.006578	4.40093E-08	0.013432	0.002502449	0.157242	0.005216	0.022777
A	CO_IDLEX	0	0	0	0	0.182077	0.135546	0.628457	4.997868655	0.549826	0	0	1.823721	0
A	CO_RUNEX	0.484447	0.895501	0.639473	0.660784	0.544761	0.383737	0.155266	0.628349624	0.288528	7.378159276	11.04655	0.716417	0.371762
A	CO_STREX	2.08878	3.413929	2.729559	2.781248	2.051418	1.109837	0.71851	0.00087263	1.464305	0.531636543	7.830862	0.671301	1.918466
A	CO2_NBIO_IDLEX	0	0	0	0	7.808851	13.36322	143.3801	719.710734	89.80588	0	0	181.8136	0
A	CO2_NBIO_RUNEX	218.6415	296.0222	304.9904	364.0422	665.9344	713.025	1074.538	1395.928332	1245.372	969.9926525	185.5769	941.807	1656.25
A	CO2_NBIO_STREX	55.99265	76.24029	77.1602	91.4769	15.88489	8.544837	6.787068	0.009437452	12.01881	3.025945099	42.83228	3.929487	20.12804
A	NOX_IDLEX	0	0	0	0	0.036306	0.076255	0.72827	3.806064714	0.333548	0	0	1.088868	0
A	NOX_RUNEX	0.023158	0.066035	0.041164	0.048222	0.312391	0.495733	0.584719	1.446947564	0.825827	0.255958394	0.509869	1.567888	1.278466
A	NOX_STREX	0.178975	0.272625	0.247045	0.271696	0.32724	0.178285	1.220957	2.603954429	0.931305	0.025581732	0.103081	0.520702	0.298107
A	PM10_IDLEX	0	0	0	0	0.000666	0.001456	0.000655	0.001737607	0.000311	0	0	0.000746	0
A	PM10_PMBW	0.007078	0.009138	0.008838	0.008892	0.0744	0.086908	0.04333	0.082108579	0.049981	0.147119217	0.012	0.043749	0.04494
A	PM10_PMTW	0.008	0.008	0.008	0.008	0.009343	0.010534	0.012	0.035145225	0.012	0.05700071	0.004	0.010442	0.013343
A	PM10_RUNEX	0.000838	0.00126	0.000989	0.000971	0.009189	0.01687	0.00542	0.023402177	0.012621	0.004822062	0.001997	0.008575	0.022807
A	PM10_STREX	0.001482	0.002074	0.001658	0.001608	0.000134	5.67E-05	8.23E-05	1.43954E-07	0.000118	1.26121E-05	0.003416	4.58E-05	0.000233
A	PM25_IDLEX	0	0	0	0	0.000637	0.001393	0.000626	0.001655588	0.000297	0	0	0.000713	0
A	PM25_PMBW	0.002477	0.003198	0.003093	0.003112	0.02604	0.030418	0.015165	0.028738003	0.017493	0.051491726	0.0042	0.015312	0.015729
A	PM25_PMTW	0.002	0.002	0.002	0.002	0.002336	0.002634	0.003	0.008786306	0.003	0.014250178	0.001	0.00261	0.003336
A	PM25_RUNEX	0.000771	0.001159	0.00091	0.000894	0.008761	0.016127	0.005178	0.022386582	0.012067	0.00460949	0.001864	0.008187	0.021783
A	PM25_STREX	0.001362	0.001907	0.001524	0.001478	0.000123	5.22E-05	7.56E-05	1.3236E-07	0.000109	1.15963E-05	0.003197	4.21E-05	0.000214
A	ROG_DIURN	0.227323	0.469769	0.248439	0.276762	0.087274	0.048494	0.014918	4.02275E-05	0.069383	0.007038146	3.680755	0.041692	20.29626
A	ROG_IDTSK	0.060745	0.120653	0.063468	0.068938	0.020831	0.011136	0.00342	1.26947E-05	0.014014	0.002098044	3.555147	0.009335	4.900484
A	ROG_IDLEX	0	0	0	0	0.01758	0.01365	0.020875	0.311156106	0.039789	0	0	0.197824	0
A	ROG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	ROG_RUNEX	0.00434	0.013675	0.006865	0.008091	0.050519	0.082873	0.014952	0.014289903	0.031966	0.05310504	0.890508	0.040189	0.050568
A	ROG_RUNLS	0.170881	0.355945	0.18526	0.207423	0.123377	0.065349	0.028627	0.000113992	0.077263	0.007877766	3.783469	0.027699	0.119258
A	ROG_STREX	0.197184	0.337555	0.26551	0.301161	0.07823	0.041209	0.034167	2.38553E-07	0.071386	0.008378471	1.134366	0.029472	0.088942
A	SO2_IDLEX	0	0	0	0	7.6E-05	0.000128	0.00132	0.006214699	0.000846	0	0	0.001639	0
A	SO2_RUNEX	0.002161	0.002926	0.003015	0.003597	0.006498	0.00686	0.010167	0.012580529	0.011835	0.007389377	0.001835	0.008739	0.016224
A	SO2_STREX	0.000554	0.000754	0.000763	0.000904	0.000157	8.45E-05	6.71E-05	9.32988E-08	0.000119	2.99145E-05	0.000423	3.88E-05	0.000199
A	TOG_DIURN	0.227323	0.469769	0.248439	0.276762	0.087274	0.048494	0.014918	4.02275E-05	0.069383	0.007038146	0.080793	0.041692	20.29626
A	TOG_HTSK	0.060745	0.120653	0.063468	0.068938	0.020831	0.011136	0.00342	1.26947E-05	0.014014	0.002098044	3.555147	0.009335	4.900484
A	TOG_IDLEX	0	0	0	0	0.0248	0.018097	0.03926	0.541395418	0.052568	0	0	0.32342	0
A	TOG_RESTL	0	0	0	0	0	0	0	0	0	0	0	0	0
A	TOG_RUNEX	0.006329	0.019954	0.010004	0.011775	0.060583	0.095343	0.026358	0.103810529	0.046832	0.694289379	1.091848	0.133799	0.062589
A	TOG_RUNLS	0.170881	0.355945	0.18526	0.207423	0.123377	0.065349	0.028627	0.000113992	0.077263	0.007877766	3.783469	0.027699	0.119258
A	TOG_STREX	0.215892	0.36958	0.2907	0.329734	0.085652	0.045119	0.037409	2.61185E-07	0.078158	0.009173371	1.234067	0.032269	0.097381
A	N2O_IDLEX	0	0	0	0	0.000589	0.00168	0.022195	0.116327365	0.013129	0	0	0.023481	0
A	N2O_RUNEX	0.003165	0.00587	0.004501	0.005405	0.035467	0.074134	0.137514	0.223022009	0.151496	0.151061958	0.036967	0.112558	0.068485
A	N2O_STREX	0.025397	0.032408	0.031653	0.032172	0.028461	0.015119	0.00476	3.77164E-06	0.011347	0.00458201	0.006341	0.004848	0.033159

**CalEEMod EMFAC2021 Fleet Mix Input**

**Year 2030**

FleetMixLandUseSubType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.514977	0.035448	0.239576	0.135703	0.02426	0.00617	0.009659	0.007844	0.001064	0.000396	0.02195	0.000681	0.002272
Enclosed Parking with Ele	0.514977	0.035448	0.239576	0.135703	0.02426	0.00617	0.009659	0.007844	0.001064	0.000396	0.02195	0.000681	0.002272
Regional Shopping Center	0.514977	0.035448	0.239576	0.135703	0.02426	0.00617	0.009659	0.007844	0.001064	0.000396	0.02195	0.000681	0.002272

Adjustment Factors	Vehicle Category	Fuel	Population	Pop Fract	VMT (miles/day)	VMT Fract	Trips/day	Trip Fract
	HHDT	GAS	1.48761568	9.81801E-06	172.849851	0.000152	29.76421444	0.000196
	HHDT	DSL	9231.23405	0.060924558	1024356.864	0.9007481	136537.8407	0.901126
	HHDT	ELEC	530.250085	0.003499559	54761.34921	0.0481533	6663.696554	0.043979
	HHDT	NG	938.272575	0.006192438	57937.9272	0.0509466	8287.794951	0.054698
			10701.2443		1137228.99		151519.0964	
	LDA	GAS	602124.626	0.184735004	21985012.74	0.8461961	2796633.75	0.858022
	LDA	DSL	966.571543	0.000296549	27899.12475	0.0010738	4169.431018	0.001279
	LDA	ELEC	74807.2796	0.022951267	2981995.184	0.114776	356617.9586	0.109412
	LDA	PIH	24661.5156	0.007566283	986083.3495	0.037954	101975.3669	0.031287
			702559.993		25980990.4		3259396.506	
	LDT1	GAS	47587.4471	0.220781409	1511766.355	0.9787303	212019.26	0.983661
	LDT1	DSL	0.76846667	3.56529E-06	17.05570223	1.104E-05	2.625517308	1.22E-05
	LDT1	ELEC	459.59884	0.002132303	19527.56637	0.0126423	2229.167753	0.010342
	LDT1	PIH	311.959599	0.001447333	13308.95728	0.0086163	1289.952942	0.005985
			48359.774		1544619.935		215541.0062	
	LDT2	GAS	315384.001	0.207524795	11011602.46	0.9644118	1467132.745	0.965383
	LDT2	DSL	1158.98987	0.000762623	40906.34603	0.0035826	5439.347127	0.003579
	LDT2	ELEC	5453.19362	0.003588238	171698.9957	0.0150376	27128.05332	0.01785
	LDT2	PIH	4846.71192	0.003189169	193738.4599	0.0169679	20041.15378	0.013187
			326842.897		11417946.26		1519741.3	
	LHDT1	GAS	19753.0188	0.042469943	727605.5091	0.5718283	294290.548	0.632739
	LHDT1	DSL	11269.2779	0.024229491	427352.764	0.3358584	141753.3387	0.304777
	LHDT1	ELEC	2074.53776	0.004460356	117461.3639	0.0923134	29061.9606	0.062485
			33096.8344	0.07115979	1272419.637		465105.8473	
	LHDT2	GAS	2461.018	0.023436275	87198.39839	0.2764804	36665.50124	0.349166
	LHDT2	DSL	5433.24767	0.051740819	199824.8391	0.6335857	68343.42067	0.650834
	LHDT2	ELEC	523.424852	0.004984575	28364.00967	0.0899339	6941.368001	0.066103
			8417.69052	0.08016167	315387.2472		105008.9219	
	MCY	GAS	29945.6713	0.021950206	170059.0451	1	59891.3425	1
	MDV	GAS	174344.044	0.2032491	5962226.801	0.9422971	807535.9337	0.94142
	MDV	DSL	2406.78655	0.002805815	79682.09193	0.0125933	11072.81735	0.012909
	MDV	ELEC	5418.75334	0.006317146	169876.9029	0.0268481	26922.57502	0.031386
	MDV	PIH	2963.42173	0.003454737	115546.1715	0.0182614	12253.74886	0.014285
			185133.006		6327331.967		857785.0749	
	MH	GAS	2034.68785	6.562577556	19970.25646	0.6642899	203.5501727	0.65652
	MH	DSL	1064.93836	3.434797413	10092.30624	0.3357101	106.4938359	0.34348
			3099.62621		30062.5627		310.0440086	
	MHDT	GAS	1369.78361	0.008097456	69786.55357	0.1286334	27406.63039	0.162014
	MHDT	DSL	10679.1279	0.063129513	415833.3823	0.766481	127641.7789	0.754553
	MHDT	ELEC	991.138618	0.005859102	51102.91436	0.094195	12793.3276	0.075628
	MHDT	NG	136.843702	0.00080895	5799.937145	0.0106907	1320.473703	0.007806
			13176.8939		542522.7874		169162.2106	
	OBUS	GAS	373.850854	0.019905227	15017.95753	0.1835305	7480.007877	0.398264
	OBUS	DSL	1041.41451	0.05544883	64198.49481	0.784553	10721.4028	0.570848
	OBUS	ELEC	23.470396	0.001249652	1822.61906	0.0222738	469.5956826	0.025003
	OBUS	NG	12.4197043	0.000661272	789.0471667	0.0096427	110.535368	0.005885
			1451.15547		81828.11857		18781.54172	
	SBUS	GAS	198.199726	0.017610498	9649.073176	0.3683175	792.7989059	0.070442
	SBUS	DSL	659.302865	0.058580564	14502.39326	0.5535749	9546.70548	0.848247
	SBUS	ELEC	42.2755564	0.00375628	1362.719324	0.0520167	492.3385095	0.043745
	SBUS	NG	29.1983511	0.00259434	683.5221158	0.0260909	422.7921234	0.037566
			928.976499		26197.70788		11254.63502	
	UBUS	GAS	46.8993965	0.021676301	4897.692973	0.0818022	187.5975859	0.086705
	UBUS	DSL	338.509163	0.156454601	37119.08129	0.6199702	1354.036652	0.625818
	UBUS	ELEC	78.6722459	0.256009323	8935.028159	1.0016223	314.6889835	1.024037
	UBUS	NG	76.8255673	0.035507794	8920.556737	0.1489929	307.3022692	0.142031
			540.906373		59872.35916		2163.625491	





















**Attachment 4: Project Construction and Operational Emissions and Health Risk Calculations**

## Construction Health Risk Assessment and Calculations – ABC Scenario

ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

Land Use	Year	Unmitigated	DPM	Unmitigated	Unmitigated	Fug PM2.5	Fug PM2.5	Unmitigated
		DPM	EMFAC2021	Emissions	Fug PM2.5	EMFAC2021	Emissions	
Tower A	2022	0.0064	0.0005	0.0069	0.0165	0.0004	0.0169	
	2023	0.0302	0.0011	0.0313	0.0064	0.0009	0.0073	
	2024	0.0377	0.0007	0.0384	0.0000	0.0006	0.0006	
Tower B	2024	0.0089	0.0005	0.0093	0.0228	0.0004	0.0232	
	2025	0.0299	0.0013	0.0312	0.0000	0.0011	0.0011	
	2026	0.0290	0.0009	0.0299	0.0000	0.0008	0.0008	
Tower C	2027	0.0189	0.0009	0.0198	0.0236	0.0008	0.0244	
	2028	0.0342	0.0012	0.0354	0.0000	0.0011	0.0011	
	2029	0.0136	0.0005	0.0141	0.0000	0.0004	0.0004	
	Year	Mitigated	DPM	Mitigated	Mitigated	Fug PM2.5	Mitigated	
		DPM	EMFAC2021	Emissions	Fug PM2.5	EMFAC2021	Emissions	
Tower A	2022	0.0004	0.0005	0.0009	0.0032	0.0004	0.0036	
	2023	0.0020	0.0011	0.0031	0.0012	0.0009	0.0022	
	2024	0.0028	0.0007	0.0035	0.0000	0.0006	0.0006	
Tower B	2024	0.0008	0.0005	0.0012	0.0045	0.0004	0.0049	
	2025	0.0023	0.0013	0.0036	0.0000	0.0011	0.0011	
	2026	0.0026	0.0009	0.0035	0.0000	0.0008	0.0008	
Tower C	2027	0.0018	0.0009	0.0026	0.0046	0.0008	0.0054	
	2028	0.0026	0.0012	0.0037	0.0000	0.0011	0.0011	
	2029	0.0013	0.0005	0.0018	0.0000	0.0004	0.0004	

ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

**DPM Emissions and Modeling Emission Rates - Without Mitigation**

Construction Year	Construction Area	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source
					(lb/yr)	(lb/hr)	(g/s)	(g/s)
2022	Tower A	0.0069	Point	49	13.8	0.00368	4.64E-04	9.46E-06
2023		0.0313	Point	49	62.6	0.01672	2.11E-03	4.30E-05
2024		0.0384	Point	49	76.8	0.02051	2.58E-03	5.27E-05
2024	Tower B	0.0093	Point	70	18.6	0.00498	6.27E-04	8.96E-06
2025		0.0312	Point	70	62.3	0.01664	2.10E-03	3.00E-05
2026		0.0299	Point	70	59.9	0.01599	2.02E-03	2.88E-05
2027	Tower C	0.0198	Point	56	39.5	0.01055	1.33E-03	2.37E-05
2028		0.0354	Point	56	70.8	0.01891	2.38E-03	4.25E-05
2029		0.0141	Point	56	28.1	0.00751	9.47E-04	1.69E-05
<b>Total</b>		<b>0.2162</b>			<b>432.4</b>	<b>0.1155</b>	<b>0.0146</b>	

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

**DPM Emissions and Modeling Emission Rates - Unmitigated**

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source
					(lb/yr)	(lb/hr)	(g/s)	(g/s)
2022	Tower A	0.0009	Point	49	1.8	0.00049	6.17E-05	1.26E-06
2023		0.0031	Point	49	6.2	0.00164	2.07E-04	4.22E-06
2024		0.0035	Point	49	7.0	0.00186	2.34E-04	4.78E-06
2024	Tower B	0.0012	Point	70	2.5	0.00066	8.28E-05	1.18E-06
2025		0.0036	Point	70	7.1	0.00191	2.41E-04	3.44E-06
2026		0.0035	Point	70	7.0	0.00188	2.37E-04	3.38E-06
2027	Tower C	0.0026	Point	56	5.3	0.00141	1.78E-04	3.18E-06
2028		0.0037	Point	56	7.5	0.00200	2.52E-04	4.50E-06
2029		0.0018	Point	56	3.6	0.00096	1.22E-04	2.17E-06
<b>Total</b>		<b>0.0240</b>			<b>48.0</b>	<b>0.0128</b>	<b>0.0016</b>	

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

**PM2.5 Fugitive Dust Emissions for Modeling - Without Mitigation**

Construction Year	Construction Activity	Area Source	PM2.5 Emissions				Modeled Area (m <sup>2</sup> )	PM2.5 Emission Rate g/s/m <sup>2</sup>
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2022	Tower A	FUG_A22	0.0169	33.8	0.0090	1.14E-03	1,757	6.47E-07
2023		FUG_A23	0.0073	14.5	0.0039	4.90E-04	1,757	2.79E-07
2024		FUG_A24	0.0006	1.2	0.0003	3.98E-05	1,757	2.26E-08
2024	Tower B	FUG_B24	0.0232	46.4	0.0124	1.56E-03	2,488	6.28E-07
2025		FUG_B25	0.0011	2.2	0.0006	7.56E-05	2,488	3.04E-08
2026		FUG_B26	0.0008	1.7	0.0005	5.68E-05	2,488	2.28E-08
2027	Tower C	FUG_C27	0.0244	48.7	0.0130	1.64E-03	2,023	8.11E-07
2028		FUG_C28	0.0011	2.2	0.0006	7.26E-05	2,023	3.59E-08
2029		FUG_C29	0.0004	0.8	0.0002	2.83E-05	2,023	1.40E-08
<b>Total</b>			<b>0.0758</b>	<b>151.6</b>	<b>0.0405</b>	<b>0.0051</b>		

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

**PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated**

Construction Year	Construction Area	Area Source	PM2.5 Emissions				Modeled Area (m <sup>2</sup> )	PM2.5 Emission Rate g/s/m <sup>2</sup>
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2022	Tower A	FUG_A22	0.0036	7.2	0.0019	2.43E-04	1,757	1.38E-07
2023		FUG_A23	0.0022	4.3	0.0012	1.45E-04	1,757	8.25E-08
2024		FUG_A24	0.0006	1.2	0.0003	3.98E-05	1,757	2.26E-08
2024	Tower B	FUG_B24	0.0049	9.7	0.0026	3.26E-04	2,488	1.31E-07
2025		FUG_B25	0.0011	2.2	0.0006	7.56E-05	2,488	3.04E-08
2026		FUG_B26	0.0008	1.7	0.0005	5.68E-05	2,488	2.28E-08
2027	Tower C	FUG_C27	0.0054	10.8	0.0029	3.62E-04	2,023	1.79E-07
2028		FUG_C28	0.0011	2.2	0.0006	7.26E-05	2,023	3.59E-08
2029		FUG_C29	0.0004	0.8	0.0002	2.83E-05	2,023	1.40E-08
<b>Total</b>			<b>0.02004</b>	<b>40.1</b>	<b>0.0107</b>	<b>0.0013</b>		

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744



ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Health Impact Summary

**Maximum Impacts at MEI Residential Location - Without Mitigation**

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration* (µg/m <sup>3</sup> )
	Exhaust PM10/DPM (µg/m <sup>3</sup> )	Fugitive PM2.5 (µg/m <sup>3</sup> )	Infant/Child	Adult		
2022	0.0409	0.5082	0.56	0.12	0.01	0.52
2023	0.1859	0.2192	30.54	0.53	0.04	0.28
2024	0.2419	0.3942	39.72	0.69	0.05	0.42
2025	0.0463	0.0191	1.20	0.13	0.01	0.09
2026	0.0445	0.0143	1.15	0.13	0.009	0.09
2027	0.0088	0.4594	0.23	0.03	0.002	0.49
2028	0.0158	0.0203	0.41	0.05	0.003	0.08
2029	0.0063	0.0079	0.16	0.02	0.001	0.03
<b>Total</b>	-	-	<b>73.96</b>	<b>1.69</b>	-	-
<b>Maximum</b>	0.2419	0.5082	-	-	<b>0.05</b>	<b>0.52</b>

\* Maximum cancer risk and maximum PM2.5 concentration occur at different levels and receptors.

**Maximum Impacts at MEI Residential Location - With Mitigation**

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration* (µg/m <sup>3</sup> )
	Exhaust PM10/DPM (µg/m <sup>3</sup> )	Fugitive PM2.5 (µg/m <sup>3</sup> )	Infant/Child	Adult		
2022	0.0054	0.1084	0.07	0.02	0.001	0.11
2023	0.0127	0.0825	3.00	0.05	0.003	0.07
2024	0.0056	0.0191	3.69	0.06	0.001	0.09
2025	0.0055	0.0143	0.14	0.02	0.001	0.02
2026	0.0010	0.1014	0.14	0.02	0.000	0.02
2027	0.0014	0.0203	0.03	0.00	0.000	0.11
2028	0.0007	0.0079	0.04	0.00	0.000	0.03
2029	0.0000	0.0000	0.02	0.00	0.000	0.01
<b>Total</b>	-	-	<b>7.13</b>	<b>0.17</b>	-	-
<b>Maximum</b>	0.0127	0.1084	-	-	<b>0.003</b>	<b>0.11</b>

\* Maximum cancer risk and maximum PM2.5 concentration occur at different levels and receptors.

- Tier 4 Final Engine and Enhanced BMPs Mitigation

**Maximum Impacts at YWCA Childcare Center - Without Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0045	0.0308	--	0.001	0.04
2023	0.0203	0.0133	7.64	0.004	0.03
2024	0.0290	0.0363	10.94	0.006	0.06
2025	0.0140	0.0017	0.68	0.003	0.02
2026	0.0134	0.0013	0.66	0.003	0.02
2027	0.0034	0.0206	0.16	0.001	0.03
2028	0.0060	0.0009	0.29	0.001	0.01
2029	0.0024	0.0004	--	0.000	0.00
<b>Total</b>	-	-	<b>20.38</b>	-	-
<b>Maximum</b>	0.0290	0.0363	-	<b>0.01</b>	<b>0.06</b>

**Maximum Impacts at YWCA Childcare Center - With Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0006	0.0066	--	0.0001	0.01
2023	0.0020	0.0039	0.7505	0.0004	0.01
2024	0.0028	0.0081	1.0560	0.0006	0.01
2025	0.0016	0.0017	0.0784	0.0003	0.00
2026	0.0016	0.0013	0.0775	0.0003	0.00
2027	0.0005	0.0045	0.0221	0.0001	0.01
2028	0.0006	0.0009	0.0314	0.0001	0.00
2029	0.0003	0.0004	--	0.0001	0.00
<b>Total</b>	-	-	<b>2.02</b>	-	-
<b>Maximum</b>	0.0028	0.0081	-	<b>0.001</b>	<b>0.01</b>

- Tier 4 Final Engine and Enhanced BMPs Mitigation

**Maximum Impacts at YWCA Childcare Center - Without Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0039	0.0149	--	0.001	0.02
2023	0.0176	0.0064	0.86	0.004	0.02
2024	0.0317	0.0408	1.55	0.006	0.07
2025	0.0338	0.0020	1.66	0.007	0.04
2026	0.0324	0.0015	1.59	0.006	0.03
2027	0.0030	0.0056	--	0.001	0.01
2028	0.0053	0.0003	--	0.001	0.01
2029	0.0021	0.0001	--	0.000	0.00
<b>Total</b>	-	-	<b>5.66</b>	-	-
<b>Maximum</b>	0.0338	0.0408	-	<b>0.01</b>	<b>0.07</b>

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 1.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0214	10	0.29	2022	0.0214	1	0.06	0.004	0.51	0.52	
1	1	0 - 1	2023	0.0970	10	15.94	2023	0.0970	1	0.28	0.019	0.22	0.28	
2	1	1 - 2	2024	0.1337	10	21.96	2024	0.1337	1	0.38	0.027	0.39	0.42	
3	1	2 - 3	2025	0.0491	3	1.27	2025	0.0491	1	0.14	0.010	0.02	0.09	
4	1	3 - 4	2026	0.0472	3	1.22	2026	0.0472	1	0.14	0.009	0.01	0.09	
5	1	4 - 5	2027	0.0075	3	0.19	2027	0.0075	1	0.02	0.001	0.46	0.49	
6	1	5 - 6	2028	0.0134	3	0.35	2028	0.0134	1	0.04	0.003	0.02	0.08	
7	1	6 - 7	2029	0.0053	3	0.14	2029	0.0053	1	0.02	0.001	0.01	0.03	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.03</b>	<b>0.51</b>	<b>0.52</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>41.35</b>				<b>1.01</b>				

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at YWCA Childcare Center (0-6 years old) - 1 meter - Infant/Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	Infant	School Child	Adult
Age -->	0 - <2	2 - <16	16 - 30
Parameter			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0045	--	--
2	1	0 - 1	2023	0.0203	10	7.64
3	1	1 - 2	2024	0.0290	10	10.94
4	1	2 - 3	2025	0.0140	3	0.68
5	1	3 - 4	2026	0.0134	3	0.66
6	1	4 - 5	2027	0.0034	3	0.16
7	1	5 - 6	2028	0.0060	3	0.29
8	1			0.0024	--	--
9	1			0.0000	--	--
<b>Total Increased Cancer Risk</b>						<b>20.38</b>

\* Children assumed to be 0-6 years of age with 6 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.001	0.031	0.035
0.004	0.013	0.033
0.006	0.036	0.062
0.003	0.002	0.018
0.003	0.001	0.017
0.001	0.021	0.026
0.001	0.001	0.012
0.000	0.000	0.005
<b>0.006</b>	<b>0.04</b>	<b>0.06</b>

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at Notre Dame High School (+14 years old) - 1.5 meters - Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Age --> Parameter	Infant	School Child	Adult
	0 - <2	2 - <16	16 - 30
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0039	--	--
2	1	14 - 15	2023	0.0176	3	0.86
3	1	15 - 16	2024	0.0317	3	1.55
4	1	16 - 17	2025	0.0338	3	1.66
5	1	17 - 18	2026	0.0324	3	1.59
6	1		2027	0.0030	--	--
7	1		2028	0.0053	--	--
8	1		2029	0.0021	--	--
9	1			0.0000	--	--
<b>Total Increased Cancer Risk</b>						<b>5.66</b>

\* Children assumed to be 14 years of age or older with 4 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.0008	0.015	0.019
0.004	0.006	0.024
0.006	0.041	0.072
0.007	0.002	0.036
0.006	0.001	0.034
0.001	0.006	0.009
0.001	0.000	0.006
0.000	0.000	0.002
<b>0.007</b>	<b>0.04</b>	<b>0.07</b>

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 1.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0028	10	0.04	2022	0.0028	1	0.01	0.001	0.11	0.11	
1	1	0 - 1	2023	0.0095	10	1.57	2023	0.0095	1	0.03	0.002	0.06	0.07	
2	1	1 - 2	2024	0.0127	10	2.09	2024	0.0127	1	0.04	0.003	0.08	0.09	
3	1	2 - 3	2025	0.0056	3	0.15	2025	0.0056	1	0.02	0.001	0.02	0.02	
4	1	3 - 4	2026	0.0055	3	0.14	2026	0.0055	1	0.02	0.001	0.01	0.02	
5	1	4 - 5	2027	0.0010	3	0.03	2027	0.0010	1	0.00	0.000	0.10	0.11	
6	1	5 - 6	2028	0.0014	3	0.04	2028	0.0014	1	0.00	0.000	0.02	0.03	
7	1	6 - 7	2029	0.0007	3	0.02	2029	0.0007	1	0.00	0.000	0.01	0.01	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.003</b>	<b>0.11</b>	<b>0.11</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>4.06</b>				<b>0.10</b>				

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at YWCA Childcare Center (0-6 years old) - 1 meter - Infant/Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	Infant	School Child	Adult
Age -->	0 - <2	2 - <16	16 - 30
Parameter			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0006	--	--
2	1	0 - 1	2023	0.0020	10	0.75
3	1	1 - 2	2024	0.0028	10	1.06
4	1	2 - 3	2025	0.0016	3	0.08
5	1	3 - 4	2026	0.0016	3	0.08
6	1	4 - 5	2027	0.0005	3	0.02
7	1	5 - 6	2028	0.0006	3	0.03
8	1			0.0003	--	--
9	1			0.0000	3	0.00
<b>Total Increased Cancer Risk</b>						<b>2.02</b>

\* Children assumed to be 0-6 years of age with 6 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.000	0.007	0.007
0.000	0.004	0.006
0.001	0.008	0.011
0.000	0.002	0.004
0.000	0.001	0.003
0.000	0.005	0.005
0.000	0.001	0.002
0.000	0.000	0.001
<b>0.001</b>	<b>0.01</b>	<b>0.01</b>

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 4.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0409	10	0.56	2022	0.0409	1	0.12	0.008	0.19	0.23	
1	1	0 - 1	2023	0.1859	10	30.54	2023	0.1859	1	0.53	0.037	0.08	0.27	
2	1	1 - 2	2024	0.2419	10	39.72	2024	0.2419	1	0.69	0.048	0.18	0.35	
3	1	2 - 3	2025	0.0463	3	1.20	2025	0.0463	1	0.13	0.009	0.01	0.13	
4	1	3 - 4	2026	0.0445	3	1.15	2026	0.0445	1	0.13	0.009	0.01	0.12	
5	1	4 - 5	2027	0.0088	3	0.23	2027	0.0088	1	0.03	0.002	0.19	0.30	
6	1	5 - 6	2028	0.0158	3	0.41	2028	0.0158	1	0.05	0.003	0.01	0.20	
7	1	6 - 7	2029	0.0063	3	0.16	2029	0.0063	1	0.02	0.001	0.00	0.08	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.05</b>	<b>0.19</b>	<b>0.35</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>73.96</b>					<b>1.58</b>			

\* Third trimester of pregnancy



**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 4.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0054	10	0.07	2022	0.0054	1	0.02	0.001	0.04	0.05	
1	1	0 - 1	2023	0.0183	10	3.00	2023	0.0183	1	0.05	0.004	0.02	0.04	
2	1	1 - 2	2024	0.0225	10	3.69	2024	0.0225	1	0.06	0.004	0.04	0.06	
3	1	2 - 3	2025	0.0053	3	0.14	2025	0.0053	1	0.02	0.001	0.01	0.02	
4	1	3 - 4	2026	0.0052	3	0.14	2026	0.0052	1	0.02	0.001	0.01	0.02	
5	1	4 - 5	2027	0.0012	3	0.03	2027	0.0012	1	0.00	0.000	0.04	0.06	
6	1	5 - 6	2028	0.0017	3	0.04	2028	0.0017	1	0.00	0.000	0.01	0.03	
7	1	6 - 7	2029	0.0008	3	0.02	2029	0.0008	1	0.00	0.000	0.00	0.01	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.004</b>	<b>0.04</b>	<b>0.06</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>7.13</b>					<b>0.16</b>			

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Tower A On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum			
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2024	0.0468	10	0.64	2024	0.0468	1	0.13	0.01	0.02	0.07	
1	1	0 - 1	2025	0.1565	10	25.71	2025	0.1565	1	0.45	0.03	0.00	0.16	
2	1	1 - 2	2026	0.1504	10	24.70	2026	0.1504	1	0.43	0.03	0.00	0.15	
3	1	2 - 3	2027	0.0045	3	0.12	2027	0.0045	1	0.01	0.001	0.02	0.03	
4	1	3 - 4	2028	0.0080	3	0.21	2028	0.0080	1	0.02	0.002	0.00	0.02	
5	1	4 - 5	2029	0.0032	3	0.08	2029	0.0032	1	0.01	0.001	0.00	0.01	
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.03	0.02	0.16	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>51.45</b>					<b>0.93</b>			

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation**  
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**  
**Impacts at Tower A On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum			
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2024	0.0062	10	0.08	2024	0.0062	1	0.02	0.001	0.005	0.01	
1	1	0 - 1	2025	0.0180	10	2.95	2025	0.0180	1	0.05	0.004	0.001	0.02	
2	1	1 - 2	2026	0.0177	10	2.90	2026	0.0177	1	0.05	0.004	0.001	0.02	
3	1	2 - 3	2027	0.0006	3	0.02	2027	0.0006	1	0.00	0.0001	0.004	0.01	
4	1	3 - 4	2028	0.0009	3	0.02	2028	0.0009	1	0.00	0.0002	0.001	0.003	
5	1	4 - 5	2029	0.0004	3	0.01	2029	0.0004	1	0.00	0.0001	0.0003	0.001	
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.004	0.005	0.02	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>5.98</b>					<b>0.11</b>			

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at Tower B On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2027	0.0040	10	0.05	2027	0.0040	-	-	-	-	-	-
1	1	0 - 1	2027	0.0040	10	0.66	2027	0.0040	1	0.01	0.001	0.01	0.01	
2	1	1 - 2	2028	0.0072	10	1.18	2028	0.0072	1	0.02	0.001	0.0002	0.01	
3	1	2 - 3	2029	0.0029	3	0.07	2029	0.0029	1	0.01	0.001	0.0001	0.003	
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.001	0.01	0.01	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>1.97</b>				<b>0.04</b>				

\* Third trimester of pregnancy

**ABC - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation**  
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**  
**Impacts at Tower B On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2027	0.0005	10	0.01	2027	0.0005	-	-	-	-	-	-
1	1	0 - 1	2027	0.0005	10	0.09	2027	0.0005	1	0.002	0.0001	0.001	0.002	
2	1	1 - 2	2028	0.0008	10	0.12	2028	0.0008	1	0.002	0.0002	0.0002	0.001	
3	1	2 - 3	2029	0.0004	3	0.01	2029	0.0004	1	0.001	0.0001	0.0001	0.0005	
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.0002	0.001	0.002	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>0.23</b>				<b>0.005</b>				

\* Third trimester of pregnancy

## Construction Health Risk Assessment and Calculations – ABC Scenario

ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

Land Use	Year	Unmitigated	DPM	Unmitigated	Unmitigated	Fug PM2.5	Unmitigated
		DPM	EMFAC2021	Emissions	Fug PM2.5	EMFAC2021	Emissions
Tower A	2022	0.0064	0.0005	0.0069	0.0165	0.0004	0.0169
	2023	0.0302	0.0011	0.0313	0.0064	0.0009	0.0073
	2024	0.0377	0.0007	0.0384	0.0000	0.0006	0.0006
Tower C	2024	0.0094	0.0004	0.0099	0.0236	0.0004	0.0240
	2025	0.0294	0.0012	0.0306	0.0000	0.0011	0.0011
	2026	0.0290	0.0009	0.0299	0.0000	0.0008	0.0008
Tower B	2027	0.0189	0.0009	0.0198	0.0228	0.0008	0.0236
	2028	0.0342	0.0012	0.0354	0.0000	0.0011	0.0011
	2029	0.0136	0.0005	0.0141	0.0000	0.0004	0.0004
		Mitigated	DPM	Mitigated	Mitigated	Fug PM2.5	Mitigated
		DPM	EMFAC2021	Emissions	Fug PM2.5	EMFAC2021	Emissions
Tower A	2022	0.0004	0.0005	0.0009	0.0032	0.0004	0.0036
	2023	0.0020	0.0011	0.0031	0.0012	0.0009	0.0022
	2024	0.0028	0.0007	0.0035	0.0000	0.0006	0.0006
Tower C	2024	0.0008	0.0004	0.0013	0.0046	0.0004	0.0050
	2025	0.0023	0.0012	0.0035	0.0000	0.0011	0.0011
	2026	0.0026	0.0009	0.0035	0.0000	0.0008	0.0008
Tower B	2027	0.0018	0.0009	0.0027	0.0045	0.0008	0.0053
	2028	0.0026	0.0012	0.0038	0.0000	0.0011	0.0011
	2029	0.0013	0.0005	0.0018	0.0000	0.0004	0.0004

ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

**DPM Emissions and Modeling Emission Rates - Without Mitigation**

Construction Year	Construction Area	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source (g/s)
					(lb/yr)	(lb/hr)	(g/s)	
2022	Tower A	0.0069	Point	49	13.8	0.00368	4.64E-04	9.46E-06
2023		0.0313	Point	49	62.6	0.01672	2.11E-03	4.30E-05
2024		0.0384	Point	49	76.8	0.02051	2.58E-03	5.27E-05
2024	Tower C	0.0099	Point	56	19.7	0.00526	6.63E-04	1.18E-05
2025		0.0306	Point	56	61.2	0.01635	2.06E-03	3.68E-05
2026		0.0299	Point	56	59.8	0.01598	2.01E-03	3.59E-05
2027	Tower B	0.0198	Point	70	39.6	0.01057	1.33E-03	1.90E-05
2028		0.0354	Point	70	70.9	0.01893	2.39E-03	3.41E-05
2029		0.0141	Point	70	28.2	0.00752	9.48E-04	1.35E-05
<b>Total</b>		<b>0.2163</b>			<b>432.5</b>	<b>0.1155</b>	<b>0.0146</b>	

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

**DPM Emissions and Modeling Emission Rates - Unmitigated**

Construction Year	Construction Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source (g/s)
					(lb/yr)	(lb/hr)	(g/s)	
2022	Tower A	0.0009	Point	49	1.8	0.00049	6.17E-05	1.26E-06
2023		0.0031	Point	49	6.2	0.00164	2.07E-04	4.22E-06
2024		0.0035	Point	49	7.0	0.00186	2.34E-04	4.78E-06
2024	Tower C	0.0013	Point	56	2.5	0.00068	8.52E-05	1.52E-06
2025		0.0035	Point	56	7.0	0.00187	2.35E-04	4.20E-06
2026		0.0035	Point	56	7.0	0.00186	2.35E-04	4.19E-06
2027	Tower B	0.0027	Point	70	5.4	0.00143	1.80E-04	2.57E-06
2028		0.0038	Point	70	7.6	0.00202	2.55E-04	3.64E-06
2029		0.0018	Point	70	3.6	0.00097	1.23E-04	1.75E-06
<b>Total</b>		<b>0.0240</b>			<b>48.0</b>	<b>0.0128</b>	<b>0.0016</b>	

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

**PM2.5 Fugitive Dust Emissions for Modeling - Without Mitigation**

Construction Year	Construction Activity	Area Source	PM2.5 Emissions				Modeled Area (m <sup>2</sup> )	PM2.5 Emission Rate g/s/m <sup>2</sup>
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2022	Tower A	FUG_A22	0.0169	33.8	0.0090	1.14E-03	1,757	6.47E-07
2023		FUG_A23	0.0073	14.5	0.0039	4.90E-04	1,757	2.79E-07
2024		FUG_A24	0.0006	1.2	0.0003	3.98E-05	1,757	2.26E-08
2024	Tower C	FUG_C24	0.0240	48.0	0.0128	1.61E-03	2,023	7.98E-07
2025		FUG_C25	0.0011	2.2	0.0006	7.24E-05	2,023	3.58E-08
2026		FUG_C26	0.0008	1.6	0.0004	5.44E-05	2,023	2.69E-08
2027	Tower B	FUG_B27	0.0236	47.2	0.0126	1.59E-03	2,488	6.38E-07
2028		FUG_B28	0.0011	2.3	0.0006	7.57E-05	2,488	3.04E-08
2029		FUG_B29	0.0004	0.9	0.0002	2.96E-05	2,488	1.19E-08
<b>Total</b>			<b>0.0758</b>	<b>151.6</b>	<b>0.0405</b>	<b>0.0051</b>		

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744

**PM2.5 Fugitive Dust Emissions for Modeling - Unmitigated**

Construction Year	Construction Area	Area Source	PM2.5 Emissions				Modeled Area (m <sup>2</sup> )	PM2.5 Emission Rate g/s/m <sup>2</sup>
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2022	Tower A	FUG_A22	0.0036	7.2	0.0019	2.43E-04	1,757	1.38E-07
2023		FUG_A23	0.0022	4.3	0.0012	1.45E-04	1,757	8.25E-08
2024		FUG_A24	0.0006	1.2	0.0003	3.98E-05	1,757	2.26E-08
2024	Tower C	FUG_C24	0.0050	10.0	0.0027	3.36E-04	2,023	1.66E-07
2025		FUG_C25	0.0011	2.2	0.0006	7.24E-05	2,023	3.58E-08
2026		FUG_C26	0.0008	1.6	0.0004	5.44E-05	2,023	2.69E-08
2027	Tower B	FUG_B27	0.0053	10.5	0.0028	3.54E-04	2,488	1.42E-07
2028		FUG_B28	0.0011	2.3	0.0006	7.57E-05	2,488	3.04E-08
2029		FUG_B29	0.0004	0.9	0.0002	2.96E-05	2,488	1.19E-08
<b>Total</b>			<b>0.02004</b>	<b>40.1</b>	<b>0.0107</b>	<b>0.0013</b>		

*Construction Hours*

hr/day = 12 (7am - 7pm Mon-Sat)  
 days/yr = 312  
 hours/year = 3744



ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Health Impact Summary

**Maximum Impacts at MEI Residential Location - Without Mitigation**

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration* (µg/m <sup>3</sup> )
	Exhaust PM10/DPM (µg/m <sup>3</sup> )	Fugitive PM2.5 (µg/m <sup>3</sup> )	Infant/Child	Adult		
	2022	0.0409				
2023	0.1859	0.2192	30.54	0.53	0.04	0.28
2024	0.2324	0.4527	38.17	0.67	0.05	0.49
2025	0.0136	0.0203	0.35	0.04	0.00	0.07
2026	0.0133	0.0152	0.34	0.04	0.003	0.06
2027	0.0294	0.4002	0.76	0.08	0.006	0.43
2028	0.0527	0.0191	1.36	0.15	0.011	0.10
2029	0.0209	0.0075	0.54	0.06	0.004	0.04
<b>Total</b>	-	-	<b>72.62</b>	<b>1.69</b>	-	-
<b>Maximum</b>	0.2324	0.5082	-	-	<b>0.05</b>	<b>0.52</b>

\* Maximum cancer risk and maximum PM2.5 concentration occur at different levels and receptors.

**Maximum Impacts at MEI Residential Location - With Mitigation**

Emissions Year	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index (-)	Maximum Annual PM2.5 Concentration* (µg/m <sup>3</sup> )
	Exhaust PM10/DPM (µg/m <sup>3</sup> )	Fugitive PM2.5 (µg/m <sup>3</sup> )	Infant/Child	Adult		
	2022	0.0054				
2023	0.0113	0.0947	3.00	0.05	0.002	0.07
2024	0.0013	0.0203	3.49	0.06	0.000	0.10
2025	0.0013	0.0152	0.04	0.00	0.000	0.03
2026	0.0042	0.0891	0.04	0.00	0.001	0.02
2027	0.0060	0.0191	0.10	0.01	0.001	0.09
2028	0.0029	0.0075	0.15	0.02	0.001	0.02
2029	0.0000	0.0000	0.07	0.01	0.000	0.01
<b>Total</b>	-	-	<b>6.96</b>	<b>0.17</b>	-	-
<b>Maximum</b>	0.0113	0.1084	-	-	<b>0.002</b>	<b>0.11</b>

\* Maximum cancer risk and maximum PM2.5 concentration occur at different levels and receptors.

- Tier 4 Final Engine and Enhanced BMPs Mitigation

**Maximum Impacts at YWCA Childcare Center - Without Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0045	0.0308	--	0.001	0.04
2023	0.0203	0.0133	7.64	0.004	0.03
2024	0.0267	0.0210	10.05	0.005	0.04
2025	0.0056	0.0009	0.28	0.001	0.01
2026	0.0055	0.0007	0.27	0.001	0.01
2027	0.0084	0.0362	0.41	0.002	0.05
2028	0.0150	0.0017	0.74	0.003	0.02
2029	0.0060	0.0007	--	0.001	0.01
<b>Total</b>	-	-	<b>19.38</b>	-	-
<b>Maximum</b>	0.0267	0.0362	-	<b>0.01</b>	<b>0.05</b>

**Maximum Impacts at YWCA Childcare Center - With Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0006	0.0066	--	0.0001	0.01
2023	0.0020	0.0039	0.7505	0.0004	0.01
2024	0.0025	0.0050	0.9353	0.0005	0.01
2025	0.0006	0.0009	0.0314	0.0001	0.00
2026	0.0006	0.0007	0.0314	0.0001	0.00
2027	0.0011	0.0081	0.0554	0.0002	0.01
2028	0.0016	0.0017	0.0784	0.0003	0.00
2029	0.0008	0.0007	--	0.0002	0.00
<b>Total</b>	-	-	<b>1.88</b>	-	-
<b>Maximum</b>	0.0025	0.0081	-	<b>0.0005</b>	<b>0.01</b>

- Tier 4 Final Engine and Enhanced BMPs Mitigation

**Maximum Impacts at YWCA Childcare Center - Without Mitigation**

Construction Year	Unmitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ( $\mu\text{g}/\text{m}^3$ )
	Exhaust PM10/DPM ( $\mu\text{g}/\text{m}^3$ )	Fugitive PM2.5 ( $\mu\text{g}/\text{m}^3$ )			
2022	0.0039	0.0149	--	0.001	0.02
2023	0.0176	0.0064	--	0.004	0.02
2024	0.0231	0.0061	--	0.005	0.03
2025	0.0046	0.0003	--	0.001	0.00
2026	0.0045	0.0002	0.22	0.001	0.00
2027	0.0214	0.0409	1.05	0.004	0.06
2028	0.0384	0.0020	1.88	0.008	0.04
2029	0.0153	0.0008	0.75	0.003	0.02
<b>Total</b>	-	-	<b>3.90</b>	-	-
<b>Maximum</b>	0.0384	0.0409	-	<b>0.01</b>	<b>0.06</b>

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 1.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0214	10	0.29	2022	0.0214	1	0.06	0.004	0.51	0.52	
1	1	0 - 1	2023	0.0970	10	15.94	2023	0.0970	1	0.28	0.019	0.22	0.28	
2	1	1 - 2	2024	0.1227	10	20.15	2024	0.1227	1	0.35	0.025	0.45	0.49	
3	1	2 - 3	2025	0.0116	3	0.30	2025	0.0116	1	0.03	0.002	0.02	0.07	
4	1	3 - 4	2026	0.0113	3	0.29	2026	0.0113	1	0.03	0.002	0.02	0.06	
5	1	4 - 5	2027	0.0312	3	0.81	2027	0.0312	1	0.09	0.006	0.40	0.43	
6	1	5 - 6	2028	0.0559	3	1.44	2028	0.0559	1	0.16	0.011	0.02	0.10	
7	1	6 - 7	2029	0.0222	3	0.57	2029	0.0222	1	0.06	0.004	0.01	0.04	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.02</b>	<b>0.51</b>	<b>0.52</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>39.80</b>					<b>1.01</b>			

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at YWCA Childcare Center (0-6 years old) - 1 meter - Infant/Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	Infant	School Child	Adult
Age -->	0 - <2	2 - <16	16 - 30
Parameter			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0045	--	--
2	1	0 - 1	2023	0.0203	10	7.64
3	1	1 - 2	2024	0.0267	10	10.05
4	1	2 - 3	2025	0.0056	3	0.28
5	1	3 - 4	2026	0.0055	3	0.27
6	1	4 - 5	2027	0.0084	3	0.41
7	1	5 - 6	2028	0.0150	3	0.74
8	1			0.0060	--	--
9	1			0.0000	--	--
<b>Total Increased Cancer Risk</b>						<b>19.38</b>

\* Children assumed to be 0-6 years of age with 6 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.001	0.031	0.035
0.004	0.013	0.033
0.005	0.021	0.041
0.001	0.001	0.010
0.001	0.001	0.010
0.002	0.036	0.047
0.003	0.002	0.020
0.001	0.001	0.008
<b>0.005</b>	<b>0.04</b>	<b>0.05</b>

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at Notre Dame High School (+14 years old) - 1.5 meters - Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	Infant	School Child	Adult
Age -->	0 - <2	2 - <16	16 - 30
Parameter			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0039	--	--
2	1		2023	0.0176	--	--
3	1		2024	0.0231	--	--
4	1		2025	0.0046	--	--
5	1	14 - 15	2026	0.0045	3	0.22
6	1	15 - 16	2027	0.0214	3	1.05
7	1	16 - 17	2028	0.0384	3	1.88
8	1	17 - 18	2029	0.0153	3	0.75
9	1			0.0000	--	--
<b>Total Increased Cancer Risk</b>						<b>3.90</b>

\* Children assumed to be 14 years of age or older with 4 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.0008	0.015	0.019
0.004	0.006	0.024
0.005	0.006	0.029
0.001	0.000	0.005
0.001	0.000	0.005
0.004	0.041	0.062
0.008	0.002	0.040
0.003	0.001	0.016
<b>0.008</b>	<b>0.04</b>	<b>0.06</b>

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 1.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0028	10	0.04	2022	0.0028	1	0.01	0.001	0.11	0.11	
1	1	0 - 1	2023	0.0095	10	1.57	2023	0.0095	1	0.03	0.002	0.06	0.07	
2	1	1 - 2	2024	0.0113	10	1.85	2024	0.0113	1	0.03	0.002	0.09	0.10	
3	1	2 - 3	2025	0.0013	3	0.03	2025	0.0013	1	0.00	0.000	0.02	0.03	
4	1	3 - 4	2026	0.0013	3	0.03	2026	0.0013	1	0.00	0.000	0.02	0.02	
5	1	4 - 5	2027	0.0042	3	0.11	2027	0.0042	1	0.01	0.001	0.09	0.09	
6	1	5 - 6	2028	0.0060	3	0.15	2028	0.0060	1	0.02	0.001	0.02	0.02	
7	1	6 - 7	2029	0.0029	3	0.07	2029	0.0029	1	0.01	0.001	0.01	0.01	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.002</b>	<b>0.11</b>	<b>0.11</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>3.86</b>					<b>0.10</b>			

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at YWCA Childcare Center (0-6 years old) - 1 meter - Infant/Child Exposure**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/12 hrs) x (7 days/6 days) x (10 hrs/8 hrs) = 2.92  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	Infant	School Child	Adult
Age -->	0 - <2	2 - <16	16 - 30
Parameter			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	2.92	2.92	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information		Age* Sensitivity Factor	Child Cancer Risk (per million)
			DPM Conc (ug/m3)			
			Year	Annual		
1	1		2022	0.0006	--	--
2	1	0 - 1	2023	0.0020	10	0.75
3	1	1 - 2	2024	0.0025	10	0.94
4	1	2 - 3	2025	0.0006	3	0.03
5	1	3 - 4	2026	0.0006	3	0.03
6	1	4 - 5	2027	0.0011	3	0.06
7	1	5 - 6	2028	0.0016	3	0.08
8	1			0.0008	--	--
9	1			0.0000	3	0.00
<b>Total Increased Cancer Risk</b>						<b>1.88</b>

\* Children assumed to be 0-6 years of age with 6 years of Construction Exposure

Maximum		
Hazard Index	Fugitive PM2.5	Total PM2.5
0.0001	0.007	0.007
0.0004	0.004	0.006
0.0005	0.005	0.007
0.0001	0.001	0.002
0.0001	0.001	0.002
0.0002	0.008	0.009
0.0003	0.002	0.004
0.0002	0.001	0.002
<b>0.0005</b>	<b>0.01</b>	<b>0.01</b>

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 4.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0409	10	0.56	2022	0.0409	1	0.12	0.008	0.19	0.23	
1	1	0 - 1	2023	0.1859	10	30.54	2023	0.1859	1	0.53	0.037	0.08	0.27	
2	1	1 - 2	2024	0.2324	10	38.17	2024	0.2324	1	0.67	0.046	0.19	0.26	
3	1	2 - 3	2025	0.0136	3	0.35	2025	0.0136	1	0.04	0.003	0.01	0.18	
4	1	3 - 4	2026	0.0133	3	0.34	2026	0.0133	1	0.04	0.003	0.01	0.17	
5	1	4 - 5	2027	0.0294	3	0.76	2027	0.0294	1	0.08	0.006	0.18	0.25	
6	1	5 - 6	2028	0.0527	3	1.36	2028	0.0527	1	0.15	0.011	0.01	0.14	
7	1	6 - 7	2029	0.0209	3	0.54	2029	0.0209	1	0.06	0.004	0.00	0.06	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	<b>0.05</b>	<b>0.19</b>	<b>0.27</b>	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>72.62</b>					<b>1.57</b>			

\* Third trimester of pregnancy



**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
Impacts at Off-Site MEI Location - 4.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Cancer Risk	Cancer Risk	Cancer Risk
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2022	0.0054	10	0.07	2022	0.0054	1	0.02	0.001	0.04	0.05	
1	1	0 - 1	2023	0.0183	10	3.00	2023	0.0183	1	0.05	0.004	0.02	0.04	
2	1	1 - 2	2024	0.0212	10	3.49	2024	0.0212	1	0.06	0.004	0.04	0.05	
3	1	2 - 3	2025	0.0016	3	0.04	2025	0.0016	1	0.00	0.000	0.01	0.03	
4	1	3 - 4	2026	0.0016	3	0.04	2026	0.0016	1	0.00	0.000	0.01	0.03	
5	1	4 - 5	2027	0.0040	3	0.10	2027	0.0040	1	0.01	0.001	0.04	0.05	
6	1	5 - 6	2028	0.0056	3	0.15	2028	0.0056	1	0.02	0.001	0.01	0.02	
7	1	6 - 7	2029	0.0027	3	0.07	2029	0.0027	1	0.01	0.001	0.00	0.01	
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.004	0.04	0.05	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>6.96</b>					<b>0.16</b>			

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation**  
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**  
**Impacts at Tower A On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum			
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0			2024	0.0022	-	-	2024	0.0022	1	0.01	0.000	0.02	0.02	
1			2025	0.0069	-	-	2025	0.0069	1	0.02	0.001	0.00	0.02	
2			2026	0.0068	-	-	2026	0.0068	1	0.02	0.001	0.00	0.02	
3	0.25	-0.25 - 0*	2027	0.0994	10	1.35	2027	0.0994	-	-	0.02	0.02	0.12	
4	1	0 - 1	2027	0.0994	10	16.33	2027	0.0994	1	0.29	0.02	0.00	0.18	
5	1	1 - 2	2028	0.1780	10	29.24	2028	0.1780	1	0.51	0.04	0.00	0.07	
6	1	2 - 3	2029	0.0707	3	1.83	2029	0.0707	1	0.20				
7	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
8	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
9	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00	0.04	0.02	0.18	
10	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
11	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
12	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00				
13	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
14	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
15	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
16	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
17	1	13 - 14		0.0000	1	0.00		0.0000	1	0.00				
18	1	14 - 15		0.0000	1	0.00		0.0000	1	0.00				
19	1	15 - 16		0.0000	1	0.00		0.0000	1	0.00				
20	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
21	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
22	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
23	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
24	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
25	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
26	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
27	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
28	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
29	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
30	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>48.75</b>					<b>1.04</b>			

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation**  
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**  
**Impacts at Tower A On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum			
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0			2024	0.0003	-	-	2024	0.0003	1	0.00	0.000	0.004	0.004	
1			2025	0.0008	-	-	2025	0.0008	1	0.00	0.000	0.001	0.003	
2			2026	0.0008	-	-	2026	0.0008	1	0.00	0.000	0.001	0.002	
3	0.25	-0.25 - 0*	2027	0.0135	10	0.18	2027	0.0135	-	-	0.003	0.005	0.019	
4	1	0 - 1	2027	0.0135	10	2.21	2027	0.0135	1	0.04	0.003	0.001	0.020	
5	1	1 - 2	2028	0.0190	10	3.13	2028	0.0190	1	0.05	0.004	0.000	0.010	
6	1	2 - 3	2029	0.0092	3	0.24	2029	0.0092	1	0.03				
7	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
8	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
9	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00	0.004	0.01	0.02	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>5.75</b>					<b>0.12</b>			

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - Without Mitigation**  
**Maximum DPM Cancer Risk and PM2.5 Calculations From Construction**  
**Impacts at Tower C On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2027	0.0119	10	0.16	2027	0.0119	-	-	-	-	-	-
1	1	0 - 1	2027	0.0119	10	1.96	2027	0.0119	1	0.03	0.002	0.01	0.03	
2	1	1 - 2	2028	0.0214	10	3.51	2028	0.0214	1	0.06	0.004	0.00	0.02	
3	1	2 - 3	2029	0.0085	3	0.22	2029	0.0085	1	0.02	0.002	0.00	0.01	
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.004	0.01	0.03	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>5.85</b>				<b>0.12</b>				

\* Third trimester of pregnancy

**ACB - 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Construction Impacts - With Mitigation  
 Maximum DPM Cancer Risk and PM2.5 Calculations From Construction  
 Impacts at Tower C On-Site MEI Location - 10.5 meter receptor height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum				
			DPM Conc (ug/m3)			Age Sensitivity Factor	Modeled			Age Sensitivity Factor	Cancer Risk	Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			Year	Annual						
0	0.25	-0.25 - 0*	2027	0.0016	10	0.02	2027	0.0016	-	-	-	-	-	-
1	1	0 - 1	2027	0.0016	10	0.27	2027	0.0016	1	0.00	0.0003	0.003	0.005	
2	1	1 - 2	2028	0.0023	10	0.38	2028	0.0023	1	0.01	0.0005	0.001	0.003	
3	1	2 - 3	2029	0.0011	3	0.03	2029	0.0011	1	0.00	0.0002	0.000	0.001	
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00				
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00				
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00				
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00				
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00				
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00	0.0005	0.003	0.005	
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00				
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00				
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00				
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00				
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00				
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00				
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00				
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00				
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00				
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00				
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00				
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00				
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00				
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00				
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00				
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00				
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00				
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00				
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00				
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00				
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00				
<b>Total Increased Cancer Risk</b>						<b>0.69</b>				<b>0.01</b>				

\* Third trimester of pregnancy

## Project Generators Health Risk Assessment and Calculations

### 420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA

#### Standby Emergency Generator Impacts

#### Off-site Sensitive Receptors

MEI Locations = Cancer Risk - 4.5m and PM2.5 - 1.5m Receptor Heights

DPM Emission Rates		
Source Type	DPM Emissions per Generator	
	Max Daily (lb/day)	Annual (lb/year)
Three, 200-kW, 270-hp Generators and Three, 125-kw, 170-HP Fire Pumps	0.052	18.80
CalEEMod DPM Emissions	0.0094	tons/year

Modeling Information	
Model	AERMOD
Source	Diesel Generator Engines
Source Type	Point
Meteorological Data	2013-2017 San Jose Airport Meteorological Data
Point Source Stack Parameters	
Generator Engine Size (hp)	270 & 170
Stack Height (ft)	29.00 2nd Level Exhaust Release
Stack Diameter (ft)**	0.60
Exhaust Gas Flowrate (CFM)*	2527.73
Stack Exit Velocity (ft/sec)**	149.00
Exhaust Temperature (°F)**	872.00
Emissions Rate (lb/hr)	0.0021      0.0007 Each Gen

\* AERMOD default

\*\*BAAQMD default generator parameters

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Project Generator Impacts**  
**Maximum DPM Cancer Risk and PM2.5 Calculations**  
**Impacts at Construction Residential MEI Receptors, 28-Year Exposure**  
**Cancer Risk MEI - 4.5m (2nd Level) Receptor Height, PM2.5 MEI - 1.5m (1st Level) Receptor Height**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

- Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)  
 FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

- Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 DBR = daily breathing rate (L/kg body weight-day)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Project Generators Operation Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information		Cancer Risk (per million)	
			DPM Conc (ug/m3)			Age Sensitivity Factor
			Year	Annual		
0	0.25	-0.25 - 0*	2022	0.00000	10	0.000
1	1	0 - 1	2022	0.00000	10	0.000
2	1	1 - 2	2023	0.00000	10	0.000
3	1	2 - 3	2024	0.00090	3	0.023
4	1	3 - 4	2025	0.00090	3	0.023
5	1	4 - 5	2026	0.00090	3	0.023
6	1	5 - 6	2027	0.00090	3	0.023
7	1	6 - 7	2028	0.00090	3	0.023
8	1	7 - 8	2029	0.00090	3	0.023
9	1	8 - 9	2030	0.00090	3	0.023
10	1	9 - 10	2031	0.00090	3	0.023
11	1	10 - 11	2032	0.00090	3	0.023
12	1	11 - 12	2033	0.00090	3	0.023
13	1	12 - 13	2034	0.00090	3	0.023
14	1	13 - 14	2035	0.00090	3	0.023
15	1	14 - 15	2036	0.00090	3	0.023
16	1	15 - 16	2037	0.00090	3	0.023
17	1	16-17	2038	0.00090	1	0.003
18	1	17-18	2039	0.00090	1	0.003
19	1	18-19	2040	0.00090	1	0.003
20	1	19-20	2041	0.00090	1	0.003
21	1	20-21	2042	0.00090	1	0.003
22	1	21-22	2043	0.00090	1	0.003
23	1	22-23	2044	0.00090	1	0.003
24	1	23-24	2045	0.00090	1	0.003
25	1	24-25	2046	0.00090	1	0.003
26	1	25-26	2047	0.00090	1	0.003
27	1	26-27	2048	0.00090	1	0.003
28	1	27-28	2049	0.00090	1	0.003
29	1	28-29	2050	0.00090	1	0.003
30	1	29-30	2051	0.00090	1	0.003
<b>Total Increased Cancer Risk</b>						<b>0.36</b>

Hazard Index	Total PM2.5
0.0002	0.001

\* Third trimester of pregnancy

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Project Generator Impacts  
 Maximum DPM Cancer Risk and PM2.5 Calculations  
 Impacts at YWCA Childcare Center (0-6 years old), 4-Year Child Exposure - 1 meter**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/24 hrs) x (7 days/7 days) x (10hrs/8hrs) = 1.25  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	<b>Infant</b>	<b>School Child</b>	<b>Adult</b>
<b>Age --&gt;</b>	<b>0 - &lt;2</b>	<b>2 - &lt;16</b>	<b>16 - 30</b>
<b>Parameter</b>			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	1.25	1.25	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Project Generators Operation Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information			Child Cancer Risk (per million)
			DPM Conc (ug/m3)		Age* Sensitivity	
			Year	Annual	Factor	
1	1	0 - 1	2022	0.00000	10	0.00
2	1	1 - 2	2023	0.00000	10	0.00
3	1	2 - 3	2024	0.00124	3	0.03
4	1	3 - 4	2025	0.00124	3	0.03
5	1	4 - 5	2026	0.00124	3	0.03
6	1	5 - 6	2027	0.00124	3	0.03
7	1		2028	0.00000	3	0.00
8	1		2029	0.00000	3	0.00
9	1		2030	0.00000	3	0.00
<b>Total Increased Cancer Risk</b>						<b>0.10</b>

\* Children assumed to be 0-6 years of age or older with 4 years of exposure

<b>Maximum</b>	
<b>Hazard Index</b>	<b>Total PM2.5</b>
0.0002	0.001



**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Project Generator Impacts  
 Maximum DPM Cancer Risk and PM2.5 Calculations  
 Impacts at Notre Dame High School (+14 years old), 2-Year Child Exposure - 1.5 meter**

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>  
 ASF = Age sensitivity factor for specified age group  
 ED = Exposure duration (years)  
 AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C<sub>air</sub> x SAF x 8-Hr BR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)  
 SAF = Student Adjustment Factor (unitless)  
 = (24 hrs/24 hrs) x (7 days/7 days) x (10hrs/8hrs) = 1.25  
 8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)  
 A = Inhalation absorption factor  
 EF = Exposure frequency (days/year)  
 10<sup>-6</sup> = Conversion factor

**Values**

	<b>Infant</b>	<b>School Child</b>	<b>Adult</b>
<b>Age --&gt;</b>	<b>0 - &lt;2</b>	<b>2 - &lt;16</b>	<b>16 - 30</b>
<b>Parameter</b>			
ASF =	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00
8-Hr BR* =	1200	520	240
A =	1	1	1
EF =	250	250	250
AT =	70	70	70
SAF =	1.25	1.25	1.00

\* 95th percentile 8-hr breathing rates for moderate intensity activities

**Project Generators Operation Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information			Child Cancer Risk (per million)
			DPM Conc (ug/m3)		Age* Sensitivity Factor	
			Year	Annual		
1	1	14 - 15	2022	0.00000	3	0.00
2	1	15 - 16	2023	0.00000	3	0.00
3	1	16 - 17	2024	0.00181	3	0.04
4	1	17 - 18	2025	0.00181	3	0.04
5	1		2026	0.00000	3	0.00
6	1		2027	0.00000	3	0.00
7	1		2028	0.00000	3	0.00
8	1		2029	0.00000	3	0.00
9	1		2030	0.00000	3	0.00
<b>Total Increased Cancer Risk</b>						<b>0.08</b>

\* Children assumed to be 14 years of age or older with 2 years of exposure

<b>Maximum</b>	
<b>Hazard Index</b>	<b>Total PM2.5</b>
0.0004	0.002

**Attachment 5: Community Risk Modeling Information and Calculations**

CT-EMFAC2017 Emissions Factors for Santa Clara County 2022

File Name: 420 2nd-3rd Sts - Santa Clara (SF) - 2022 - Annual.EF  
 CT-EMFAC2017 Version: 1.0.2.27401  
 Run Date: 6/22/2022 16:13  
 Area: Santa Clara (SF)  
 Analysis Year: 2022  
 Season: Annual

Vehicle Category	VMT	Diesel VMT	Gas VMT
	Fraction	Fraction	Fraction
	Across	Within	Within
	Category	Category	Category
Truck 1	0.015	0.478	0.522
Truck 2	0.02	0.94	0.046
Non-Truck	0.965	0.014	0.961

Road Type: Major/Collector  
 Silt Loading Factor: CARB 0.032 g/m2  
 Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph
PM2.5	0.010417	0.006915	0.004735	0.003408	0.002622	0.002145	0.001861
TOG	0.220898	0.145348	0.097291	0.068555	0.051819	0.041294	0.034513
Diesel PM	0.001756	0.001459	0.001108	0.000865	0.000743	0.000683	0.000662

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.418515

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002108

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016811

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.014871

=====  
 END  
 =====

S. 3<sup>rd</sup> Street Traffic Emissions and Health Risk Calculations

Analysis Year = **2022**

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2022 Vehicles (veh/day)
<b>Total</b>	<b>12,825</b>	<b>12,825</b>

Increase From 2022 1.00  
**Vehicles/Direction 6,413**  
 Avg Vehicles/Hour/Direction 267

Traffic Data Year = **2022**

Project Traffic Data - Background Plus Project ADT	ADT Total	Total Truck
S. 3rd Street & E. San Salvador St	12,825	450

Percent of Total Vehicles 3.51%  
 Traffic Increase per Year (%) = 1.00%

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling

Cumulative Operation - S. 3rd Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = **2022**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	43.7	3.4	25	12,825
Total										12,825

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.00074			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and DPM Emissions - DPM\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.91%	501	4.45E-05	9	6.44%	826	7.33E-05	17	5.52%	708	6.28E-05
2	2.59%	332	2.95E-05	10	7.25%	929	8.25E-05	18	3.34%	428	3.80E-05
3	2.82%	361	3.21E-05	11	6.33%	811	7.20E-05	19	2.42%	310	2.75E-05
4	3.39%	435	3.86E-05	12	6.90%	885	7.86E-05	20	0.92%	118	1.05E-05
5	2.19%	280	2.49E-05	13	6.27%	804	7.14E-05	21	2.99%	383	3.40E-05
6	3.39%	435	3.86E-05	14	6.15%	789	7.01E-05	22	4.14%	531	4.71E-05
7	6.10%	782	6.94E-05	15	5.12%	656	5.83E-05	23	2.47%	317	2.82E-05
8	4.66%	597	5.30E-05	16	3.85%	494	4.39E-05	24	0.86%	111	9.82E-06
Total										12,825	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions  
 Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	12,825
									Total	12,825

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
25	0.002622			
Emissions per Vehicle (g/VMT)				

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and PM2.5 Emissions - PM25\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	148	4.62E-05	9	7.11%	912	2.86E-04	17	7.39%	947	2.97E-04
2	0.42%	54	1.68E-05	10	4.39%	563	1.76E-04	18	8.17%	1048	3.28E-04
3	0.41%	52	1.64E-05	11	4.67%	598	1.87E-04	19	5.70%	730	2.29E-04
4	0.27%	34	1.07E-05	12	5.89%	756	2.37E-04	20	4.27%	548	1.72E-04
5	0.50%	64	2.01E-05	13	6.15%	789	2.47E-04	21	3.26%	418	1.31E-04
6	0.91%	116	3.64E-05	14	6.03%	774	2.42E-04	22	3.30%	423	1.33E-04
7	3.79%	487	1.52E-04	15	7.01%	899	2.82E-04	23	2.46%	315	9.87E-05
8	7.76%	996	3.12E-04	16	7.13%	915	2.87E-04	24	1.86%	239	7.48E-05
									Total	12,825	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions  
 Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	12,825
									Total	12,825

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.05182			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	148	9.14E-04	9	7.11%	912	5.65E-03	17	7.39%	947	5.86E-03
2	0.42%	54	3.33E-04	10	4.39%	563	3.49E-03	18	8.17%	1048	6.49E-03
3	0.41%	52	3.25E-04	11	4.67%	598	3.71E-03	19	5.70%	730	4.52E-03
4	0.27%	34	2.12E-04	12	5.89%	756	4.68E-03	20	4.27%	548	3.39E-03
5	0.50%	64	3.96E-04	13	6.15%	789	4.88E-03	21	3.26%	418	2.59E-03
6	0.91%	116	7.20E-04	14	6.03%	774	4.79E-03	22	3.30%	423	2.62E-03
7	3.79%	487	3.01E-03	15	7.01%	899	5.56E-03	23	2.46%	315	1.95E-03
8	7.76%	996	6.16E-03	16	7.13%	915	5.67E-03	24	1.86%	239	1.48E-03
Total										12,825	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling

Cumulative Operation - S. 3rd Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	12,825
									Total	12,825

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle per Hour (g/hour)	1.41852			
Emissions per Vehicle per Mile (g/VMT)	0.05674			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	148	1.00E-03	9	7.11%	912	6.18E-03	17	7.39%	947	6.42E-03
2	0.42%	54	3.64E-04	10	4.39%	563	3.82E-03	18	8.17%	1048	7.10E-03
3	0.41%	52	3.56E-04	11	4.67%	598	4.06E-03	19	5.70%	730	4.95E-03
4	0.27%	34	2.32E-04	12	5.89%	756	5.12E-03	20	4.27%	548	3.72E-03
5	0.50%	64	4.34E-04	13	6.15%	789	5.35E-03	21	3.26%	418	2.83E-03
6	0.91%	116	7.88E-04	14	6.03%	774	5.25E-03	22	3.30%	423	2.87E-03
7	3.79%	487	3.30E-03	15	7.01%	899	6.09E-03	23	2.46%	315	2.14E-03
8	7.76%	996	6.75E-03	16	7.13%	915	6.20E-03	24	1.86%	239	1.62E-03
Total										12,825	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions  
 Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	12,825
									Total	12,825

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681			
Road Dust - Emissions per Vehicle (g/VMT)	0.01487			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03379			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	148	5.96E-04	9	7.11%	912	3.68E-03	17	7.39%	947	3.82E-03
2	0.42%	54	2.17E-04	10	4.39%	563	2.27E-03	18	8.17%	1048	4.23E-03
3	0.41%	52	2.12E-04	11	4.67%	598	2.42E-03	19	5.70%	730	2.95E-03
4	0.27%	34	1.38E-04	12	5.89%	756	3.05E-03	20	4.27%	548	2.21E-03
5	0.50%	64	2.59E-04	13	6.15%	789	3.18E-03	21	3.26%	418	1.69E-03
6	0.91%	116	4.69E-04	14	6.03%	774	3.12E-03	22	3.30%	423	1.71E-03
7	3.79%	487	1.96E-03	15	7.01%	899	3.63E-03	23	2.46%	315	1.27E-03
8	7.76%	996	4.02E-03	16	7.13%	915	3.69E-03	24	1.86%	239	9.65E-04
Total										12,825	



**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. 3rd Street Traffic - TACs & PM2.5  
 AERMOD Risk Modeling Parameters and Maximum Concentrations  
 at Construction MEI Receptors, PM2.5 1.5m, Cancer Risk 4.5m receptor heights**

**Emission Year** 2022  
**Receptor Information** Construction MEI receptors  
 Number of Receptors 2  
 Receptor Height PM2.5 1.5m, Cancer Risk 4.5m  
 Receptor Distances At Construction MEI locations

**Meteorological Conditions**  
 BAQMD San Jose Airport Met Data 2013-2017  
 Land Use Classification Urban  
 Wind Speed Variable  
 Wind Direction Variable

**Construction Cancer Risk MEI Cancer Risk Maximum Concentrations**

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0033	0.1764	0.1929

**Construction PM2.5 MEI PM2.5 Maximum Concentrations**

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.1301	0.1208	0.0093

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. 3rd Street Cancer Risk & PM2.5  
Impacts at Construction MEIs - PM2.5 1.5m, Cancer Risk 4.5m receptor heights  
30 Year Residential Exposure**

**Cancer Risk Calculation Method**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10<sup>-6</sup> = Conversion factor

**Cancer Potency Factors (mg/kg-day)<sup>-1</sup>**

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

**Values**

Age → Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Maximum - Exposure Information				Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
0	0.25	-0.25 - 0*	2023	10	0.0033	0.1764	0.1929	0.045	0.014	0.0009	0.06
1	1	0 - 1	2023	10	0.0033	0.1764	0.1929	0.542	0.165	0.0107	0.72
2	1	1 - 2	2024	10	0.0033	0.1764	0.1929	0.542	0.165	0.0107	0.72
3	1	2 - 3	2025	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
4	1	3 - 4	2026	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
5	1	4 - 5	2027	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
6	1	5 - 6	2028	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
7	1	6 - 7	2029	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
8	1	7 - 8	2030	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
9	1	8 - 9	2031	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
10	1	9 - 10	2032	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
11	1	10 - 11	2033	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
12	1	11 - 12	2034	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
13	1	12 - 13	2035	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
14	1	13 - 14	2036	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
15	1	14 - 15	2037	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
16	1	15 - 16	2038	3	0.0033	0.1764	0.1929	0.085	0.026	0.0017	0.11
17	1	16 - 17	2039	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
18	1	17 - 18	2040	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
19	1	18 - 19	2041	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
20	1	19 - 20	2042	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
21	1	20 - 21	2043	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
22	1	21 - 22	2044	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
23	1	22 - 23	2045	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
24	1	23 - 24	2046	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
25	1	24 - 25	2047	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
26	1	25 - 26	2048	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
27	1	26 - 27	2049	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
28	1	27 - 28	2050	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
29	1	28 - 29	2051	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
30	1	29 - 30	2052	1	0.0033	0.1764	0.1929	0.009	0.003	0.0002	0.01
<b>Total Increased Cancer Risk</b>								2.46	0.749	0.048	<b>3.25</b>

\* Third trimester of pregnancy

Maximum  
**Hazard Index** 0.0007  
**Fugitive PM2.5** 0.12  
**Total PM2.5** 0.13

S. Market Street Traffic Emissions and Health Risk Calculations

Analysis Year = **2022**

Vehicle Type	2021 Caltrans Vehicles (veh/day)	2022 Vehicles (veh/day)
<b>Total</b>	<b>17,385</b>	<b>17,559</b>

Increase From 2021 1.01  
**Vehicles/Direction** **8,779**  
 Avg Vehicles/Hour/Direction 366

Traffic Data Year = **2021**

<i>Nearby Project Traffic Data - Background Plus Project ADT</i>	ADT Total	Total Truck
S. Market Street & E. San Salvador St	17,385	610

Percent of Total Vehicles 3.51%  
 Traffic Increase per Year (%) = 1.00%

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling

Cumulative Operation - S. Market Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	43.7	3.4	25	8,779
DPM_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	43.7	3.4	25	8,779
									Total	17,559

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.00074			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and DPM Emissions - DPM\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.91%	343	2.34E-05	9	6.44%	565	3.85E-05	17	5.52%	485	3.30E-05
2	2.59%	227	1.55E-05	10	7.25%	636	4.33E-05	18	3.34%	293	2.00E-05
3	2.82%	247	1.69E-05	11	6.33%	555	3.78E-05	19	2.42%	212	1.44E-05
4	3.39%	298	2.03E-05	12	6.90%	606	4.13E-05	20	0.92%	81	5.50E-06
5	2.19%	192	1.31E-05	13	6.27%	550	3.75E-05	21	2.99%	263	1.79E-05
6	3.39%	298	2.03E-05	14	6.15%	540	3.68E-05	22	4.14%	363	2.48E-05
7	6.10%	535	3.65E-05	15	5.12%	449	3.06E-05	23	2.47%	217	1.48E-05
8	4.66%	409	2.79E-05	16	3.85%	338	2.30E-05	24	0.86%	76	5.16E-06
									Total	8,779	

2022 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.91%	343	2.28E-05	9	6.44%	565	3.75E-05	17	5.52%	485	3.21E-05
2	2.59%	227	1.51E-05	10	7.25%	636	4.22E-05	18	3.34%	293	1.94E-05
3	2.82%	247	1.64E-05	11	6.33%	555	3.68E-05	19	2.42%	212	1.41E-05
4	3.39%	298	1.98E-05	12	6.90%	606	4.02E-05	20	0.92%	81	5.36E-06
5	2.19%	192	1.27E-05	13	6.27%	550	3.65E-05	21	2.99%	263	1.74E-05
6	3.39%	298	1.98E-05	14	6.15%	540	3.58E-05	22	4.14%	363	2.41E-05
7	6.10%	535	3.55E-05	15	5.12%	449	2.98E-05	23	2.47%	217	1.44E-05
8	4.66%	409	2.71E-05	16	3.85%	338	2.24E-05	24	0.86%	76	5.02E-06
									Total	8,779	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling

Cumulative Operation - S. Market Street

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,779
PM25_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,779
									Total	17,559

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	25	0.002622		

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and PM2.5 Emissions - PM25\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	101	2.43E-05	9	7.11%	624	1.50E-04	17	7.39%	648	1.56E-04
2	0.42%	37	8.85E-06	10	4.39%	386	9.27E-05	18	8.17%	717	1.72E-04
3	0.41%	36	8.64E-06	11	4.67%	410	9.85E-05	19	5.70%	500	1.20E-04
4	0.27%	23	5.63E-06	12	5.89%	517	1.24E-04	20	4.27%	375	9.02E-05
5	0.50%	44	1.05E-05	13	6.15%	540	1.30E-04	21	3.26%	286	6.88E-05
6	0.91%	80	1.91E-05	14	6.03%	530	1.27E-04	22	3.30%	290	6.97E-05
7	3.79%	333	8.01E-05	15	7.01%	615	1.48E-04	23	2.46%	216	5.19E-05
8	7.76%	682	1.64E-04	16	7.13%	626	1.51E-04	24	1.86%	164	3.93E-05
Total										8,779	

2022 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	101	2.36E-05	9	7.11%	624	1.46E-04	17	7.39%	648	1.52E-04
2	0.42%	37	8.61E-06	10	4.39%	386	9.02E-05	18	8.17%	717	1.68E-04
3	0.41%	36	8.41E-06	11	4.67%	410	9.59E-05	19	5.70%	500	1.17E-04
4	0.27%	23	5.48E-06	12	5.89%	517	1.21E-04	20	4.27%	375	8.78E-05
5	0.50%	44	1.03E-05	13	6.15%	540	1.26E-04	21	3.26%	286	6.70E-05
6	0.91%	80	1.86E-05	14	6.03%	530	1.24E-04	22	3.30%	290	6.78E-05
7	3.79%	333	7.80E-05	15	7.01%	615	1.44E-04	23	2.46%	216	5.05E-05
8	7.76%	682	1.59E-04	16	7.13%	626	1.47E-04	24	1.86%	164	3.83E-05
Total										8,779	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling  
 Cumulative Operation - S. Market Street  
 TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions  
 Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,779
TEXH_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,779
									Total	17,559

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.05182			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	101	4.80E-04	9	7.11%	624	2.97E-03	17	7.39%	648	3.08E-03
2	0.42%	37	1.75E-04	10	4.39%	386	1.83E-03	18	8.17%	717	3.41E-03
3	0.41%	36	1.71E-04	11	4.67%	410	1.95E-03	19	5.70%	500	2.38E-03
4	0.27%	23	1.11E-04	12	5.89%	517	2.46E-03	20	4.27%	375	1.78E-03
5	0.50%	44	2.08E-04	13	6.15%	540	2.57E-03	21	3.26%	286	1.36E-03
6	0.91%	80	3.78E-04	14	6.03%	530	2.52E-03	22	3.30%	290	1.38E-03
7	3.79%	333	1.58E-03	15	7.01%	615	2.92E-03	23	2.46%	216	1.02E-03
8	7.76%	682	3.24E-03	16	7.13%	626	2.98E-03	24	1.86%	164	7.77E-04
Total										8,779	

2022 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	101	4.67E-04	9	7.11%	624	2.89E-03	17	7.39%	648	3.00E-03
2	0.42%	37	1.70E-04	10	4.39%	386	1.78E-03	18	8.17%	717	3.32E-03
3	0.41%	36	1.66E-04	11	4.67%	410	1.89E-03	19	5.70%	500	2.31E-03
4	0.27%	23	1.08E-04	12	5.89%	517	2.39E-03	20	4.27%	375	1.74E-03
5	0.50%	44	2.03E-04	13	6.15%	540	2.50E-03	21	3.26%	286	1.32E-03
6	0.91%	80	3.68E-04	14	6.03%	530	2.45E-03	22	3.30%	290	1.34E-03
7	3.79%	333	1.54E-03	15	7.01%	615	2.85E-03	23	2.46%	216	9.97E-04
8	7.76%	682	3.15E-03	16	7.13%	626	2.90E-03	24	1.86%	164	7.56E-04
Total										8,779	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling

Cumulative Operation - S. Market Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,779
TEVAP_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,779
									Total	17,559

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle per Hour (g/hour)	1.41852			
Emissions per Vehicle per Mile (g/VMT)	0.05674			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	101	5.26E-04	9	7.11%	624	3.25E-03	17	7.39%	648	3.37E-03
2	0.42%	37	1.91E-04	10	4.39%	386	2.01E-03	18	8.17%	717	3.73E-03
3	0.41%	36	1.87E-04	11	4.67%	410	2.13E-03	19	5.70%	500	2.60E-03
4	0.27%	23	1.22E-04	12	5.89%	517	2.69E-03	20	4.27%	375	1.95E-03
5	0.50%	44	2.28E-04	13	6.15%	540	2.81E-03	21	3.26%	286	1.49E-03
6	0.91%	80	4.14E-04	14	6.03%	530	2.76E-03	22	3.30%	290	1.51E-03
7	3.79%	333	1.73E-03	15	7.01%	615	3.20E-03	23	2.46%	216	1.12E-03
8	7.76%	682	3.55E-03	16	7.13%	626	3.26E-03	24	1.86%	164	8.51E-04
Total										8,779	

2022 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	101	5.12E-04	9	7.11%	624	3.16E-03	17	7.39%	648	3.28E-03
2	0.42%	37	1.86E-04	10	4.39%	386	1.95E-03	18	8.17%	717	3.63E-03
3	0.41%	36	1.82E-04	11	4.67%	410	2.07E-03	19	5.70%	500	2.53E-03
4	0.27%	23	1.19E-04	12	5.89%	517	2.62E-03	20	4.27%	375	1.90E-03
5	0.50%	44	2.22E-04	13	6.15%	540	2.73E-03	21	3.26%	286	1.45E-03
6	0.91%	80	4.03E-04	14	6.03%	530	2.68E-03	22	3.30%	290	1.47E-03
7	3.79%	333	1.69E-03	15	7.01%	615	3.12E-03	23	2.46%	216	1.09E-03
8	7.76%	682	3.45E-03	16	7.13%	626	3.17E-03	24	1.86%	164	8.28E-04
Total										8,779	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Offsite Roadway Modeling  
 Cumulative Operation - S. Market Street  
 Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions  
 Year = 2022

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,779
FUG_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,779
									Total	17,559

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681			
Road Dust - Emissions per Vehicle (g/VMT)	0.01487			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03379			

Emission Factors from CT-EMFAC2017

2022 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	101	3.13E-04	9	7.11%	624	1.94E-03	17	7.39%	648	2.01E-03
2	0.42%	37	1.14E-04	10	4.39%	386	1.19E-03	18	8.17%	717	2.22E-03
3	0.41%	36	1.11E-04	11	4.67%	410	1.27E-03	19	5.70%	500	1.55E-03
4	0.27%	23	7.26E-05	12	5.89%	517	1.60E-03	20	4.27%	375	1.16E-03
5	0.50%	44	1.36E-04	13	6.15%	540	1.67E-03	21	3.26%	286	8.87E-04
6	0.91%	80	2.47E-04	14	6.03%	530	1.64E-03	22	3.30%	290	8.98E-04
7	3.79%	333	1.03E-03	15	7.01%	615	1.91E-03	23	2.46%	216	6.68E-04
8	7.76%	682	2.11E-03	16	7.13%	626	1.94E-03	24	1.86%	164	5.07E-04
									Total	8,779	

2022 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	101	3.05E-04	9	7.11%	624	1.88E-03	17	7.39%	648	1.96E-03
2	0.42%	37	1.11E-04	10	4.39%	386	1.16E-03	18	8.17%	717	2.16E-03
3	0.41%	36	1.08E-04	11	4.67%	410	1.24E-03	19	5.70%	500	1.51E-03
4	0.27%	23	7.06E-05	12	5.89%	517	1.56E-03	20	4.27%	375	1.13E-03
5	0.50%	44	1.32E-04	13	6.15%	540	1.63E-03	21	3.26%	286	8.63E-04
6	0.91%	80	2.40E-04	14	6.03%	530	1.60E-03	22	3.30%	290	8.74E-04
7	3.79%	333	1.00E-03	15	7.01%	615	1.86E-03	23	2.46%	216	6.50E-04
8	7.76%	682	2.06E-03	16	7.13%	626	1.89E-03	24	1.86%	164	4.93E-04
									Total	8,779	



**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. Market Street Traffic - TACs & PM2.5  
AERMOD Risk Modeling Parameters and Maximum Concentrations  
at Construction MEI Receptors, PM2.5 1.5m, Cancer Risk 4.5m receptor heights**

<b><u>Emission Year</u></b>	2022
<b><u>Receptor Information</u></b>	Construction MEI receptors
Number of Receptors	2
Receptor Height	PM2.5 1.5m, Cancer Risk 4.5m
Receptor Distances	At Construction MEI locations

<b><u>Meteorological Conditions</u></b>	
BAQMD San Jose Airport Met Data	2013-2017
Land Use Classification	Urban
Wind Speed	Variable
Wind Direction	Variable

**Construction Cancer Risk MEI Cancer Risk Maximum Concentrations**

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0003	0.0165	0.0180

**Construction PM2.5 MEI PM2.5 Maximum Concentrations**

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0124	0.0115	0.0009

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. Market Street Cancer Risk & PM2.5  
Impacts at Construction MEIs - PM2.5 1.5m, Cancer Risk 4.5m receptor heights  
30 Year Residential Exposure**

**Cancer Risk Calculation Method**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10<sup>-6</sup> = Conversion factor

**Cancer Potency Factors (mg/kg-day)<sup>-1</sup>**

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

**Values**

Age → Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Maximum - Exposure Information				Concentration (ug/m3)			Cancer Risk (per million)			TOTAL
	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	
1	1	0 - 1	2022	10	0.0003	0.0165	0.0180	0.046	0.015	0.0010	0.06
2	1	1 - 2	2023	10	0.0003	0.0165	0.0180	0.046	0.015	0.0010	0.06
3	1	2 - 3	2024	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
4	1	3 - 4	2025	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
5	1	4 - 5	2026	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
6	1	5 - 6	2027	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
7	1	6 - 7	2028	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
8	1	7 - 8	2029	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
9	1	8 - 9	2030	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
10	1	9 - 10	2031	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
11	1	10 - 11	2032	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
12	1	11 - 12	2033	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
13	1	12 - 13	2034	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
14	1	13 - 14	2035	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
15	1	14 - 15	2036	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
16	1	15 - 16	2037	3	0.0003	0.0165	0.0180	0.007	0.002	0.0002	0.01
17	1	16 - 17	2038	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
18	1	17 - 18	2039	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
19	1	18 - 19	2040	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
20	1	19 - 20	2041	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
21	1	20 - 21	2042	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
22	1	21 - 22	2043	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
23	1	22 - 23	2044	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
24	1	23 - 24	2045	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
25	1	24 - 25	2046	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
26	1	25 - 26	2047	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
27	1	26 - 27	2048	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
28	1	27 - 28	2049	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
29	1	28 - 29	2050	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
30	1	29 - 30	2051	1	0.0003	0.0165	0.0180	0.001	0.000	0.0000	0.00
<b>Total Increased Cancer Risk</b>								0.21	0.070	0.005	<b>0.28</b>

\* Third trimester of pregnancy

Maximum  
**Hazard Index** 0.0001  
**Fugitive PM2.5** 0.01  
**Total PM2.5** 0.01

CT-EMFAC2017 Emissions Factors for Santa Clara County 2024

File Name: 420 2nd-3rd Sts - Santa Clara (SF) - 2024 - Annual.EF  
 CT-EMFAC2017 Version: 1.0.2.27401  
 Run Date: 6/22/2022 16:14  
 Area: Santa Clara (SF)  
 Analysis Year: 2024  
 Season: Annual

Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
Truck 1	0.015	0.495	0.505
Truck 2	0.02	0.937	0.048
Non-Truck	0.965	0.014	0.955

Road Type: Major/Collector  
 Silt Loading Factor: CARB 0.032 g/m2  
 Precipitation Correction: CARB P = 64 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph
PM2.5	0.008837	0.005727	0.003882	0.002774	0.002102	0.001693	0.001451
TOG	0.182802	0.119558	0.080373	0.056919	0.043051	0.034349	0.028781
Diesel PM	0.000842	0.000689	0.000532	0.000425	0.000365	0.000339	0.000339

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name	Emission Factor
TOG	1.303551

Fleet Average Tire Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.002108

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.016805

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name	Emission Factor
PM2.5	0.01484

=====END=====

## S. 3<sup>rd</sup> Street Traffic Emissions and Health Risk Calculations

Analysis Year = **2024**

Vehicle Type	2022 Caltrans Vehicles (veh/day)	2024 Vehicles (veh/day)
<b>Total</b>	<b>12,825</b>	<b>13,082</b>

Increase From 2022 1.02  
**Vehicles/Direction 6,541**  
 Avg Vehicles/Hour/Direction 273

Traffic Data Year = **2022**

Project Traffic Data - Background Plus Project ADT	AADT Total	Total Truck
S. 3rd Street & E. San Salvador St	12,825	450

Percent of Total Vehicles 3.51%  
 Traffic Increase per Year (%) = 1.00%

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling

Cumulative Operation - S. 3rd Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = **2024**

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	43.7	3.4	25	13,082
Total										13,082

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.00037			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.90%	510	2.22E-05	9	6.42%	840	3.66E-05	17	5.62%	735	3.20E-05
2	2.58%	337	1.47E-05	10	7.34%	960	4.18E-05	18	3.27%	427	1.86E-05
3	2.87%	375	1.63E-05	11	6.42%	840	3.66E-05	19	2.35%	307	1.34E-05
4	3.32%	435	1.90E-05	12	6.88%	900	3.92E-05	20	0.86%	112	4.90E-06
5	2.18%	285	1.24E-05	13	6.25%	817	3.56E-05	21	3.09%	405	1.77E-05
6	3.38%	442	1.93E-05	14	6.19%	810	3.53E-05	22	4.13%	540	2.35E-05
7	6.02%	787	3.43E-05	15	5.10%	667	2.91E-05	23	2.52%	330	1.44E-05
8	4.64%	607	2.65E-05	16	3.78%	495	2.16E-05	24	0.92%	120	5.23E-06
Total										13,082	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions  
 Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	13,082
									Total	13,082

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.002102			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	151	3.78E-05	9	7.11%	930	2.34E-04	17	7.39%	966	2.43E-04
2	0.42%	55	1.37E-05	10	4.39%	574	1.44E-04	18	8.18%	1070	2.69E-04
3	0.41%	53	1.33E-05	11	4.66%	610	1.53E-04	19	5.70%	745	1.87E-04
4	0.26%	34	8.59E-06	12	5.89%	770	1.93E-04	20	4.27%	559	1.40E-04
5	0.50%	65	1.64E-05	13	6.15%	805	2.02E-04	21	3.26%	426	1.07E-04
6	0.90%	118	2.97E-05	14	6.04%	790	1.98E-04	22	3.30%	431	1.08E-04
7	3.79%	496	1.25E-04	15	7.01%	918	2.30E-04	23	2.46%	322	8.09E-05
8	7.76%	1016	2.55E-04	16	7.14%	934	2.34E-04	24	1.87%	244	6.13E-05
									Total	13,082	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions  
 Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	13,082
									Total	13,082

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.04305			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	151	7.75E-04	9	7.11%	930	4.79E-03	17	7.39%	966	4.97E-03
2	0.42%	55	2.81E-04	10	4.39%	574	2.95E-03	18	8.18%	1070	5.50E-03
3	0.41%	53	2.73E-04	11	4.66%	610	3.14E-03	19	5.70%	745	3.83E-03
4	0.26%	34	1.76E-04	12	5.89%	770	3.96E-03	20	4.27%	559	2.88E-03
5	0.50%	65	3.36E-04	13	6.15%	805	4.14E-03	21	3.26%	426	2.19E-03
6	0.90%	118	6.08E-04	14	6.04%	790	4.06E-03	22	3.30%	431	2.22E-03
7	3.79%	496	2.55E-03	15	7.01%	918	4.72E-03	23	2.46%	322	1.66E-03
8	7.76%	1016	5.22E-03	16	7.14%	934	4.80E-03	24	1.87%	244	1.26E-03
									Total	13,082	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling

Cumulative Operation - S. 3rd Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	13,082
									Total	13,082

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle per Hour (g/hour)	1.30355			
Emissions per Vehicle per Mile (g/VMT)	0.05214			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	151	9.38E-04	9	7.11%	930	5.80E-03	17	7.39%	966	6.02E-03
2	0.42%	55	3.40E-04	10	4.39%	574	3.57E-03	18	8.18%	1070	6.66E-03
3	0.41%	53	3.31E-04	11	4.66%	610	3.80E-03	19	5.70%	745	4.64E-03
4	0.26%	34	2.13E-04	12	5.89%	770	4.80E-03	20	4.27%	559	3.48E-03
5	0.50%	65	4.07E-04	13	6.15%	805	5.01E-03	21	3.26%	426	2.65E-03
6	0.90%	118	7.36E-04	14	6.04%	790	4.92E-03	22	3.30%	431	2.69E-03
7	3.79%	496	3.09E-03	15	7.01%	918	5.72E-03	23	2.46%	322	2.01E-03
8	7.76%	1016	6.33E-03	16	7.14%	934	5.82E-03	24	1.87%	244	1.52E-03
Total										13,082	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling  
 Cumulative Operation - S. 3rd Street  
 Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions  
 Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_NB_3rd	S. 3rd Street Northbound	NB	2	692.2	0.43	13.3	44	1.3	25	13,082
									Total	13,082

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681			
Road Dust - Emissions per Vehicle (g/VMT)	0.01484			
<b>Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)</b>	<b>0.03375</b>			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG\_NB\_3rd

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	151	6.07E-04	9	7.11%	930	3.75E-03	17	7.39%	966	3.90E-03
2	0.42%	55	2.20E-04	10	4.39%	574	2.31E-03	18	8.18%	1070	4.31E-03
3	0.41%	53	2.14E-04	11	4.66%	610	2.46E-03	19	5.70%	745	3.00E-03
4	0.26%	34	1.38E-04	12	5.89%	770	3.11E-03	20	4.27%	559	2.25E-03
5	0.50%	65	2.64E-04	13	6.15%	805	3.25E-03	21	3.26%	426	1.72E-03
6	0.90%	118	4.77E-04	14	6.04%	790	3.18E-03	22	3.30%	431	1.74E-03
7	3.79%	496	2.00E-03	15	7.01%	918	3.70E-03	23	2.46%	322	1.30E-03
8	7.76%	1016	4.10E-03	16	7.14%	934	3.77E-03	24	1.87%	244	9.84E-04
Total										13,082	



**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. 3rd Street Traffic - TACs & PM2.5  
 AERMOD Risk Modeling Parameters and Maximum Concentrations  
 On-Site 1st Level of Residential Receptors - 3rd Floor, 10.5m Receptor Height**

**Emission Year** 2024  
**Receptor Information** Maximum On-Site Receptor  
 Number of Receptors 175  
 Receptor Height 10.5 Meters  
 Receptor Distances 6 meter grid spacing in residential areas

**Meteorological Conditions**  
 BAQMD San Jose Airport Met Data 2013-2017  
 Land Use Classification Urban  
 Wind Speed Variable  
 Wind Direction Variable

**On-Site Cancer Risk Maximum Concentrations**

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0008	0.0615	0.0746

**On-Site PM2.5 Maximum Concentrations**

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0513	0.0483	0.0030

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. 3rd Street Cancer Risk & PM2.5 Impacts at On-Site 1st Level of Residential Receptors - 10.5m (3rd Fl) receptor heights 30 Year Residential Exposure**

**Cancer Risk Calculation Method**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10<sup>-6</sup> = Conversion factor

**Cancer Potency Factors (mg/kg-day)<sup>-1</sup>**

	TAC	CPF
DPM		1.10E+00
Vehicle TOG Exhaust		6.28E-03
Vehicle TOG Evaporative		3.70E-04

**Values**

Age → Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Maximum - Exposure Information				Concentration (ug/m3)			Cancer Risk (per million)			TOTAL			
	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG				
												0	0.25	-0.25 - 0*
1	1	0 - 1	2022	10	0.0008	0.0615	0.0746	0.123	0.058	0.0041	0.18			
2	1	1 - 2	2023	10	0.0008	0.0615	0.0746	0.123	0.058	0.0041	0.18			
3	1	2 - 3	2024	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
4	1	3 - 4	2025	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
5	1	4 - 5	2026	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
6	1	5 - 6	2027	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
7	1	6 - 7	2028	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
8	1	7 - 8	2029	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
9	1	8 - 9	2030	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
10	1	9 - 10	2031	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
11	1	10 - 11	2032	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
12	1	11 - 12	2033	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
13	1	12 - 13	2034	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
14	1	13 - 14	2035	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
15	1	14 - 15	2036	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
16	1	15 - 16	2037	3	0.0008	0.0615	0.0746	0.019	0.009	0.0006	0.03			
17	1	16-17	2038	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
18	1	17-18	2039	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
19	1	18-19	2040	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
20	1	19-20	2041	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
21	1	20-21	2042	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
22	1	21-22	2043	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
23	1	22-23	2044	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
24	1	23-24	2045	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
25	1	24-25	2046	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
26	1	25-26	2047	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
27	1	26-27	2048	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
28	1	27-28	2049	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
29	1	28-29	2050	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
30	1	29-30	2051	1	0.0008	0.0615	0.0746	0.002	0.001	0.0001	0.00			
<b>Total Increased Cancer Risk</b>											<b>0.56</b>	<b>0.261</b>	<b>0.019</b>	<b>0.84</b>

\* Third trimester of pregnancy

Maximum  
**Hazard Index** 0.0002  
**Fugitive PM2.5** 0.05  
**Total PM2.5** 0.05

S. Market Street Traffic Emissions and Health Risk Calculations

Analysis Year = **2024**

Vehicle Type	2021 Caltrans Vehicles (veh/day)	2024 Vehicles (veh/day)
Total	17,385	17,907

Increase From 2021 Vehicles/Direction 1.03  
 Avg Vehicles/Hour/Direction 8,953  
 373

Traffic Data Year = **2021**

<i>Nearby Project Traffic Data - Background Plus Project ADT</i>	ADT Total	Total Truck
S. Market Street & E. San Salvador St	17,385	610

Percent of Total Vehicles 3.51%  
 Traffic Increase per Year (%) = 1.00%

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling

Cumulative Operation - S. Market Street

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	43.7	3.4	25	8,953
DPM_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	43.7	3.4	25	8,953
									Total	17,907

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.00037			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	3.90%	349	1.17E-05	9	6.42%	575	1.92E-05	17	5.62%	503	1.68E-05
2	2.58%	231	7.73E-06	10	7.34%	657	2.20E-05	18	3.27%	292	9.79E-06
3	2.87%	257	8.59E-06	11	6.42%	575	1.92E-05	19	2.35%	210	7.04E-06
4	3.32%	298	9.96E-06	12	6.88%	616	2.06E-05	20	0.86%	77	2.58E-06
5	2.18%	195	6.53E-06	13	6.25%	559	1.87E-05	21	3.09%	277	9.27E-06
6	3.38%	303	1.01E-05	14	6.19%	554	1.85E-05	22	4.13%	369	1.24E-05
7	6.02%	539	1.80E-05	15	5.10%	457	1.53E-05	23	2.52%	226	7.56E-06
8	4.64%	416	1.39E-05	16	3.78%	339	1.13E-05	24	0.92%	82	2.75E-06
									Total	8,953	

2024 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	3.90%	349	1.14E-05	9	6.42%	575	1.87E-05	17	5.62%	503	1.64E-05
2	2.58%	231	7.52E-06	10	7.34%	657	2.14E-05	18	3.27%	292	9.53E-06
3	2.87%	257	8.36E-06	11	6.42%	575	1.87E-05	19	2.35%	210	6.85E-06
4	3.32%	298	9.69E-06	12	6.88%	616	2.01E-05	20	0.86%	77	2.51E-06
5	2.18%	195	6.35E-06	13	6.25%	559	1.82E-05	21	3.09%	277	9.03E-06
6	3.38%	303	9.86E-06	14	6.19%	554	1.81E-05	22	4.13%	369	1.20E-05
7	6.02%	539	1.76E-05	15	5.10%	457	1.49E-05	23	2.52%	226	7.35E-06
8	4.64%	416	1.35E-05	16	3.78%	339	1.10E-05	24	0.92%	82	2.67E-06
									Total	8,953	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling

Cumulative Operation - S. Market Street

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,953
PM25_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,953
									Total	17,907

Emission Factors - PM2.5

Speed Category Travel Speed (mph)	1	2	3	4
	25	0.002102		
Emissions per Vehicle (g/VMT)				

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	103	1.99E-05	9	7.11%	637	1.23E-04	17	7.39%	661	1.27E-04
2	0.42%	37	7.21E-06	10	4.39%	393	7.57E-05	18	8.18%	732	1.41E-04
3	0.41%	36	7.01E-06	11	4.66%	418	8.05E-05	19	5.70%	510	9.83E-05
4	0.26%	23	4.51E-06	12	5.89%	527	1.02E-04	20	4.27%	383	7.38E-05
5	0.50%	45	8.62E-06	13	6.15%	551	1.06E-04	21	3.26%	292	5.62E-05
6	0.90%	81	1.56E-05	14	6.04%	540	1.04E-04	22	3.30%	295	5.69E-05
7	3.79%	339	6.54E-05	15	7.01%	628	1.21E-04	23	2.46%	220	4.25E-05
8	7.76%	695	1.34E-04	16	7.14%	639	1.23E-04	24	1.87%	167	3.22E-05
Total										8,953	

2024 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	103	1.93E-05	9	7.11%	637	1.19E-04	17	7.39%	661	1.24E-04
2	0.42%	37	7.02E-06	10	4.39%	393	7.37E-05	18	8.18%	732	1.37E-04
3	0.41%	36	6.82E-06	11	4.66%	418	7.84E-05	19	5.70%	510	9.57E-05
4	0.26%	23	4.39E-06	12	5.89%	527	9.89E-05	20	4.27%	383	7.18E-05
5	0.50%	45	8.39E-06	13	6.15%	551	1.03E-04	21	3.26%	292	5.47E-05
6	0.90%	81	1.52E-05	14	6.04%	540	1.01E-04	22	3.30%	295	5.54E-05
7	3.79%	339	6.37E-05	15	7.01%	628	1.18E-04	23	2.46%	220	4.13E-05
8	7.76%	695	1.30E-04	16	7.14%	639	1.20E-04	24	1.87%	167	3.13E-05
Total										8,953	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling  
 Cumulative Operation - S. Market Street  
 TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions  
 Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,953
TEXH_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,953
									Total	17,907

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.04305			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	103	4.07E-04	9	7.11%	637	2.51E-03	17	7.39%	661	2.61E-03
2	0.42%	37	1.48E-04	10	4.39%	393	1.55E-03	18	8.18%	732	2.89E-03
3	0.41%	36	1.43E-04	11	4.66%	418	1.65E-03	19	5.70%	510	2.01E-03
4	0.26%	23	9.24E-05	12	5.89%	527	2.08E-03	20	4.27%	383	1.51E-03
5	0.50%	45	1.77E-04	13	6.15%	551	2.17E-03	21	3.26%	292	1.15E-03
6	0.90%	81	3.19E-04	14	6.04%	540	2.13E-03	22	3.30%	295	1.17E-03
7	3.79%	339	1.34E-03	15	7.01%	628	2.48E-03	23	2.46%	220	8.70E-04
8	7.76%	695	2.74E-03	16	7.14%	639	2.52E-03	24	1.87%	167	6.60E-04
Total										8,953	

2024 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	103	3.96E-04	9	7.11%	637	2.45E-03	17	7.39%	661	2.54E-03
2	0.42%	37	1.44E-04	10	4.39%	393	1.51E-03	18	8.18%	732	2.81E-03
3	0.41%	36	1.40E-04	11	4.66%	418	1.60E-03	19	5.70%	510	1.96E-03
4	0.26%	23	9.00E-05	12	5.89%	527	2.03E-03	20	4.27%	383	1.47E-03
5	0.50%	45	1.72E-04	13	6.15%	551	2.12E-03	21	3.26%	292	1.12E-03
6	0.90%	81	3.11E-04	14	6.04%	540	2.08E-03	22	3.30%	295	1.13E-03
7	3.79%	339	1.30E-03	15	7.01%	628	2.41E-03	23	2.46%	220	8.47E-04
8	7.76%	695	2.67E-03	16	7.14%	639	2.46E-03	24	1.87%	167	6.42E-04
Total										8,953	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling

Cumulative Operation - S. Market Street

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,953
TEVAP_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,953
									Total	17,907

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle per Hour (g/hour)	1.30355			
Emissions per Vehicle per Mile (g/VMT)	0.05214			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	103	4.93E-04	9	7.11%	637	3.04E-03	17	7.39%	661	3.16E-03
2	0.42%	37	1.79E-04	10	4.39%	393	1.88E-03	18	8.18%	732	3.50E-03
3	0.41%	36	1.74E-04	11	4.66%	418	2.00E-03	19	5.70%	510	2.44E-03
4	0.26%	23	1.12E-04	12	5.89%	527	2.52E-03	20	4.27%	383	1.83E-03
5	0.50%	45	2.14E-04	13	6.15%	551	2.63E-03	21	3.26%	292	1.39E-03
6	0.90%	81	3.87E-04	14	6.04%	540	2.58E-03	22	3.30%	295	1.41E-03
7	3.79%	339	1.62E-03	15	7.01%	628	3.00E-03	23	2.46%	220	1.05E-03
8	7.76%	695	3.32E-03	16	7.14%	639	3.06E-03	24	1.87%	167	7.99E-04
Total										8,953	

2024 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	103	4.80E-04	9	7.11%	637	2.96E-03	17	7.39%	661	3.08E-03
2	0.42%	37	1.74E-04	10	4.39%	393	1.83E-03	18	8.18%	732	3.41E-03
3	0.41%	36	1.69E-04	11	4.66%	418	1.94E-03	19	5.70%	510	2.37E-03
4	0.26%	23	1.09E-04	12	5.89%	527	2.45E-03	20	4.27%	383	1.78E-03
5	0.50%	45	2.08E-04	13	6.15%	551	2.56E-03	21	3.26%	292	1.36E-03
6	0.90%	81	3.77E-04	14	6.04%	540	2.52E-03	22	3.30%	295	1.37E-03
7	3.79%	339	1.58E-03	15	7.01%	628	2.92E-03	23	2.46%	220	1.03E-03
8	7.76%	695	3.24E-03	16	7.14%	639	2.97E-03	24	1.87%	167	7.77E-04
Total										8,953	

420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - Onsite Roadway Modeling  
 Cumulative Operation - S. Market Street  
 Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions  
 Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_NB_MAR	S. Market Street Northbound	NB	2	531.3	0.33	13.3	44	1.3	25	8,953
FUG_SB_MAR	S. Market Street Southbound	SB	2	517.1	0.32	13.3	44	1.3	25	8,953
									Total	17,907

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00211			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01681			
Road Dust - Emissions per Vehicle (g/VMT)	0.01484			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03375			

Emission Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG\_NB\_MAR

Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s	Hour	% Per Hour	VPH	g/s
1	1.15%	103	3.19E-04	9	7.11%	637	1.97E-03	17	7.39%	661	2.05E-03
2	0.42%	37	1.16E-04	10	4.39%	393	1.22E-03	18	8.18%	732	2.27E-03
3	0.41%	36	1.13E-04	11	4.66%	418	1.29E-03	19	5.70%	510	1.58E-03
4	0.26%	23	7.25E-05	12	5.89%	527	1.63E-03	20	4.27%	383	1.18E-03
5	0.50%	45	1.38E-04	13	6.15%	551	1.70E-03	21	3.26%	292	9.03E-04
6	0.90%	81	2.50E-04	14	6.04%	540	1.67E-03	22	3.30%	295	9.14E-04
7	3.79%	339	1.05E-03	15	7.01%	628	1.94E-03	23	2.46%	220	6.82E-04
8	7.76%	695	2.15E-03	16	7.14%	639	1.98E-03	24	1.87%	167	5.17E-04
									Total	8,953	

2024 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG\_SB\_MAR

Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile	Hour	% Per Hour	VPH	g/mile
1	1.15%	103	3.11E-04	9	7.11%	637	1.92E-03	17	7.39%	661	1.99E-03
2	0.42%	37	1.13E-04	10	4.39%	393	1.18E-03	18	8.18%	732	2.21E-03
3	0.41%	36	1.09E-04	11	4.66%	418	1.26E-03	19	5.70%	510	1.54E-03
4	0.26%	23	7.05E-05	12	5.89%	527	1.59E-03	20	4.27%	383	1.15E-03
5	0.50%	45	1.35E-04	13	6.15%	551	1.66E-03	21	3.26%	292	8.79E-04
6	0.90%	81	2.44E-04	14	6.04%	540	1.63E-03	22	3.30%	295	8.89E-04
7	3.79%	339	1.02E-03	15	7.01%	628	1.89E-03	23	2.46%	220	6.64E-04
8	7.76%	695	2.09E-03	16	7.14%	639	1.93E-03	24	1.87%	167	5.03E-04
									Total	8,953	



**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. Market Street Traffic - TACs & PM2.5  
 AERMOD Risk Modeling Parameters and Maximum Concentrations  
 On-Site 1st Level of Residential Receptors - 3rd Floor, 10.5m Receptor Height**

**Emission Year** 2024  
**Receptor Information** Maximum On-Site Receptor  
 Number of Receptors 175  
 Receptor Height 10.5 Meters  
 Receptor Distances 6 meter grid spacing in residential areas

**Meteorological Conditions**  
 BAQMD San Jose Airport Met Data 2013-2017  
 Land Use Classification Urban  
 Wind Speed Variable  
 Wind Direction Variable

**On-Site Cancer Risk Maximum Concentrations**

Meteorological Data Years	Concentration (µg/m3)		
	DPM	Exhaust TOG	Evaporative TOG
2013-2017	0.0002	0.0165	0.0200

**On-Site PM2.5 Maximum Concentrations**

Meteorological Data Years	PM2.5 Concentration (µg/m3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013-2017	0.0137	0.0129	0.0008

**420 S. 2nd Street & 420 S. 3rd Street, San Jose, CA - S. Market Street Cancer Risk & PM2.5 Impacts at On-Site 1st Level of Residential Receptors - 10.5m (3rd Fl) receptor heights  
30 Year Residential Exposure**

**Cancer Risk Calculation Method**

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)<sup>-1</sup>

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C<sub>air</sub> x DBR x A x (EF/365) x 10<sup>-6</sup>

Where: C<sub>air</sub> = concentration in air (µg/m<sup>3</sup>)

DBR = daily breathing rate (L/kg body weight-day)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10<sup>-6</sup> = Conversion factor

**Cancer Potency Factors (mg/kg-day)<sup>-1</sup>**

	TAC	CPF
DPM		1.10E+00
Vehicle TOG Exhaust		6.28E-03
Vehicle TOG Evaporative		3.70E-04

Values

Age → Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

\* 95th percentile breathing rates for infants and 80th percentile for children and adults

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

Exposure Year	Exposure Duration (years)	Maximum - Exposure Information			Concentration (ug/m3)			Cancer Risk (per million)			TOTAL			
		Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG				
0	0.25	-0.25 - 0*	2022	10	0.0002	0.0165	0.0200	0.002	0.001	0.0001	0.00			
1	1	0 - 1	2022	10	0.0002	0.0165	0.0200	0.026	0.015	0.0011	0.04			
2	1	1 - 2	2023	10	0.0002	0.0165	0.0200	0.026	0.015	0.0011	0.04			
3	1	2 - 3	2024	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
4	1	3 - 4	2025	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
5	1	4 - 5	2026	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
6	1	5 - 6	2027	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
7	1	6 - 7	2028	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
8	1	7 - 8	2029	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
9	1	8 - 9	2030	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
10	1	9 - 10	2031	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
11	1	10 - 11	2032	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
12	1	11 - 12	2033	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
13	1	12 - 13	2034	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
14	1	13 - 14	2035	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
15	1	14 - 15	2036	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
16	1	15 - 16	2037	3	0.0002	0.0165	0.0200	0.004	0.002	0.0002	0.01			
17	1	16-17	2038	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
18	1	17-18	2039	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
19	1	18-19	2040	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
20	1	19-20	2041	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
21	1	20-21	2042	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
22	1	21-22	2043	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
23	1	22-23	2044	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
24	1	23-24	2045	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
25	1	24-25	2046	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
26	1	25-26	2047	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
27	1	26-27	2048	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
28	1	27-28	2049	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
29	1	28-29	2050	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
30	1	29-30	2051	1	0.0002	0.0165	0.0200	0.000	0.000	0.0000	0.00			
<b>Total Increased Cancer Risk</b>											<b>0.12</b>	<b>0.070</b>	<b>0.005</b>	<b>0.19</b>

\* Third trimester of pregnancy

Maximum  
Hazard Index 0.00003  
Fugitive PM2.5 0.01  
Total PM2.5 0.01



# BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

[Click here for guidance on conducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.](#)

[Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.](#)

**Table A: Requester Contact Information**

Date of Request	2/24/2022
Contact Name	Casey Divine
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x103
Email	<a href="mailto:cdivine@illingworthrodkin.com">cdivine@illingworthrodkin.com</a>
Project Name	420 S. 2nd & 3rd Streets
Address	420 S. 2nd & 3rd Streets
City	San Jose
County	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.)	Mixed-Use
Project Size (# of units or building square feet)	474 du, 10k retail
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in **Table A**. Incomplete forms will not be processed. Please include a project site map.
2. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
5. List the stationary source information in **Table B** blue section only.
6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

**Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.**

Submit forms, maps, and questions to Matthew Hanson at 415-749-8733, or [mhanson@baaqmd.gov](mailto:mhanson@baaqmd.gov)

**Table B: Google Earth data**

**Construction MEIs**

Distance from Receptor (feet) or MEI <sup>1</sup> Cancer/PM2.5	Plant No.	Facility Name	Address	Cancer Risk <sup>2</sup>	Hazard Risk <sup>2</sup>	PM <sub>2.5</sub> <sup>2</sup>	Source No. <sup>3</sup>	Type of Source <sup>4</sup>	Fuel Code <sup>5</sup>	Status/Comments	Distance Adjustment	Distance Adjustment	Adjusted	Adjusted	Adjusted
											Multiplier to Cancer MEI	Multiplier to PM2.5 MEI	Cancer Risk Estimate	Hazard Risk	PM2.5
1000/940	2060	Team San Jose	408 Almaden Boulevard	20.06	0.03	0.59		Generator, Boiler (S), Fire Pump		2018 Dataset	0.04	0.04	0.80	0.001	0.02
690/690	9339-8	San Jose State University	One Washington Square	0.02	--	--		Generators		2018 Dataset	0.08	0.08	0.002	#VALUE!	#VALUE!
690/690	9339-17	San Jose State University	One Washington Square	11.62	0.02	0.01		Generators		2018 Dataset	0.08	0.08	0.93	0.002	0.001
860/850	9339-22	San Jose State University	One Washington Square	0.29	--	--		Generators		2018 Dataset	0.05	0.05	0.01	#VALUE!	#VALUE!
860/850	9339-27	San Jose State University	One Washington Square	6.21	0.02	0.01		Generators		2018 Dataset	0.05	0.05	0.31	0.001	0.001
940/880	15031	Robert F Peckham Federal Building	280 So 1st Street	1.57	--	0.14		Generator, Boiler		2018 Dataset	0.04	0.05	0.06	#VALUE!	0.01
1000/1000	15125	San Jose Marriott Hotel	301 So Market Street	1.29	--	0.12		Generator, Tank, Boiler (2)		2018 Dataset	0.04	0.04	0.05	#VALUE!	0.005
930/865	17018	San Jose Redevelopment Agency	435 So Market Street	0.13	--	--		Generators		2018 Dataset	0.04	0.05	0.01	#VALUE!	#VALUE!
890/850	22239	G&K Management	201 So 4th Street	1.06	--	--		Generators		2018 Dataset	0.05	0.05	0.05	#VALUE!	#VALUE!
500/550	111979	Super Gas & Mart	498 S 4th St	2.37	0.01	--		Gas Dispensing Facility		2018 Dataset	0.04	0.04	0.10	0.0004	#VALUE!

**Footnotes:**

1. Maximally exposed individual

2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.

3. Each plant may have multiple permits and sources.

4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.

5. Fuel codes: 98 = diesel, 189 = Natural Gas.

6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.

7. The date that the HRSA was completed.

8. Engineer who completed the HRSA. For District purposes only.

9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.

10. The HRSA "Chronic Health" number represents the Hazard Index.

11. Further information about common sources:

a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.

b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or

c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010.

Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.

d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect

e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.

f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.

g. This spray booth is considered to be insignificant.

Date last updated:

03/13/2018

**Project Site**

Distance from Receptor (feet) or MEI <sup>1</sup>	FACID (Plant No.)	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
755	2060	0.07	1.40	0.002	0.04
465	9339-8	0.14	0.003	#VALUE!	#VALUE!
465	9339-17	0.14	1.63	0.003	0.001
670	9339-22	0.08	0.02	#VALUE!	#VALUE!
670	9339-27	0.08	0.50	0.002	0.001
710	15031	0.07	0.11	#VALUE!	0.01
940	15125	0.04	0.05	#VALUE!	0.005
690	17018	0.08	0.01	#VALUE!	#VALUE!
715	22239	0.07	0.07	#VALUE!	#VALUE!
280	111979	0.11	0.27	0.001	#VALUE!

**Gasoline Dispensing Facility (GDF) Distance Multiplier Tool:** This distance multiplier tool refines the screening values for cancer risk and chronic hazard index found in the District's Stationary Source Screening Analysis Tool for GDF's, to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

**Diesel Internal Combustion (IC) Engine Distance Multiplier Tool:** This distance multiplier tool refines the screening values for cancer risk and PM<sub>2.5</sub> concentrations found in the District's Stationary Source Screening Analysis Tool for permitted facilities which contain only diesel IC engines, to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

**Generic Distance Multiplier Tool:** This distance multiplier tool refines the screening values to represent adjusted risk and hazard impacts that can be expected with farther distances from the source of emissions.

Gas Station				
Distance (meters)	Distance (feet)	Distance adjustment multiplier	Enter Risk or Hazard	Adjusted Risk or Hazard
0	0.0	1.000		0.0000
5	16.4	1.000		0.0000
10	32.8	1.000		0.0000
15	49.2	1.000		0.0000
20	65.6	1.000		0.0000
25	82.0	0.728		0.0000
30	98.4	0.559		0.0000
35	114.8	0.445		0.0000
40	131.2	0.365		0.0000
45	147.6	0.305		0.0000
50	164.0	0.260		0.0000
55	180.4	0.225		0.0000
60	196.9	0.197		0.0000
65	213.3	0.174		0.0000
70	229.7	0.155		0.0000
75	246.1	0.139		0.0000
80	262.5	0.126		0.0000
85	278.9	0.114		0.0000
90	295.3	0.104		0.0000
95	311.7	0.096		0.0000
100	328.1	0.088		0.0000
105	344.5	0.082		0.0000
110	360.9	0.076		0.0000
115	377.3	0.071		0.0000
120	393.7	0.066		0.0000
125	410.1	0.062		0.0000
130	426.5	0.058		0.0000
135	442.9	0.055		0.0000
140	459.3	0.052		0.0000
145	475.7	0.049		0.0000
150	492.1	0.046		0.0000
155	508.5	0.044		0.0000
160	524.9	0.042		0.0000
165	541.3	0.040		0.0000
170	557.7	0.038		0.0000
175	574.1	0.036		0.0000
180	590.6	0.034		0.0000
185	607.0	0.033		0.0000
190	623.4	0.031		0.0000
195	639.8	0.030		0.0000
200	656.2	0.029		0.0000
205	672.6	0.028		0.0000
210	689.0	0.027		0.0000
215	705.4	0.026		0.0000
220	721.8	0.025		0.0000
225	738.2	0.024		0.0000
230	754.6	0.023		0.0000
235	771.0	0.022		0.0000
240	787.4	0.022		0.0000
245	803.8	0.021		0.0000
250	820.2	0.020		0.0000
255	836.6	0.020		0.0000
260	853.0	0.019		0.0000
265	869.4	0.018		0.0000
270	885.8	0.018		0.0000
275	902.2	0.017		0.0000
280	918.6	0.017		0.0000
285	935.0	0.016		0.0000
290	951.4	0.016		0.0000
295	967.8	0.015		0.0000
300	984.3	0.015		0.0000

Diesel Backup Generator						
Distance (meters)	Distance (feet)	Distance adjustment multiplier	Enter Risk or Hazard	Adjusted Risk or Hazard	Enter PM2.5 Concentration	Adjusted PM2.5 Concentration
0	0.0	1.000		0		0
5	16.4	1.000		0		0
10	32.8	1.000		0		0
15	49.2	1.000		0		0
20	65.6	1.000		0		0
25	82.0	0.85		0		0
30	98.4	0.73		0		0
35	114.8	0.64		0		0
40	131.2	0.58		0		0
50	164.0	0.5		0		0
60	196.9	0.41		0		0
70	229.7	0.31		0		0
80	262.5	0.28		0		0
90	295.3	0.25		0		0
100	328.1	0.22		0		0
110	360.9	0.18		0		0
120	393.7	0.16		0		0
130	426.5	0.15		0		0
140	459.3	0.14		0		0
150	492.1	0.12		0		0
160	524.9	0.1		0		0
180	590.6	0.09		0		0
200	656.2	0.08		0		0
220	721.8	0.07		0		0
240	787.4	0.06		0		0
260	853.0	0.05		0		0
280	918.6	0.04		0		0

Generic Case		
Distance (meters)	Distance (feet)	Multiplier
0	0.0	1.000
5	16.4	1.000
10	32.8	0.883
15	49.2	0.855
20	65.6	0.827
25	82.0	0.801
30	98.4	0.775
35	114.8	0.750
40	131.2	0.726
45	147.6	0.702
50	164.0	0.679
55	180.4	0.658
60	196.9	0.636
65	213.3	0.616
70	229.7	0.596
75	246.1	0.577
80	262.5	0.558
85	278.9	0.540
90	295.3	0.523
95	311.7	0.506
100	328.1	0.489
105	344.5	0.474
110	360.9	0.458
115	377.3	0.444
120	393.7	0.429
125	410.1	0.415
130	426.5	0.402
135	442.9	0.389
140	459.3	0.376
145	475.7	0.364
150	492.1	0.353
155	508.5	0.341
160	524.9	0.330
165	541.3	0.319
170	557.7	0.309
175	574.1	0.299
180	590.6	0.290
185	607.0	0.280
190	623.4	0.271
195	639.8	0.262
200	656.2	0.254
205	672.6	0.246
210	689.0	0.238
215	705.4	0.230
220	721.8	0.223
225	738.2	0.216
230	754.6	0.209
235	771.0	0.202
240	787.4	0.195
245	803.8	0.189
250	820.2	0.183
255	836.6	0.177
260	853.0	0.171
265	869.4	0.166
270	885.8	0.160
275	902.2	0.155
280	918.6	0.150
285	935.0	0.145
290	951.4	0.141
295	967.8	0.136
300	984.3	0.132

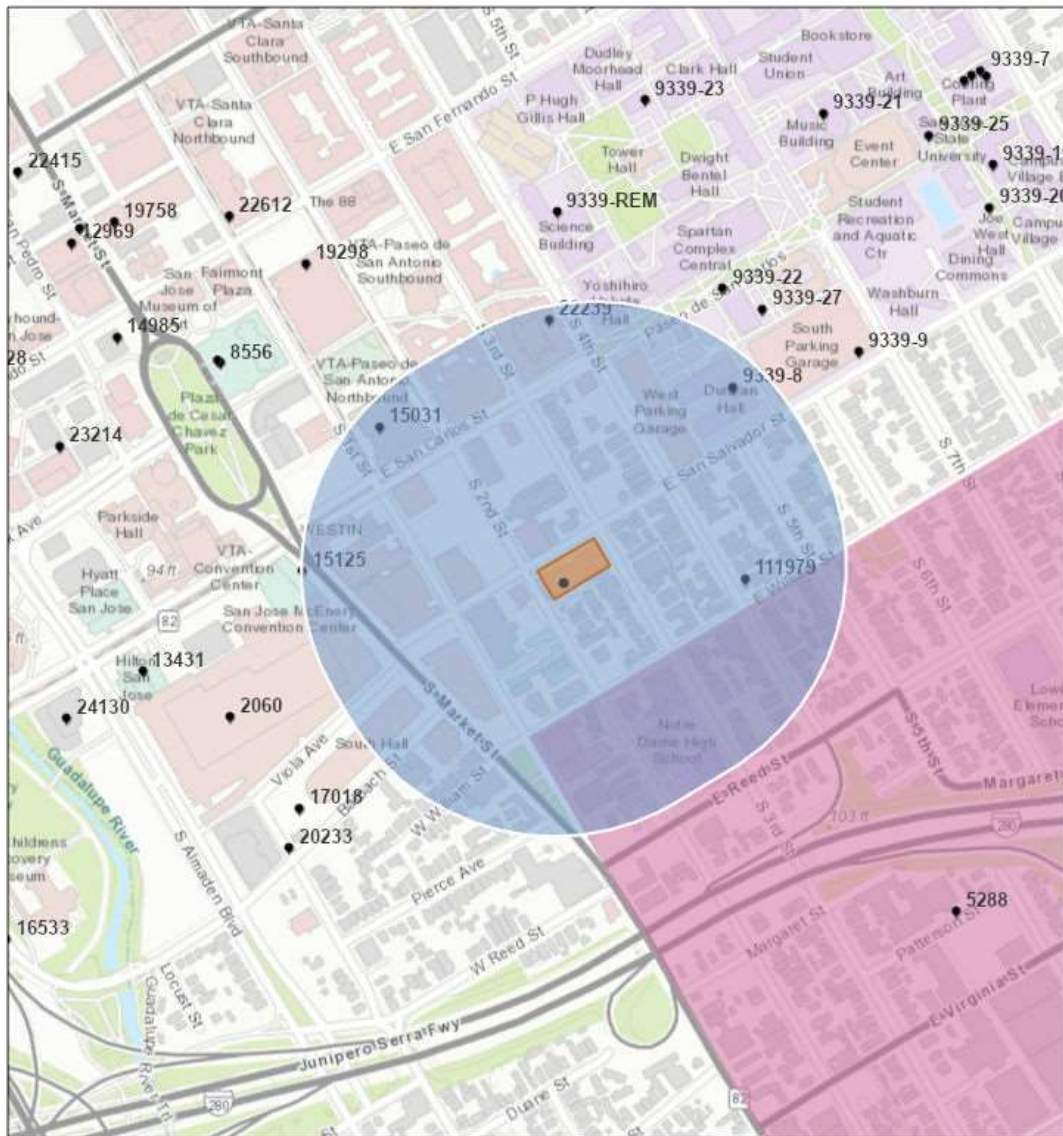


# Stationary Source Risk & Hazards Screening Report

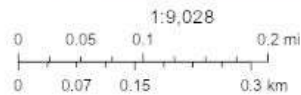
## Area of Interest (AOI) Information

Area : 3,999,314.77 ft<sup>2</sup>

Feb 24 2022 13:51:54 Pacific Standard Time



- Permitted Facilities 2018
- CalEnviroScreen 4.0 (Top 30%)



City of San Jose, County of Santa Clara, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., Intermap, USGS, METI/NASA, EPA, USDA

## Summary

Name	Count	Area(ft <sup>2</sup> )	Length(ft)
Permitted Facilities 2018	6	N/A	N/A

## Permitted Facilities 2018

#	FACID	Name	Address	City	St
1	15031	Robert F Peckham Federal Building	280 So 1st Street	San Jose	CA
2	15125	San Jose Marriott Hotel	301 So Market Street	San Jose	CA
3	22239	G&K Management	201 So 4th Street	San Jose	CA
4	111979	Super Gas & Mart	498 S 4th St	San Jose	CA
5	9339-17	San Jose State University	One Washington Square	San Jose	CA
6	9339-8	San Jose State University	One Washington Square	San Jose	CA

#	Zip	County	Cancer	Hazard	PM_25	Type	Count
1	95113	Santa Clara	1.570	0.000	0.140	Contact BAAQMD	1
2	95113	Santa Clara	1.290	0.000	0.120	Contact BAAQMD	1
3	95112	Santa Clara	1.060	0.000	0.000	Generators	1
4	95112	Santa Clara	2.370	0.010	0.000	Gas Dispensing Facility	1
5	95192	Santa Clara	11.620	0.020	0.010	Generators	1
6	95192	Santa Clara	0.020	0.000	0.000	Generators	1

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.

© Copyright 2018 Bay Area Air Quality Management District

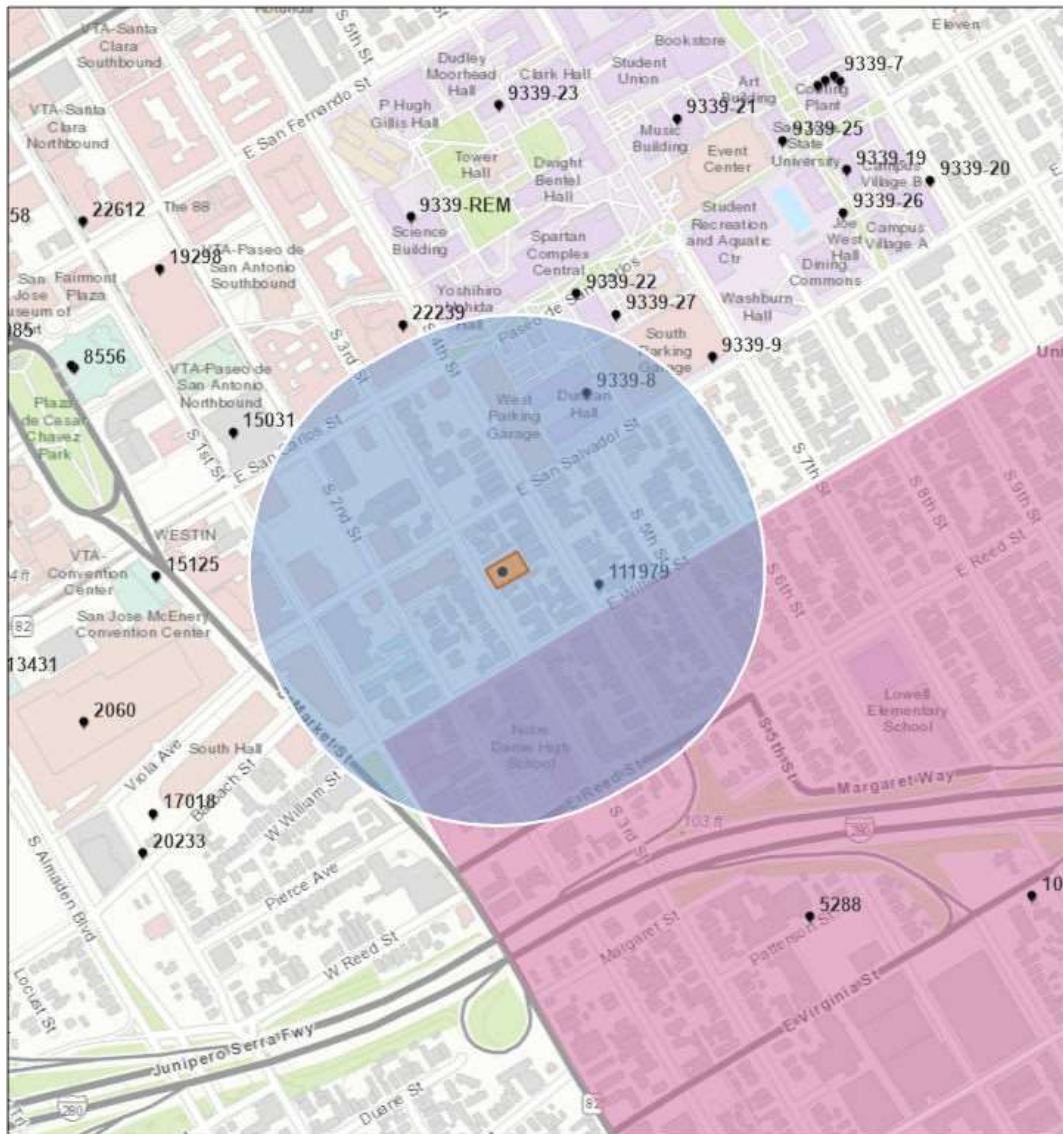


# Stationary Source Risk & Hazards Screening Report

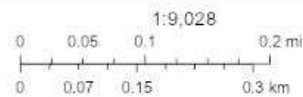
## Area of Interest (AOI) Information

Area : 3,648,754.94 ft<sup>2</sup>

Feb 24 2022 14:04:34 Pacific Standard Time



- Permitted Facilities 2018
- CalEnviroScreen 4.0 (Top 30%)



City of San Jose, County of Santa Clara, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., Intermap, USGS, METI/NASA, EPA, USDA



## Summary

Name	Count	Area(ft <sup>2</sup> )	Length(ft)
Permitted Facilities 2018	3	N/A	N/A

## Permitted Facilities 2018

#	FACID	Name	Address	City	St
1	111979	Super Gas & Mart	498 S 4th St	San Jose	CA
2	9339-17	San Jose State University	One Washington Square	San Jose	CA
3	9339-8	San Jose State University	One Washington Square	San Jose	CA

#	Zip	County	Cancer	Hazard	PM_25	Type	Count
1	95112	Santa Clara	2.370	0.010	0.000	Gas Dispensing Facility	1
2	95192	Santa Clara	11.620	0.020	0.010	Generators	1
3	95192	Santa Clara	0.020	0.000	0.000	Generators	1

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.

© Copyright 2018 Bay Area Air Quality Management District